PONDICHERRY UNIVERSITY

B.A.M.S. CURRICULUM

(Bachelor of Ayurvedic Medicine and Surgery)

2021-22 Onwards

IN ACCORDANCE WITH

NATIONAL COMMISSIONFOR INDIAN SYSTEM OF MEDICINE,

NEW DELHI

NATIONAL COMMISSIONFOR INDIAN SYSTEM OF MEDICINE,

NEW DELHI

(MINIMUM STANDARDS OF EDUCATION IN INDIAN MEDICINE)
(Amendment) REGULATIONS, 1ST MAY, 2024.

Submitted by

RAJIV GANDHI AYURVEDA MEDICAL COLLEGE

(A Puducherry government institute)

CHALAKKARA – NEW MAHE

U.T.OF PUDUCHERRY

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COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)

Kayachikitsa including Manasa Roga, Rasayana and Vajikarana (Internal Medicine including Psychiatry Rejuvenative Medicine, Reproductive Medicine and Epigenetics)

(SUBJECT CODE : AyUG-KC)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

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।। आयुषे सर्वलोकानाम् ।।

BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026

NCISM

III Professional Ayurvedacharya
(BAMS)
Subject Code : AyUG-KC

Kayachikitsa including Manasa Roga, Rasayana and Vajikarana
(Internal Medicine including Psychiatry Rejuvenative Medicine, Reproductive Medicine and Epigenetics)

Summary

Total number of Teaching hours: 450			
Lecture (LH) - Theory		**150**	**150(LH)**
Paper I	61		
Paper II	43		
Paper III	46		
Non-Lecture (NLHT)		**90**	**300(NLH)**
Paper I	35		
Paper II	24		
Paper III	31		
Non-Lecture (NLHP)		**210**	
Paper I	64		
Paper II	85		
Paper III	61		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	70	-	30
Paper II	100				
Paper III	100				
Sub-Total	300	200			
Total marks	500				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

The evolving landscape of healthcare necessitates a dynamic and integrative approach to medical education, particularly in Ayurveda. Kayachikitsa, the branch of internal medicine in Ayurveda, forms the clinical foundation for understanding, diagnosing, and managing diseases based on Ayurvedic principles. This revised competency-based syllabus ensures that students gain a holistic understanding of disease processes, blending traditional wisdom with modern advancements to provide effective, patient-centered care. The curriculum is designed to develop critical thinking, diagnostic skills, and clinical expertise, enabling students to interpret investigations, understand disease pathology (Samprapti), and apply individualized treatment strategies. Special emphasis is placed on emergency medicine (Atyayik Chikitsa), Rasayana, Vajikarana, and Apunarbhava Chikitsa, ensuring that students are well-equipped to handle both acute and chronic conditions.

Kayachikitsa builds upon the fundamentals learned in the first and second professional years, such as Kriya Sharira, Dosha-Dhatu-Mala Vijnana, and Roga Nidana Vikriti Vijnana. By the third professional year, students transition from understanding disease formation to Samprapti Vighatana (breaking the disease process) and applying treatment protocols based on Hetu, Linga, and Aushadha. The syllabus has been structured into three papers: Vyadhi Vishesh Chikitsa – I, Vyadhi Vishesh Chikitsa – II, and Vyadhi Vishesh Chikitsa Evam Rasayana-Vajikarana. The curriculum integrates ICD codes for disease classification, making it easier for students to correlate Ayurvedic and contemporary medical terminologies. Additionally, it includes the management of newly emerging diseases (Anukta Vyadhi), zoonotic infections (Kasherukajeeva-janya Vyadhi), and infectious conditions (Sankramika Jvara), reinforcing Ayurveda's relevance in addressing modern health challenges.

The new syllabus incorporates core Ayurvedic competencies, interdisciplinary integration, and hands-on clinical training to ensure students develop expertise in both Ayurvedic and contemporary medical approaches. Emphasis is also placed on research methodology, ethics, and professionalism, preparing students to contribute to evidence-based Ayurvedic practice. This curriculum is the result of collective efforts by experts in Ayurvedic education, clinical practice, and modern medicine, ensuring that students emerge as confident, skilled, and compassionate practitioners. By equipping them with practical knowledge, research acumen, and ethical grounding, this syllabus strengthens the role of Ayurveda in comprehensive healthcare, making it a vital contributor to global health and well-being.

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Course Code and Name of Course

Course code	Name of Course
AyUG-KC	Kayachikitsa including Manasa Roga, Rasayana and Vajikarana

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-KC At the end of the course AyUG-KC, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Appraise the knowledge of health and diseases along with principles and practices of kayachikitsa in various ailments of adult population in alignment with Trisutra concept.	PO1
CO2	Integrate the application of multidisciplinary sciences, tools and techniques for a biopsychosocial approach towards diagnosis, prognosis & management of diseases including anukta roga to restore dhatusamya.	PO2,PO3,PO5
CO3	Construct treatment plans/protocols applying yukti in accordance with the Chikitsa sutra including pathya apathya with appropriate documentation adhering to legal, safety and regulatory standards.	PO1,PO3,PO4,PO5
CO4	Demonstrate the application of Rasayana and Vajikarana as prophylactic, therapeutic, restorative and palliative medicine.	PO1,PO4,PO5
CO5	Perform various skills (Karma kaushalya) in dealing with atyayika avastha including first aid and primary management.	PO2,PO4,PO5
CO6	Demonstrate self directedness in pursuit of new advancements in the field of biomedical research and government health care policies.	PO7,PO9
CO7	Demonstrate agility, virtuous, ethical behaviour, compassion and communicate effectively with patients, relatives, and stakeholders about the prognosis and treatment including informed consent.	PO6,PO8,PO9

Table 2 : Contents of Course

Paper 1 (Vyadhi Vishesha Chikitsa - 1)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Kaya, Chikitsa and Kayachikitsa - Nirukti, Paribhasha, Paryaya and Bheda** Explanation of Kaya, Chikitsa and Kayachikitsa according to different Classical texts	1	3	1	1	0
2	**Clinical ethics in the practice of Kayachikitsa** • Doctor patient relationship • Good communication skills • Ethical and legal issues in the practice of Kayachikitsa(Ayurveda Medicine) .	1	7	1	0	4
3	**Samprapti vighatana, Chikitsa sutra, Chikitsa, Aushadha yoga and Pathyaapathya of Jvara (SP51/TM2)** • Nava jvara chikitsa • Jeerna jvara chikitsa • Nija jvara and Sannipataja jvara chikitsa • Agantuja jvara chikitsa • Dhatugata jvara chikitsa • Vishama jvara chikitsa • Punaravartaka jvara chikitsa	1	22	11	7	4
4	**Anuktaroga treatment principles based on Doshadushyadi vivechana** • Chikitsa yojana of Anukta roga • Anukta roga upadrava chikitsa	1		1	1	2
5	**Chikitsa of Sankramika jvara** • Vishama jvara(Malaria) • Antrika jvara(Typhoid) • Dandaka jvara(Dengue)	1		2	4	8

	• Sandhiga sannipata jvara(Chikungunya) • Mastishkavarana shotha jvara(Meningitis) • Mastishka shotha(Encephalitis) • Shwasanaka jvara(Pneumonia)					
6	**Chikitsa of Rasa pradoshaja vikara** • Pandu roga (SL80) • Hematopoietic diseases - Raktalpata(Anaemia), Kuposhanajanya raktalpata(Nutritional Anaemia) • Anuvanshika raktavikara- (Thalassemia, hemoglobinopathies, Sickle cell Anaemia), Raktakarka (Leukaemia), Haemolytic anaemia, Thrombocytopenia • Hridroga ,Hridshoola (SL61, SL6Z) • Uchcha raktachaapa (Hypertension), Hrudgata dhamanisanga vikara (Coronary artery disease-Ischemic heart disease and Myocardial Infarction), Hrudgata rakta -Sankulanjanya karya-akshamata(congestive cardiac failure). Hrudgati vaishamya(Conduction defects of heart) • Aamavata (SP11) (Rheumatoid Arthritis) • Madatyaya (SQ20)	2	18	12	6	16
7	**Chikitsa of Rakta pradoshaja vikara** • Kaamala (SM41, SM42, SM43) Jaundice • Yakrut shotha(Hepatitis), , Yakrutdalyodara(Liver cirrhosis), Madyaatirek janya yakrut vikara(Alcoholic liver disease) and Madya-etar karana janya yakrut vikara(Non- Alcoholic Fatty Liver Disease -NAFLD), madya-etar vasamaya-janya yakrut shotha(Non-Alcoholic Steato-hepatitis -NASH), yakrut koshakiya arbuda (Hepatocellular Carcinoma) • Raktapitta (SL81) • Raktaskandana sambandhi vikara (Coagulation disorders) Vanshanugata adhiraktasrava pravrutti (Heriditary - Haemophilia), Acquired-Immune thrombocytopenia -ITP • Vatarakta (SP14) Gout • Parisariya sira dhamaniya vikara (Peripheral vascular diseases) • Mada, Murchha, Sanyasa (SQ22, SP98) • Visarpa (SN4T)Erysipelas, Shingles,	2	24	22	11	18

	• Kushtha and Kilasa/Shwitra (SN40, SN43, SN46, SN48, SN49, SN4A, SN4B SN4D, SN4P, SN4U) • Anurjatajanya tvak vikara(Allergic skin disorders - Atopic dermatitis/Eczyma, Urticaria), shalkayukta tvak vikara (Squamous lesions) - Psoriasis, Shewalikabha tvak vikara (Lichen planus), Visphota (Bullous lesion), Udasphotanvika tvak vikara (Pemphigus and Pemphigoid lesions) • Sheetapitta, Udarda, Kota and Utkota (SN4K, SN4L) • Daha					
8	**Chikitsa of Kshudra roga** • Identification and chikitsa of - Yavaprakhya(SN5Y), Andhalaji(SN5Y), Vivritta(SN5Y), Kacchapika,(SN9Y) Indravriddha, Gardabhi, Jalagardabha(SM0Y), Irivellika(SN5Y), Gandhanama(SN5Y), Kaksha(SN4T), Visphotaka(SN4P), Agnirohini, Vidarika(SP9Y), Sharkararbuda(SP71), Pama(SN46), Vicharchika(SN43), Rakasa(SN40), Padadari, Alasa(SN48), Masurika, Tilkalaka(SN4E), Masaka(SN4H), Nyaccha(SN5Y), Vyanga(SN4G), Nilika(SN41) • Identification and chikitsa of - Ajagallika(SN5Y), Valmika(SN5Y), Panasika, Pashanagardabha(SM1D), Chippa, Kunakha(SN6Y), Anushayi(SP9Y), Kadara(SN9Y), Indralupta(SN90), Darunaka(SN91), Arumshika(SN70), Palitya, Yuvanpidika(SN4V), Padminikantaka(SN5Y), Jatumani(SN4F), Charmakeela, Parivaritika(SN0A), Avapatika, Niruddhaprakasha(SN0A), Sannirudhaguda(SM5Y), Ahiputana(SN5Y), Vrishanakacchu(SN40), Gudabhramsha(SM55)	3	5	2	1	2
9	**Chikitsa of Mamsapradoshaja and**	3	16	8	2	8

	Medopradoshaja vikara • Galaganda (SL0Y) • Gandamala (SL08) • Arbuda (SP72) • Shosha (SP2Y) • Karshya (SP61) • Sthaulya (SP64) • Prameha (SM8D) • Madhumeha(Diabetes mellitus) (SP60) • Medapachaya(Dyslipidaemia) (SP62) • Sthoulya(obesity) • Arbuda(Neoplasm)					
10	**Shuddha-Ashuddha chikitsa, Chikitsajanita vikara** • Concept of Shuddha chikitsa & Ashuddha chiktsa • Preventive protocol in the General principles of Drug administration, • Concept of Iatrogenic diseases • Chikitsa yojana of drug induced Iatrogenic diseases	3	5	1	2	2
Total Marks			**100**	**61**	**35**	**64**

Paper 2 (Vyadhi Vishesha Chikitsa - 2)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
11	**Chikitsa of Vatavyadhi** • Vatavyadhi samanya chikitsa • Snayugatavata • Akshepaka chikitsa (SK 30) • Pakshaghata chikitsa(SK22) (Cerebrovascular accident) • Ekangavata(SK22), Sarvangavata(SK22) • Kampavata(SK52) (Parkinson's Disease)	1	24	16	6	26

	• Ardita(SK20) (Bell's palsy) • Manyastambha(SP44) • Jihwastambha(SK22) • Avabahuka(SP15), Vishwachi(SK51) • Gridhrasi(SP20) (Sciatica) • Khanja(SK2Y), Pangu(SK21), Kalayakhanja • Padadaha(SK51), Padaharsha(SK54) • Parisareeya Nadishotha(Peripheral Neuropathy) • Urustambha(SP46) • Udarvarta(SM35) • Tantrikaanughata(Guillan Barre syndrome), Tantrighata(Motor Neuron Disease), Anuprasthiya-sitamajjachadda shotha(Transverse Myelitis), Peshi dourbalya(Myasthenia Gravis)					
12	**Chikitsa of Asthi-Majja pradoshaja vikara (SR54) (SR55)** • Asthisoushirya (Osteoporosis), Asthikshaya (Osteopenia) (SP00) • Sandhigata vata (SP12) (Osteoarthritis), Vatakantaka(SP4Y)(Calcaneal Spur), • Kateegraha(SP42(Lumbar spondylosis), Greeva graha(SP45) • Kroshtuka sheersha • Raktaheenatajanya dhatunasha(AvascularNecrosis) • Katishoola(Lumbago), Kasheruka vyadhi(Spondylopathies), • Asthisankatarbuda(Osteosarcoma)	2	14	8	4	11
13	**Chikitsa of Pranavaha Srotodushti Vikara (TM2:SL40-SL4Z)** • Shwasa (SL42), Hikka(SM74) • Kasa(SL41), Urahkshat • Rajayakshma • Tamaka Shwasa(Bronchial Asthma) (SL40) • Jirna Shwasakrichchhanika (Chronic Obstructive Pulmonary Disease) • Antaraalayi Phuphphusa Vikara (Interistitial Lung Disease) • Vispharah (Bronchiectasis) • Phuphphusasruti(Pleural effusion) • Phuphphusa arbuda (Lung Cancer)	2	24	6	4	24
14	**Chikitsa of Udakavaha srotodushti vikara**	3	10	5	2	8

	• Trishna • Shotha(SP91) • Udara-Jalodara (Ascites) (SM32) • Jaliyovidyutansha vaishamya(Fluid & Electrolyte Imbalance)					
15	**Chikitsa of Mootravaha srotodushti vikara** • Mootrakrichchha (SM82) • Mootraghata (SM81) • Ashmari (SM8C) • Mootranalika shotha(UTI), Vrikka koshika shotha(Nephritis),(SM84) • vrikka nishkriyata(Renal failure) • Mootraashmari(Urolithiasis) • Pourusha granthi vriddhi(Benign prostatic hyperplasia) • Apavrukkatva(Nephrotic Syndrome)	3	12	4	4	8
16	**Chikitsa of Purishavaha srotodushti vikara (SR5A)** • Atisara(SM37) • Pravahika(Dysentery)(SM38) • Arsha (SM53) • Raktatisara(Ulcerative colitis)(SM37) • Krimi • Bruhadaantra arbuda (Colorectal cancer)	3	16	4	4	8
Total Marks			**100**	**43**	**24**	**85**

Paper 3 (Vyadhi Vishesha Chikitsa Evam Rasayana, Vajikarana)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
17	**Chikitsa of Annavaha srotodushti vikara** • Agnimandya, Aruchi/ Arochaka • Ajeerna/ Alasaka/ Vishuchika, Vilambika(SM 3A 3B) • Aanaha/ Aatopa/ Aadhmana(SM31) • Amlapitta(SM-39), Bhasmaka	1	16	12	4	14

	• Parinama shoola, Annadrava shoola- (SM 3A,3B,3C,3D,3E), Shoola (SM33) • Chhardi(SM-3L) • Gulma(SM 3K) • Grahani(SM -36) • Annadravashoola-Parinamashoola(Acid peptic disease) • Amlapitta(Gastro esophageal reflux disease) • Grahani(Irritable bowel syndrome) • Udarastha karkatarbuda-Malignancies of abdomen (Ca Pancreas, Ca Duodenum/Stomach)					
18	**Chikitsa of Manovaha srotas dushti vikara** • Manasika vikara like Kaama, krodha, Lobha, Mada, Maatsarya, Shoka, Bhaya, Dainya, Harsha • Unmada roga (SQ03) • Apasmara roga(SK30) • Atattvabhinivesha(SQ04) • Chittodvega & Vishada • Chinta(General Anxiety Disorder) • Nidra vikara(Sleep Disorder) • Bhaavodvega(Somatoform and mood disorder) • Pratyabalajanya vikara(Stress induced disorder) • Kaamonmada(Psychosexual disorders) • Atattvabhinivesha(Obsessive compulsive disorder,Nurotic disorder) • Vyaktatva evum swabhav viparyaya(Personality and behavioral disorder) • Manoavasada(Depression) • Medhya rasayana in Manoroga • Identification of Bhutonmada and its basic management	2	10	8	4	8
19	**Chikitsa of of Antahsravi Granthi vyadhi** • Avatuka Granthi(Thyroid) Disorders: Manda vatuka(Hypothyroidism) & Tivra vatuka(Hyperthyroidism)(SP9Y) • Pravaravatuka Granthi Vyadhis (Parathyroid) Disorders:	2	10	4	4	4

	Hypoparathyroidism & Hyperparathyroidism • Piyusha Granthi vikara(Pituitary Disorders): Hypopitutarism-vamanata(Dwarfism)(SP9Y) Atihrisvata & Hyperpitutarism-Dirghakayata(Gigantism) (Atidirgha) and Vikayata(Acromegaly) Udakameha(Diabetes Insipidus) • Adhivrikka granthi vikara(Adrenal gland Disorders): Hyperaldosteronism- Tivra upavrikkasrava(Addison's disease) & Hypoaldosteronism-Upavrikkasrava mandya(Cushing's Syndrome)					
20	**Chikitsa of Vyadhikshamatva vikara** • Vyadhikshamatva heenata vikara (Immunodeficiency diseases -Primary and secondary immune deficiency disorders) • Atmapratirodha-Kshamatva Vikara (Auto immune disorders) • Pratirakshaja(Systemic Lupus Erythematosis-SLE) • Vamshakasheru ruk(Ankylosing Spondylitis-AS) • Drutotak(Multiple Sclerosis-MS) • Aamavata(Rheumatoid Arthritis) • Atisamvedanasheelata-janya vyadhi (Hypersensitiviy Reactions**)**	2	8	3	4	3
21	**Chikitsa of Shukravaha srotasa vikara** • Klaibya (SN02) • Shukralpata (SN03) • Shukradosha • Kshinashukra • Dhwajabhang • Kapourushya(Male hypogonadism) • Napunsakatva(Impotence) • Vandhyatva(Infertility)	3	8	3	4	4
22	**Chikitsa of Guhya roga** • Phiranga(SN31) Upadamsha(SN30)	3	8	2	2	2

	• Phiranga(Syphilis)(SN31) • Puyameha(Gonorrhoea)(SN30) • Vankshaneeya lasika granthikanarbud(Lymphomagranuloma Inguinale) • Phirangiya vrana(Soft Chancroid) • Visarpa(Herpes Simplex)(SN4T)					
23	**Vajikarana** • Principles, benefits & need for Vajikarana • Shuddha Shukra, Vajikarana dravya in Shukravaha srotodushti vikara • Vajikarana dravya in Klaibya(infertility) & Shandhatva(impotency) • Interpretation of investigation in Shukravaha srotodushti vikara • Phalashruti, Sevana kala, Matra & Anupana of various Vajikarana yoga	3	12	6	3	6
24	**Rasayana** • Principles, indications & dosage of Rasayana according to the ayu(age) • Aachara Rasayana in clinical practice • Evidence based Rasayana • Naimittika rasayana • Medhya rasayana • Kanthya rasayana • Varnya rasayana • Keshya rasayana • Chikitsa karmukatva, Matra, Sevana kala & Anupana of various Vyadhihara rasayana	3	20	6	4	8
25	**Chikitsa of Jarajanya vikara and Indriyapradoshaja vikara** • Jarajanya vikara(Geriatric Disorders) • Indriyapradoshaja vikara(sensory & cranial nerve disorders) • Smritilopa(Alzheimer's disease)	3	8	2	2	12
Total Marks			**100**	**46**	**31**	**61**

Table 3 : Learning objectives of Course

Paper 1 (Vyadhi Vishesha Chikitsa - 1)										
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Kaya, Chikitsa and Kayachikitsa - Nirukti, Paribhasha, Paryaya and Bheda (LH :1 NLHT: 1 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Explain the Nirukti, Paribhasha, Paryaya and Bheda of the term ‘Kaya’, ‘Chikitsa’ and ‘Kayachikitsa’.	CC	MK	KH	L&PPT ,REC	M-POS,VV -Viva,PRN, QZ	F&S	I	-	LH
CO1	Advice the appropriate type of Chikitsa to the simulated case	CAP	MK	KH	RP,DIS	CBA,Log book,VV-Viva	F&S	I	-	NLHT1.1

Non Lecture Hour Theory

S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 1.1	Selection of the appropriate treatment for a simulated case, enacted role play	Role play - 1 hour • The Mentor assigns the role (Vaidya, Rogi, and bystander) to 3 students of the allotted batch on a rotation basis for the role-play • Students prepare themselves to perform their assigned roles in the role-play • The mentor instructs other students(viewers) in the batch to draft an appropriate Chikitsa for the enacted role play based on the Chikitsa bheda (Dvividha, Trividha,etc) • THe mentor concludes the session with remarks

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 2 Clinical ethics in the practice of Kayachikitsa (LH :1 NLHT: 0 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO7	Explain the ethical principles, effective communication and professionalism in clinical practice	CC	MK	KH	L&PPT	M-POS,VV-Viva,DEB,COM,PRN	F&S	I	-	LH
CO7	Practice good communication skills and professionalism in healthcare	AFT-RES	MK	SH	SIM	P-EXAM,P-PRF,PM	F&S	I	-	NLHP2.1
CO7	Perform the ethical decision-making skills in clinical practice	AFT-RES	MK	SH	CBL	P-RP,P-EXAM,CBA	F&S	I	-	NLHP2.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 2.1	Communication skill and professionalism	Simulation - bedside 2 hours • The mentor selects few students from the allotted batch, takes them to the simulation bedside and assigns the role of Doctor and Patient • The mentor provides the instructions to be followed by each one (doctor, patient and viewers) and advises them to play their roles efficiently • The Viewers (Students) need to be vigilant and notify any discrepancy/breech during the process of communication/professionalism between doctor and patient • The mentor concludes the session with final remarks

NLHP 2.2	Ethical Principles in Clinical Practice	Case based learning - 2 hours The Mentor provides case scenarios pertaining to • Patient's Autonomy (informed consent vs Coercion) • Balancing Beneficence and Non- Maleficence • Ethical handling of end-of-life decisions • Resource allocation in a crisis • Confidentiality • Ethical handling of medical errors Students enact the scenario, discuss and present the given case scenario incorporating the concept of clinical ethics The mentor observes the ethical decision making skills of the students The mentors serve as observers and facilitators The mentors provide the concluding remarks

Topic 3 Samprapti vighatana, Chikitsa sutra, Chikitsa, Aushadha yoga and Pathyaapathya of Jvara (SP51/TM2) (LH :11 NLHT: 7 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Detail the treatment algorithm for Jvara according to stages of Shadkriyakala	CC	MK	KH	L&PPT ,L&GD	P-REC,T-CS,VV-Viva	F&S	I	-	LH
CO1, CO3	Create a treatment plan for Saama stages in Jvara and explain Taruna jvara Chikitsa (Nava jvara Chikitsa/Pachana-upaya Chikitsa in Jvara)	CS	MK	KH	REC,L &PPT ,L&GD	T-CS,P-REC,VV-Viva	F&S	I	-	LH
CO1, CO3	Create a treatment plan for Nirama stages in Jvara and explain Purana jvara chikitsa(Jeerna jvara chikitsa)	CS	MK	KH	DIS,REC,L&PPT	P-EXAM,VV-Viva,T-CS	F&S	I	-	LH

CO1, CO3	Describe the management of Nija jvara and Sannipata jvara	CC	MK	KH	L&PPT ,REC,L &GD	T-CS,VV-Viva,P-EXAM	F&S	I	-	LH
CO1, CO3	Describe the management of Agantuja jvara	CC	MK	KH	PER,L& PPT ,L&GD	PRN,T-CS, VV-Viva	F&S	I	-	LH
CO1, CO3	Detail the Dhatugata jvara Chikitsa	CC	MK	KH	L,L&G D,L&PP T ,DIS	T-CS,PRN, VV-Viva	F&S	I	-	LH
CO1, CO3	Describe the management of Vishama jvara	CC	MK	KH	L&PPT ,REC,L	INT,VV-Viva,P-EXAM,T-CS	F&S	I	-	LH
CO1, CO3	Plan the treatment according to the status of Ojus in Punaravartaka jvara	CS	MK	KH	REC,L, L&PPT	VV-Viva,PRN,DEB,T-CS	F&S	I	-	LH
CO1, CO3	Differentiate the appropriate Shodhana and Shamana Chikitsa in Jvara	CK	MK	KH	L&PPT ,L,L&G D	PRN,INT,VV-Viva	F&S	I	H-KB	LH
CO1, CO3	Explain the Bahirparimarjana chikitsa and Daivavyapasraya chikitsa in the management of Jvara	CAN	MK	KH	L&PPT ,L&GD	T-CS,VV-Viva,INT	F&S	I	-	LH
CO1, CO3, CO4	Prescribe the Pathyapathya and Rasayana in the management of Jvara	CS	MK	KH	L,DIS,L &PPT	DEB,PRN,INT,T-CS	F&S	I	-	LH
CO1, CO2	Discuss the Avastha and construct the Chikitsa yojana of Jvara	CC	MK	KH	CBL,DIS,TBL	P-CASE,PRN,P-VIVA	F&S	I	-	NLHT3.1

CO1, CO2	Discuss the clinical understanding of Nija jvara,Sannipata jvara and Aagantuja jvara and construct the Chikitsa yojana.	CC	MK	KH	PER,CBL,BS,SIM	P-VIVA,INT,P-EXAM	F&S	I	-	NLHT3.2
CO1, CO3	Discuss the importance of Langhana Chikitsa in Jvara	CC	MK	KH	L&GD, FC,CBL	T-CS,CL-PR	F&S	I	-	NLHT3.3
CO1, CO3	Point out the importance of Ksheera prayoga and Ghrita prayoga in Jvara	CAN	MK	KH	CBL,L&GD,FC	INT,T-CS,PRN	F&S	I	-	NLHT3.4
CO1, CO3	Discuss the clinical understanding of Dhatugata jvara,Vishama jvara, Punaravartaka jvara and construct the Chikitsa yojana	CC	MK	KH	REC,L&GD,DIS	PRN,T-CS,DEB	F&S	I	-	NLHT3.5
CO1, CO3	Discuss the clinical understanding and management of various varieties of Jvara.	CC	MK	KH	L&GD, PBL,BS	P-EXAM,PRN,T-CS	F&S	I	-	NLHT3.6
CO1, CO3	State the Phalashruti,Sevanakala,Matra,Anupana of the given Aushadha kalpana	CK	MK	K	SDL,PER,L&GD	INT,DEB,PRN	F&S	I	-	NLHT3.7
CO1, CO2, CO3, CO6, CO7	Demonstrate and write a case and construct the Chikitsa of Jvara	PSY-GUD	MK	SH	CBL,CD,D-BED,LRI	PRN,P-VIVA,P-CASE, P-EXAM	F&S	I	-	NLHP3.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 3.1	Clinical understanding and treatment of Jvara according to its different stages(Avasthanusara Jvara chikitsa)	**Team based learning, Discussion**

		• A few students are selected and divided into 3 teams. • Each team is allotted a specific stage of Jvara (Ama, Pachyamana, and Pakva) along with its management. • The teams refer to and compile material from library sources and prepare a presentation. • Each team presents the allotted topic. • Other students are encouraged to interact and discuss the presentations under the supervision of the mentor. • The mentor provides concluding remarks on the presentations.
NLHT 3.2	Clinical understanding of Nija jvara,Sannipataja jvara and Agantuja jvara and its Chikitsa yojana	**Case Based Learning, Simulation** • The mentor allots simulated cases on the topic to the students. • The students are expected to diagnose and chart out an appropriate Chikitsa yojana along with its Pathyapathya. • A discussion is generated among the students on the given topic. • The mentor concludes the class with remarks.
NLHT 3.3	Importance of Langhana Chikitsa in Jvara	**Flipped class room, Group discussion** • Students are asked to prepare a presentation on the role of Langhana Chikitsa in Jvara. • The next day, students present the allotted topic. • Students are encouraged to participate in the discussion. • The mentor supervises the process and provides guidance.
NLHT 3.4	Importance of Ksheera prayoga and Ghrita prayoga in Jvara	**Group Discussion, Flipped class room** • The students are divided into 2 groups. • Topic is assigned to two groups as follows-: • One group refers to the topic of Ksheera Prayoga in Jvara. • The other group is allotted the topic of Ghrita Prayoga in Jvara.

		• Both groups present their respective topics in the class using PowerPoint. • A discussion is conducted among the students on the given topic. • The mentor supervises the discussion and concludes the class with remarks.
NLHT 3.5	Clinical understanding and management of Dhatugata jvara,Vishama jvara and Punaravartaka jvara	**Group Discussion, Recitation** • The students are instructed to refer to the management of Dhatugata jvara Vishama jvara and Punaravartaka jvara from Samhitas/Ayurvedic Literature • The students are asked to start a discussion on the topic. • The mentor supervises the process and provides guidance.
NLHT 3.6	Understanding the Nidana panchaka and framing the management of various varieties of Jvara through case scenario.	**Problem based learning, Brainstorming** • The students are divided into different groups. • Each group is allotted different varieties of Jvara through case scenario • All groups members discuss the problem and formulate a treatment protocol with its rationale • The students start interaction and discussion on the topic. • The mentor supervises the process and provides guidance.

NLHT 3.7	Phalashruti,Sevanakala,Matra,Anupana of the given Aushadha kalpana
	
	• Shadanga paneeya
	• Amritottaram Kashaya
	• Indukantam Kashaya
	• Vishamajvara nashaka kashaya
	• Sudarshana churna
	• Mrityunjaya rasa
	• Amritarishta
	• Pippalyadi Ghrita
		Self directed learning, Presentation
		
		• The students are divided into small groups.
		• Each group is allotted specific Aushadha yogas.
		• The students are asked to refer to the Aushada kalpana with its
		  ◦ Phalashruti
		  ◦ Sevanakala
		  ◦ Matra
		  ◦ Anupana
		• The students compile the material, prepare a presentation, and present it to the class.
		• Students are encouraged to interact with the presenter under the supervision of the mentor.

	• Aparajita dhoopa	• The mentor provides concluding remarks on the presentations.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 3.1	Diagnose and constuct the Chikitsa yojana of Jvara(Nava jvara/Purana jvara/Nija jvara/Sannipata jvara/Agantuja jvara/Dhatugata jvara/Vishama jvara/Punaravartaka jvara)	Cases in the IPD 2 Bedside cases = 4 hours **Demonstration bedside** • The Mentor takes students to the ward/OPD of Kayachikitsa, dividing them into small groups. • Mentor assigns each group a case OR Students in the clinical batch select a case. • Mentor shows the construction of the Chikitsa yojana and documenting it in the following steps: • The students shall introduce themselves to the patient and take verbal consent. • The students shall interrogate the patient and document the clinical history. • The students further brief the patient about the steps in examination that will be performed on him/her. • The students perform the relevant clinical examinations adopting the Ayurvedic and conventional clinical methods of examination. • The necessary investigations are proposed by the students. • The investigation reports are interpreted. • The students analyze the Nidana panchaka and the extent of alteration in Samprapti ghataka. • The students interpret the collected information and state the Vyadhi nama (arrive at a tentative clinical diagnosis) following the method of Vyavachedaka nidana (differential diagnosis) • The students determine the Sadhyaasadhyata (prognosis) of the disease in the patient. • The students construct the chikitsa yojana for the diagnosed disease. • The students recommend Pathyaapathya to the patient. • Finally, the students address the patient's doubts & acknowledge his/her cooperation in the case taking.

		• The students present and discuss the documented case. • The mentor facilitates the case presentation. • The mentor evaluates the student's performance, knowledge, psychomotor and communication skills using rubrics or checklists and gives feedback. • Remedial measures should be implemented if found necessary.

Topic 4 Anuktaroga treatment principles based on Doshadushyadi vivechana (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2	Formulate the Chikitsa yojana of Anukta Roga considering its Nidana panchaka	CS	MK	KH	L&PPT	M-POS,QZ ,DEB,PRN, T-CS	F&S	I	-	LH
CO1, CO2	Understand the Dosha-dushyadi vivechana in the management of Anukta roga	CC	MK	K	LS,TBL ,IBL,RP ,LRI	CL-PR,OS PE,M-POS,QZ ,OSCE	F	I	-	NLHT4.1
CO1, CO2	Construct the Chikitsa yojana in a case on Anukta roga along with its complications	PSY-MEC	NK	KH	PBL,SI M,CBL, LRI,D-BED	PUZ,P-CA SE,SP,P-EXAM	F&S	I	-	NLHP4.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 4.1	Understanding of Samprapti vighatana in Anukta roga	Student should illustrate the treatment of Anukta Roga based on Dosha-dushyaadi vivechana in the given situation through Poster presentation

		• The Mentor instructs the students to refer tutorials, library resources, and reading materials on the allotted common situation of clinical findings of Anukta roga • The students in groups are instructed to present their knowledge and ideas on treating Anukta yoga based on Dosha-dushyaadi vivechan by preparing posters, charts, or e-posters. • Students will accordingly present the discussed topics through poster • The Mentor encourages the activity & gives concluding remarks
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 4.1	Chikitsa yojana of Anukta roga & its complications	Students are able to plan the Chikitsa yojana for the Anukta roga & its Upadrava understanding the Doshadushya sammurchhana in a given clinical case/case scenario Case based learning - 2 Short cases x 1hour = 2 hours per batch • The Mentor takes students to the ward/OPD of Kayachikitsa & assigns a case of Anukta Roga. • Mentor shows the art of writing a rational treatment prescription and documenting it in the following steps: • The students shall introduce self to the patient and take verbal consent. • The students shall interrogate the patient and document the clinical history. • The students further brief the patient about the steps in examination that will be performed on him/her. • The students perform the relevant clinical examinations adopting the Ayurvedic and conventional clinical methods of examination of the involved system • The available investigation reports are interpreted by the students. • The students interpret the collected information and state the vyadhi nama (arrive at a tentative clinical diagnosis) following the method of vyavachedaka nidana (differential diagnosis) • The students determine the sadhyaasadhyata (prognosis) of the disease in the patient. • The students formulate a rational treatment prescription for the diagnosed disease & plan the appropriate chikitsa yojana for the upadrava of anukta vyadhi if any . • The students recommend pathyaapathya to the patient. • Finally, the students address the doubts of the patient & acknowledge his/her cooperation in

		the case taking. • The students present and discuss the documented short case. • The mentor facilitates the case presentation. • The mentor evaluates the student's performance, knowledge, psychomotor and communication skills using rubrics or checklist and gives the feedback. • Remedial measures should be implemented if found necessary.

Topic 5 Chikitsa of Sankramika jvara (LH :2 NLHT: 4 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO3	Describe Sankramika jvara and Kasheruka-jeeva-janya vyadhi(zoonotic diseases).Explain the Ayurveda management of Vishama jvara(Malaria) and Antrika jvara(Typhoid) by comprehending the contemporary therapeutic modalities	CC	MK	K	L&PPT ,L_VC	QZ ,PRN	F&S	I	-	LH
CO1, CO2, CO3	Explain the ayurveda management of Vata-shlaishmika jvara(Influenza), Shwasanaka jvara(Pneumonia), COVID and H1N1 by comprehending the contemporary therapeutic modalities	CC	MK	K	L&PPT ,L_VC, L	QZ ,PRN	F&S	I	-	LH
CO1, CO2, CO3	Apply the Ayurveda concepts in the management of Mastishkavarana shotha jvara(Meningitis) Mastishka shotha(Encephalitis) and Dhanurvaata(Tetanus) by assessing the contemporary therapeutic approaches	CAP	DK	KH	L&GD, PER,DIS	CL-PR,PRN,QZ	F&S	I	-	NLHT5.1
CO1, CO2, CO3	Discuss the contemporary therapeutic modalities and frame ayurveda management of Granthika sannipata jvara(Plague), and Leptospirosis	CC	NK	K	BL,L&GD,DIS ,BS	QZ ,PRN,CL-PR	F	I	-	NLHT5.2
CO1, CO2, CO3	Apply the Ayurveda concepts in the management of Beejanu jvara(Anthrax), and Peeta jvara(Yellow fever) by assessing the contemporary therapeutic approaches	CAP	NK	KH	DIS,BS, L&GD, FC	CL-PR,PRN,QZ	F	I	-	NLHT5.3
CO1, CO2,	Summarize the Ayurveda management of Sandhiga sannipata jvara(Chikungunya), Dandaka jvara(Dengue) and	CS	DK	K	L&GD, RP	PRN,QZ	F	I	-	NLHT5.4

CO3	Shleepada(Filariasis) by assessing the contemporary therapeutic approaches									
CO1, CO2, CO3	Demonstrate the Chikitsa yojana & prepare case record in cases of Sankramika jvara after performing relevant clinical examination	PSY-MEC	MK	SH	D-BED, DL,CBL,PT,PBL	CBA,Mini-CEX,P-VIVA,OSCE, P-PRF	F&S	I	-	NLHP5.1
CO1, CO2, CO3	Commemoration of International days	PSY-MEC	DK	SH	PBL,RP,RLE,FV	P-RP,Log book,P-SUR, P-PS,INT	F	I	-	NLHP5.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 5.1	Approach to the diagnosis and management of Mastishkavarana shotha jvara(Meningitis) Mastishka shotha(Encephalitis) and Dhanurvaata(Tetanus	**Team based learning** • The students are divided into different teams • One team is asked to present etiopathogenesis and diagnosis of Mastishkavarana shotha jvara(Meningitis), • The second team presents about the topic related to etiopathogenesis and diagnosis of Mastishka shotha(Encephalitis), • The third team presents a detailed presentation about the topic related to etiopathogenesis and diagnosis of Dhanurvaata (Tetanus) • The fourth team does a presentation on the investigations and Principles of management of all • Followed by group discussion • Mentor clears the doubts, answers the queries and gives the concluding remarks.
NLHT 5.2	Approach to the diagnosis and management of Granthika sannipata jvara(Plague) and Leptospirosis	**Blended learning** • Students are given online learning material like description of the online link and scientific

		research articles • Students are divided into various small groups, and they will be allotted topics related to etiopathogenesis, diagnosis, principles of management of Granthika sannipata jvara (Plague) and Leptospirosis • Each group is asked to do a presentation related to the topic given • Group discussion follows • Mentor clears the doubts, answers the queries and gives the concluding remarks
NLHT 5.3	Approach to the diagnosis and management of Beejanu jvara (Anthrax), and Peeta jvara (Yellow fever)	**Flipped classroom** • Student are asked to prepare notes and PPT after referring all the available books and online study material • On the coming day they are asked to lead the class • Followed by Group Discussion • Mentor clears the doubts, answers the queries and gives the concluding remarks
NLHT 5.4	Approach to the diagnosis and management of Sandhiga sannipata jvara (Chikungunya) Dandaka jvara(Dengue) and Shleepada (Filariasis),	**Role play** • The students are divided into many teams • Each team will be assigned the role of doctor, Patient and bystander • They should do the role of the doctor patient and bystander • The other members of team watch the role play and contribute for its refinement • Mentor gives the concluding remarks
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 5.1	Bedside case taking of the given Sankramika jvara	• The Mentor takes students to the ward/OPD of Kayachikitsa, dividing them into the clinical batch, selecting a case. • Mentor shows the art of writing a rational treatment prescription and documenting it in the

		following steps: • The students shall introduce themselves to the patient and take verbal consent. • The students shall interrogate the patient and document the clinical history. • The students further brief the patient about the steps in the examination that will be performed on him/her. • The students perform the relevant clinical examinations adopting the Ayurvedic and conventional clinical methods of examination of the involved system • The necessary investigations are proposed by the students. • The investigation reports are interpreted. • The students interpret the collected information and state the Vyadhi nama (arrive at a tentative clinical diagnosis) following the method of Vyavachedaka nidana (differential diagnosis) • The students determine the Sadhyaasadhyata (prognosis) of the disease in the patient. • The students formulate a rational treatment prescription for the diagnosed disease.
NLHP 5.2	Public awareness activity related to Malaria/hepatitis/epidemic preparedness/vaccination/meningitis/encephalitis	• World malaria day /World dengue day /World hepatitis day /day of Epidemic preparedness /National vaccination day /World meningitis day /World encephalitis day**(** 6 Hours) • **Kinesthetic learning** students are asked to make posters on various aspects of the illness and do an exhibition of the same for the public OR • **Role** play- The students are encouraged to perform a role-play depicting the importance of preventing these diseases and swift action on witnessing the early symptoms. OR • **Public outreach program**- Conduct a survey among the public to assess the susceptibility of infectious diseases and educate them. OR • Organize a rally to create awareness about Prevention OR • conduct medical camps for these disease • Prepare a report with a Geotagged photograph

Topic 6 Chikitsa of Rasa pradoshaja vikara (LH :12 NLHT: 6 NLHP: 16)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Describe the Chikitsa sutra of Rasavaha sroto dushti and explain the Samprapti vighatana, Chikitsa sutra and chikitsa of Pandu	CC	MK	KH	REC,L &PPT	VV-Viva,T -OBT,S-LA	F&S	II	-	LH

	roga (SL80)					Q,P-VIVA				
CO1, CO3	Design a treatment algorithm for Pandu roga according to the stages of Shadkriyakala	CS	MK	KH	L&PPT	QZ ,P-VIVA,VV-Viva	F&S	II	-	LH
CO1, CO3	Construct a Chikitsa yojana (treatment plan) including Rasayana and Pathyaapathya for Pandu roga.State the Phalashruti, Aushadha Sevana-kala, matra, Anupana of the Aushadha yoga in Pandu roga • Navayasa churna • Tapyadi Lauha • Lohasava • Punarnava mandoora • Dadimadi ghrita • Drakshavalehya	CAP	MK	KH	L&PPT	QZ ,VV-Viva,P-VIVA,T-OBT	F&S	II	-	LH
CO1, CO2, CO6	Explain the etiopathogenesis, diagnosis, treatment of Raktalpata (Anaemia) and Kuposhanajanya Raktalpata (Nutritional Anaemia)	CC	DK	K	L&PPT,L_VC	QZ ,P-VIVA,VV-Viva	F&S	II	-	LH
CO2, CO6	Chart the etiopathogenesis, morphological changes in the Rudhiravarnika(RBC), clinical diagnosis and treatment of Anuvanshika rakta vikara. (Haematopoietic diseases)a. Thalassemia b. Sickle cell Anaemia c. Haemolytic anaemia	CAP	NK	K	SDL,DIS,PER,PL	QZ ,M-CHT,M-POS,PRN,VV-Viva	F	II	-	NLHT6.1
CO1, CO2, CO6	Discuss the etiopathogenesis, diagnosis and treatment of Raktakarkah (Leukemia)	CC	NK	K	PER,DIS,PL	VV-Viva,WP	F	II	-	NLHT6.2
CO1, CO2,	Discuss the etiopathogenesis, diagnosis, treatment of Rudhiravarnika vikara (Haemoglobinopathies).	CC	NK	K	PL,SDL,DIS,FC	QZ ,WP,VV-Viva	F	II	-	NLHT6.3

CO6										
CO1, CO3	Explain the Samprapti vighatana and chikitsa of Hridroga and Hridshoola **(SL61, SL6Z)**	CC	MK	K	L&PPT	VV-Viva,T-CS	F&S	II	-	LH
CO1, CO3	Construct a Chikitsa yojana including the Rasayana and Pathyaapathya for Hridroga and state the Phalashruti, Aushadha sevana kala, Matra, Anupana of the following Aushadha yoga in Hridshoola/Hridroga. **(SL61, SL6Z)** • Prabhakara vati • Hridayarnava rasa • Arjunarishta • Drakshasava • Nagarjunabhra rasa	CAP	MK	KH	L&PPT	VV-Viva,T-OBT,P-VIVA,PUZ,QZ	F&S	II	-	LH
CO1, CO2, CO6	Explain the etiopathogenesis, diagnosis and treatment of Uchcha Raktachapa (Hypertension) and Nyuna Raktachapa (Hypotension)	CC	MK	K	L&PPT ,L_VC	QZ ,T-CS, VV-Viva	F&S	II	-	LH
CO2, CO6	Demonstrate an algorithm for etiopathogenesis and diagnosis of Samanya parisancharana- tantragata- roga (common cardiovascular diseases) and discuss the treatment strategies in brief	CAP	DK	KH	DIS,PL, SDL	VV-Viva,QZ , M-CHT,M-MOD	F&S	II	-	NLHT6.4
CO1, CO2, CO6	Discuss the etiopathogenesis, diagnosis along with treatment of Raktapravaha-hinata-janya hridroga - Hritshoola, Hritpeshiraktalpata, and Hritpeshirodhah (Coronary Artery Diseases- Angina Pectoris, Ischemic heart disease and Myocardial Infarction).	CC	DK	K	TBL,DIS,PBL	PUZ,QZ ,VV-Viva	F&S	II	-	NLHT6.5
CO1,	Discuss the etiopathogenesis, diagnosis along with principles of	CC	DK	K	DIS,TB	T-OBT,VV-	F&S	II	-	NLHT6.6

CO2, CO6	management in Raktaja Hridghaatah (Congestive Cardiac failure) and Hritpaatah (Cardiac arrest and conductive disorders of the cardia).				L,PBL	Viva,T-CS				
CO1, CO3	Explain the Samprapti vighatana, Chikitsa sutra incorporating the applicable Shadvidhopakrama in Aamavata (Rheumatoid Arthritis) **(SP11)**.	CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	II	-	LH
CO1, CO3	Design a treatment algorithm according to the stages of Shadkriyakala and construct a chikitsa yojana including Pathyapathya for Aamavata.	CS	MK	KH	L&PPT	T-OBT,T-CS	F&S	II	-	LH
CO1, CO3	State the Phalashruti, Sevana kala, Matra, and Anupana of the Aushadha yoga in Aamavata. • Panchakola kvatha • Amavatari rasa • Ajamodadi churna • Maharasnadi kvatha • Yogaraja guggulu • Simhanada guggulu • Eranda taila • Brihat saindhavadi taila	CK	MK	K	L&PPT	QZ ,T-OBT ,VV-Viva,PUZ	F&S	II	-	LH
CO1, CO3	Describe the Samprapti vighatana of Madatyaya and explain the Chikitsa-sutra along with Chikitsa, Pathya-apathya of Madatyaya.	CC	DK	K	L,L&PPT	VV-Viva	F	II	-	LH
CO1, CO3	State the Phalashruti, Aushadha sevana kala, Matra and Anupana of the following aushadha yoga in Madatyaya **(SQ20)** • Shrikhandasava • Kharjuradi mantha	CK	DK	K	L,L&PPT	VV-Viva	F	II	-	LH

	• Madiphala rasayana • Drakshadi kashaya • Ashtanga lavana									
CO2, CO5, CO6	Demonstrate the steps of Cardio Pulmonary Resuscitation (CPR) on a mannequin (Simulator) in a simulating laboratory.	PSY-MEC	MK	SH	W,D-M, SIM,PT	P-EXAM,Log book,SA,OSPE,CHK	F	II	-	NLHP6.1
CO1, CO2, CO3, CO6, CO7	Sketch a rational treatment prescription for the diagnosed case of Rasa pradoshaja vikara	PSY-GUD	MK	SH	D-BED, LRI,CD ,PER,PSM	DOAP,P-VIVA,CBA, CHK,CWS	F&S	II	-	NLHP6.2
CO1, CO2, CO3, CO6, CO7	Design a Chikitsa yojana for the clinical case of Rasa pradoshaja vikara.	PSY-GUD	MK	SH	CD,PER ,PSM,LRI,CBL	CBA,P-CASE,CWS ,RK,PP-Practical	F&S	II	-	NLHP6.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 6.1	An insight into Anuvanshika rakta vikara (Haematopoietic diseases) and their chikitsa.	**Presentation of e-posters/ posters/charts** The students gain an insight into the etiopathogenesis, morphological changes in the RBC, clinical diagnosis of Haematopoietic diseases along with their chikitsa through the activity of e-poster/poster/charts presentation. • The mentor allots the topics to a few students in class.

		• The students are instructed to collect adequate information and materials related to the topic by utilizing library facility and e-resources. • Student prepare e-posters/posters/ charts related to their topics. • On the day of presentation, the students are given a brief introduction on the topic by the mentor as a set induction. • It is followed by students presenting their e-posters/posters/charts during the alloted class. • All students involve in a discussion on the topics presented. • The students clarify their doubts with the presenter and the mentor. • The mentor gives the concluding remarks
NLHT 6.2	Leukemia and its treatment	**Oral presentation using Audio-visual aids** An audio-visual presentation on different varieties of Leukemia along with its treatment to have a gross understanding about the disease. • The mentor allots the topics to a randomly picked group of students on a prior date. • The students refer the related material utilizing institutional library facilities and e-resources and prepare their oral presentations using audio visual aids. • The students in the class are given a brief introduction on the topic by the mentor as a set induction on the day of presentation. • The students proceed with their oral presentations followed by a classroom discussion. • Students clarify their doubts with the presenter/ mentor. • The mentor gives the concluding remarks.
NLHT 6.3	Haemoglobinopathies	**Flipped classroom** • Students learn the varieties of etiopathogenesis, diagnosis, and treatment for Haemoglobinopathies. • The students learn and come prepared for the given topic. • The mentor gives an introduction about Haemoglobinopathies as a set induction. • Students discuss their views on the given topic and put forth their queries to the mentor.

		• The Mentor answers the queries and motivates a healthy interactive session. • The mentor concludes with an appreciation to the students for their interactive participation.
NLHT 6.4	Common Cardiovascular Diseases	**Making of charts/ Model making** Student learn to classify different Cardio vascular diseases and discuss about their treatment principles in brief, using charts and models. • Mentor introduces the topic and gives sufficient time for students to prepare the materials. • Students present charts/ models either individually or in groups. • Students are encouraged to discuss on the topic. • The Mentor concludes the topic.
NLHT 6.5	Diagnosis and treatment of Raktapravaha-hinata-janya hridroga with special reference to Coronary Artery Diseases	**Problem based learning/ Case scenario** Students are encouraged to recognise the abnormality in ECG and interpret the changes related to Coronary artery diseases and plan the suitable treatment. • The students are given a brief introduction to the topic by their mentor. • The mentor presents various case scenarios along with abnormal patterns of ECG. • The mentor discusses the probable diagnosis and possible treatment plans. • The students discuss in small groups and present their findings mentioning the treatment. • Finally Mentor concludes the topic.
NLHT 6.6	Diagnosis and management of Raktaja Hridghaatah and Hritpaatah (Congestive Cardiac failure, Cardiac arrest and Conductive disorders of the Cardia)	**Problem-based learning/ Case scenario** Students are encouraged to recognize the abnormality in ECG and interpret the changes related to Congestive Cardiac failure, Cardiac arrest, and Conductive disorders of the Cardia. Suitable planning of treatment is also studied. Refer to the steps mentioned in NLHT 6.5
Non Lecture Hour Practical		

S.No	Name of Practical	Description of Practical Activity
NLHP 6.1	Cardio Pulmonary Resuscitation (CPR) Description	**Workshop -** Hands on training program on CPR (Utilisation of 8 NLHP)) Preferable occasion shall be WORLD HEART DAY (If not possible, any convenient time in the given term must be utilised). • Students are made into small groups and sent to the simulation laboratory. • A pre-test analysis of students' knowledge on CPR is done by sharing a questionnaire to each student. • Demonstrator demonstrates the procedure of CPR on the mannequin. • Each student shall perform the CPR technique on the mannequin. • Student's skill evaluation is done by the mentor through any suitable assessment method like following OSPE stations. • A post-test analysis of students' knowledge on CPR is done by sharing a questionnaire to each student and compared with pre-test scores. • Remedial measures are suggested if needed.
NLHP 6.2	Short cases presentation in Rasa pradoshaja vikara	• Case taking, documentation and presentation of **short clinical cases** from any of the Rasa Pradoshaja Vikara, selected from the OPD of Kayachikitsa of the attached treatment hospital. • 2 short cases = 2 NLHP per batch • Type of cases to be selected: • Pandu Roga (Any variety), Hridroga, Hritshoola, Madatyaya, Uchcha raktachapa, Bhrama. • Requirement: Students must document and demonstrate a minimum of **2 short cases** per clinical batch in their clinical diary/ clinical observation book. Later short cases may be chosen from the list to document in the case record. • Refer the short case framework as in NLHP 5.1
NLHP 6.3	Long cases presentation in Rasapradoshaja vikara	• Case taking, documentation and presentation of **Long clinical cases** from any of the Rasa Pradoshaja Vikara, selected from the IPD of Kayachikitsa of the attached treatment hospital. (**3 Long cases = 6 NLHP per batch)** • Type of cases: Any variety of Pandu Roga, Aamavata, Hridroga, Hritshoola, Madatyaya

		• Requirement: Students must document and demonstrate a minimum of **3 Long cases** per clinical batch in their clinical diary/ clinical observation book. Later long cases may be chosen from the list to document into the case record. • Refer the Long case framework as mentioned in NLHP 3.1

Topic 7 Chikitsa of Rakta pradoshaja vikara (LH :22 NLHT: 11 NLHP: 18)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Explain the Chikitsa sutra of Rakta Pradoshaja vikara. Differentiate the Samprapti vighatana, Chikitsa sutra and chikitsa of Koshthashrita Kaamala with Shakhashrita Kaamala. **(SM41, SM42, SM43)**	CC	MK	K	L&PPT ,REC	T-OBT,VV-Viva	F&S	II	-	LH
CO1, CO3	Design a treatment algorithm for Koshthashrita Kaamala and Shakhashrita Kaamala as per the stages of Shadkriyakala. Describe the Chikitsa of Kumbha Kaamala, Halimaka (laaghavaka, alasa)	CS	MK	KH	L&PPT ,L,DIS	T-OBT,VV-Viva,P-VIVA	F&S	II	-	LH
CO1, CO3	Construct a Chikitsa yojana including the Pathyaapathya in Koshthashrita Kaamala & Shakhashrita Kaamala and state the Phalashruti, Aushadha sevana kala, Matra, Anupana of the Aushadha yoga in Kaamala roga. • Vasaguduchyadi kashaya • Patoladi kvatha • Yakrutplihari lauha • Arogayavardhini vati • Drakshavalehya • Mahatiktaka ghrita • Triphala kashaya	CAP	MK	KH	L&PPT	VV-Viva,T-OBT,WP	F&S	II	-	LH

CO1, CO2, CO6	Discuss the etiopathogenesis, diagnosis, principles of management of Yakrut shotha (Infective and Non-Infective Hepatitis)	CC	DK	K	PBL,L&GD,CBL	WP,VV-Viva,P-VIVA,QZ	F&S	II	-	NLHT7.1
CO1, CO2, CO6	Discuss the etiopathogenesis, diagnosis, and principles of management of Yakrutdalyodara/ Yakrutadhitantrujah (Liver cirrhosis) .	CC	DK	K	L&PPT	QZ ,VV-Viva	F&S	II	-	LH
CO1, CO2, CO6	Discuss the etio-pathogenesis, diagnosis and principles of management of Madyaatirek-janya yakrut-vikara (Alcoholic Fatty Liver Disease), Madyetar karana-janya yakrut-vikara (Non-Alcoholic Fatty Liver Disease -NAFLD) and Madyetar vasamaya-janya yakrut-shotha (Non-Alcoholic Steato-hepatitis -NASH).	CC	DK	K	CD,PER,PBL	QZ ,PUZ,WP	F&S	II	-	NLHT7.2
CO2, CO6	Describe the etiopathogenesis, diagnosis and principles of management of Yakrut koshakiya arbuda (Hepato cellular Carcinoma)	CC	DK	K	L&PPT	P-VIVA,VV-Viva	F&S	II	-	LH
CO1, CO3	Elaborate the Samprapti vighatana, Chikitsa sutra, Chikitsa and Pathyaapathya of Raktapitta and design a treatment algorithm for Raktapitta **(SL81)** according to the stages of Shadkriyakala .	CC	MK	KH	L&PPT	VV-Viva,QZ	F&S	II	-	LH
CO1, CO3	Construct a Chikitsa yojana including the Pathyaapathya in Vividha margagata Raktapitta	CAP	MK	KH	L&PPT	VV-Viva,P-VIVA	F&S	II	-	LH
CO1, CO3	State the Phalashruti, Aushadha sevana kala, Matra, Anupana of the Aushadha yoga in Raktapitta. • Vasa putapaka swarasa • Bolabaddha rasa • Lodhrasava • Vasaguduchyadi kashaya • Chandrakala rasa • Vasa ghrita	CK	MK	K	L&PPT	VV-Viva,T-OBT,QZ ,P-VIVA	F&S	II	-	LH

CO2, CO6	Discuss the etiopathogenesis, diagnosis, and principles of management of Raktaskandana sambandhi vikara (Coagulation disorders) and Vanshanugata adhiraktasrava pravrutti (Hereditary - Haemophilia)	CC	NK	K	PER,DIS	QZ ,VV-Viva,CL-PR	F	II	-	NLHT7.3
CO2, CO6	Discuss the etiopathogenesis, diagnosis and treatment of Uparjit ghanasra kosha nyunata (Acquired- Immune thrombocytopenia -ITP), Vyapak antah siradhamani raktaskandata (Disseminated Intravascular Coagulation -DIC)	CC	NK	K	PER,DIS	VV-Viva,QZ ,CL-PR	F	II	-	NLHT7.4
CO1, CO3	Explain the Samprapti vighatana, Avastha anusara (Uttana Gambheera) Chikitsa sutra of Vatarakta **(SP14)**	CC	MK	K	L&PPT ,REC	S-LAQ,P-VIVA,VV-Viva	F&S	II	-	LH
CO1, CO3	Design a treatment algorithm stating Samanya and Doshanusara chikitsa in Vatarakta according to Shadkriyakala.	CS	MK	KH	REC,L &PPT	P-VIVA,T-OBT,S-LAQ,VV-Viva,QZ	F&S	II	-	LH
CO1, CO3	Construct a Chikitsa yojana along with Pathyaapathya for Vatarakta	CAP	MK	KH	REC,L &PPT	QZ ,T-OBT ,P-VIVA,VV-Viva	F&S	II	-	LH
CO1, CO3	State the Phalashruti, Aushadha sevana kala, Matra, Anupana for the Aushadha yoga in Vatarakta • Kaishora guggulu • Amruta guggulu • Gruhadhumadi pralepa • Madhuyashtyadi taila • Pinda taila • Kokilakshadi kvatha	CK	MK	K	REC,L &PPT	VV-Viva,QZ	F&S	II	-	LH

CO1, CO2, CO6	Discuss the various clinical presentations of Gout and discuss the etiopathogenesis, diagnosis and principles of management of Gouty arthritis in parlance with Vatarakta.	CC	DK	KH	L&GD, DIS,PER,SDL	M-POS,VV-Viva	F&S	II	-	NLHT7.5
CO1, CO2, CO6	Describe the etiopathogenesis, diagnosis, principles of management of Parisariya sira dhamaniya vikara (Peripheral vascular disorders).	CC	NK	K	L&PPT	VV-Viva	F	II	-	LH
CO1, CO2, CO3	Illustrate the various Parisariya sira dhamaniya vikara (Peripheral vascular disorders).	CAP	NK	KH	BS,TPW,PER,TBL,DIS	M-CHT,VV-Viva,M-MOD	F	II	-	NLHT7.6
CO1, CO2, CO3	Explain the Samprapti vighatana, Samanya chikitsa and Vegakaleena chikitsa of Mada, Murchha and Sanyasa (SQ22, SP98).	CC	DK	K	L&PPT	VV-Viva	F	II	-	LH
CO1, CO3	Explain the Samprapti vighatana, Chikitsa sutra, Chikitsa of Visarpa.Design a treatment algorithm for it according to the stages of Shadkriyakala.Appraise the applicable Shadvidhopakrama in the Chikitsa of Visarpa (SN4T)	CC	MK	K	L&PPT,REC	T-OBT,VV-Viva,S-LAQ	F&S	II	-	LH
CO1, CO3	Construct a Chikitsa yojana along with Aushadha yoga and Pathyapathya in Visarpa.State the Phalashruti, Sevana kala, Matra, Anupana of the following Aushadha yoga in Visarpa • Mahatiktaka kashaya • Pravala pishti • Tiktaka ghrita • Amrutadi kvatha/kashaya • Shirisha lepa • Manjishthadi kashaya	CAP	MK	KH	L&PPT	T-OBT,VV-Viva,T-CS	F&S	II	-	LH

CO1, CO2, CO6	Discuss the various clinical presentations of Visarpa (Shingles, Erysipelas) along with their management.	CC	NK	K	PER,SDL,TBL, DIS	M-CHT,VV-Viva,M-POS	F	II	-	NLHT7.7
CO1, CO3	Explain the Samprapti vighatana, Chikitsa sutra, Samanya chikitsa and design a treatment algorithm for Kushtha and Kilasa according to the stages of Shadkriyakala (SN40, SN43, SN46, SN48, SN49, SN4A, SN4B SN4D, SN4P, SN4U)	CC	MK	K	REC,L &PPT	S-LAQ,VV-Viva	F&S	II	-	LH
CO1, CO3	Appraise the concept of repeated Shodhana and Bahirparimarjana Chikitsa in Kushtha. Outline the applicable Doshopakrama in Doshanusara chikitsa of Kushtha roga	CE	MK	KH	L&PPT	P-VIVA,CR-W,T-OBT,VV-Viva	F&S	II	-	LH
CO1, CO3	Construct a Chikitsa yojana with Pathyaapathya, Naimittika rasayana in Kushtha and Kilasa and state the Phalashruti, Aushadha sevana kala, Matra, Anupana of the Aushadha yoga in Kushtha • Patolamooladi kashaya • Khadirarishta • Madhusnuhi rasayana • Gandhaka rasayana • Panchatikta ghrita guggulu • Avalgujadi lepa • Marichadi Taila • Rasamanikya • Arogyavardhini vati • Tuvaraka rasayana	CAP	MK	KH	L&PPT	QZ ,VV-Viva,T-OBT, P-VIVA,T-CS	F&S	II	-	LH
CO1,	Compare the different types of Kshudra and Mahakushtha and	CAN	DK	KH	PER,TB	WP,P-POS,	F&S	II	-	NLHT7.8

CO3	discuss their treatment modalities.				L,SDL, PL,DIS	M-CHT,M-POS				
CO1, CO3	Compare the similarities and differences in the treatment of Sheetapitta, Udarda, Kota, Utkota, (SN4K, SN4L) construct a Chikitsa yojana (treatment plan) including the Pathyaapathya for these diseases and state the Phalashruti, Aushadha sevana kala, Matra, Anupana of the following Aushadha yoga- • Haridra khanda • Ardraka khanda • Eladi tailam • Eladi gana churna	CAN	MK	KH	L&PPT ,L	VV-Viva,T-CS	F&S	II	-	LH
CO1, CO2, CO6	Explain the etiopathogenesis, diagnosis, principles of management of Tvak vikara (Common dermatological conditions in clinical practice).	CC	DK	K	L&PPT	QZ ,PUZ,VV-Viva	F	II	-	LH
CO1, CO2, CO6	Review case reports from indexed journals on Tvak vikara.	CK	DK	K	DIS,IBL ,PER,SDL,PL	CR-RED	F	II	-	NLHT7.9
CO1, CO2, CO6	Discuss the diagnosis and treatment of the Tvak vikara - Tvak anurjatiya vikara (Allergic disorders of the skin, Atopic dermatitis-Eczyma, Urticaria), Shalkayukta tvak vikara (Squamous lesions) - Psoriasis, Shewalikabha tvak vikara (Lichen planus), Visphota (Bullous lesion), Udasphotanvika tvak vikara (Pemphigus and Pemphigoid lesions), Kavkad tvak vikara (mycotic skin diseases).	CC	DK	K	PER,TPW,PL,TBL,L&GD	PUZ,VV-Viva,QZ ,M-POS	F	II	-	NLHT7.10
CO1, CO2, CO6	Discuss the treatment of Galit Kushtha (leprosy), Shvitra (Vitiligo/ Leukoderma)	CC	MK	KH	TBL,PL ,D,DIS, PER	QZ ,VV-Viva	F&S	II	-	NLHT7.11

CO1, CO3	Explain the Samprapti vighatana and Chikitsa of Daha according to its types. Construct a Chikitsa yojana incorporating the applicable Doshopakrama and Pathyaapathya in Daha and state the Phalashruti, Aushadha sevana kala, Matra, Anupana of the Aushadha yoga in Daha • Mukta- shukti pishti • Guduchyadi Kashaya • Kamadudha rasa • Chinchadi lehya	CC	DK	K	L,L&PPT	VV-Viva	F&S	II	-	LH
CO1, CO2, CO3, CO6, CO7	Sketch a rational treatment prescription for the diagnosed case of Rakta Pradoshaja vikara.	PSY-GUD	MK	SH	PSM,LRI,CD, D-BED, CBL	P-EXAM,RK,P-REC,OSCE,P-VIVA	F&S	II	-	NLHP7.1
CO1, CO2, CO3, CO6, CO7	Design a Chikitsa yojana on demonstration of a clinical case of Rakta Pradoshaja Vikara	PSY-GUD	MK	SH	CBL,CD,PER, D-BED, LRI	OSCE,PM, DOPS,DOPS,VV-Viva	F&S	II	-	NLHP7.2
CO7	Associate with the purpose of commemorating the day of medical importance.	AFT-VAL	NK	K	FV	Log book	F&S	II	-	NLHP7.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 7.1	A diagnostic and treatment approach to Yakrut shotha w.s.r to Infective and Non-Infective	An approach to a patient presenting with peeta varnata, with an insight into Yakrut shotha (Hepatitis) and its management through case scenarios, Liver Function Test, and imaging techniques

	Hepatitis.	interpretations. • **Activity to be done**: **Case Scenario/Problem based learning** • The mentor introduces the approach to diagnosis using clinical features. • The students are divided into small groups. • The mentor gives a case scenario with LFT and/or USG reports to each group of students. • The students discuss the problem within their small groups and get ready for a presentation based on their interpretation. • The mentor guides each group through the approach of diagnosis and planning of the treatment after their presentation. • The mentor gives concluding remarks.
NLHT 7.2	An Insight into Yakrut vikara (common liver disorders) and their management	**Case Scenario/ Problem based learning** An approach to a patient with a diagnosis of Yakrut vikara and its management; learning the art of diagnosis and treatment through case scenarios and investigations interpretations. Refer the framework as mentioned in NLHT 7.1
NLHT 7.3	Disorders of Coagulation	**Oral presentation using Audio visual aids.** The students are selected to make an audio visual presentation on the etiopathogenesis, diagnosis, and principles of management of Raktaskanda sambandhi vikara (Coagulation disorders) and Vanshanugata adhiraktasrava pravrutti (Hereditary - Haemophilia). Refer to the description of the activity as in NLHT 6.2
NLHT 7.4	Acquired disorders of coagulation	**Oral presentation using Audio visual aids.** The selected students shall make an audio visual presentation on the etiopathogenesis, diagnosis and principles of management of Acquired- Immune thrombocytopenia and Disseminated Intravascular Coagulation which will be followed by a discussion. Refer the framework as in NLHT 6. 2

NLHT 7.5	Maladies and remedies of Gout with special reference to Vatarakta	P**resentation of e-posters/ posters** The students gain an insight into the various manifestations and clinical presentations of Gout including Gouty arthritis. A correlative study is made with special reference to Vatarakta (**SP14)** through the activity of e-poster/ poster presentations. Refer the framework as in NLHT 6.1
NLHT 7.6	Management of peripheral vascular disorders	**Brain storming and Making of Charts/ Models on Peripheral vascular disorders** An attempt will be made by the students to understand various Peripheral vascular disorders and their management. Students shall present their ideas through making of Charts/ models. • The mentor divides the students into small groups and instructs them to refer tutorials, library resources, reading materials on the given topic. • The students ponder on their ideas related to the topic. • The student groups are instructed to present their knowledge and ideas on the clinical aspects including treatment modalities of Peripheral vascular diseases by preparing charts/ models. • The mentor encourages the activity and gives concluding remarks.
NLHT 7.7	Contemporary understanding of Visarpa along with its management	P**resentation of e-posters/posters/charts** The students gain an insight into the clinical presentation of Shingles, Erysipelas through the activity of e-poster/ poster presentations/ Charts. Refer the framework as in NLHT 6.1
NLHT 7.8	Kushtha bheda and doshahara chikitsa	**E-Poster presentation** Comparison of the different types of Kshudra and Mahakushtha with their treatment descriptions using the principles of Doshopakrama. Refer, as mentioned in NLHT6.1
NLHT 7.9	Article review on Tvak vikara	**Journal reading and presentation**

		The students are expected to select and present case reports/ research articles/ review articles on Tvak vikara from peer reviewed indexed journals. • Students are divided into small groups. • Each group is directed to utilise library resourses and search for peer reviewed indexed journals to find a case report/ research article/ review article published on Tvak vikara. • Each team presents one article during the class hour. • The mentor teaches the students how to review a scientific/research article. • The mentor summarises the presentations and concludes with remarks.
NLHT 7.10	Diagnosis and treatment of Tvak vikara (Common Dermatological conditions in clinical practice)	**Photography presentation** Comparison of the different types of Tvak vikara with their treatment descriptions - Tvak anurjatiya vikara (Allergic disorders of the skin, Atopic dermatitis-Eczyma, Urticaria), Shalkayukta tvak vikara (Squamous lesions) - Psoriasis, Shewalikabha twak vikara (Lichen planus), Visphota (Bullous lesion), Udasphotanvika tvak vikara (Pemphigus and Pemphigoid lesions), Kavkad tvak vikara (mycotic skin diseases) • The students are divided into small groups and instructed to click photographs of available types of Tvak vikara in the attached hospital; after taking informed consent of patients and following clinical ethics guidelines. • The students present their prepared material during an allotted class hour. • The mentor supervises the photograph presentations made by the students. • The mentor evaluates the presentations made by the various teams of students. • The mentor concludes the activity with remarks on the topic and activity
NLHT 7.11	Diagnosis and treatment of Leprosy and Vitiligo/Leukoderma	**Oral presentation using Audio visual aids** Few students are selected to make an oral presentation using audio visual aids on the diagnosis and treatment of Leprosy and Vitiligo/ Leukoderma. Refer framework as in NLHT 6.2

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 7.1	Short cases presentation in Rakta Pradoshaja Vikara	**Short Case taking** Case taking, documentation, and presentation of **short clinical cases** from any of the Rakta pradoshaja vikara, selected from the OPD of Kayachikitsa of the attached treatment hospital. (2 short cases = 2 NLHP per batch) Type of cases- Koshthashrita Kamala/ Nasagata raktapitta/ Uttana Vatarakta/ Gambhira vatarakta/ Siraja granthi/ Sheetapitta/ Udarda/ Kota/ Kushtha (any variety)/ Kilasa/ Visarpa (any variety) Requirement: Students must document and demonstrate a minimum of **two Short cases** per clinical batch in their clinical diary/ clinical observation book. Short cases may be chosen from this list to document into the case record. Refer short case framework as mentioned in NLHP 5.1
NLHP 7.2	Long cases presentation in Rakta Pradoshaja Vikara	**Long clinical case taking**: Case taking, documentation and presentation of **Long clinical cases** from any of the Rakta pradoshaja vikara, selected from the IPD of Kayachikitsa of the attached treatment hospital. (5 Long cases = 10 NLHP per batch)) Type of cases to be selected - Koshthashrita Kamala/ Shakhashrita Kamala/ Haleemaka/ Kumbha Kamala/ Raktapitta (any marga)/ Uttana Vatarakta/ Gambhira Vatarakta/ Sheetapitta/ Kushtha (any variety)/ Visarpa (any variety). Requirement: Students must document and demonstrate a minimum of 5 Long cases per clinical batch in their clinical diary/ clinical observation book. Cases may be chosen from the list to document in the case record. Refer the long case framework as mentioned in NLHP 3.1
NLHP 7.3	Commemoration of day of medical importance	**Public awareness program:** Commemoration of World Liver Day **OR** World Hepatitis Day by a public awareness activity. (If not, any convenient time in the given term can be utilised).

		Utilization of 6 NLHP hours Organize an **outreach activity** for public awareness - Awareness and sensitization resource talk along with a medical camp for the local population involving the students in the activity.

Topic 8 Chikitsa of Kshudra roga (LH :2 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO3, CO6	Identifying the following Kshudra roga and explain their treatment :Yavaprakhya (SN5Y), Andhalaji (SN5Y), Vivritta (SN5Y), Kacchapika(SN9Y), Indravriddha, Gardabhi, Jalagardabha (SM0Y), Irivellika (SN5Y), Gandhanama (SN5Y), Kaksha (SN4T), Visphotaka (SN4P), Agnirohini, Vidarika (SP9Y), Sharkararbuda (SP71), Pama (SN46), Vicharchika (SN43), Rakasa (SN40), Padadari, Alasa (SN48), Masurika, Tilkalaka (SN4E), Masaka (SN4H), Nyaccha (SN5Y), Vyanga (SN4G), Nilika (SN41)	CC	DK	KH	L&PPT ,L_VC	QZ ,VV-Viva	F&S	III	-	LH
CO1, CO2, CO3, CO6	Identifying the following Kshudra roga and explain their treatment :Ajagallika (SN5Y), Valmika (SN5Y), Panasika, Pashanagardabha (SM1D), Chippa, Kunakha (SN6Y), Anushayi (SP9Y), Kadara (SN9Y), Indralupta (SN90), Darunaka (SN91), Arumshika (SN70), Palitya, Yuvanpidika (SN4V), Padminikantaka (SN5Y), Jatumani (SN4F), Charmakeela, Parivaritika (SN0A), Avapatika, Niruddhaprakasha (SN0A), Sannirudhaguda (SM5Y), Ahiputana (SN5Y), Vrishanakacchu (SN40) & Gudabhramsha (SM55).	CK	NK	K	L&PPT ,L_VC	VV-Viva,QZ	F	III	H-SH,H-KB	LH
CO1, CO2, CO3, CO6	Recognize the Kshudra roga and describe its Chikitsa	CK	DK	K	SDL	M-POS,QZ ,VV-Viva, M-CHT	F	III	-	NLHT8.1

CO1, CO2, CO3, CO6, CO7	Demonstrate a short case on Kshudra roga and write an OPD prescription of the diagnosed case.	PSY-SET	DK	SH	CBL	VV-Viva,P-CASE	F	III	-	NLHP8.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 8.1	Photography competition to familiarize the students with diagnosis and treatment of Kshudra roga.	Self-Directed Learning • The mentor announces the photography competition on Kshudra roga. • Students are asked to take the photograph of cases of Kshudra roga patients after seeking written consent of patient and following guidelines of clinical ethics. • Students compile the photograph and prepare chart/poster specifying the diagnosis and treatment of the photographed case. • Students display their chart/poster on the day of competition. • Mentor declares the winner.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 8.1	Clinical case study on Kshudra roga.	Case Based Learning(2 NLHP) Refer the case taking framework as described in NLHP 4.1

Topic 9 Chikitsa of Mamsapradoshaja and Medopradoshaja vikara (LH :8 NLHT: 2 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Describe the Samanya chikitsa of Mamsapradoshaja vikara (SR52) and Medopradoshaja vikara (SR53) and explain the Vishesha chikitsa of Gandamala (SL08) and Galaganda (SL0Y) with its types	CK	MK	K	L,L&PPT	QZ ,PRN,CL-PR	F&S	III	-	LH
CO1, CO3	Summarize the etipathogenesis, diagnosis and principles of management of Galaganda (Goitre) (SL0Y) and state the Phalashruti, Matra, Anupana, and Sevana kala of the following Yoga • Kanchanara guggulu • Tiktaka ghrita • Mahatikta ghrita • Amritadi taila • Hamsapathyadi kashaya	CC	DK	K	L&PPT,L	PRN,QZ	F	III	-	LH
CO1, CO3	Explain the Samprapti vighatana, Chikitsa sutra, Chikitsa of Arbuda(SP72).and Apachi	CC	DK	K	L&PPT,L	QZ ,PRN	F&S	III	-	LH
CO1, CO3	Review the etiopathogenesis, diagnosis, principles of management and ayurvedic perspective of neoplasm and discuss the undesirable(untoward) effects of radiotherapy & chemotherapy in cancer management with the role of ayurvedic management as supportive/adjuvant therapy based on principles of Anukta roga chikitsa	CC	NK	K	L_VC,L&PPT,L	PRN,QZ	F	III	-	LH
CO1, CO3	Develop the Samprapti vighatana, Chikitsa sutra, Chikitsa, and Pathyaapathya for Shosha (SP2Y) and Karshya (SP61)	CS	MK	KH	L_VC,L,L&PPT	QZ ,PRN	F&S	III	-	LH

CO1, CO3	Describe Samprapti vighatana, Chikitsa sutra, Chikitsa yojana along with Pathyaapathya of Sthoulya	CC	MK	K	L,L&PPT ,L_VC	QZ ,PRN	F&S	III	-	LH
CO1, CO3	Explain Samprapti vighatana, Chikitsa sutra and Chikitsa yojana along with Pathyaapathya of Prameha (SM8D) and design a treatment algorithm for Prameha according to its stages of Shadkriyakala	CC	MK	K	L&PPT ,L_VC, L	QZ ,PRN	F&S	III	-	LH
CO1, CO3	Plan the treatment according to the status of Ojus in Madhumeha and discuss the etiopathogenesis, diagnosis,principles of management of Diabetes mellitus (SP60)	CS	MK	KH	L&PPT ,L_VC, L	PRN,QZ ,CL-PR	F&S	III	-	LH
CO1, CO3	State the Phalashruti, Matra, Anupana, and Sevana kala of Aushadha yoga in Sthoulya (SP64) and Prameha	CK	DK	KH	DIS,REC,L&GD,PER, TBL	CL-PR,O-QZ,PRN,QZ	F&S	III	-	NLHT9.1
CO1, CO2, CO3	Discuss the etiopathogenesis, diagnosis and principles of management of Medapachaya (Dyslipidaemia) (SP62) and Sthoulya (obesity)(SP64)	CC	NK	KH	PER,DIS,BL,L&GD	PRN,QZ	F	III	-	NLHT9.2
CO1, CO3, CO5	Demonstrate the Chikitsa yojana & prepare case record in cases of given Mamsavaha and Medovaha srotas vikara after performing relevant clinical examination	PSY-MEC	MK	KH	LRI,D-BED,CBL,PBL ,PT	PP-Practical,OSCE,PRN,VV-Viva ,P-VIVA	F&S	III	-	NLHP9.1
CO1, CO3, CO5	Commemoration of International days	PSY-MEC	NK	KH	DIS,RLE,KL,BS,RP	PRN,INT	F	III	-	NLHP9.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 9.1	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha yoga for Sthoulya and Prameha	**Group Discussion and Team based learning** The students are divided in groups of 3-5 students • Each Group is allotted Aushada yogas from the given yoga • Navaka guggulu • .Vidangadi lauha, • .Shiva gutika • Ayaskriti • Trimurti rasa • Nishakatakadhi kashayam • Chandraprabha vati, • Vasant Kusumakar rasa • Phalatrikadhi kasayam(Prameha adhikara) • .Asanadi kashayam • Students refer and compile the material from library sources and prepare a presentation • Each group will present the allotted topic in class • Students will be encouraged to interact with the presenter under the supervision of the mentor • Mentor gives concluding remarks on the topic
NLHT 9.2	Detailed understanding of dyslipidemia and Obesity and its ayurvedic management	**Blended learning** • Students are given online learning material like description of the internet links and scientific articles • Students are divided into various small groups, and they will be allotted topic related dyslipidemia and Obesity • Mentor gives an introduction to the topic as a set induction • Each group is asked to do a presentation related to the topic given • Group discussion will be followed • Mentor answers the queries raised by students • Mentor gives concluding remarks on the presentations

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 9.1	Bedside case taking of of Galaganda / Gandamala /Sthoulya / Karshya/ Prameha	Interpretation of the blood, and imaging reports of patients in IP related mamsa- medovaha srotas and its avasthika chikitsa. Students are asked to take cases in the IPD **(5 Hours**) (2 long casesX2 hours = 4 hours) each batch and one other activity **Demonstration Bedside** Refer case taking framework as described in NLHP3.1 use for details **Group Discussion/Class Presentation(1 Hour)** • The students are divided in groups of 3-5 students • Each group is allotted topics related to blood, urine examination and imaging reports in specific disease related to mamsa- medovaha Srotas • they will go through various sources and prepare a presentation. • Each group will present its presentation in class. • Other students will be free to ask the questions and presenting team will answer queries. • Group discussion will be proceeded • Mentor gives concluding remarks.
NLHP 9.2	Public awareness activity related to World cancer day / Obesity Day/Diabetes Day	World cancer day / Obesity Day/Diabetes Day (Any one)**(3 hours)** **Kinesthetic learning**-The students are asked to make posters on various aspect of the illness and do an exhibition of the same for the public OR **Role play**-The students are encouraged to perform a role play depicting the importance of prevention of these diseases and swift action on witnessing the early symptoms. OR **Public outreach program**-Conduct a survey among the public to assess the susceptibility of cancer/ Obesity /Diabetes and educate them about the same. OR Organize a rally to create awareness about Prevention OR conduct medical camps for these disease Prepare a report with a Geotagged photograph

Topic 10 Shuddha-Ashuddha chikitsa, Chikitsajanita vikara (LH :1 NLHT: 2 NLHP: 2)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2, CO3	Paraphrase Shuddha - Ashuddha chikitsa & Explain Iatrogenic Disease	CC	MK	KH	L&PPT ,PER	VV-Viva,COM,T-OBT,Log book	F&S	III	-	LH
CO1, CO2, CO3	Develop a protocol for the general principles of Drug administration to prevent Iatrogenic DiseasesAssess the benefits of Shuddha chikitsa & ill effects of Ashuddha chikitsa	CS	DK	KH	PBL,DIS,SIM, BS,IBL	P-CASE,PRN,P-EXAM,DEB,P-VIVA	F	III	-	NLHT10.1
CO1, CO2, CO3	Integrate the treatment protocol of Drug induced Iatrogenic Disease in the given case	AFT-SET	MK	SH	SDL,D-M,SIM, LRI,CBL	WP,P-EN,P-VIVA,P-CASE,SP	F&S	III	-	NLHP10.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 10.1	Identifying the occurrence of Iatrogenic Disease & assessment of the benefits of Shuddha chikitsa & ill effects of Ashuddha chikitsa	Students demonstrate in a blended learning the occurrence of Iatrogenic disease in the given simulation & Students are able to understand the knowledge of Shuddha & Ashuddha chikitsa through a debate. 2 activities x 1 hour each = 2 hours • The students are given a brief introduction by the Mentor about Shuddha & Ashuddha chikitsa • The mentor assigns a simulation based scenario to students to demonstrate the occurrence of Iatrogenic disease • Student collects information from different sources and discusses on the given topic. • The Mentor encourages the other students in the classroom for framing the guidelines for prevention & treatment of iatrogenic diseases

		• The mentor divides the students into two groups allotting benefits of Shuddha chikitsa & ill effects of Ashuddha chikitsa to respective groups • Each group is instructed to search study material on the given topic, students discuss and debate their respective topics • Post debate, the mentor evaluates the points presented during debate by the students. • The Mentor discusses aspects of Shuddha-ashuddha chikitsa and gives concluding remarks.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 10.1	Chikitsa yojana for Drug induced Iatrogenic Disease	Student will be able to plan a Chikitsa yojana in the given case of Drug induced Iatrogenic Disease. Case based learning - 2 Short cases x 1 hour = 2hours per batch The Mentor takes students to the ward/OPD of Kayachikitsa & assigns a case of Ashuddha chikitsajanya Iatrogenic disease. Mentor shows the art of writing a rational treatment prescription and documenting it in the following steps: • The students shall introduce self to the patient and take verbal consent. • The students shall interrogate the patient and document the clinical history. • The students further brief the patient about the steps in examination that will be performed on him/her. • The students perform the relevant clinical examinations adopting the Ayurvedic and conventional clinical methods of examination of the involved system • The available investigation reports are interpreted by the students. • The students interpret the collected information and state the vyadhi nama (arrive at a tentative clinical diagnosis) following the method of vyavachedaka nidana (differential diagnosis) • The students determine the sadhyaasadhyata (prognosis) of the disease in the patient. • The students formulate a rational treatment prescription for the diagnosed disease & plan the nidan parivarjan for the drug induced disease . • The students recommend pathyaapathya to the patient. • Finally, the students address the doubts of the patient & acknowledge his/her cooperation in

		the case taking. • The students present and discuss the documented short case. • The mentor facilitates the case presentation. • The mentor evaluates the student's performance, knowledge, psychomotor and communication skills using rubrics or checklist and gives the feedback. • Remedial measures should be implemented if found necessary.

Paper 2 (Vyadhi Vishesha Chikitsa - 2)

A3 Course out come	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/sub	D3 MK / DK / NK	E3 Level	F3 T-L method	G3 Assessment	H3 Assessment Type	I3 Term	K3 Integration	L3 Type
Topic 11 Chikitsa of Vatavyadhi (LH :16 NLHT: 6 NLHP: 26)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO3	Detail the Chikitsa sutra, Chikitsa, and role of Sneha sweda in Nirupastambhita Vatavyadhi.	CC	MK	K	L&PPT	VV-Viva,T-CS	F&S	I	-	LH
CO1, CO3	Describe the Chikitsa and the role of Shodhana in Upastambhita vata.	CC	MK	K	L&PPT	T-CS,S-LAQ,VV-Viva	F&S	I	-	LH
CO1, CO3	Summarize the Samprapti Vighatana, Chikitsa sutra & Chikitsa of Akshepaka vyadhi	CC	MK	K	L&PPT	VV-Viva,T-CS	F&S	I	-	LH
CO1, CO3	• Describe the Samprapti vighatana, Chikitsasutra of snayugata vata • Construct Chiktsayojana including Rasayana and Pathyaapathya of Snayugatavata	CAP	MK	KH	L&PPT	VV-Viva,T-CS	F&S	I	-	LH

CO1, CO3, CO4	Explain the Samprapti vighatana, Chikitsa sutra, Chikitsa of Pakshaghata(SK22)	CC	MK	KH	L&PPT	VV-Viva,T-CS	F&S	I	-	LH
CO1, CO3, CO4	Explore the Chikitsa Yojana including Rasayana & Pathyaapathya of Ekangavata, Sarvanga vata &Sarvanga roga	CAP	MK	KH	L&PPT	CBA,T-CS, S-LAQ,T-OBT	F&S	I	-	LH
CO1, CO3	Describe the Samprapti vighatana , Chikitsa sutra and chikitsa of Jihwastambha	CC	MK	KH	L&PPT	T-OBT,VV-Viva,T-CS	F&S	I	-	LH
CO1, CO2, CO3, CO4	Detail the Samprapti Vighatana, Chikitsa sutra and Chikitsa of Ardita (Bell's Palsy) and Construct chikitsa yojana including Rasayana & Pathyaapathya	CAP	MK	KH	L&PPT	T-CS,T-OBT,VV-Viva	F&S	I	-	LH
CO1, CO3	Express the Samprapti Vighatana, Chikitsa sutra & Chikitsa of Manyastambha	CC	MK	K	L&PPT	T-CS,VV-Viva,T-OBT	F&S	I	-	LH
CO1, CO3	Describe Samprapti vighatana, Chikitsa sutra, Chikitsa, of Vishwachi(SK51)	CC	MK	K	L&PPT	T-OBT,T-CS,VV-Viva	F&S	I	-	LH
CO1, CO3	Explain Samprapti vighatana, Chikitsa sutra, and Chikitsa of Avabahuka(SK15)	CC	MK	K	L&PPT	VV-Viva,T-CS,T-OBT	F&S	I	-	LH
CO1, CO2, CO3, CO4	Describe the Etiopathogenesis,Diagnosis , Samprapti Vighatana, Chikitsa sutra, Chikitsa of Gridhrasi (Sciatica)(SP20) and Construct the Chikitsayojana including Rasayana and Pathyaapathya.	CAP	MK	KH	L&PPT	T-CS,T-OBT,VV-Viva	F&S	I	-	LH
CO1, CO3,	Derive Samprapti vighatana, Chikitsa sutra ,Chikitsa of Khanja (SK2Y) ,Kalaya khanja Pangu(SK21) and Construct Chikitsa	CAP	MK	KH	L&PPT	T-CS,VV-Viva	F&S	I	-	LH

CO4	yojana including Rasayana & Pathyapathya.									
CO1, CO3, CO4	Explain Samprapti vighatana, Chikitsa sutra, Chikitsa of Padadaha (SK51) and Padaharsha(SK54) and Construct Chikitsa yojana including Rasayana & Pathyapathya.	CAP	MK	K	L&PPT	T-CS,VV-Viva,T-OBT	F&S	I	-	LH
CO1, CO3	Outline Samprapti vighatana, Chikitsa sutra ,Chikitsa of Kaphavruta vata, Medogatavata and Medoavruta vata	CK	DK	K	L&PPT	T-CS,T-OBT	F&S	I	-	LH
CO1, CO2, CO3	Elaborate the Etiopathogenesis, Diagnosis and Ayurvedic Perspective including principles of Managemnet of Parisareeya nadi shotha(Peripheral Neuropathy)	CC	DK	K	L&PPT ,L_VC	T-OBT,T-CS,VV-Viva	F&S	I	-	LH
CO1, CO3	Discuss Samprapti vighatana, Chikitsa sutra & Chikitsa of Urustambha(SP 46)	CC	MK	K	REC,SY ,BS,IBL ,DIS	T-CS,VV-Viva,T-OBT	F&S	I	-	NLHT11.1
CO1, CO3, CO4	Discuss the Samprapti Vighatana, Chikitsasutra and Chikitsa of Udavarta(SM35) & Construct the Chikitsayojana including Rasayana and Pathyaapathya	CAP	MK	K	TBL,IBL,LS,PSM,DIS	SA,VV-Viva,QZ ,T-CS,CL-PR	F&S	I	-	NLHT11.2
CO1, CO2, CO3	Summarize the Etiopathogenesis, Diagnosis, and Ayurvedic perspective and principles of Management of Guillain- Barre Lakshana samuchchaya (Guillain- Barre syndrome), Ajnavaha nadikosha vikara (Motor Neuron Disease), Anuprasthiya-sitamajjachadda -shotha (Transverse Myelitis), Peshi dourbalya (Myasthenia Gravis)	CC	DK	K	EDU,FC,DIS	T-CS,T-OBT,VV-Viva	F&S	I	-	NLHT11.3
CO1, CO2, CO3	Differentiate between the various types of Strokes and apply the treatment principles of Vatavyadhi and Pakshaghata in its management	CC	MK	K	CBL,SDL,EDU,FC,TBL	T-OBT,T-CS,VV-Viva	F&S	I	-	NLHT11.4
CO1, CO2, CO3	Discuss the Chikitsa sutra of Gata vata	CC	MK	K	PER,DIS	T-OBT,VV-Viva	F&S	I	-	NLHT11.5

CO1, CO3, CO4	Sketch the importance of Antahparimarjana and Bahirparimarjana chikitsa in Vata vyadhi	CAP	MK	KH	TPW,PBL,DIS	VV-Viva,C-INT,PUZ,QZ	F&S	I	-	NLHT11.6
CO1, CO2, CO3, CO6, CO7	Demonstrate the Chikitsa yojana & prepare case record in cases of Vatavyadhi after performing relevant contemporary and Ayurveda clinical examination.	PSY-MEC	MK	SH	D-BED	CBA,C-INT,VV-Viva,INT,OSCE	F&S	I	-	NLHP11.1
CO1, CO3	Select the Matra, Sevana kala and Anupana in various clinical condition of Vatavyadhi (Any 10-yoga mentioned in Vatavyadhi adhikara of classical texts)	AFT-RES	DK	KH	D-BED,CBL,SDL,IBL,DA	QZ ,O-QZ,VV-Viva	F&S	I	-	NLHP11.2
CO1, CO2, CO3, CO6, CO7	Assess the importance of commemorating International Day on Stroke	AFT-RES	NK	SH	RLE,EDU,RP	DEB,QZ	F	I	-	NLHP11.3
CO1, CO2, CO3, CO5, CO6, CO7	Assess the importance of commemorating International Day on Arthritis	AFT-RES	NK	SH	EDU,D	QZ	F	I	-	NLHP11.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 11.1	Symposium on Urustambha	Symposium

		• The entire class is divided into a small group • Each group is allotted various aspects of Urustambha and its management like NIdana, Samprapti, Contemporary diagnostic approach, Treatment principle, Dravya chikitsa, and Adravya chikitsa • One person from each group is asked to do a presentation • Followed by a group discussion • Faculty moderate the Discussion and a senior faculty gives concluding remarks • Evaluation is done using quiz.
NLHT 11.2	Understanding of Udavarta and its application	Team-based learning and Library Session • Initially, the mentor gives a basic introduction to Udavarta • Each team is asked to analyze the role of Udavarta in Various systems like Neurology, gastroenterology, Ophthalmology, Psychiatry, Anorectal conditions, Respiratory disorders • To gather information, they are given a Library session • Each team does a presentation on their respective topic • Followed by Discussion and Quiz
NLHT 11.3	Detailed understanding of Guillain- Barre Lakshana samuchchaya (Guillain -Barre syndrome),Ajna Nadi Vikara (Motor Neuron Disease),,Anuprasthiyasitamajjachadda shotha (Transverse Myelitis),Peshi dourbalya (Myasthenia Gravis)	Flipped classroom • The topic is given and they are asked to prepare notes on etiopathogenesis, ayurvedic perspective, and management from medical books and online scientific articles(shared by mentor) • The next day the students are divided into groups and engage in group discussions. • Mentors facilitate the discussion and students are encouraged to ask questions • Mentors give answers to the queries • Evaluation is done by Quiz and Presentation
NLHT 11.4	Understanding of Cerebrovascular Accident and its management	Blended learning

		• Students are given online learning material (video link) and scientific articles • Students are divided into various small groups and they will be allotted topics related to CVA such as Circle of Willis, Ischemic stroke, Hemorrhagic Stroke, Stroke with Aphasia, and Cranial nerve lesions associated with stroke. • Mentor gives an introduction about the topic as a set induction. • Each group is asked to do a presentation related to the given topic. • The presentation is followed by a group discussion • The Mentor clarify the doubts. • Assessment is done using a quiz
NLHT 11.5	Gata vata Chikitsa	Class Presentation • Small groups of students are allotted different topics on gata vata • Student groups are asked to do a Presentation on their topic • Followed by a discussion on the Utility of gatavata chikitsa and its Clinical application • Evaluation is done using a quiz
NLHT 11.6	Chikitsa yojana in Vatavyadhi	Problem based learning • Students are divided into groups • Each group is given a case scenario • Group members discuss the problem and formulate a treatment protocol with special reference to Antahparimarjana and Bahirparimarjana Chikitsa and its rationale. • The mentor clarifies the doubts and modifies the protocol if needed • Evaluation is done using a quiz
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 11.1	Bedside casetaking of Pakshagatha, Ardita,	Refer Activity description 3.1 (total 16hrs)

	Avabahuka/Viswachi,Kampavata, Gridhrasi, Manyasthmba,Khanja/ Pangu, Padadaha/ Padaharsha	
NLHP 11.2	Selection of appropriate Aushadhi in Vatavyadhi	PBL & Real-life Experience (2hours) Students go through the IP Case sheet and OP prescription and interact with the patient and assess the Vyadhyavastha and follow up with the patient. • Students are divided into groups and each group is assigned two or three Yoga from the given list. Gandharvahastadi kashaya Ashtavargam kashaya Dhanadanayanaadi kashaya Sahacharaadi kashaya Prasarinyaadi kashaya Trayodashanga guggulu Mahayogaraja guggulu Rasna guggulu , Shaddharana choorna Ekangaveera rasa Bruhat vata chintamani rasa Bala taila Prasarinyaadi tailam Karapasasthyaadi taila, Vishagarbha taila Karpooradi taila Ksheerabala taila Dhanwantaram taila (avarti) Mahamasha taila

		• They do a project based on the respective Yoga . • They visit the Hospital dispensary to get acquainted with the medicine. • Followed by a class presentation. • The teacher answers the queries raised by the students on various aspects of drug administration. • The Evaluation is done using a quiz.
NLHP 11.3	Commemoration of World Stroke Day	Role play/Making of posters/Real life experience The students are asked to make posters on various aspects of the illness and do an exhibition of the same OR The students are encouraged to perform a role-play depicting the importance of prevention of disease using the ayurvedic principles and swift action on witnessing the early symptoms. OR Survey the public to assess the susceptibility of Stroke and educate them about the same. OR Conduct a rally to create awareness about Prevention/ conduct a medical camp Prepare a report with a Geotagged Photograph At the end, the students will be analyzed using a quiz,
NLHP 11.4	Commemoration of World arthritis day	(4hrs) The students are asked to make posters on various aspects of the illness and do an exhibition of the same OR The students are encouraged to perform role-play that depicts the importance of disease prevention using Ayurvedic principles and swift action when witnessing early symptoms. OR Survey the public to assess the susceptibility of Arthritis and educate them about the same. OR

		Conduct a rally to create awareness about Prevention/ conduct a medical camp Prepare a report with a Geotagged Photograph At the end, the students will be analyzed using a quiz.

Topic 12 Chikitsa of Asthi-Majja pradoshaja vikara (SR54) (SR55) (LH :8 NLHT: 4 NLHP: 11)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4	• Express the Chikitsa sutra of Asthivaha and Majjavaha srotodushti and Asthi kshaya. • Construct the Chikitsayojana including Rasayana and Pathyaapathya of Asthisoushirya	CS	MK	KH	REC,L &PPT	S-LAQ,SA, T-CS,T-OBT	F&S	II	-	LH
CO1, CO3, CO4	Compile the Samprapti vighatana, Chikitsa Sutra & Chikitsa of Sandhigata vata (SP12) and Construct a Chikitsa yojana including Rasayana and Pathyapathya	CS	MK	KH	REC,L &PPT	T-OBT,T-CS,VV-Viva	F&S	II	-	LH
CO1, CO2, CO3, CO4	• Explain the Samprapti Vighatana, Chikitsa sutra, and Chikitsa Yojana, including the Rasayana and Pathyaapathya of Vatakantaka(SP4Y). • Summarize the Etiopathogenesis, Diagnosis, and	CC	MK	KH	L&PPT	QZ ,T-CS,T-OBT,S-LAQ,CL-PR	F&S	II	-	LH

	Ayurvedic Perspective of Plantar fasciitis/Calcaneal Spur									
CO1, CO3, CO4	Explore the Samprapti vighatana, Chikitsa sutra & Chikitsa of Kateegraha(SP42) andConstruct a Chikitsa yojana including Rasayana and Pathyapathya	CAN	MK	KH	L&PPT	T-CS,VV-Viva	F&S	II	-	LH
CO1, CO2, CO3	Describe the Samprapti vighatana Chikitsa sutra & Chikitsa of Greevagraha(SP45) andGenerate the Chikitsa yojana including Rasayana and Pathyaapathya	CS	MK	KH	L&PPT	T-CS,VV-Viva	F&S	II	-	LH
CO1, CO3, CO4	Explore the Samprapti vighatana Chikitsa sutra & Chikitsa of Kroshtuka sheersha andDevelop the Chikitsa yojana including Rasayana and Pathyaapathya	CS	MK	KH	L&PPT	VV-Viva,T-CS	F&S	II	-	LH
CO1, CO2, CO3, CO4	Describe the Etiopathogenesis, Diagnosis, Ayurvedic perspective and Principles of management of Osteoporosis(SP00) and Osteopenia	CC	DK	KH	L&PPT	VV-Viva,T-CS,T-OBT	F&S	II	-	LH
CO1, CO2, CO3, CO4	Detail the Etiopathogenesis, Diagnosis, Ayurvedic perspective and Principles of management ofRaktaheenatajanya dhatunasha(AvascularNecrosis)	CC	DK	KH	L&PPT	T-OBT,T-CS,VV-Viva	F&S	II	-	LH
CO1, CO2, CO3, CO4	Consolidate the Etiopathogenesis, Diagnosis, Ayurvedic perspective, and Principles of management of Sandhi gatavata(Osteoarthritis(SP12)) and Construct a Chikitsa yojana based on Ayurvedic principles	CS	MK	KH	DIS,IBL,FC	T-OBT,T-CS,VV-Viva	F&S	II	-	NLHT12.1
CO1, CO2, CO3	Summarize the Etiopathogenesis, Diagnosis, Ayurvedic perspective and Principles of management of Kasheruka vyadhi(Spondylopathies) and Kateeshoola (Lumbago)	CC	DK	KH	TBL	T-OBT,VV-Viva	F	II	-	NLHT12.2

CO1, CO2, CO3, CO4	Construct the Chikitsa yojana based on the interpretation of various investigations utilized in the diagnosis of Asthimajjavaha srotodushti vikara	CAP	DK	K	TUT,X-Ray,DIS,IBL,LRI	QZ ,CL-PR,PUZ	F&S	II	-	NLHT12.3
CO1, CO2	Discuss the Etiopathogenesis, Diagnosis, Ayurvedic perspective and Management of Asthisankatarbuda(Osteosarcoma)	CC	DK	K	PER	CL-PR,QZ	F	II	-	NLHT12.4
CO1, CO2, CO3, CO6, CO7	Demonstrate the Chikitsa yojana including Rasayana and Pathyaapathya & prepare the case record of Asthivahasrothodushti vikara after performing a relevant clinical examination.	PSY-MEC	MK	SH	D-BED	QZ	F&S	II	-	NLHP12.1
CO1, CO2, CO3, CO4	Assess the importance of commemorating World Spinal Day.	AFT-RES	NK	SH	D	QZ	F	II	-	NLHP12.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 12.1	Discussion on the etiopathogenesis, Diagnosis and Management of Osteoarthritis	Flipped classroom The topic is given and they are asked to prepare notes on etiopathogenesis, ayurvedic perspective, and management from medical books and online scientific articles(shared by mentor) The next day the students are divided into groups and engage in group discussions. Mentors facilitate the discussion and students are encouraged to ask questions Mentors give answers to the queries Evaluation is done by Quiz and Presentation
NLHT 12.2	Detailed understanding of the Diagnosis, Clinical examination, ayurvedic perspective and	Team-based learning, Presentation The students are divided into different teams

	management of Lumbar spondylosis and Cervical Spondylosis	One team is asked to present a case on Lumbar spondylosis and Cervical Spondylosis The second team does a detailed presentation about the topic The third team performs a clinical examination in a simulated case The fourth team does a presentation on the investigations Followed by a group discussion on Ayurveda diagnosis and Management Mentors answer the queries and give feedback
NLHT 12.3	Ayurvedic management of Asthimajjavaha srotodushti vikara based on interpretation of Radiological Investigations	Tutorial A mentor gives a brief introduction about the various investigations advised in a clinical case of Asthi /Majja vikruti Students are encouraged to be involved in small group discussion Each group is given an X-ray, CT scan, or MRI film Students observe and interpret the radiological findings and plan the Ayurvedic Management accordingly. Discussion is followed
NLHT 12.4	Discussion on Asthisankatarbuda(Osteosarcoma)	Class Presentation The students are encouraged to collect information on the etiopathogenesis, Diagnosis, Investigations Prognosis and Management of Osteosarcoma The students do a presentation Discussion is followed The Mentor gives answers to the queries The Evaluation is done using a Quiz, Puzzle
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 12.1	Bedside case taking of 1.Sandhigata vata 2 Kateegraha 3.Greeva graha 4.Raktaheenatajanya dhatunasha(AvascularNecrosis)/ Kroshtuka sheersha/Asthikshaya	Refer the case-taking framework as detailed in the NLHP Activity 3.1 Total 8 hrs
NLHP 12.2	Commemoration of World spine day(Oct 16)	Inhouse OR Outreach activity(3hrs) The Students are encouraged to conduct public awareness programs using suitable mass communication, and audio-visual aids showing the importance of spinal health, Preventive and therapeutic aspect of spinal disorders.Public outreach activity can be conducted during the Syllabus teaching of asthimajjavaha sroto-dushti vikara

Topic 13 Chikitsa of Pranavaha Srotodushti Vikara (TM2:SL40-SL4Z) (LH :6 NLHT: 4 NLHP: 24)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Describe Chikitsa Sutra of Pranavaha Srotodushti, Samprapti vighatana of Shwasa roga(SL42) & Hikka roga (SM74) with a treatment algorithm according to its stages of shadkriyakala and appropriate plan of Shadvidopkrama & Doshopakrama.	CE	MK	KH	L,L&GD,L&PPT	S-LAQ,VV-Viva,OSCE,CBA,P-VIVA	F&S	II	-	LH
CO1, CO3	Explain Chikitsa Sutra and Samprapti Vighatana of Kasa roga with a treatment algorithm according to its stages of Shadkriyakala and appropriate plan of Shadvidopkrama & Doshopkrama.	CE	MK	KH	L&GD, L&PPT ,L	S-LAQ,QZ ,P-VIVA,CBA,VV-Viva	F&S	II	-	LH
CO1, CO3	Explain Chikitsa sutra and Samprapti vighatana of Rajayakshma with a treatment algorithm according to its stages of Shadkriyakala, status of Ojus and appropriate plan of Doshopakrama.	CE	MK	KH	L,L&PPT ,L&GD	P-VIVA,CBA,P-CASE,M-POS,S-LAQ	F&S	II	-	LH

CO1, CO3	Define Chikitsa sutra and Samprapti vighatana of Urahkshat with a treatment algorithm according to its stages of Shadkriyakala and status of Ojus.	CE	MK	KH	L&PPT,L,PSM,CBL,PER	CBA,PRN,P-VIVA,COM,M-POS	F&S	II	-	LH
CO2, CO6	Explain the Etiopathogenesis, Diagnosis & Principles of management and Ayurvedic perspective of Tamaka shwas(Bronchial Asthma) (SL40), Jirna shwasakrichchhanika (ChronicObstructive Pulmonary Disease), Vispharah (Bronchiectasis).	CC	DK	KH	CBL,L&GD,LS,DIS,L	T-CS,COM,M-POS,SBA,PRN	F&S	II	-	LH
CO1, CO2, CO3	Explain the Etiopathogenesis, Diagnosis, Principles of management, and Ayurvedic perspective of Antaraaleeya Phuphphusa Vikara (Interstitial lung Disease), Phuphphusa arbuda (Lung Cancer), Phuphphusaasruti(Pleural effusion)	CC	NK	KH	FC,SDL,L_VC,L&GD,D	CBA,VV-Viva,S-LAQ,P-VIVA,OSCE	F&S	II	-	LH
CO1, CO3, CO4	Construct a chikitsa yojana (treatment plan) of Shwasa (SL42)& Hikka (SM74)	CS	MK	KH	PSM,PBL,FC,PER,BS	S-LAQ,CBA,QZ ,VV-Viva,P-VIVA	F&S	II	-	NLHT13.1
CO1, CO3, CO4	Formulate Chikitsa yojana (treatment plan) of Kaasa Roga (SL41)	CS	MK	KH	FC,L&GD,CBL,BS,PER	P-VIVA,CBA,RK,Mini-CEX,S-LAQ	F&S	II	-	NLHT13.2
CO1, CO3, CO4	Sketch Chikitsa-yojana (treatment plan) of Trirupa , Shadrupa, Ekadasha rupa Rajyakshama , Anuloma Kshaya & Pratiloma Kshaya	CS	MK	KH	FC,BS,PER,SDL,CBL	VV-Viva,Mini-CEX,P-VIVA,PRN,S-LAQ	F&S	II	-	NLHT13.3
CO1, CO3, CO4	Construct Chikitsa yojana (treatment plan) of Urahkshat roga.	CS	MK	KH	PER,L&GD,BS,FC,CBL	VV-Viva,PRN,COM,S-LAQ,P-	F&S	II	-	NLHT13.4

						VIVA				
CO1, CO2, CO3, CO6, CO7	Demonstrate clinical examination to diagnose & prognosticate , write treatment & prepare case record in a case of Mahashwasa, Urdhwa shwasa, Chhinna Shwasa, Kshudra Shwasa.	PSY-GUD	MK	SH	CBL,CD,X-Ray,D-BED,LRI	Mini-CEX, CBA,VV-Viva,P-VIVA ,OSCE	F&S	II	-	NLHP13.1
CO1, CO2, CO3, CO6, CO7	Perform clinical examination to diagnose & prognosticate, write treatment & prepare case record in a case of Kaasa Roga (SL41)	PSY-GUD	MK	SH	CBL,CD,X-Ray,D-BED	P-VIVA,RK,VV-Viva ,CBA,CHK	F&S	II	-	NLHP13.2
CO1, CO2, CO3, CO6, CO7	Demonstrate clinical examination to diagnose & prognosticate , write treatment & prepare case record in a case of Tamaka Shwasa (SL42)	PSY-MEC	MK	SH	CBL,CD,D-BED,LRI, X-Ray	P-VIVA,COM,QZ ,P-CASE,VV-Viva	F&S	II	-	NLHP13.3
CO1, CO2, CO3, CO6, CO7	Perform clinical examination to diagnose & prognosticate , write treatment & prepare case record in a case of Rajayakshma (~Pulmonary Tuberculosis)	PSY-GUD	MK	SH	X-Ray, CBL,CD,D-BED,LRI	QZ ,P-CASE,VV-Viva, OSCE,COM	F&S	II	-	NLHP13.4
CO1, CO2, CO3, CO6, CO7	Conduct clinical examination to diagnose & prognosticate , write treatment & prepare case record in a case of Jirna Shwasakrichchhanika (Chronic Obstructive Pulmonary Disease)	PSY-GUD	MK	KH	LRI,D-BED,X-Ray,CBL,CD	P-VIVA,RK,VV-Viva ,Mini-CEX,OSCE	F&S	II	-	NLHP13.5
CO1, CO2,	Perform clinical examination to diagnose & prognosticate, write treatment & prepare case record in a case of Vispharah	PSY-MEC	DK	SH	CD,CBL,D-BE	QZ ,Mini-CEX,COM,O	F&S	II	-	NLHP13.6

CO3, CO6, CO7	(Bronchiectasis)				D,X-Ray,LRI	SCE,P-VIVA				
CO1, CO2, CO3, CO6, CO7	Practice clinical examination to diagnose & prognosticate, write treatment & prepare case record in a case of Phuphphusaasruti (Pleural effusion)	PSY-GUD	DK	SH	CBL,CD,X-Ray,LRI,D-BED	VV-Viva,COM,QZ ,CL-PR,OSCE	F&S	II	-	NLHP13.7
CO1, CO2, CO3, CO6, CO7	Perform clinical examination to diagnose & prognosticate, write treatment & prepare case record in a case of Antaraalayi Phuphphusa Vikara (Interstitial Lung Disease)	PSY-MEC	NK	KH	CD,CBL,X-Ray,D-BED,LRI	CL-PR,QZ ,RK,VV-Viva,Mini-CEX	F	II	-	NLHP13.8
CO1, CO2, CO3, CO5, CO6, CO7	Describe the working of DOTs Centre	CC	MK	KH	FV	RK,CL-PR, VV-Viva,P-VIVA,PRN	F&S	II	-	NLHP13.9
CO1, CO2, CO5	Practice nebulization and administer oxygen therapy	PSY-GUD	MK	SH	CBL,D, D-BED, TUT	CBA,VV-Viva,SP,P-RP,DOPS	F&S	II	-	NLHP13.10

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 13.1	Chikitsa yojana (treatment plan) of Shwasa (SL42)& Hikka (SM74) by	**Lecture with group discussion** The teacher lays down ground rules of discussion and delivers a primer lecture to introduce the topic and points to be discussed during the course of discussion by putting up open ended questions and

encouraging students to share meaningful thoughts and ideas.
If discussion is lingering on one talking point, the teacher intervenes by putting up a new dimension / idea for discussion by asking questions.
At the end of the discussion the teacher summarises the important concepts & ideas.
Teacher may use powerpoint slides to navigate the discussion)

Brainstorming:

The teacher sets up a context of brainstorming and explains the process of brainstorming and defines a clear objective and expected outcome from the session. The students are divided into teams.
After students are divided, the teacher appoints facilitator(s) for the whole process.
Ground rules are set for the process in consultation with facilitators and a time limit is set for the whole process.
All the teams work separately and then capture all possible ideas. After all the ideas have been captured, it's time to discuss them. The team needs to be productive in choosing a creative idea that suits the problem, or they can try combining a few ideas to come up with a holistic solution. To make decisions as a group and come to an agreement, teams can use the voting method. Team leaders capture all ideas and presents before the whole class.

Case Based learning

Case-based Learning is an inquiry-based approach to learning medicine through clinical case scenarios in a collaborative small group setting.
The teacher divides class into small groups and a case history/ case study to each group
The students thoroughly go through the case history/case study and available supplementary material.
While going through case study students annotate the parts of the case that they feel are the most relevant. They can also use a highlighter or a pen to highlight, underline or circle important pieces of information.
The students sum up the essence of the case/case study and summarise it.

Flipped Classroom

It is implemented in three steps
Pre-class learning :Teacher assigns readings, videos, podcasts and other available materials which students go through on themself. After going through these students are required to respond to a series of quizzes or simple questions based on the concept discussed. The teacher can ask the students to post their own questions and attempt to answer other ones on a shared online platform.

In class activities :Within the classroom, students check with the teacher whether they have truly understood the subject through activities that require the skills they have acquired to develop. The students work together in small groups to analyze a problem, come up with their own solution, and evaluate other possible courses of action.
Post class reinforcement : Then students go to the OPDs/IPDs to experience/ learn in a real world scenario.
Presentation
The class is divided in groups of 3-5 students
Each student is allotted a specific component of the topic to go through from various sources and prepare a presentation.
Each group gives its presentation in class .
Other students ask the questions and the presenting team answers queries.
Teacher makes a concluding remark after each presentation including following points

- Assessment for suitability (yogya- ayogya) for

a. Shodhana Chikitsa
b. Shamana Chikitsa

- Aushadha yojna for shamana chikitsa :

A. Ekala Aushadha Yoga (single drug therapy) for Shwasa & Hikka with appropriate anupana: 1. Kushmanda shifa churna 2. Pippali churna 3. Shuddha Gandhaka 4. Bharangi kvatha 5. Kanaka(Dhattura Phala) Dhoomrasaayana
B. Aushadha Kalpas with appropriate sevana kala matra, anupana of the following Aushadh yoga in Shwasa & Hikka : 1. Shwashara Mahakashaya & Hikkanigrahana Mahakashaya 2. Bharangi- Nagara Kwatha 3. Gojihwadi kwatha 4. Shwasa Kutara rasa 5. Shringarabhra rasa 6. Shwasa Kasa Chintamani rasa

		C. Naimittika Rasayan for Shwasa & Hikka D. Pathyaapathya
NLHT 13.2	Chikitsa yojana (treatment plan) of Kaasa Roga (SL41)	For Details refer NHLT 13.1 • Asessement for suitability (yogya- ayogya) for a. Shodhana Chikitsa b. Shamana Chikitsa • Aushadha yojna for shaman chikitsa : A. Ekala Aushadha (Single Drug) Yoga with appropriate anupana: 1. Shringavera (Ardraka) swarasa 2. Kantakari Kwatha 3. Bibhitaka Churna 4. Vasa swarasa 5. Maricha Churna B. Ausadha Kalpa Prayog with appropriate matra, anupana , sevana kala :1. Kasahara Mahakashaya 2. Bharangi- Nagara Kwatha 3. Gojihwaadi kwath 4. Chandramrita rasa 5. Naardeeya Laxmivilaas rasa 6. Aanada bhairava rasa 7. Sitopaladi Choorna 8. Taalishaadi churna 9. Chitraka Haritaki Avleha 10. Marichadi Gutika 11. Lavangadi gutika 12. Vyoshadi vati. C. Naimittika Rasayana for Kaasa roga. D. Pathyaapathya recommendation
NLHT 13.3	Chikitsa yojana (treatment plan) of or Trirupa , Shadrupa, Ekadasha rupa rajyakshama , Anuloma kshaya & Pratiloma kshaya	**Refer NHLT13.1** • Asessement for suitability (yogya- ayogya) for

		a. Shodhana chikitsa b. Shamana chikitsa • Aushadha yojana for Shaman chikitsa : A. Ekala aushadha yoga with appropriate anupana: 1. Nagbala Churna 2. Kakjangha Churna 3. Laksha Churna 4. Vasa Panchanga 5. Haritaki Churna 6. Pippali churna. B.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following : 1. Balya Mahakashaya 2. Brinhaneeya Mahakashaya 3. Trailokya chintamani rasa 4. Loknath rasa 5. Swarnabhupati rasa 6. Hemgarbha pottali rasa 7. Yavani Shadav Churna 8. Pippali vardhmana rasayana 9. Vaasa Avleha 10. Drakshasava C. Naimittika Rasaayana for Rajayakshma & Shosha D. Pathyaapathya recommendation for Raajyakshma & Shosha
NLHT 13.4	Construct Chikitsa yojana (treatment plan) of Urahkshat roga.	**For details refer NHLT13.1** • Asessement for suitability (yogya- ayogya) for a. Shodhana Chikitsa b. Shamana Chikitsa • Aushadha yojna for shaman chikitsa : A. Ekala Aushadha Yoga with appropriate anupana:1. Laksha Churna 2. Nagbala Kalpa 2. Brahmi Kalpa 3. Madhuyashti Kalpa 4. Nagar Kalpa 5. Laja churna B.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following1. Elaadi

		gutika 2. Amritpraash Avleha 3. Ajaamaamsa Rasaayan C. Naimittika Rasayana for Kshata-ksheena/Urahkshat D. Pathya -Apathya Recommendation for Urahkshata
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 13.1	Bedside demonstration of a case of Mahashwasa, Urdhwa shwasa, Chhinna Shwasa, Kshudra Shwasa. (Any one case)	Refer the case taking framework as described in NHLP 3.1 (2 hours)
NLHP 13.2	Bedside case demonstration of case of Kaasa Roga (SL41)	Refer the case taking framework as described in NHLP 3.1 (2 hours)
NLHP 13.3	Bedside demonstration of case of Tamaka Shwasa (SL42)	Refer the case taking framework as described in NHLP 3.1
NLHP 13.4	Bedside case demonstration of a case of Rajayakshma (~Pulmonary Tuberculosis) (2 hours)	Refer NHLP 3.1
NLHP 13.5	Bedside demonstration of a case of Jirna Shwasakrichchhanika (ChronicObstructive Pulmonary Disease)	Refer the case taking framework as described in NHLP 3.1 (2 hours)
NLHP 13.6	Bedside demonstration of case of Vispharah (Bronchiectasis)	Refer the case taking framework as described in NHLP 3.1 (2hours)
NLHP 13.7	Bedside Case demonstration of case of Phuphphusaasruti (Pleural effusion)	Refer the case taking framework as described in NHLP 3.1 (2 hours)

NLHP 13.8	Bedside demonstration of case of Antaraalayi Phuphphusa Vikara (Interstitial Lung Disease)	Refer the case taking framework as described in NHLP 3.1 (2 hours)
NLHP 13.9	Field visit to DOTs Centre	The students will visit with mentor to nearest DOTs centre and understand the four pillars of NTEP (Revised National TB Eradication Program) 1. Detect 2. Treat 3. Prevent 4. Build (6 hours)
NLHP 13.10	Demonstration of Nebulization & oxygen therapy (2 hours)	**Nebulization** The nebulizers should be used according to manufacture's instructions The mentor will demonstrate the basic steps to set up and use nebulizer are as follows: • To Wash hands. • To Connect the hose to an air compressor. • To Fill the medicine cup with your medicine. • To avoid spills, close the medicine cup tightly and always hold the mouthpiece straight up and down. • To attach the other end of the hose to the mouthpiece and medicine cup. • To turn on the nebulizer machine. • To place the mouthpiece in mouth. • To keep lips firmly around the mouthpiece so that all of the medicine goes into lungs. If using a facemask, to place it over the mouth and nose. • To breathe through mouth until all the medicine is used. (This takes 5 to 20 minutes, depending on the device and medicine used. If needed, use a nose clip) • To turn off the machine when done. • Wash the medicine cup and mouthpiece with water and air dry until next treatment.

To administer Oxygen therapy
The mentors will demonstrate

- Assesment of need of oxygen therapy (suspected or confirmed hypoxemia)
- Assess if high flow and low flow oxygen therapy is needed. (A prescription is required for oxygen therapy. The prescription should include the oxygen-delivery device, the flow rate, and the amount of oxygen to deliver)
- Set the target peripheral oxygen saturation (SpO2) (for most acutely ill patients is 94% to 98%.Patients with chronic obstructive pulmonary disease should have a target of 85% to 92%.)
- Set up the oxygen delivery system.
- Attach the oxygen flowmeter to the oxygen source. (Verify that the flowmeter is connected to oxygen, not air or another gas. Connecting the flowmeter to a gas other than oxygen can have fatal consequences.)
- Attach the humidifier to the oxygen flowmeter, if needed.
- Attach the oxygen delivery device (i.e., cannula, mask) via the oxygen tubing to the humidifier or directly to the oxygen flowmeter via the flowmeter adaptor.
- Adjust the oxygen flowmeter to the prescribed flow rate
- Position the oxygen delivery device on the patient's face and adjust the elastic headband (or behind-ear loops and under-chin lanyard of the cannula) to achieve a comfortably snug fit. Maintain enough slack on the oxygen tubing.
    - *Nasal cannula:* Ensure proper positioning of the cannula tips in the patient's nares. If the cannula tips are curved, ensure that they point downward.
    - *Simple face mask:* Ensure that the mask is over the patient's mouth and nose, forming a seal
    - *Partial rebreathing mask:* Ensure that the mask is over the patient's mouth and nose, forming a tight seal. Also ensure that the reservoir bag remains partially inflated on inspiration
    - *Non-rebreathing mask:* Ensure that the mask is over the patient's mouth and nose, forming a tight seal. Ensure that both one-way valves at the side ports are in place to maintain a full non-rebreather system. Also ensure that the reservoir bag remains partially inflated on inspiration

		◦ *Venturi mask:* Ensure that the mask is over the patient's mouth and nose, forming a tight seal, and that the appropriate port has been selected ◦ *Face tent:* Ensure that the tent fits under the patient's chin and over the mouth and nose ◦ Verify that the oxygen delivery device is functioning properly • HFNC OXYGEN THERAPY 1. Position the nasal cannula on the patient's face and adjust the head strap to achieve a comfortably snug fit . Follow the manufacturer's instructions for application. 2. Ensure proper positioning of the cannula tips in the patient's nares. If the cannula tips are curved, ensure that they point downward. 3. Maintain enough slack on the oxygen tubing. 4. Review the high-flow oxygen delivery device settings, use of humidifier and heater, and alarms with the respiratory therapist. 5. Verify that the oxygen delivery device is functioning properly. 6. Observe the oxygen delivery device frequently to ensure proper placement. Readjust as necessary. 7. Monitor the patient's vital signs and SpO2 level and when making changes in oxygen therapy. 8. Consider adding continuous SpO2 monitoring for patients newly placed on oxygen 9. Check the humidifier when taking vital signs. ◦ Low-flow oxygen therapy: Replace the humidifier when it is empty. ◦ High-flow oxygen therapy: Notify the respiratory therapist when it is almost empty. 10. Observe the skin of the patient's outer ears, back of the head, bridge of the nose, nares, and nasal mucous membranes for evidence of pressure injuries or drying.

Topic 14 Chikitsa of Udakavaha srotodushti vikara (LH :5 NLHT: 2 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1,	Appraise Chikitsa sutra and Samprapti vighatana of Trishna with	CE	MK	KH	L&GD,	QZ ,CBA,P	F&S	III	-	LH

CO3	a treatment algorithm according to its stages of Shadkriyakala and appropriate Chikitsa yojana of Trishna Roga.				L&PPT ,L	-VIVA,T-CS,VV-Viva				
CO1, CO3	Explain Chikitsa sutra and Samprapti vighatana of Shotha roga with a treatment algorithm according to its stages of Shadkriyakala and appropriate plan of Shadvidhopakrama & Doshopakrama.	CE	MK	KH	L&PPT ,L,L&GD	M-POS,CHK,QZ ,P-CASE,RK	F&S	III	-	LH
CO1, CO3	Describe Chikitsa sutra and Samprapti vighatana of Jalodara roga with a treatment algorithm according to its stages of Shadkriyakala and appropriate plan of Shadvidhopakrama & Doshopakrama.	CE	MK	KH	L&GD, L&PPT ,L	VV-Viva,S-LAQ,T-CS, CL-PR,M-CHT	F&S	III	-	LH
CO2, CO6	Explain the Etiopathogenesis, Diagnosis, Principles of management and Ayurvedic perspective of Ascites & Jaliyovidyutansh vaishamya (Fluid- electrolyte imbalance)	CC	NK	KH	L&PPT ,L&GD, L	PRN,CL-PR,OSCE,VV-Viva,P-VIVA	F	III	-	LH
CO1, CO3	Appraise Chikitsa sutra and Samprapti vighatana of Ekdesheeya roga with a treatment algorithm according to its stages of Shadkriyakala and appropriate plan of Shadvidhopakrama & Doshopakrama.	CE	DK	KH	L,L&GD,L&PPT	T-CS,QZ , CBA,COM, P-VIVA	F&S	III	-	LH
CO1, CO3, CO4	Construct Chikitsa yojana for Shotha roga.	CE	MK	KH	DIS,SDL,D,CBL,FC	VV-Viva,QZ ,S-LAQ,CHK ,CBA	F&S	III	-	NLHT14.1
CO1, CO3, CO4	Construct chikitsa yojana of Udar roga & Jalodara	CE	MK	KH	BS,CBL ,PER,FC,L&GD	Mini-CEX, P-VIVA,QZ , VV-Viva,CHK	F&S	III	-	NLHT14.2

CO1, CO2, CO3, CO6, CO7	Perform clinical examination to diagnose & prognosticate , write treatment & prepare case record in a case of Vatodar- Pittodara- Kaphodara- Dushyodara.	PSY-MEC	MK	SH	CD,D-BED,X-Ray,LRI, CBL	OSPE,VV-Viva,Mini-CEX,CBA, P-VIVA	F&S	III	-	NLHP14.1
CO1, CO2, CO3, CO6, CO7	Perform clinical examination to diagnose & prognosticate , write treatment & prepare case record in a case of Yakritodara & Pleehodara, Chhidrodara, Baddha gudodara.	PSY-MEC	MK	SH	CD,X-Ray,LRI, CBL,D-BED	CBA,RK,Mini-CEX,P-VIVA,QZ	F&S	III	-	NLHP14.2
CO1, CO2, CO3, CO6, CO7	Perform clinical examination to diagnose & prognosticate , write treatment & prepare case record in a case of Jalodara	PSY-MEC	MK	SH	LRI,X-Ray,CD ,CBL,D-BED	OSCE,VV-Viva,P-VIVA,CBA,Mini-CEX	F&S	III	-	NLHP14.3
CO1, CO3, CO4, CO6, CO7	Perform clinical examination to diagnose & prognosticate, write treatment & prepare case record in a case of Shotha roga .	PSY-MEC	MK	SH	CBL,D-BED,LRI,X-Ray,PT	Mini-CEX, VV-Viva,P-VIVA,RK, CBA	F&S	III	-	NLHP14.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 14.1	Constructing chikitsa yojana for Shotha roga	Refer the framework as described in NHLT 13.1 • Asesement for suitability (yogya- ayogya) for a. Shodhana Chikitsa

		b. Shamana Chikitsa • Aushadha yojna for shaman chikitsa :1. Bilva patra svaras 2. Punarnavamoola churna /Kwatha 3. Maankand Churna 4. Gudardraka Kalpa 5. Eranda taila A. Ekala Aushadha Yoga with appropriate anupana:1. Shothahar Mahakashaya 2. Gudardraka Yog 3. Punarnavashtaka Kwaatha 4. Kansa Hareetaki 5. Dashmoola haritaki 6. Punarnaavasava 7.Patoladi Kwaath 8. Punarnavaadi Guggulu 9. Punarnavaadi Madura B.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following C. Naimittika Rasayana for Shotha roga D. Pathya -Apathya Recommendation for shotha roga
NLHT 14.2	Constructing Chikitsa yojana of Udar roga & Jalodara	Refer the framework as described in NHLT 13.1 • Assessment for suitability (yogya- ayogya) for a. Shodhana Chikitsa b. Shamana Chikitsa • Aushadha yojna for shaman chikitsa : A. Ekala Aushadha Yoga with appropriate anupana:1. Guggulu Kalpa 2. Haritaki Kalpa 3. Shilajatu Kalpa 4. Pippali Vardhmana Kalpa 5. Gomutra B.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following:1. Arogayavardhini Vati 2. Jalodarari rasa 3. Ichchhabhedi rasa 4. Abhayadi Modaka 5. Sahasra hareetaki yog 6. Narayan Choorna 7. Narach Ghrita C. Naimittika Rasayana for for udara roga

		D. Pathya -Apathya Recommendation for udara roga

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 14.1	Bedside demonstration of a case of Vatodara- Pittodara- Kaphodara- Dushyodara	Refer the case taking framework as described in NHLP3.1 (2 hours)
NLHP 14.2	Bedside demonstration of case of Yakritodara & Pleehodara, Chhidrodara, Baddha gudodara.	Refer the case taking framework as described in NHLP3.1 (3 hours)
NLHP 14.3	Bedside demonstration of case of Jalodara	Refer the case taking framework as described in NHLP3.1 (2 hours)
NLHP 14.4	Bedside demonstration of case of Shotha roga	Refer the case taking framework as described in NHLP3.1 (2 hours)

Topic 15 Chikitsa of Mootravaha srotodushti vikara (LH :4 NLHT: 4 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4	Describe Chikitsa sutra and Samprapti vighatana of Mootrakriccha roga with a treatment algorithm according to its stages of Shadkriyakala and appropriate plan of Shadvidhopakrama & Doshopakrama..	CE	MK	KH	L&GD, L&PPT ,L_VC	VV-Viva,P-VIVA,COM,QZ ,CBA	F&S	III	-	LH
CO1, CO3, CO4	Detail Chikitsa sutra and Samprapti vighatana of Mootraghat (SM81) with a treatment algorithm according to its stages of Shadkriyakala and appropriate plan of Shadvidhopakrama &	CE	MK	KH	L,L&PPT ,L&GD	S-LAQ,VV-Viva,COM ,QZ ,CBA	F&S	III	-	LH

	Doshopakrama									
CO1, CO3	Explain the Etiopathogenesis, Diagnosis, Principles of management and Ayurvedic perspective of Ashu Vrikka -nishkriyata (Acute Renal Failure) & Chirakaari vrikka -nishkriyata (Chronic Renal Failure)	CE	DK	KH	L,L&PPT ,L&GD	M-POS,P-VIVA,S-LAQ,VV-Viva,CBA	F&S	III	-	LH
CO1, CO3	Explain the Etiopathogenesis, Diagnosis, Principles of management and Ayurvedic perspective of Mutra Gaveenika shotha (UTI), Vrikka Koshika Shotha (Nephritis)(SM84), Pourusha Granthi Shotha (Prostitis), and Mutranalika- Basti shotha (Urethritis-Cystitis),	CC	MK	KH	L&PPT ,L,L&GD	T-CS,Mini-CEX,P-VIVA,M-POS ,S-LAQ	F&S	III	-	LH
CO1, CO3, CO4	Construct Chikitsa yojana for Samprapti vighatana of Mootrakrichchha roga (SM82)	CS	MK	KH	PER,SDL,PBL, L&GD, CBL	CBA,P-VIVA,VV-Viva,QZ ,S-LAQ	F&S	III	-	NLHT15.1
CO1, CO3, CO4	Construct Chikitsa yojana for Samprapti vighatana of Mootraghaata roga (SM81)	CS	DK	KH	L&PPT ,L&GD, L	CBA,S-LAQ,CHK,VV-Viva,QZ	F&S	III	H-SH	NLHT15.2
CO1, CO3, CO4	Construct Chikitsa yojana for Samprapti vighatana of Ashmari roga (SM82).	CS	MK	KH	FC,PER ,CBL,L &GD,BS	S-LAQ,P-VIVA,QZ , VV-Viva,CBA	F&S	III	-	NLHT15.3
CO1, CO3	Explain the Etiopathogenesis, Diagnosis, Principles of management and Ayurvedic perspective of Pourusha Granthi vriddhi (BPH) , Pourusha Granthi Arbuda (Ca Prostate) & Apavrukkatva (Nephrotic Syndrome)	CC	NK	KH	FC,BS, PER,CBL,L&GD	RK,QZ ,VV-Viva,CBA,P-VIVA	F	III	-	NLHT15.4
CO1, CO2,	Perform clinical examination to diagnose & prognosticate, write treatment & prepare case record in a case of Mootraghata.	PSY-MEC	MK	SH	LRI,D-BED,C	VV-Viva,QZ ,O	F&S	III	-	NLHP15.1

CO3, CO6, CO7					D,CBL, X-Ray	SCE,P-VIVA,RK				
CO1, CO2, CO3, CO6, CO7	Perform clinical examination to diagnose & prognosticate , write treatment & prepare case record in a case of Vrikka-nishkriyata (Chronic Kidney Disease)	PSY-MEC	MK	SH	CBL,LRI,D-BED,CD,X-Ray	CBA,VV-Viva,P-VIVA,OSCE,RK	F&S	III	-	NLHP15.2
CO1, CO2, CO3, CO6, CO7	Perform clinical examination to diagnose & prognosticate, write treatment & prepare case record in a case of Mootrakrichccha.	PSY-MEC	MK	SH	LRI,D-BED,CBL,X-Ray,CD	CBA,VV-Viva,COM,Mini-CEX,P-VIVA	F&S	III	-	NLHP15.3
CO1, CO2, CO5	Demonstrate Indwelling Urethral Catheter Insertion, manage problems due to Indwelling Catheters and remove Indwelling Urethral catheters.	PSY-GUD	MK	SH	SIM,SDL,D-BED,CD,X-Ray	DOPS,P-PS,SP,VV-Viva,Mini-CEX	F	III	H-SH	NLHP15.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 15.1	Constructing Chikitsa Yojana for Samprapti vighatana of Mootrakrichchha roga (SM82)	Refer the framework as described in NHLT 13.1 • Assessment for suitability (yogya- ayogya) for a. Shodhana Chikitsa b. Shamana Chikitsa

		• Aushadha yojna for shaman chikitsa : A. Ekala Aushadha Yoga with appropriate anupana:1. Gokshur kwaatha 2. Ela churna 3. Daruhaldi churna 4. Narikela Pushpa 5. Amalaki Kwatha B.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following:1. Mootrarechaneeya Mahakashaya 2. Trinpanchmula Kashaya 3. Shatavaryadi Kashaya 4. Pashanbhedadi Choorna 5. Gokshuradi Guggulu 6. Chandanasava 7. Chandrakala rasa C. Naimittika Rasayana for Mootrakriccha D. Pathya -Apathya Recommendation for Mootrakrichchha.
NLHT 15.2	Constructing Chikitsa Yojana for Samprapti Vighatana of Mootraghaata roga (SM81)	Refer the framework as described in NHLT 13.1 • Assessment for suitability (yogya- ayogya) for a. Shodhana Chikitsa b. Shamana Chikitsa • Aushadha Yojna for Shaman Chikitsa : A. Ekala Aushadha Yoga with appropriate anupana: B.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following C. Naimittika Rasayana for D. Pathyaapathya Recommendation for Mootraghata
NLHT 15.3	Constructing chikitsa yojana for samprapti vighatana of Ashmari roga (SM82)	Refer the framework as described in NHLT 13.1

		• Asesement for suitability (yogya- ayogya) for a. Shodhana Chikitsa b. Shamana Chikitsa • Aushadha yojna for shaman chikitsa : A. Ekala Aushadha Yoga with appropriate anupana:1. Varuna Kwaatha 2. Narikela Pushpa 3. Taalmooli churna 4. Yavakshar 5. Kulatttha yusha /kwatha B.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following:1. Varunadi kashaya 2. Veertarvadi Kashaya 3. Shigrumooladi Kashaya 4. Trivikram rasa C. Naimittika Rasayana for Ashmari roga D. Pathyaapathya Recommendation for Ashmari roga
NLHT 15.4	Detailed understanding of management of Pourusha Granthi Vriddhi (BPH) , Pourusha Granthi Arbuda (Ca Prostate) & Apavrukkatva (Nephrotic Syndrome)	Refer the framework as described in NHLT 13.1 • Asesement for suitability (yogya- ayogya) for a. Shodhana Chikitsa b. Shamana Chikitsa • Aushadha yojna for shaman chikitsa : A. Ekala Aushadha Yoga with appropriate anupana. B.Aushadha Kalpa prayoga . C. Naimittika Rasayana D. Pathya -Apathya Recommendation

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 15.1	Bedside demonstration of a case of Mootraghata	Refer the case taking framework as described in NHLP 3.1
NLHP 15.2	Bedside demonstration of a case of CKD	Refer the case taking framework as described in NHLP 3.1
NLHP 15.3	Bedside demonstration of a case of Mootrakrichcha	Refer the case taking framework as described in NHLP 3.1
NLHP 15.4	Bedside demonstration of indwelling Urethral Catheter Insertion, managing problems due to Indwelling Catheters and removing Indwelling Urethral catheters.	Mentor will demonstrate • Scope of practice.,Informed consent.Cultural safety. • Key consideration in decision to catheterise. • Key considerations in choice of indwelling catheter Equipment. • Infection prevention,Catheter care, Catheter bag emptying,Catheter bag Change,Urine Sampling for an Indwelling catheter. • Indwelling Urethral Catheter Insertion (Female & Male) Procedure. • Problem Management for Indwelling Catheters. • Decision to Remove Indwelling Urethral catheters, Potential problems During Removal of urethral catheter. • Complications and Monitoring Following Removal of Indwelling Urethral catheters. • The students will practice same under guidance of same through simulation models or patients.

Topic 16 Chikitsa of Purishavaha srotodushti vikara (SR5A) (LH :4 NLHT: 4 NLHP: 8)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**

CO1, CO3	Describe the treatment plan for Sama and Nirama stages of Atisara (SM37) and Explain Samanya chikitsa sutra and Chikitsa along with Pathyaapathya	CC	MK	KH	L&PPT ,L	PRN,QZ	F&S	III	-	LH
CO1, CO3	Explain the Samprapti vighatana, Chikitsa sutra and Chikitsa including Pathyaapathya of Pravahika (SM38) and Raktatisara	CC	DK	KH	L,L&PPT	PRN,QZ	F&S	III	-	LH
CO1, CO3	Summarize the Samprapti vighatana, Chikitsa sutra, Chikitsa and Pathyaapathya of Krimi roga(SQ50)	CC	MK	KH	L&PPT ,L	QZ ,PRN	F&S	III	-	LH
CO1, CO3	Detail the Samprapti vighatana, Chikitsa sutra and Chikitsa including Rasayana and Pathyaapathya of Arsha according to its types.	CC	MK	KH	L,L&PPT	PRN,CL-PR,QZ	F&S	III	H-SH	LH
CO1, CO3	State Phalashruti, Matra, Anupana and Sevana kala of Aushadha yoga mentioned in atisara and pravahika • Kutajaghana vati • Dadimashtaka choorna • Mustaarishtam • Bilwadhi leha • Gangadhara vati	CK	DK	KH	TBL,L&GD,DIS	QZ ,PRN	F&S	III	-	NLHT16.1
CO1, CO3, CO5	Discuss the etiopathogenesis, diagnosis, and principles of management of Pravahika (dysentery) ,Raktatisara (ulcerative colitis), Bruhadaantra arbuda (colorectal cancer)	CC	DK	KH	L_VC,TBL,PER ,L&GD	QZ ,O-QZ,PRN	F&S	III	-	NLHT16.2
CO1, CO3	State Phalashruti, mention the Matra, Anupana and Sevana kala of Yoga mentioned in various classical text for Krimi roga • Krimikuthara rasa • Krimighna vati	CK	DK	KH	REC,TBL,DIS,L&GD	PRN,QZ	F&S	III	-	NLHT16.3

	• Nimbamrita kashaya • Vidangarishtam									
CO1, CO3	Describe the Phalashruti, Matra, Anupana and Sevana kala of commonly used Yoga in Arsha • Arshakuthara rasa • Kankayana vati • Abhayarishta • Takrarishta (Arshaadhikara)	CC	DK	KH	TBL,DIS,L&GD,REC	O-QZ,PRN,QZ	F&S	III	-	NLHT16.4
CO1, CO3, CO5	Demonstrate the chikitsa yojana & prepare case record in cases of Pureeshavaha sroto vikara after performing relevant clinical examination	PSY-MEC	MK	SH	DIS,LRI,L&GD,TBL,PER	PRN,VV-Viva,PP-Practical,P-PRF,OSCE	F&S	III	-	NLHP16.1
CO1, CO5	Commemoration of International days	PSY-MEC	NK	SH	RLE,PER,PBL,TBL,RP	P-POS,P-PS,P-RP,QZ	F	III	-	NLHP16.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 16.1	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha yoga for Atisara and Pravahika	**Group Discussion and Team based learning** • The students are divided in groups of 3-5 students • Each Group is allotted specific Aushadha yoga • Students refer and compile the material from library sources and prepare a presentation

		• Each group will present the allotted topic in class • Students are encouraged to interact with the presenter under the supervision of the mentor • Mentor clears the doubts, answers the queries and gives the concluding remarks
NLHT 16.2	Detailed understanding of Pravahika (dysentery), Raktatisara (ulcerative colitis), Bruhadantra arbuda (colorectal cancer) and its ayurvedic management	**Team based learning** • The students are divided into different teams • One team is asked to present a case on dysentery (Pravahika), ulcerative colitis(Raktatisara), colorectal cancer (Bruhadantra arbuda) • The second team present a detailed presentation about the topic on etiopathogenesis, diagnosis • The third team perform clinical examination in a simulated case • The fourth team does a presentation on the investigations and plan of treatment • Followed by group discussion • Mentor clears the doubts, answers the queries and gives the concluding remarks
NLHT 16.3	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha for Krimi roga	**Group Discussion** • The students are divided in groups of 3-5 students • Each Group is allotted specific Aushadha yoga • Students refer and compile the material from library sources and prepare a presentation • Each group will present the allotted topic in class • Students are encouraged to interact with the presenter under the supervision of the mentor • Mentor clears the doubts, answers the queries and gives the concluding remarks.
NLHT 16.4	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha for Arsha	**Group Discussion** • The students are divided in groups of 3-5 students • Each Group is allotted specific Aushada yoga • Students refer and compile the material from library sources and prepare a presentation • Each group will present the allotted topic in class

		• Students are encouraged to interact with the presenter under the supervision of the teacher. • Mentor clears the doubts, answers the queries and gives the concluding remarks
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 16.1	Bedside Case taking of Atisara , Pravahika ,Arsha, Raktatisara and Krimi	Long case taking of Atisara,Pravahika and Arsha (2 cases X 2hours = 4 hours)each batch short case taking of Raktatisara and Krimi (2cases X 1hour= 2 hours) each batch. Interpretation of the Blood, Stools and Imaging reports of patients in IP related to Pureeshavaha srotas and its Avasthika chikitsa Students are asked to take cases in the IPD **(6 Hours**) **Demonstration Bedside** Refer case taking framework as described in NLHP3.1 and NLHP5.1 use for details **Team based learning** • The students will be divided into different teams • One team will be asked to present Blood reports of patients in IP related to Pureeshavaha srotas • The second team will present a presentation about Stools report of patients in IP related to Pureeshavaha srotas • The third team will be asked to present on Imaging reports of patients in IP related to Pureeshavaha srotas • The fourth team will do a presentation on avasthika chikitsa related to the lab reports • Followed by group discussion • Mentor clears the doubts, answers the queries and gives the concluding remarks
NLHP 16.2	Public awareness activity related to World colorectal cancer awareness day/world IBS day/World piles day	World colorectal cancer awareness day/ world IBS day/ World piles day (Any one) **(2 hours**) **Kinesthetic learning**-The students will be asked to make posters on various aspect of the illness and do an exhibition of the same OR **Role play**-The students will be encouraged to perform a role play depicting the importance of prevention of disease using the ayurvedic principles and swift action on witnessing the early

		symptoms. OR **Public outreach program-**Conduct a survey among the public to assess the susceptibility of Colorectal cancer and educate them about the same. OR Organise a rally to create awareness about Prevention OR conduct medical camps Prepare a report with a Geotagged Photograph

Paper 3 (Vyadhi Vishesha Chikitsa Evam Rasayana, Vajikarana)										
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 17 Chikitsa of Annavaha srotodushti vikara (LH :12 NLHT: 4 NLHP: 14)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO3	Describe the Samprapti vighatana, Chikitsa sutra Chikitsa and Aushadha yoga of Agnimandya(SM3B) Aruchi/ Arochaka	CC	MK	KH	L&PPT	T-CS,T-OBT,QZ ,VV-Viva	F&S	I	-	LH
CO1, CO3	Articulate the Samprapti vighatana, Chikitsa sutra and Chikitsa of Gulma(SM3K)	CC	MK	KH	L&PPT	QZ ,T-CS,T-OBT,VV-Viva	F&S	I	-	LH
CO1, CO3	Detail Chikitsa sutra and Chikitsa yojana including Aushadha yoga and Pathyaapathya of Doshaja Gulma(SM3K)	CC	MK	KH	L&PPT	T-OBT,QZ ,T-CS	F&S	I	-	LH
CO1, CO3	• Generate a treatment protocol for Sama Pitta and Nirama	CC	MK	KH	L&PPT	T-CS,VV-Viva,QZ ,T-OBT	F&S	I	-	LH

	Pitta. • Illustrate Samprapti vighatana, Chikitsa sutra, and Chikitsa yojana including Aushadha yoga and Pathyaapathya of Amlapitta(SM39)									
CO1, CO3	Describe Samprapti vighatana, Chikitsa sutra ,Chikitsa yojana including Aushadha yoga and pathyapathya of Parinaama shoola(SM3D), Annadrava shoola (SM3E)	CC	MK	KH	L&PPT	VV-Viva,T-CS,T-OBT,QZ	F&S	I	-	LH
CO1, CO3	Explain Samprapti vighatana, Chikitsa sutra, Aushadha yoga, and Pathyaapthya of Chhardi(SM3L)	CC	MK	KH	L&PPT	VV-Viva,T-CS,T-OBT,QZ	F&S	I	-	LH
CO1, CO3	Detail the Samprapti vighatana, Chikitsa sutra, Chikitsa of Grahani dosha (SM36)	CC	MK	KH	L&PPT	T-CS,T-OBT,VV-Viva,QZ	F&S	I	-	LH
CO1, CO3, CO4	Construct Doshaja chikitsa , Chikitsa yojana including Aushadha yoga, Rasayana and Pathyaapathya of Grahani(SM36))	CAP	MK	KH	L&PPT	T-OBT,QZ ,VV-Viva,T-CS	F&S	I	-	LH
CO1, CO3	• Illustrate Sama dosha chiklitsa • Explain the Samprapti vighatana, Chikitsa sutra ,Chikitsa of Ajeerna(SM 3B), Alasaka(SM3C), Vishuchika, Vilambika(SM34)	CC	MK	KH	L&PPT	VV-Viva,T-CS,QZ ,T-OBT	F&S	I	-	LH
CO1, CO3	Apply Samprapti vighatana, Chikitsa sutra and Chikitsa of Aatopa, Aadhmana(SM31) and Aanaaha	CC	MK	KH	L&PPT	QZ ,T-OBT ,VV-Viva,T-	F&S	I	-	LH

						CS				
CO1, CO2, CO3	Review the Etiopathogenesis,Diagnosis, Ayurvedic Perspective and Principles of Management of Udaraarbuda (Malignancy of Abdomen)	CC	DK	K	L&PPT ,L&GD	T-OBT,QZ ,VV-Viva,T-CS	F	I	-	LH
CO1, CO3	Explain the Samprapti vighatana, Chiktsa sutra, and chikitsa of Shoola(SM33)	CC	MK	K	L&PPT	VV-Viva,T-CS,QZ	F&S	I	-	LH
CO1, CO2, CO4	Discuss the Etiopathogenesis, Diagnosis, Ayurvedic Mangement of Pittashaya Shotha(Cholecystitis),Agniashaya shotha(Pancreatitis), Diverticulitis and Gastroenteritis(Udara Shotha)	CC	DK	K	FC	T-CS,QZ , VV-Viva,T-OBT	F	I	-	NLHT17.1
CO1, CO2, CO3	Interpret the Etiopathogenesis, Diagnosis, and Ayurveda Management of Grahani (irritable bowel syndrome)	CC	DK	K	L&PPT	T-CS,P-VIVA	F	I	-	NLHT17.2
CO1, CO2, CO3	Differentiate the Etiopathogenesis, Diagnosis and Management of Urdhwaga Amlapitta(GERD) , Parinama shoola and Annadrava shoola(Acid Peptic Disease)	CC	DK	K	BS,DIS	QZ ,T-CS, VV-Viva,T-OBT	F	I	-	NLHT17.3
CO1, CO3	State the Phalashruti, Matra, Sevana kala and Anupana of various yoga mentioned in Annavaha srotodushti vikara	CC	MK	KH	LS,REC ,PER	VV-Viva,QZ	F&S	I	-	NLHT17.4
CO1, CO2, CO3, CO6, CO7	Identify Annavaha Srotodushti Lakshana in 5 cases of Annavahasroto vikaraDemonstrate the Chikitsa yojana including Pathyaapathya and Rasayana in 5 Annavahasrotodushti vikara	PSY-MEC	MK	KH	D-BED	C-INT,QZ , VV-Viva,SA	F&S	I	-	NLHP17.1
CO1, CO2, CO3, CO6,	Appraise two Annavahasroto dushti vikara in the OPD and formulate a treatment plan based on the Dosha Dooshya vivechana	CS	MK	SH	D	QZ ,C-INT, VV-Viva	F&S	I	-	NLHP17.2

CO7										
CO1, CO2, CO5	Demonstrate the insertion of the Nasogastric Tube/ Ryles tube in a mannequin	PSY-MEC	MK	KH	SIM,D, EDU	QZ ,CHK	F	I	-	NLHP17.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 17.1	Discussion on Chikitsa of Agniyashaya Shotha(Pancreatitis) and Pittashaya Shotha(Cholecystitis	Flipped classroom • The students are given the topic and they do a compilation on etiopathogenesis, ayurvedic perspective, and management from medical books and online scientific articles (shared by the mentor) • The following day the students get engaged in a discussion on the assigned topic • The students are encouraged to ask questions • The Mentor gives answers to the queries • Evaluation is done by Quiz and Presentation
NLHT 17.2	Compilation of scientific research articles on Irritable Bowel Syndrome/ (Grahani)	Journal Club • The topic is allotted to the students and they are asked to read scientific articles in different Journals and prepare notes on etiopathogenesis, the Ayurvedic perspective, and management on the given topic • The next day the students are divided into groups. They share the information gathered with other groups and engage in group discussions.

		• Mentors facilitate the discussion and students are encouraged to ask questions. • Mentors give answers to the queries • Evaluation is done by Quiz and Presentation
NLHT 17.3	Brainstorming on Etiopathogenesis, Diagnosis & Management of Urdhwaga Amlapitha(GERD), , Parinama shoola and Annadrava shoola(Acid Peptic Diseases)	Brainstorming • The topic is given and they are asked to prepare notes on etiopathogenesis, ayurvedic perspective, and management from medical books and online scientific articles (shared by mentor) • The next day the students are divided into groups and engage in group discussions and generate a conceptual framework on the Ayurveda perspective of the disease • Mentors facilitate the discussion and students are encouraged to ask questions • Mentors give answers to the queries • Evaluation is done by Quiz and Puzzles
NLHT 17.4	Clinical application of Aushadha yoga based on different Kalpana in Annavaha srotodushti vikara.	Library session and Class Presentation • The Mentor gives a brief description of each Aushadha yoga • The students are divided into small groups of 2 or 3 • Each group is given one Aushadha yoga • They are given a Library session and have to refer and collect information regarding each Aushadha yoga • Each group does a class presentation which is followed by a quiz
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 17.1	Bedside Case taking of Annavaha srotodushti vikara.	Bedside Case taking of Annavaha srotodushti vikara of Gulma(SM3K), Grahani (SM3), .Amlapitta(SM39), Parinaama shoola & Annadrava shoola/ Udarashoola(SM-3A, 3B,3C,3D,3E). Refer the case-taking format as explained in NLHP Activity Description 3.1 (Total 10hrs)
NLHP 17.2	OP-based case taking of two Annavahasrotodushti vikara	Refer to the case-taking format as mentioned in NLHP activity 5.1 (Total 2hrs)
NLHP 17.3	Insertion of Nasogastric tube/ Ryles tube in a Mannequin	Simulation/ Video-based learning (total 2hrs) • The students will be taken to the simulation Lab • The mentor gives a brief description of the indications and contraindications of NG tube insertion • Then, the Mentor demonstrates the Procedure Step By step to the students • The students practice the procedure on their own • The mentor guides the students and clears their doubts • Assessment will be done using a checklist. https://www.msdmanuals.com/professional/gastrointestinal-disorders/how-to-do-gastrointestinal-procedures/how-to-insert-a-nasogastric-tube

Topic 18 Chikitsa of Manovaha srotas dushti vikara (LH :8 NLHT: 4 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Summarize the Chikitsa Sutra of Manovaha sroto dushti and explain Samprapti vighatana, Chikitsa sutra and Chikitsa of Unmada roga.(SQ03)	CC	MK	K	L&PPT ,DIS,RE C,L_VC	CL-PR,T-C S,S-LAQ,C R-W,INT	F&S	II	-	LH
CO1, CO3	Explore the role of Adravyabhuta Chikitsa in Unmada roga.	CAP	MK	KH	L_VC,D IS,L&P	T-CS,T-OB T,CR-	F&S	II	-	LH

					PT	W,INT				
CO1, CO3	Explain the Samprapti vighatana, Chikitsasutra and Chikitsa of Apasmara roga(SK30)	CC	MK	KH	DIS,L&PPT ,L_VC,REC	CR-W,T-OBT,T-CS,S-LAQ,PRN	F&S	II	-	LH
CO1, CO3	Outline the Samprapti Vighatana, Chikitsasutra and Chikitsa of Atattvabhinivesha roga, Chittodvega and Vishada	CAN	MK	KH	L&PPT ,L,DIS	INT,CR-W, T-OBT,T-CS	F&S	II	-	LH
CO1, CO2, CO3	Review the Etiopathogenesis,Diagnosis and Management of Chinta roga (General Anxiety Disorder) .	CC	MK	KH	L_VC,DIS,L&PPT ,L	CR-W,T-CS,INT, C-VC,T-OBT	F&S	II	-	LH
CO1, CO2, CO3	Summarize the Etiopathogenesis,Diagnosis and Management of Vishada (Depression).	CS	MK	K	L&PPT ,L_VC, L,DIS	C-VC,T-CS,T-OBT,INT,CR-W	F&S	II	-	LH
CO1, CO2, CO3	Describe the etiopathogenesis, diagnosis, treatment principles of Epilepsy (non-organic)	CC	DK	KH	DIS,L&PPT ,L,L_VC	T-OBT,PRN,INT,CR-W,T-CS	F&S	II	-	LH
CO1, CO3	Describe the etiopathogenesis, diagnosis, treatment principles of Bhavodvega (Somatoform and mood disorder), Pratyabalajanya vikara (Stress induced disorder), Kamonmada (Psychosexual disorders).	CC	DK	KH	L&PPT ,L_VC, L,DIS	T-OBT,T-CS,QZ ,INT,CL-PR	F&S	II	-	LH
CO1, CO3	State the Ekala Aushadha prayoga, Aushadha Kalpa , Rasayana in Manasa roga.	CK	MK	KH	DIS,L&GD,TBL	SA,CBA,S-LAQ,INT	F&S	II	-	NLHT18.1
CO1, CO2	Explain the Bhutonmada and its basic management.	CC	NK	KH	EDU,PER,DIS	QZ , C-VC,PRN	F	II	-	NLHT18.2

CO1, CO2, CO3	Discuss clinical understanding of Atatvabhinivesha(Obsessive compulsive disorder,Neurotic disorder) and Vyaktatva evum swabhav viparyaya(Personality and behavioral disorder) and its treatment plan.	CAP	NK	KH	DIS,BS	QZ ,INT,CR-W	F	II	-	NLHT18.3
CO1, CO2, CO3	Discuss clinical understanding of Vishada (Depression) and its treatment plan	CAP	MK	KH	TUT,TBL,DIS	QZ ,INT	F&S	II	-	NLHT18.4
CO1, CO2, CO3, CO6, CO7	Demonstrate the Chikitsa yojana and prepare case record in a case of Manovaha srotodushti after performing relevant clinical examination	PSY-MEC	MK	SH	L&GD, D-BED, TBL,CD,PER	VV-Viva,PRN,PP-Practical,OSCE	F&S	II	-	NLHP18.1
CO1, CO2, CO3, CO7	Identify various clinical conditions of mental disorders, changes in the higher mental functions and study the case management protocols in the establishment.	PSY-MEC	NK	SH	FV,D-BED,RLE	C-VC,PP-Practical,OSCE,Log book	F	II	-	NLHP18.2
CO2, CO6	Assess the importance of commemmorating World Mental Health day	PSY-MEC	DK	SH	TUT,EDU	QZ	F	II	-	NLHP18.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 18.1	Aushadha prayoga for Manasa roga	**Group Discussion and Team based learning** • The students are divided in groups of 3-5 students • Each Group is allotted specific Aushadha yoga • Students refer and compile the material from library sources and prepare a presentation • Each group will present the allotted topic in class

		• Students are encouraged to interact with the presenter under the supervision of the mentor • Mentor clears the doubts, answers the queries and gives the concluding remarks 1.Ekala Aushadha Yoga (single drug therapy) for manasa roga with appropriate anupana: • **B**ramhi, • Kushmanda, • Ashwagandha, • Vacha • Jyotishmati, • Shankhapushpi 2. Aushadha Kalpas with appropriate sevana kala matra, anupana of manasa roga – • Kalyanaka Ghrita, • Saraswatarishta, • Manasamitra Vataka, • Panchagavya Ghrita, • Smritisagara rasa, 3.Naimittika Rasayana for manasa roga • Kushmanda avalehya • Brahmi Ghrita • Medhya rasayana

NLHT 18.2	Bhutonmada and its basic management.	Discussion on the lakshana of Bhutonmada and its basic management. Group Discussion • Small groups are formed in the class. • The group of students discuss and interact among themseleves the panchnidana of bhutonmada along with its chikitsa. • Student and Mentor interaction takes place and queries are solved.
NLHT 18.3	Detailed discussion on Obsessive compulsive disorder, Neurotic disorder, personality and behavioral disorder.	Detailed discussion on the Diagnosis, Clinical examination and treatment of Atatvabhinivesha(Obsessive compulsive disorder,Neurotic disorder) and vyaktatva evum swabhav viparyaya(Personality and behavioral disorder). Group Discussion • Students are instructed to refer from available resources and prepare PPT. • On the following day they present the topic using audio visual aids followed by Group Discussion. • Mentor answers the queries raised by the students.
NLHT 18.4	Detailed discussion on the Diagnosis, Clinical examination and treatment of Vishada (Depression).	**Team based learning** • The students are divided into different teams. • One team is instructed to present a case on depression • The second team is instructed to present a detailed presentation about the topic related to etiopathogenesis, diagnosis. • The third team is as instructed to perform clinical examination in a simulated case. • The fourth team is instructed to do a presentation on the treatment.

		• Presentation is followed by group discussion • Mentor answers the queries and gives the concluding remarks.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 18.1	Case study/ case scenario to devise a treatment plan according to principles of Manovaha srotas Documentation of a case/condition requiring manovaha srotas	Clinical case study (2 Long cases x 2hours = 4 hours per batch) Refer the case taking format mentioned in NLHP activity description 3.1 •
NLHP 18.2	An insight into functionality of a mental hospital /de-addiction center/psycho social rehabilitation center.	Activitiy - Field visit (2 hours) Community based learning Students are taken to nearest mental health care facility. • They observe the inmates of the facility and identify various mental health disorders and their management. • Students make a brief report about visit. The report is be presented by the students and assessed by the Mentors followed by concluding remarks.
NLHP 18.3	Public awareness activity related to Mental health day.	Commemoration of World Mental Health day(Oct 10) (2 hours) Community based learning Students are encouraged to conduct public awareness programs using suitable mass communication, audio-visual aids showing the importance of Mental Health, Preventive and therapeutic aspect of

		psychiatric disorders.

Topic 19 Chikitsa of of Antahsravi Granthi vyadhi (LH :4 NLHT: 4 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO3, CO6	Explain Chikitsa of Mandavatuk (Hypothyroidism)	CAP	MK	KH	L_VC,L &PPT ,LRI	M-CHT,V V-Viva,WP ,M-POS	F&S	II	-	LH
CO1, CO2, CO3, CO6	Describe Chikitsa of Tivravatuk (Hyperthyroidism) (SP9Y).	CAP	MK	KH	LRI,L& PPT ,L_VC	VV-Viva,M -CHT,WP, M-POS	F&S	II	-	LH
CO1, CO2, CO3, CO6	Explain Chikitsa of Adhivrikka granthi vikara (Adrenal gland Disorders): Hyperaldosteronism-Addison vyadhi (Addison's disease).	CAP	MK	KH	LRI,L_ VC,L& PPT	M-CHT,W P,M-POS,V V-Viva	F&S	II	-	LH
CO1, CO2, CO3, CO6	Explain Chikitsa of Adhivrikka granthi vikara (Adrenal gland disorders): Hypoaldosteronism-Cushing roga samuchchaya (Cushing's Syndrome).	CAP	MK	KH	LRI,L& PPT ,L_VC	M-POS,VV -Viva,WP, M-CHT	F&S	II	-	LH
CO1, CO2, CO3, CO6	Discuss Chikitsa of Piyusha granthi vikara (Pituitary disorders): Hypopituitarism-Vamanatva (Dwarfism) (SP9Y).	CAP	NK	KH	TUT,DI S,PER	VV- Viva,QZ	F	II	-	NLHT19.1
CO1, CO2, CO3,	Explain Chikitsa of Piyusha granthi vikara (Pituitary disorders): Hyperpituitarism-Dirghakayata /Atidirgha (Gigantism) and Vikayata (Acromegaly).	CAP	NK	KH	DIS,PE R,TUT	QZ ,VV- Viva	F	II	-	NLHT19.2

CO6										
CO1, CO2, CO3, CO6	Explain the Chikitsa of Piyusha granthi vikara : Udakameha (Diabetes insipidus).	CAP	NK	KH	PER,TUT,DIS	QZ ,VV-Viva	F	II	-	NLHT19.3
CO1, CO2, CO3, CO6	Explain the Chikitsa of Para-avatuka granthi vyadhi (Parathyroid disorders: Hypoparathyroidism and Hyperparathyroidism).	CAP	NK	KH	DIS,PER,TUT	QZ ,VV-Viva	F	II	-	NLHT19.4
CO1, CO2, CO3, CO6, CO7	Demonstrate clinical case of an Endocrine disorder and discuss its Chikitsa with Pathyapathya.	PSY-SET	MK	KH	D,TBL, PER,CD ,LRI	QZ ,P-VIVA,OSCE,PRN,P-CASE	F&S	II	-	NLHP19.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 19.1	Hypopituitarism-Vamanatva (Dwarfism) (SP9Y)	Students prepare a powerpoint presentation to read, learn and understand the topic. **Group Discussion** • Mentor allots the topic to the student. • Student prepares a Power point presentation for the allotted topic by referring to the study material. • Student presents the topic in the class using power point. • A discussion is generated among the students on the given topic. • Mentor concludes the class with remarks.

NLHT 19.2	Hyperpituitarism-Dirghakayata /Atidirgha (Gigantism) and Vikayata (Acromegaly)	Students prepare a powerpoint presentation to read, learn and understand the topic. Refer the Activity Description of NLHT 19.1
NLHT 19.3	Udakameha (Diabetes insipidus)	Students prepare a powerpoint presentation to read, learn and understand the topic. Refer the Activity Description of NLHT 19.1
NLHT 19.4	Hypoparathyroidism and Hyperparathyroidism	Students prepare a powerpoint presentation to read, learn and understand the topic. Refer the Activity Description of NLHT 19.1

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 19.1	Case taking of Endocrine disorder. Case presentation of Endocrine disorder	Case based learning(4NLHP - 2 Cases) Please refer the case taking framework as described in NLHP 3.1.

Topic 20 Chikitsa of Vyadhikshamatva vikara (LH :3 NLHT: 4 NLHP: 3)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO3	Describe the Etiopathogenesis, Diagnosis and Ayurvedic management of Vyadhikshamata heenatajanya vikara **(**Immunodeficiency diseases -Primary and secondary immune deficiency disorders)	CC	MK	KH	DIS,L,L &PPT	QZ ,PRN	F&S	II	-	LH
CO1, CO2, CO3	• Explain the Etiopathogenesis, Diagnosis and Principles of management of Atmapratirodha Kshamatvajanya Vikara (Auto immune disorders)	CC	MK	KH	L_VC,L &PPT ,L	PRN,QZ	F&S	II	-	LH

	• Explain Samprapti vighatana and Chikitsa of Pratirakshija (Systemic Lupus Erythematosus)									
CO1, CO2, CO3	Describe the Etiopathogenesis,Types, Diagnosis and Principles of management of Atisamvedanasheelata janya vyadhi (Hypersensitivity Reactions).	CC	MK	KH	L,L_VC ,L&PPT	QZ ,PRN	F&S	II	-	LH
CO1, CO2, CO3	Discuss the Etiopathogenesis, Diagnosis, Principles of management and Ayurvedic understanding of Ankylosing Spondylitis	CC	NK	K	BL,L& GD,L_ VC	QZ ,PRN	F	II	-	NLHT20.1
CO1, CO2, CO3	Summarizes the Etiopathogenesis, Diagnosis, Principles of management along with Ayurvedic perspective of Multiple sclerosis (MS)	CK	NK	K	DIS,L_ VC,L& GD,LRI ,TBL	QZ ,PRN	F	II	-	NLHT20.2
CO1, CO2, CO3	Discuss the Etiopathogenesis, Diagnosis,Pprinciples of management along with Ayurvedic perspective of Crohn’s disease	CC	NK	K	L_VC,C D,L&G D,DIS,L RI	QZ ,PRN	F	II	-	NLHT20.3
CO1, CO2, CO3	Discuss the Etiopathogenesis, Diagnosis, Principles of management along with Ayurvedic perspective of Rheumatoid Arthritis	CC	NK	K	BL,BS, DIS,L& GD,LRI	PRN,QZ	F	II	-	NLHT20.4
CO1, CO2, CO3	Demonstrate the Chikitsa yojana & prepare case record in cases of Vyadhikshamatva vikara after performing relevant clinical examinations	PSY-MEC	MK	KH	LRI,D-BED,PT ,CD,DL	PRN,Mini-CEX,OSCE ,P-VIVA,P-PRF	F&S	II	-	NLHP20.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 20.1	Approach to the Diagnosis, Ayurvedic perspective and management of Ankylosing Spondylitis	**Blended learning and Group discussion** • Students are given online learning material like description of the internet link and scientific articles • Students are divided into various small groups and they will be allotted topic related to Ankylosing Spondylitis • Each group is asked to do a presentation related to the topics given • Group discussion will be followed • Mentor clears the doubts, answers the queries and gives the concluding remarks
NLHT 20.2	Approach to the Diagnosis, Ayurvedic perspective and management of Multiple sclerosis	**Team-based learning, Presentation** • The students are divided into different teams • One team is asked to present on etiopathogenesis and diagnosis of Multiple sclerosis • The second team does a detailed presentation about the Ayurvedic understanding of Multiple sclerosis • The third team does a presentation on the investigations related to multiple sclerosis • Followed by a group discussion on Ayurveda management • Mentors answers the queries and gives the concluding remarks.
NLHT 20.3	Approach to the Diagnosis, Ayurvedic perspective and management of Crohn’s disease	**Class Presentation** • The students are encouraged to collect information on the etiopathogenesis, Diagnosis,

		Investigations Prognosis and Management of Crohn's disease • The students do a presentation • Discussion is followed • Mentors answers the queries and gives the concluding remarks
NLHT 20.4	Approach to the Etiopathogenesis, Diagnosis, Ayurvedic perspective and management of Rheumatoid Arthritis	**Blended learning and Group discussion** • Students are given online learning material like description of the internet link and scientific research articles • Students are divided into various small groups, and they will be allotted topic related Rheumatoid Arthritis • Each group is asked to do a presentation related to the topic given • Group discussion will be followed • Mentor clears the doubts, answers the queries and gives the concluding remarks
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 20.1	Bed side Case Presentation on Immune system disorders	Case Presentation on Immune system disorders 2 cases per clinical batch One long case 2hrs &one short case 1 hr.) Total =3hrs Refer case taking framework as described in NLHP3.1 and NLHP5.1 use for details
Topic 21 Chikitsa of Shukravaha srotasa vikara (LH :3 NLHT: 4 NLHP: 4)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4	Describe the Samprapti vighatana, Chikitsa sutra and Chikitsa of Klaibya and Shukralpata	CC	MK	KH	L&PPT ,L_VC, L	PRN,CL-PR,QZ	F&S	III	-	LH
CO1, CO2, CO3	Elaborate the Samprapti vighatana, Chikitsa sutra and Chikitsa of Shukradosha and Kshinashukra	CC	MK	KH	L_VC,L ,L&PPT	PRN,QZ	F&S	III	-	LH
CO1, CO3, CO4	Detail the Samprapti vighatana, Chikitsa sutra and Chikitsa of Dhwajabhanga and Explain the causes of Impotency and Plan the treatment.	CC	MK	KH	DIS,L,L _VC,L &PPT	QZ ,PRN	F&S	III	-	LH
CO2, CO4	Discuss the Applied clinical anatomy and Endocrinology of male reproductive system in context of chikitsa of Shukravahasrotas Dushti Vikara	CC	NK	K	L&GD, DIS,L_ VC,BL	PRN,QZ	F	III	-	NLHT21.1
CO2, CO4	Determine the Etiopathogenesis, Diagnosis, Principles of management and Ayurveda perspective in the treatment of Male hypogonadism, and Infertility	CE	NK	K	L_VC,T BL,DIS, BS,L& GD	PRN,QZ	F	III	-	NLHT21.2
CO1, CO3, CO4	State the Phalashruti, Matra, Anupana and Sevana kala of Aushadha yoga in Shukravaha Srotas vikara • Vidarikanda churna • Vrishya ghrita • Madanakameswara lehya • Vrishya gutika	CK	DK	K	DIS,BS, L&GD, REC	PRN,QZ	F	III	-	NLHT21.3
CO1,		CE	NK	K	DIS,TB	PRN,QZ	F	III	-	NLHT21.4

CO2, CO3, CO4	• Explain the concept of Beeja dushti janya vikara and corelate it with hereditary and congenital disorders. • Sketch a management plan for Beejadushti janya vikara • Explain Ayurvedic perspective and principles of management of Male hypogonadism,and Infertility				L,L&GD,L_VC,CBL					
CO1, CO2, CO3, CO4, CO5	Demonstrate the Chikitsa yojana & prepare case record in cases of Shukravaha srotodushti vikara after performing relevant clinical examination	PSY-MEC	MK	SH	L&GD, L_VC,DIS,PER	PRN,QZ	F&S	III	-	NLHP21.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 21.1	Understanding the Applied clinical anatomy and endocrinology aspects for male reproduction	**Blended learning** • Students are given online learning material like description of the digital resources and scientific research articles • Students are divided into various small groups and they will be allotted topic related to Applied clinical anatomy and endocrinology aspects of male reproductive system • Each group is asked to do a presentation related to the topic given • Group discussion will be followed • Mentor clear the doubts and answer the queries to conclude with remarks on the topic
NLHT 21.2	Understanding on the Diagnosis, Clinical	**Team based learning**

	examination and Ayurvedic perspective and Principles of management of Male hypogonadism, and Infertility	• The students are divided into different teams • One team is asked to present a case on Male hypogonadism and Infertility • The second team present a detailed presentation about the topic related to etiopathogenesis, diagnosis • The third team perform clinical examination in a simulated case • The fourth team does a presentation on the investigations • Followed by group discussion • Mentor will clear the doubts and answer the queries • Give the concluding remarks
NLHT 21.3	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha yoga in Shukravaha Srotas vikara	**Group Discussion** • The students are divided in groups of 3-5 students • Each Group is allotted specific Aushadha yoga • Students refer and compile the material from library sources and prepare a presentation • Each group presents the allotted topic in class • Students are encouraged to interact with the presenter under the supervision of the teacher. • Mentor gives concluding remarks on the presentations
NLHT 21.4	Detailed understanding on the Diagnosis, Clinical examination and Ayurvedic perspective and principles of management of Male hypogonadism, Infertility and Beeja dushtijanya vikara	**Team based learning** • The students are divided into different teams • One team is asked to present a case on Male hypogonadism and Infertility • The second team present a detailed presentation about the topic related to etiopathogenesis, diagnosis • The third team perform clinical examination in a simulated case • The fourth team does a presentation on the investigations • Followed by group discussion

		• Mentor will clear the doubts and answer the queries • Give the concluding remarks

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 21.1	Bedside case taking of case of Klaibya (Male sexual dysfunction), Shukradosha	**Case Presentation on Immune system disorders** Two cases per clinical batch (One long case 2 hours & one short case 1 hour.) Total =3 hours **Demonstration bedside** Refer casetaking framework as described in NLHP3.1 and NLHP5.1 use for details

Topic 22 Chikitsa of Guhya roga (LH :2 NLHT: 2 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO3, CO6	Describe the Samprapti vighatana, Chikitsa and Aushadha yoga of Upadamsha (SN30), Phiranga (Syphilis) (SN31) and Puyameha (Gonorrhoea) (SN30).	CAP	DK	KH	L&PPT	VV-Viva	F	III	-	LH
CO1, CO2, CO3, CO6	Describe the Samprapti vighatana, Chikitsa and Aushadha yoga of Vankshana lasika granthikanarbud (Lymphomagranuloma Inguinale), Phirangiya vrana (Soft Chancroid) and Visarpa (Herpes Simplex) (SN4T).	CAP	DK	KH	CBL,L_VC,L,DIS,BS	VV-Viva	F&S	III	-	LH
CO1, CO2, CO3,	Differentiate between the Chikitsa of Guhya roga	CAP	DK	KH	L_VC,DIS,TPW,LS	M-POS,VV-Viva,M-CHT,QZ	F	III	-	NLHT22.1

CO6						,WP				
CO1, CO2, CO3, CO6	Discuss the Chikitsa yojana of Guhya roga along with Phalashruti, Aushadha sevana kala, Matra and Anupana of the following Aushadha yoga • Chopachinyadi churna • Ashtamurti rasa • Rasakarpoora • Triphala masee	CAP	DK	KH	PrBL,DIS,LRI,TBL	VV-Viva	F&S	III	-	NLHT22.2
CO1, CO2, CO6, CO7	Demonstrate awareness about Sexually transmitted diseases (STD) among the teenagers/ young adults in the educational institutes.	AFT-CHR	MK	K	TBL	Log book	F	III	-	NLHP22.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 22.1	Differentiating between the Chikitsa of Guhya roga	Student should learn to differentiate the treatment of Guhya rogas based on their sign and symptoms. Student should prepare an algorithm of treatment plan according to the diagnosis. **Team Project Work** • Students are assigned the task of collecting images/photos of the ulcer pattern of different Guhya rogas. • They are encouraged to prepare posters or charts. • They are also instructed to prepare flow charts of treatment in different Guhya rogas.

NLHT 22.2	Chikitsa of Guhya roga	Student should learn to treat various Guhya roga by making a clinical diagnosis supported by laboratory investigations and Prayoga of different Aushadha yoga with their Phalashruti, Aushadha sevana kala, Matra and Anupana. **Small group discussion** • The Mentor divides the students into small groups. • Some groups are alloted different Guhya roga and other groups are alloted different aushadha yoga. • These groups discuss among themselves the treatment plan of given roga. • The groups which are alloted aushadha yoga should discuss different aspects of its use. • Each Group gives the presentation. • Mentor assesses the presentation of students and conclude with remarks.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 22.1	Creating awareness about Sexually transmitted diseases during National STD Awareness week.	**Community Health Education/Public Outreach Program** (2 NLHP) • .Students are instructed to prepare awareness material regarding Sexually Transmitted Diseases like documentary, posters, slogans etc. • .A convenient day is selected from the National STD awareness week (Second week of April) • .Students are taken to nearby educational institute. • .Students display the awareness material and educate the audience under the guidance of the mentor.

Topic 23 Vajikarana (LH :6 NLHT: 3 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1,	Recall the principles of Vajikarana & summarize its need along	CC	MK	K	PER,TU	PRN,VV-	F&S	III	-	LH

CO3, CO4	with the benefits				T,L&PPT	Viva,QZ , M-POS,S-LAQ				
CO1, CO3, CO4	Comprehend the concept of Shuddha Shukra and analyse its role in male fertility and reproductive health	CAN	MK	KH	L&PPT ,LRI,TUT	M-CHT,QZ ,VV-Viva,COM,WP	F&S	III	-	LH
CO1, CO3, CO4	Explain the types of Vajikarana Dravya useful in different Shukravaha sroto dushti vikara	CC	DK	KH	PER,L&PPT ,FC ,L_VC	S-LAQ,QZ ,M-POS,PRN,PUZ	F	III	-	LH
CO1, CO3, CO4	Elaborate the role of Vajikarana in the management of Infertility(Klaibya) and Impotency(Shandhatva)	CC	MK	KH	PER,LRI,SY,L&PPT	DEB,QZ ,COM,PRN,VV-Viva	F	III	-	LH
CO1, CO3, CO4	State the Therapeutic benefits of individual herbs in Shukra janana mahakashaya & Shukra shodhaka mahakashaya for the treatment of male/female Infertility	CC	DK	KH	L&PPT ,LS,TUT,BS	QZ ,PUZ,T-OBT,VV-Viva,M-CHT	F&S	III	-	LH
CO1, CO3, CO4	Classify the Phalashruti, Sevana kala, Matra & Anupana of the following Aushadha KalpanaSiddha makardwajamJatiphaladi vatiAmrita bhallataka	CK	NK	K	L&PPT ,TUT,FC,PER, LS	M-CHT,CL-PR,VV-Viva,QZ	F	III	-	LH
CO1, CO3, CO4	Discuss the Phalashruti of the following Aushadha Kalpana along with its Sevana kala, Matra & AnupanaShilajatuVanga bhasmaSuvarna bhasma	CK	DK	KH	L&GD, FC,PER ,TBL,LS	P-EXAM,CL-PR,COM ,VV-Viva,QZ	F&S	III	-	NLHT23.1
CO1, CO3, CO4	Devise the Chikitsa Karmukatva, Sevana kala, Matra & Anupana of the following Aushadha KalpanaVajikarana ghrutaVrishya ghrutaVrishya gutikaShrigopal taila	CK	DK	KH	BL,TBL ,SY,LS, TUT	WP,M-POS ,VV-Viva,COM,T-CS	F&S	III	-	NLHT23.2

CO1, CO3, CO4	Demonstrate the Phalashruti, Sevana kala, Matra & Anupana of the following Vajikarana YogaMadanakameswara lehyaNarasimha rasayanBrimhani gulika	CC	DK	KH	PER,PSM,LS,DIS,TBL	M-CHT,T-CS,CL-PR,VV-Viva,P-VIVA	F&S	III	-	NLHT23.3
CO1, CO3, CO4	Formulate the appropriate treatment applying the principles of management of Vajikarana in Shukra Dushti	PSY-MEC	DK	SH	LRI,D-BED,CBL,DIS,TBL	P-CASE,OSCE,CBA,C-VC,SP	F&S	III	-	NLHP23.1
CO1, CO3, CO4	Construct a Chikitsayojana based on the interpretation of Investigations related to Male & Female Infertility	PSY-MEC	NK	SH	CD,LRI,CBL,SIM,DIS	P-VIVA,P-POS,SP, C-VC,CBA	F&S	III	-	NLHP23.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 23.1	Mono Drug Vajikarana therapy like - Shilajatu, Suvarna bhasma and Vanga bhasma	Student discusses the phalashruti of a few ekala Vajikarana Dravya along with their sevana kala, matra, anupana & pathyaapathya. • The students participate in Groups as per the instructions of the Mentor • Mentor allots one of mono drug vajikarana therapy like Shilajatu, Suvarna bhasma or Vanga bhasma to each group to discuss & construct a chikitsa yojana. • Each group discusses about indications, method of administration, phalashruti, Matra, Anupana & Pathyaapathya kalpana of the alloted herb. • Each group gives a powerpoint presentation on the allotted topic. • The Mentor concludes the session with remarks

NLHT 23.2	Vajikarana ghruta, Vrishya ghruta, Vrishya gutika & Shrigopal taila in Vajikarana Prayoga	Students devise the Chikitsa karmukatva, Sevana kala, Matra, Anupana & Pathyaapathya of Vajeekarana aushadha Kalpana. Team Based Learning • The Mentor selects few students & divide them into 4 teams • Each team is allotted one of Vajeekaran ghruta, Vrishya ghruta, Vrishya gutika or Shrigopal taila & instructed to search information. • The teams refer to & collect the necessary information related to indications, method of administration, phalashruti, Matra, Anupana & Pathyaapathya of the given medicine from library sources • Each team discusses the contents and presents the summary. • Other students are encouraged to participate in the discussion under supervision of mentor. • The Mentor provides concluding remarks on the presentation.
NLHT 23.3	Vajikarana Yoga - Madanakameshwara Lehya, Narasimha Rasayan & Brimhani Gulika.	Students to demonstrate the Phalashruti, Sevana kala, Matra, Anupana & Pathyaapathya of Vajikarana Aushadha yoga Team based Learning • The Mentor divides the students into small groups & instructs them to refer tutorials, library resources, reading materials on the allotted Madanakameswara lehya, Narasimha rasayana or Brimhani gulika • The students in groups are instructed to present their knowledge & ideas on the indications, method of administration, phalashruti, matra, anupana & pathyaapathya of the given medicine by preparing posters/charts/e-posters. • Students will accordingly present the discussed topics through poster • The Mentor encourages the activity & gives concluding remarks

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 23.1	Formulate a treatment plan according to principles of Vajikarana.	The students will document:- A case of shukra dushti Structure an appropriate treatment plan Select the appropriate aushadha(aushadha yoga/mono drug therapy). Case based learning - 2 long cases x 2 hours = 4hours per batch The Mentor takes students to the ward/OPD of Kayachikitsa. Students in the clinical batch select a case requiring vajikarana. Mentor shows the construction of the chikitsa yojana and documenting it in the following steps: • The students shall introduce self to the patient and take verbal consent. • The students shall interrogate the patient and document the clinical history. • The students further brief the patient about the steps in examination that will be performed on him/her. • The students perform the relevant clinical examinations adopting the Ayurvedic and conventional clinical methods of examination of the involved system • students collect information from Blood analysis, semen analysis, radiological investigations and consider it for doshadushyadi vivechan • The students interpret the collected information and state the vyadhi nama (arrive at a tentative clinical diagnosis) following the method of vyavachedaka nidana (differential diagnosis) • The students determine the sadhyaasadhyata (prognosis) of the disease in the patient. • The students formulate a chikitsa yojana of vajikaran medicines • The students recommend pathyaapathya to the patient. • Finally, the students address the doubts of the patient & acknowledge his/her cooperation in the case taking. • The students present and discuss the documented short case. • The mentor facilitates the case presentation. • The mentor evaluates the student’s performance, knowledge, psychomotor and

		communication skills using rubrics or checklist and gives the feedback. • Remedial measures should be implemented if found necess
NLHP 23.2	Constructing a Chikitsa yojana based on the Interpretation of the Investigations related to Male & Female Infertility	Students will construct a chikitsa yojana in a case interpreting the available investigations like Blood analysis, semen analysis, radiological investigations. Case based learning - 2 short cases x 1hour = 2hours per batch Each student will be given two cases(one male & one female) by the mentor for interpretations of the available investigation reports in a male/female infertility patient for treatment purpose Mentor shows the art of writing a rational treatment prescription and documenting it in the following steps: • The students shall introduce self to the patient and take verbal consent. • The students shall interrogate the patient and document the clinical history. • The students further brief the patient about the steps in examination that will be performed on him/her. • The students perform the relevant clinical examinations adopting the Ayurvedic and conventional clinical methods of examination of the involved system • students collect information from Blood analysis, semen analysis, radiological investigations and consider it for doshadushyadi vivechan • The students interpret the collected information and state the vyadhi nama (arrive at a tentative clinical diagnosis) following the method of vyavachedaka nidana (differential diagnosis) • The students determine the sadhyaasadhyata (prognosis) of the disease in the patient. • The students formulate a chikitsa yojana of vajikaran medicines • The students recommend pathyaapathya to the patient. • Finally, the students address the doubts of the patient & acknowledge his/her cooperation in the case taking. • The students present and discuss the documented short case. • The mentor facilitates the case presentation.

		• The mentor evaluates the student's performance, knowledge, psychomotor and communication skills using rubrics or checklist and gives the feedback. • Remedial measures should be implemented if found necessary.

Topic 24 Rasayana (LH :6 NLHT: 4 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4	Retrieve the Indications of Rasayana & Comprehend the Dose of Rasayana according to Ayu(age) of the patient/subject	CAN	DK	KH	L_VC,L &PPT	PRN,S-LAQ,QZ ,PUZ,M-CHT	F&S	III	-	LH
CO1, CO3, CO4	Identify the role of Aachara Rasayana in clinical practice	CK	DK	KH	BS,L&PPT ,L_VC,PL, PER	PA,M-CHT ,O-QZ,T-CS,WP	F	III	-	LH
CO1, CO3, CO4	Elaborate the application & benefits of Naimittika Rasayana with examples.	CC	MK	KH	TUT,PER,KL,BS,L&PPT	PRN,M-POS,P-VIVA, PUZ,COM	F&S	III	-	LH
CO1, CO3, CO4	Classify the given Vyadhihara Rasayana according to its Chikitsa karmukatva, Matra, Aushadha sevana kala & AnupanaAamalaki RasayanaBhallataka RasayanaVardhamana Pippali Rasayana	CC	NK	KH	FC,L&PPT ,BS,PER	PRN,DEB, QZ ,COM, M-CHT	F&S	III	-	LH
CO1, CO3, CO4	Explain the Chikitsa karmukatva, Matra, Aushadha sevana kala & Anupana of the following Vyadhihara Rasayana Tuvaraka Rasayana	CC	NK	KH	FC,PER ,BS,L& PPT	WP,PRN,M-POS,VV-Viva,QZ	F	III	-	LH

	Shilajatu RasayanaLasuna Rasayana									
CO1, CO3, CO4	Elaborate the Aushadha sevana kala, Matra & Anupana along with the Chikitsa Karmukatva of the following Vyadhihara RasayanaTriphala RasayanaChyavanprashaAgastya HaritakiKushmanda Rasayana	CC	NK	KH	L&PPT ,FC,BS, PER	M-CHT,COM,PUZ,QZ ,VV-Viva	F	III	-	LH
CO1, CO3, CO4	Demonstrate the use of single herbs as Rasayana in Chikitsa	CAP	DK	KH	LS,TBL ,IBL,L &GD	SA,T-CS,CL-PR,PRN, M-POS	F&S	III	-	NLHT24.1
CO1, CO3, CO4	Integrate the Evidence based therapeutic effects of Rasayana	CAN	NK	KH	IBL,PER,LRI,LS,PL	CL-PR,QZ ,PRN,CR-RED,PA	F&S	III	-	NLHT24.2
CO1, CO3, CO4	Illustrate a treatment protocol incorporating a Rasayana	CAP	NK	KH	CBL,SIM,FC,IBL,PER	Log book,VV-Viva,CL-PR,P-CASE,CBA	F&S	III	-	NLHT24.3
CO1, CO3, CO4	Devise an ideal Rasayana protocol as Apunarbhava Chikitsa	CS	NK	KH	SIM,DIS,LS,FC ,PER	VV-Viva,M-CHT,CL-PR,WP,P-CASE	F&S	III	-	NLHT24.4
CO1, CO3, CO4	Devise an appropriate treatment protocol in a case study/case scenario applying the principles of Rasayana	PSY-GUD	DK	SH	CBL,LRI,IBL,D-BED,CD	P-CASE,OSCE,SP,CBA,P-VIVA	F&S	III	-	NLHP24.1
CO1, CO3,	Formulate appropriate Rasayana in the given caseKanthya RasayanaVarnya RasayanaKeshya RasayanaMedhya	PSY-SET	NK	SH	LRI,CBL,SIM,	CBA,SP,P-CASE,Log	F&S	III	-	NLHP24.2

CO4	RasayanaNaimittika Rasayana – ShwasaNaimittika Rasayana – Tvacha roga				CD,DIS	book, C-VC					

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 24.1	Application of the properties of the single herbs for using them as Rasayana	Discussion on justifying the use of single herbs as Rasayana in Chikitsa Group Discussion • The students participate in Groups as per the instructions of the Mentor • Mentor allots single herb to each group to discuss their Rasayana properties. • Each group discusses about kalpana, matra & anupana of the alloted herb. • Each group gives a ppt presentation on the allotted topic. • The Mentor concludes the session with remarks
NLHT 24.2	Evidence based therapeutic effects of Rasayana	Utilization of Library resources by the students to collect information on Rasayana from peer-reviewed Indexed Journals Team based learning • The Mentor selects few students & divide them into 4 teams • Each team is instructed to search articles related to rasayana in peer- reviewed indexed journals to gather information. • The teams refer to & collect the necessary information from the referred research article of library sources • Each team discusses the contents and presents the summary. • Other students are encouraged to participate in the discussion under supervision of mentor. • The Mentor provides concluding remarks on the presentation.

NLHT 24.3	Utility of Naimittika Rasayana in a treatment protocol	Case Based Learning • The Mentor allots simulated disease condition to the students • The students are expected to chalk out an appropriate chikitsa yojana along with rasayana prayog for the given diagnosis. • A discussion is generated among the students for the given topics • Selected Students will present the given topic under the supervision of mentor. • The Mentor concludes the class will remarks
NLHT 24.4	Planning of Apunarbhava Chikitsa applying the principles & procedures of Rasayana Therapy	Flipped classroom • Students are divided into small groups by the mentor • students in the group are asked to prepare a presentation on the role of rasayana in apunarbhava chikitsa • In the following lecture, groups present the sequential procedures of rasayana therapy (purva & pradhana karma). • Other group students are encouraged to participate in the discussion • The Mentor supervises the presentations & provides guidance
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 24.1	Devise a treatment plan according to principles of Rasayana.	Bedside Demonstration- 3 Long cases x 2 hours = 6 hours per batch Documentation of a case/condition requiring Rasayana Selection of appropriate Rasayana dravya by the student. The Mentor takes students to the ward/OPD of Kayachikitsa. Students in the clinical batch select a case requiring rasayana. Mentor shows the construction of the chikitsa yojana and documenting it in the following steps • The students shall introduce self to the patient and take verbal consent. • The students shall interrogate the patient and document the clinical history. • The students further brief the patient about the steps in examination that will be performed on him/her. • The students perform the relevant clinical examinations adopting the Ayurvedic and conventional clinical methods of examination. • The available investigation reports are interpreted by the students. • The students analyze the nidana panchaka and extent of alteration in samprapti ghataka. The students interpret the collected information and state the vyadhi nama (arrive at a tentative clinical diagnosis) following the method of vyavachedaka nidana (differential diagnosis) • The students determine the sadhyaasadhyata (prognosis) of the disease in the patient. • The students construct the chikitsa yojana & prescribes certain rasayana required for the diagnosed disease. • The students recommend pathyaapathya to the patient. • Finally, the students address the doubts of the patient & acknowledge his/her cooperation in the case taking. The students present and discuss the documented long case. • The mentor facilitates the case presentation. • The mentor evaluates the student's performance, knowledge, psychomotor and communication skills using rubrics or checklist and gives the feedback. • Remedial measures should be implemented if found necessary.
NLHP 24.2	Formulate a treatment plan using appropriate enlisted Rasayana	Case Based Learning - 2 Short cases x 1 hour = 2 hours per batch The Mentor takes students to the ward/OPD of Kayachikitsa & assigns them a case requiring rasayana

		treatment. Mentor shows the art of writing a rational treatment prescription and documenting it in the following steps: • The students shall introduce self to the patient and take verbal consent. • The students shall interrogate the patient and document the clinical history. • The students further brief the patient about the steps in examination that will be performed on him/her. • The students perform the relevant clinical examinations adopting the Ayurvedic and conventional clinical methods of examination of the involved system • The available investigation reports are interpreted by the students. • The students interpret the collected information and state the vyadhi nama (arrive at a tentative clinical diagnosis) following the method of vyavachedaka nidana (differential diagnosis) • The students determine the sadhyaasadhyata (prognosis) of the disease in the patient. • The students formulate a rational treatment prescription for the diagnosed disease & plan the appropriate rasayana therapy enlisted below. • Kanthya Rasayana, Varnya Rasayana, Keshya Rasayana, Medhya Rasayana, Naimittika Rasayana – Shwasa, Naimittika Rasayana – Tvacha roga. • The students recommend pathyaapathya to the patient. • Finally, the students address the doubts of the patient & acknowledge his/her cooperation in the case taking. • The students present and discuss the documented short case. • The mentor facilitates the case presentation. • The mentor evaluates the student's performance, knowledge, psychomotor and communication skills using rubrics or checklist and gives the feedback. • Remedial measures should be implemented if found necessary.

Topic 25 Chikitsa of Jarajanya vikara and Indriyapradoshaja vikara (LH :2 NLHT: 2 NLHP: 12)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1,	Explain Samprapti vighatana and Samanya chikitsa of Jarajanya	CC	MK	SH	L,DIS,L	S-LAQ,T-C	F&S	III	-	LH

CO3	vikara and Indriyapradoshaja vikara .				&PPT	S,CR-W,T-OBT,CL-PR				
CO1, CO2, CO3	Review the Etiopathogenisis, Diagnosis and Principles of Management of Smritilopa(Alzheimer's disease).	CC	MK	KH	L_VC,DIS,L&PPT	OSCE,T-CS,INT,CR-W,T-OBT	F&S	III	-	LH
CO1, CO3	State the Ekala Aushadha prayoga, Aushadha Kalpa, Rasayana in Jarajanya vikara.	CK	MK	KH	DIS,L&GD,TBL	CBA,INT,S-LAQ,QZ	F&S	III	-	NLHT25.1
CO1, CO3	State the Ekala Aushadha prayoga, Aushadha Kalpa, Rasayana in Indriyapradoshaja vikara.	CK	MK	KH	DIS,L&GD,TBL	S-LAQ,PRN,CBA,INT	F&S	III	-	NLHT25.2
CO1, CO2, CO3, CO6, CO7	Demonstrate the Chikitsa yojna and prepare case record in a case of Jarajanya vikara and Indriyapradoshaja vikara after performing relevant clinical examination	PSY-MEC	MK	SH	CBL,DIS,D-BED,L&GD	Log book,OSCE,PRN	F&S	III	-	NLHP25.1
CO1, CO2, CO3	Identify various clinical conditions of elderly, age related physiological changes and their clinical significance and study the case management protocols in the establishment.	PSY-MEC	NK	SH	FV,D-BED,RLE,DIS	CBA, C-VC,OSCE,Log book	F	III	-	NLHP25.2
CO2, CO7	Create awareness on the Role of Ayurveda in the prevention and management of age related diseases.	PSY-MEC	DK	SH	TUT,DIS,EDU	QZ ,Log book	F	III	-	NLHP25.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 25.1	Aushadha prayoga for Jarajanya roga	**Group Discussion and Team based learning**

		• The students are divided in groups of 3-5 students • Each Group is allotted specific Aushadha yoga • Students refer and compile the material from library sources and prepare a presentation • Each group will present the allotted topic in class • Students are encouraged to interact with the presenter under the supervision of the mentor • Mentor clears the doubts, answers the queries and gives the concluding remarks 1. Ekala Aushadha Yoga (single drug therapy) for Jarajanya vikara with appropriate anupana: • Vidari • Shatavari • Ashvagandha • Jivanti • Madhuka 2.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following: • Yashtimadhu churna • Guduchi swarasa • Ashvagandhai churna • Shatavrayadi churna • Vidryadi churna 3.Naimittika Rasayana for Jarajanya vikara
NLHT 25.2	Aushadha prayoga for Indriyapradoshoja vikara	Group Discussion and Team based learning • The students are divided in groups of 3-5 students

		• Each Group is allotted specific Aushadha yoga • Students refer and compile the material from library sources and prepare a presentation • Each group will present the allotted topic in class • Students are encouraged to interact with the presenter under the supervision of the mentor • Mentor clears the doubts, answers the queries and gives the concluding remarks 1.Ekala Aushadha Yoga (single drug therapy) for Indriyapradoshaja vikara with appropriate anupana: • Daruharidra • Haritaki • Vibhitaki • Amalaki • Pippali 2.Aushadha Kalpa prayoga with appropriate matra, anupana , sevana kala for following: • Ksheerbala tail • Sarivadi vati • Chavayanprakash • Bilva tail • Triiphala churna 3. Naimittika Rasayana for Indriyapradoshaja vikara.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 25.1	Case study/ case scenario to devise a treatment	Documentation of a case/condition requiring Jarajanya vikara and Indriyapradoshaja vikara

	plan according to principles of Jarajanya vikara and Indriyapradoshaja vikara	Clinical case study (2 Long cases x 2 hours = 4 hours per batch) Case based learning Refer the case taking framework as described in NLHP 3.1
NLHP 25.2	An insight into functionality of a senior citizens' home/Geriatric care center.	Field visit (4 hours) Community based learning Students are taken to nearest senior citizens' home/Geriatric care center. . • They observe the inmates of the facility and identify various age related disorders and their management. • Students make a brief report about visit. • The report is be presented by the students and assessed by the Mentors followed by concluding remarks.
NLHP 25.3	Public awareness activity related to age related diseases.	Commemoration of International day of older people and Screening health camp (4 hours) Community based learning Students are encouraged to conduct public awareness programs using suitable mass communication, audio-visual aids consisting the information of age related disorders , Preventive and therapeutic aspect of age related diseases.

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
1.1	CO1	Selection of the appropriate treatment for a simulated case, enacted role play
3.1	CO1,CO2	Clinical understanding of Nija jvara,Sannipataja jvara and Agantuja jvara and its Chikitsa yojana
3.2	CO1,CO3	Importance of Langhana Chikitsa in Jvara
3.3	CO1,CO2	Clinical understanding and treatment of Jvara according to its different stages(Avasthanusara Jvara chikitsa)
3.4	CO1,CO3	Clinical understanding and management of Dhatugata jvara,Vishama jvara and Punaravartaka jvara
3.5	CO1,CO3	Understanding the Nidana panchaka and framing the management of various varieties of Jvara through case scenario.
3.6	CO1,CO3	Importance of Ksheera prayoga and Ghrita prayoga in Jvara
3.7	CO1,CO3	Phalashruti,Sevanakala,Matra,Anupana of the given Aushadha kalpana • Shadanga paneeya • Amritottaram Kashaya • Indukantam Kashaya • Vishamajvara nashaka kashaya • Sudarshana churna • Mrityunjaya rasa • Amritarishta • Pippalyadi Ghrita • Aparajita dhoopa
4.1	CO1,CO2	Understanding of Samprapti vighatana in Anukta roga
5.1	CO1,CO2,CO3	Approach to the diagnosis and management of Mastishkavarana shotha jvara(Meningitis) Mastishka shotha(Encephalitis) and Dhanurvaata(Tetanus
5.2	CO1,CO2,CO3	

		Approach to the diagnosis and management of Granthika sannipata jvara(Plague) and Leptospirosis
5.3	CO1,CO2,CO3	Approach to the diagnosis and management of Beejanu jvara (Anthrax), and Peeta jvara (Yellow fever)
5.4	CO1,CO2,CO3	Approach to the diagnosis and management of Sandhiga sannipata jvara (Chikungunya) Dandaka jvara(Dengue) and Shleepada (Filariasis),
6.1	CO2,CO6	An insight into Anuvanshika rakta vikara (Haematopoietic diseases) and their chikitsa.
6.2	CO1,CO2,CO6	Leukemia and its treatment
6.3	CO1,CO2,CO6	Haemoglobinopathies
6.4	CO2,CO6	Common Cardiovascular Diseases
6.5	CO1,CO2,CO6	Diagnosis and treatment of Raktapravaha-hinata-janya hridroga with special reference to Coronary Artery Diseases
6.6	CO1,CO2,CO6	Diagnosis and management of Raktaja Hridghaatah and Hritpaatah (Congestive Cardiac failure, Cardiac arrest and Conductive disorders of the Cardia)
7.1	CO2,CO6	Disorders of Coagulation
7.2	CO2,CO6	Acquired disorders of coagulation

7.3	CO1,CO2,CO6	Contemporary understanding of Visarpa along with its management
7.4	CO1,CO3	Kushtha bheda and doshahara chikitsa
7.5	CO1,CO2,CO6	Diagnosis and treatment of Leprosy and Vitiligo/Leukoderma
7.6	CO1,CO2,CO6	A diagnostic and treatment approach to Yakrut shotha w.s.r to Infective and Non-Infective Hepatitis.
7.7	CO1,CO2,CO6	An Insight into Yakrut vikara (common liver disorders) and their management
7.8	CO1,CO2,CO6	Maladies and remedies of Gout with special reference to Vatarakta
7.9	CO1,CO2,CO3	Management of peripheral vascular disorders
7.10	CO1,CO2,CO6	Article review on Tvak vikara
7.11	CO1,CO2,CO6	Diagnosis and treatment of Tvak vikara (Common Dermatological conditions in clinical practice)
8.1	CO1,CO2,CO3,CO6	Photography competition to familiarize the students with diagnosis and treatment of Kshudra roga.
9.1	CO1,CO3	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha yoga for Sthoulya and Prameha

9.2	CO1,CO2,CO3	Detailed understanding of dyslipidemia and Obesity and its ayurvedic management
10.1	CO1,CO2,CO3	Identifying the occurrence of Iatrogenic Disease & assessment of the benefits of Shuddha chikitsa & ill effects of Ashuddha chikitsa
11.1	CO1,CO2,CO3	Gata vata Chikitsa
11.2	CO1,CO3,CO4	Chikitsa yojana in Vatavyadhi
11.3	CO1,CO3	Symposium on Urustambha
11.4	CO1,CO3,CO4	Understanding of Udavarta and its application
11.5	CO1,CO2,CO3	Detailed understanding of Guillain- Barre Lakshana samuchchaya (Guillain -Barre syndrome),Ajna Nadi Vikara (Motor Neuron Disease),,Anuprasthiyasitamajjachadda shotha (Transverse Myelitis),Peshi dourbalya (Myasthenia Gravis)
11.6	CO1,CO2,CO3	Understanding of Cerebrovascular Accident and its management
12.1	CO1,CO2	Discussion on Asthisankatarbuda(Osteosarcoma)
12.2	CO1,CO2,CO3,CO4	Discussion on the etiopathogenesis, Diagnosis and Management of Osteoarthritis
12.3	CO1,CO2,CO3	Detailed understanding of the Diagnosis, Clinical examination, ayurvedic perspective and management of Lumbar spondylosis and Cervical Spondylosis
12.4	CO1,CO2,CO3,CO4	Ayurvedic management of Asthimajjavaha srotodushti vikara based on interpretation of Radiological Investigations
13.1	CO1,CO3,CO4	Chikitsa yojana (treatment plan) of Shwasa (SL42)& Hikka (SM74) by
13.2	CO1,CO3,CO4	Chikitsa yojana (treatment plan) of Kaasa Roga (SL41)
13.3	CO1,CO3,CO4	Chikitsa yojana (treatment plan) of or Trirupa , Shadrupa, Ekadasha rupa

		rajyakshama , Anuloma kshaya & Pratiloma kshaya
13.4	CO1,CO3,CO4	Construct Chikitsa yojana (treatment plan) of Urahkshat roga.
14.1	CO1,CO3,CO4	Constructing chikitsa yojana for Shotha roga
14.2	CO1,CO3,CO4	Constructing Chikitsa yojana of Udar roga & Jalodara
15.1	CO1,CO3,CO4	Constructing Chikitsa Yojana for Samprapti vighatana of Mootrakrichchha roga (SM82)
15.2	CO1,CO3,CO4	Constructing Chikitsa Yojana for Samprapti Vighatana of Mootraghaata roga (SM81)
15.3	CO1,CO3,CO4	Constructing chikitsa yojana for samprapti vighatana of Ashmari roga (SM82)
15.4	CO1,CO3	Detailed understanding of management of Pourusha Granthi Vriddhi (BPH) , Pourusha Granthi Arbuda (Ca Prostate) & Apavrukkatva (Nephrotic Syndrome)
16.1	CO1,CO3	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha yoga for Atisara and Pravahika
16.2	CO1,CO3,CO5	Detailed understanding of Pravahika (dysentery), Raktatisara (ulcerative colitis), Bruhadantra arbuda (colorectal cancer) and its ayurvedic management
16.3	CO1,CO3	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha for Krimi roga
16.4	CO1,CO3	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha for Arsha
17.1	CO1,CO3	Clinical application of Aushadha yoga based on different Kalpana in Annavaha srotodushti vikara.
17.2	CO1,CO2,CO4	Discussion on Chikitsa of Agniyashaya Shotha(Pancreatitis) and Pittashaya Shotha(Cholecystitis

17.3	CO1,CO2,CO3	Compilation of scientific research articles on Irritable Bowel Syndrome/ (Grahani)
17.4	CO1,CO2,CO3	Brainstorming on Etiopathogenesis, Diagnosis & Management of Urdhwaga Amlapitha(GERD), , Parinama shoola and Annadrava shoola(Acid Peptic Diseases)
18.1	CO1,CO2	Bhutonmada and its basic management.
18.2	CO1,CO3	Aushadha prayoga for Manasa roga
18.3	CO1,CO2,CO3	Detailed discussion on Obsessive compulsive disorder, Neurotic disorder, personality and behavioral disorder.
18.4	CO1,CO2,CO3	Detailed discussion on the Diagnosis, Clinical examination and treatment of Vishada (Depression).
19.1	CO1,CO2,CO3,CO6	Hyperpituitarism-Dirghakayata /Atidirgha (Gigantism) and Vikayata (Acromegaly)
19.2	CO1,CO2,CO3,CO6	Udakameha (Diabetes insipidus)
19.3	CO1,CO2,CO3,CO6	Hypoparathyroidism and Hyperparathyroidism
19.4	CO1,CO2,CO3,CO6	Hypopituitarism-Vamanatva (Dwarfism) (SP9Y)
20.1	CO1,CO2,CO3	Approach to the Diagnosis, Ayurvedic perspective and management of Crohn's disease
20.2	CO1,CO2,CO3	Approach to the Diagnosis, Ayurvedic perspective and management of Ankylosing Spondylitis
20.3	CO1,CO2,CO3	Approach to the Diagnosis, Ayurvedic perspective and management of Multiple sclerosis

20.4	CO1,CO2,CO3	Approach to the Etiopathogenesis, Diagnosis, Ayurvedic perspective and management of Rheumatoid Arthritis
21.1	CO2,CO4	Understanding the Applied clinical anatomy and endocrinology aspects for male reproduction
21.2	CO2,CO4	Understanding on the Diagnosis, Clinical examination and Ayurvedic perspective and Principles of management of Male hypogonadism, and Infertility
21.3	CO1,CO3,CO4	Presenting the Phalashruti, Matra, Anupana and Sevana kala of Aushadha yoga in Shukravaha Srotas vikara
21.4	CO1,CO2,CO3,CO4	Detailed understanding on the Diagnosis, Clinical examination and Ayurvedic perspective and principles of management of Male hypogonadism, Infertility and Beeja dushtijanya vikara
22.1	CO1,CO2,CO3,CO6	Differentiating between the Chikitsa of Guhya roga
22.2	CO1,CO2,CO3,CO6	Chikitsa of Guhya roga
23.1	CO1,CO3,CO4	Mono Drug Vajikarana therapy like - Shilajatu, Suvarna bhasma and Vanga bhasma
23.2	CO1,CO3,CO4	Vajikarana ghruta, Vrishya ghruta, Vrishya gutika & Shrigopal taila in Vajikarana Prayoga
23.3	CO1,CO3,CO4	Vajikarana Yoga - Madanakameshwara Lehya, Narasimha Rasayan & Brimhani Gulika.
24.1	CO1,CO3,CO4	Application of the properties of the single herbs for using them as Rasayana
24.2	CO1,CO3,CO4	Evidence based therapeutic effects of Rasayana
24.3	CO1,CO3,CO4	Utility of Naimittika Rasayana in a treatment protocol
24.4	CO1,CO3,CO4	Planning of Apunarbhava Chikitsa applying the principles & procedures of

		Rasayana Therapy
25.1	CO1,CO3	Aushadha prayoga for Jarajanya roga
25.2	CO1,CO3	Aushadha prayoga for Indriyapradoshoja vikara

Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Practical No*	CO No	Practical Activity details
2.1	CO7	Communication skill and professionalism
2.2	CO7	Ethical Principles in Clinical Practice
3.1	CO1,CO2,CO3,CO6, CO7	Diagnose and constuct the Chikitsa yojana of Jvara(Nava jvara/Purana jvara/Nija jvara/Sannipata jvara/Agantuja jvara/Dhatugata jvara/Vishama jvara/Punaravartaka jvara)
4.1	CO1,CO2	Chikitsa yojana of Anukta roga & its complications
5.1	CO1,CO2,CO3	Bedside case taking of the given Sankramika jvara
5.2	CO1,CO2,CO3	Public awareness activity related to Malaria/hepatitis/epidemic preparedness/vaccination/meningitis/encephalitis
6.1	CO2,CO5,CO6	Cardio Pulmonary Resuscitation (CPR) Description
6.2	CO1,CO2,CO3,CO6, CO7	Short cases presentation in Rasa pradoshaja vikara
6.3	CO1,CO2,CO3,CO6, CO7	Long cases presentation in Rasapradoshaja vikara
7.1	CO1,CO2,CO3,CO6, CO7	Short cases presentation in Rakta Pradoshaja Vikara
7.2	CO1,CO2,CO3,CO6, CO7	Long cases presentation in Rakta Pradoshaja Vikara
7.3	CO7	Commemoration of day of medical importance
8.1	CO1,CO2,CO3,CO6, CO7	Clinical case study on Kshudra roga.
9.1	CO1,CO3,CO5	Bedside case taking of of Galaganda / Gandamala /Sthoulya / Karshya/ Prameha

9.2	CO1,CO3,CO5	Public awareness activity related to World cancer day / Obesity Day/Diabetes Day
10.1	CO1,CO2,CO3	Chikitsa yojana for Drug induced Iatrogenic Disease
11.1	CO1,CO2,CO3,CO6, CO7	Bedside casetaking of Pakshagatha, Ardita, Avabahuka/Viswachi,Kampavata, Gridhrasi, Manyasthmba,Khanja/ Pangu, Padadaha/ Padaharsha
11.2	CO1,CO3	Selection of appropriate Aushadhi in Vatavyadhi
11.3	CO1,CO2,CO3,CO6, CO7	Commemoration of World Stroke Day
11.4	CO1,CO2,CO3,CO5, CO6,CO7	Commemoration of World arthritis day
12.1	CO1,CO2,CO3,CO6, CO7	Bedside case taking of 1.Sandhigata vata 2 Kateegraha 3.Greeva graha 4.Raktaheenatajanya dhatunasha(AvascularNecrosis)/ Kroshtuka sheersha/Asthikshaya
12.2	CO1,CO2,CO3,CO4	Commemoration of World spine day(Oct 16)
13.1	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of a case of Mahashwasa, Urdhwa shwasa, Chhinna Shwasa, Kshudra Shwasa. (Any one case)
13.2	CO1,CO2,CO3,CO6, CO7	Bedside case demonstration of case of Kaasa Roga (SL41)
13.3	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of case of Tamaka Shwasa (SL42)
13.4	CO1,CO2,CO3,CO6, CO7	Bedside case demonstration of a case of Rajayakshma (~Pulmonary Tuberculosis) (2 hours)
13.5	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of a case of Jirna Shwasakrichchhanika (ChronicObstructive Pulmonary Disease)
13.6	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of case of Vispharah (Bronchiectasis)
13.7	CO1,CO2,CO3,CO6, CO7	Bedside Case demonstration of case of Phuphphusaasruti (Pleural effusion)
13.8	CO1,CO2,CO3,CO6,	Bedside demonstration of case of Antaraalayi Phuphphusa Vikara (Interstitial

	CO7	Lung Disease)
13.9	CO1,CO2,CO3,CO5, CO6,CO7	Field visit to DOTs Centre
13.10	CO1,CO2,CO5	Demonstration of Nebulization & oxygen therapy (2 hours)
14.1	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of a case of Vatodara- Pittodara- Kaphodara- Dushyodara
14.2	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of case of Yakritodara & Pleehodara, Chhidrodara, Baddha gudodara.
14.3	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of case of Jalodara
14.4	CO1,CO3,CO4,CO6, CO7	Bedside demonstration of case of Shotha roga
15.1	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of a case of CKD
15.2	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of a case of Mootrakrichcha
15.3	CO1,CO2,CO5	Bedside demonstration of indwelling Urethral Catheter Insertion, managing problems due to Indwelling Catheters and removing Indwelling Urethral catheters.
15.4	CO1,CO2,CO3,CO6, CO7	Bedside demonstration of a case of Mootraghata
16.1	CO1,CO3,CO5	Bedside Case taking of Atisara , Pravahika ,Arsha, Raktatisara and Krimi
16.2	CO1,CO5	Public awareness activity related to World colorectal cancer awareness day/world IBS day/World piles day
17.1	CO1,CO2,CO3,CO6, CO7	Bedside Case taking of Annavaha srotodushti vikara.
17.2	CO1,CO2,CO3,CO6, CO7	OP-based case taking of two Annavahasrotodushti vikara
17.3	CO1,CO2,CO5	Insertion of Nasogastric tube/ Ryles tube in a Mannequin
18.1	CO1,CO2,CO3,CO6, CO7	Case study/ case scenario to devise a treatment plan according to principles of Manovaha srotas Documentation of a case/condition requiring manovaha srotas
18.2	CO2,CO6	Public awareness activity related to Mental health day.

18.3	CO1,CO2,CO3,CO7	An insight into functionality of a mental hospital /de-addiction center/psycho social rehabilitation center.
19.1	CO1,CO2,CO3,CO6, CO7	Case taking of Endocrine disorder. Case presentation of Endocrine disorder
20.1	CO1,CO2,CO3	Bed side Case Presentation on Immune system disorders
21.1	CO1,CO2,CO3,CO4, CO5	Bedside case taking of case of Klaibya (Male sexual dysfunction), Shukradosha
22.1	CO1,CO2,CO6,CO7	Creating awareness about Sexually transmitted diseases during National STD Awareness week.
23.1	CO1,CO3,CO4	Formulate a treatment plan according to principles of Vajikarana.
23.2	CO1,CO3,CO4	Constructing a Chikitsa yojana based on the Interpretation of the Investigations related to Male & Female Infertility
24.1	CO1,CO3,CO4	Devise a treatment plan according to principles of Rasayana.
24.2	CO1,CO3,CO4	Formulate a treatment plan using appropriate enlisted Rasayana
25.1	CO1,CO2,CO3,CO6, CO7	Case study/ case scenario to devise a treatment plan according to principles of Jarajanya vikara and Indriyapradoshaja vikara
25.2	CO1,CO2,CO3	An insight into functionality of a senior citizens' home/Geriatric care center.
25.3	CO2,CO7	Public awareness activity related to age related diseases.

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (200)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-KC	3	300	100	70	-	30	200	500

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	3 PA & First TT	3 PA & Second TT	3 PA	**UE****

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
****University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 11	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

Topics for Periodic Assessments

PA	Paper 1	Paper 2	Paper 3
PA 1	Topic 1,2	Topic 11	-
PA 2	Topic 3,4	-	-
PA 3	Topic 5	-	Topic 17
Term test 1	Entire Syllabus of Term 1 of 3 papers		
PA 4	Topic 6	Topic 12	Topic 18
PA 5	-	Topic 13	Topic 19
PA 6	Topic 7	-	Topic 20
Term test 2	Entire Syllabus of Term 2 of 3 papers		
PA 7	Topic 8	Topic 14	Topic 21,22.
PA 8	Topic 9	Topic 15	Topic 23
PA 9	Topic 10	Topic 16	Topic 24,25

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-KC
PAPER-I
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II & III

6 F : Distribution of theory examination

Paper 1 (Vyadhi Vishesha Chikitsa - 1)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
1	**Kaya, Chikitsa and Kayachikitsa - Nirukti, Paribhasha, Paryaya and Bheda**	3	Yes	No	No
2	**Clinical ethics in the practice of Kayachikitsa**	7	Yes	Yes	No
3	**Samprapti vighatana, Chikitsa sutra, Chikitsa, Aushadha yoga and Pathyaapathya of Jvara (SP51/TM2)**	22	Yes	Yes	Yes
4	**Anuktaroga treatment principles based on Doshadushyadi vivechana**		Yes	Yes	No
5	**Chikitsa of Sankramika jvara**		Yes	Yes	Yes
6	**Chikitsa of Rasa pradoshaja vikara**	18	Yes	Yes	Yes
7	**Chikitsa of Rakta pradoshaja vikara**	24	Yes	Yes	Yes
8	**Chikitsa of Kshudra roga**	5	Yes	Yes	No
9	**Chikitsa of Mamsapradoshaja and Medopradoshaja vikara**	16	Yes	Yes	Yes
10	**Shuddha-Ashuddha chikitsa, Chikitsajanita vikara**	5	Yes	Yes	No
Total Marks		**100**			

Paper 2 (Vyadhi Vishesha Chikitsa - 2)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
11	**Chikitsa of Vatavyadhi**	24	Yes	Yes	Yes
12	**Chikitsa of Asthi-Majja pradoshaja vikara (SR54) (SR55)**	14	Yes	Yes	Yes
13	**Chikitsa of Pranavaha Srotodushti Vikara (TM2:SL40-SL4Z)**	24	Yes	Yes	Yes
14	**Chikitsa of Udakavaha srotodushti vikara**	10	Yes	Yes	Yes
15	**Chikitsa of Mootravaha srotodushti vikara**	12	Yes	Yes	Yes
16	**Chikitsa of Purishavaha srotodushti vikara (SR5A)**	16	Yes	Yes	Yes
Total Marks		**100**			

Paper 3 (Vyadhi Vishesha Chikitsa Evam Rasayana, Vajikarana)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**

17	**Chikitsa of Annavaha srotodushti vikara**	16	Yes	Yes	Yes
18	**Chikitsa of Manovaha srotas dushti vikara**	10	Yes	Yes	Yes
19	**Chikitsa of of Antahsravi Granthi vyadhi**	10	Yes	Yes	Yes
20	**Chikitsa of Vyadhikshamatva vikara**	8	Yes	Yes	No
21	**Chikitsa of Shukravaha srotasa vikara**	8	Yes	Yes	No
22	**Chikitsa of Guhya roga**	8	Yes	Yes	No
23	**Vajikarana**	12	Yes	Yes	Yes
24	**Rasayana**	20	Yes	Yes	Yes
25	**Chikitsa of Jarajanya vikara and Indriyapradoshaja vikara**	8	Yes	Yes	No
Total Marks		**100**			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 100-mark question paper shall contain:
   - 20 MCQs
   - 8 SAQs
   - 4 LAQs

7. MCQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 3.
   - Questions from the Nice to Know part of syllabus shall not exceed 2.

8. SAQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 1.
   - No questions shall be drawn from the Nice to Know part of syllabus.
   - SAQs shall assess understanding, application, and analysis, rather than simple recall.

9. LAQs:
   - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
   - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
   - Number of LAQs should not exceed one per topic unless maximum marks exceed 20 for the topic.

10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

S.No	Heads	Marks
1	Long case 15 marks for case writing + 15 marks for case presentation + 15 marks for bedside viva-voce	45
2	Short case 10 marks for Case writing + 5 marks for case presentation + 10 marks for bedside viva-voce	25
3	Spotting (Assessing Skills - Any 5) • Ryle's tube • Rubber catheter • Foley's catheter • Nebulizer • HFNC mask • Ambu bag • Urine bag • Life-saving medicines • Defibrillator • Distilled water • Syringe • Insulin syringe • Intravenous Infusion set • Scalp vein set/ Intravenous cannula • 1 mark each for Identification + 1 mark each for mentioning the important clinical use	10
4	Case records • 20 Long cases (at least one case from each srotas + Antahsravi granthi vikara) +3 Rasayana cases + 2 Vajikarana cases • 20 Short cases (at least one case from each srotas + Kshudra roga) • 5 marks Neatness + 15 marks Case writing skills	20
5	**Viva-Voce** **(The examiner is expected to utilize sufficient time to check students' knowledge across all topics of the syllabus)** **Distribution of viva Marks across 3 papers** **Paper 1 - 20 Marks**	70

	• Derivation, definition, synonyms, and classification of Kaya, Chikitsa, and Kayachikitsa • Clinical Ethics in the practice of Kayachikitsa • Samprapti vighatana, Chikitsa sutra, Chikitsa of Jvara • Anuktaroga treatment principles • Sankramika jvara • Chikitsa of Rasa-pradoshaja vikara • Chikitsa of Rakta-pradoshaja vikara • Chikitsa of Kshudra roga • Chikitsa of Mamsapradoshaja and Medopradoshaja vikara • Concept of Shuddha-ashuddha chikitsa(Iatrogenic diseases) **Paper 2 - 20 marks** • Chikitsa of Vatavyadhi • Chikitsa of Asthi-majja-pradoshaja vikara • Chikitsa of Pranavaha srotodushti vikara • Chikitsa of Udakavaha srotodushti vikara • Chikitsa of Mootravaha srotodushti vikara • Chikitsa of Purishavaha srotodushti vikara **Paper 3 - 20 marks** • Chikitsa of Annavaha srotodushti vikara • Chikitsa of Manovaha srotodushti vikara • Chikitsa of Antahsravi Granthi vikara • Chikitsa of Vyadhikshamata vikara • Chikitsa of Shukravaha srotodushti vikara • Chikitsa of Guhya roga • Vajikarana • Rasayana • Chikitsa of Jarajanya and Indriyapradoshaja vikara **Communication Skills - 10 Marks**	
6	Internal Assessment	30
Total Marks		**200**

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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)

Panchakarma & Upakarma
(Therapeutic Procedural Management)

(SUBJECT CODE : AyUG-PK)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

ncism

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BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026

NCISM

III Professional Ayurvedacharya
(BAMS)
Subject Code : AyUG-PK

Panchakarma & Upakarma
(Therapeutic Procedural Management)

Summary

Total number of Teaching hours: 300			
Lecture (LH) - Theory		**100**	**100(LH)**
Paper I	100		
Non-Lecture (NLHT)		**60**	**200(NLH)**
Paper I	60		
Non-Lecture (NLHP)		**140**	
Paper I	140		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	70	-	30
Sub-Total	100	200			
Total marks	300				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

Panchakarma, a cornerstone of Ayurveda, embodies holistic healing through detoxification, rejuvenation, and restoration of balance in body and mind. This syllabus is designed to provide students with a profound understanding of its principles, therapeutic applications, and integration into modern healthcare.

Structured into ten sections, the curriculum covers foundational and advanced concepts, emphasizing detoxification, rejuvenation, and the clinical implementation of various Panchakarma procedures. Special attention is given to Keraleeya Kriyakrama therapies such as Takradhara, Thalapothichil, Annalepa, and Pizhichil, broadening students' knowledge of region-specific treatments. Additionally, the syllabus explores the selection and application of formulations used in Snehana, Vamana, Virechana, Basti, and Nasya, ensuring students can provide personalized and effective care based on Prakriti, Vikriti, and individual health conditions.

To enhance practical skills, the syllabus incorporates hands-on training, case studies, mannequin-based simulations, and interactive learning methods. These approaches foster competency, teamwork, and communication skills—essential qualities for effective clinical practice. The curriculum also integrates contemporary research and modern technological advancements in Panchakarma, ensuring relevance in today's healthcare landscape. Additionally, the inclusion of physiotherapy principles enhances students' ability to combine Panchakarma with other therapeutic modalities.

This revised syllabus represents a significant advancement, removing outdated content while incorporating contemporary insights. Beyond technical proficiency, it fosters essential qualities such as empathy, patient-centered care, and professional communication. Through this comprehensive and innovative approach, students will emerge as skilled practitioners, capable of promoting and integrating Ayurveda within modern medical practice, contributing to its global acceptance and continued relevance.

Furthermore, the curriculum aims to inspire critical thinking and research-oriented learning, encouraging students to explore evidence-based applications of Panchakarma. By integrating traditional knowledge with scientific advancements, the syllabus prepares students to to make meaningful contributions to the continued relevance and efficacy of Panchakarma in contemporary medical practice.

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Course Code and Name of Course

Course code	Name of Course
AyUG-PK	Panchakarma & Upakarma

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-PK At the end of the course AyUG-PK, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Describe the fundamental concepts of Panchakarma	PO1
CO2	Identify and describe drugs, dose, instruments and their method of application in Panchakarma procedures	PO3
CO3	Analyze the clinical applications of each procedure based on fundamental principles	PO2
CO4	Illustrate comprehensive knowledge of Panchakarma procedures with appropriate and sequential Purva Karma, Pradhana Karma and Paschat Karma	PO2
CO5	Demonstrate skills in performing procedures in various situations	PO4,PO5
CO6	Assess the therapeutic efficiency and manage complications	PO2,PO7
CO7	Utilize technological advancements and allied therapeutic interventions	PO2,PO7
CO8	Possess qualities of a good Communicator and ethical Clinician & Researcher	PO6,PO7,PO8,PO9

Table 2 : Contents of Course

Paper 1 (Panchakarma and Upakarma)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Fundamentals of Panchakarma** 1. Introduction to Panchakarma 2. Panchakarma in Swastha and Atura 3. Indications and contraindications of Shodhana 4. Agni and Koshta Pariksha in Panchakarma 5. Principles in Shodhana 6. Requirements of Panchakarma theatre	1	8	6	2	4
2	**Snehana Karma** 1. Introduction 2. Sneha Dravya 3. Lipids 4. Rookshana 5. Abhyantara Snehana 6. Bahya Snehana	1	12	16	12	28
3	**Swedana Karma** 1. Introduction 2. Swedana Dravya 3. Indications and Contraindications of Swedana 4. Sagni Sweda 5. Niragni Sweda 6. Procedure of Saagni Swedana Karma 7. Principles of practice of Swedana Karma in Sandhigata Vata, Vatarakta, Pakshaghata, Ardita, Gridhrasi, Amavata 8. Swedana Karmukata	1	12	9	4	10
4	**Special Procedures: Sankara Sweda, Ksheeradhooma, Pizhichil, Dhanyamladhara, Takradhara, Thalam and Thalapothichil and Annalepa** Definition, Types, Procedure and Benefits of: 1. Sankara Sweda	2	10	7	9	19

	2. Ksheeradhooma 3. Pizhichil 4. Dhanyamladhara 5. Takradhara 6. Thalam and Thalapothichil 7. Annalepa					
5	**Physiotherapy** 1. Introduction 2. Static exercise 3. Isotonic Exercise 4. Deep Heating Modalities 5. Superficial Heating Modalities 6. Electro Therapy 7. Manual Therapy	2	5	6	1	7
6	**Vamana Karma** 1. Introduction 2. Indications and Contraindications of Vamana Karma 3. Purva Karma of Vamana 4. Pradhana Karma of Vamana 5. Paschat Karma of Vamana 6. Sadyo Vamana 7. Vamana Karmukata 8. Principles of practice of Vamana Karma in Shwasa, Amlapitta, Kushta and Yuvanapidaka	2	10	13	7	15
7	**Virechana Karma** 1. Introduction 2. Classification of Virechana 3. Principles of selection of Virechana formulations 4. Indications and Containdications of Virechana Karma 5. Purva Karma of Virechana 6. Pradhana Karma of Virechana 7. Paschat Karma of Virechana 8. Virechana Karmukata 9. Principles of practice of Virechana Karma in Kushta, Vatarakta, Pakshaghata and Prameha	2	10	13	7	15
8	**Basti Karma** 1. Introduction 2. Basti Yantra and Matra	3	18	18	10	25

	3. Anuvasana and Anuvasanopaga, Asthapana and Asthapanopaga Dravya 4. Indications and Contra indications of Anuvasana Basti 5. Purva Karma of Anuvasana Basti 6. Pradhana Karma of Anuvasana Basti 7. Paschat Karma of Anuvasana Basti 8. Indications and Contra indications of Niruha Basti 9. Purva Karma of Niruha Basti 10. Preparation of Basti Dravya 11. Pradhana Karma of Niruha Basti 12. Paschat Karma of Niruha Basti 13. Niruha Basti Karmukata 14. Anuvasana Basti Karmukata 15. Basti Formulations 16. Principles of practice of Basti a) Niruha in Gridhrasi and Amavata b) Anuvasana in Kateegraha					
9	**Nasya Karma** 1. Introduction 2. Shirovirechana Gana 3. Purva Karma of Nasya 4. Pradhana Karma of Nasya 5. Paschat Karma of Nasya 6. Nasya formulations 7. Nasya Karmukata 8. Principles of practice of Nasya in Pakshaghata, Apabahuka, Manyastambha and Ardita	3	10	10	6	12
10	**Emergency management and Research updates in Panchakarma and Upakarma** 1. Emergency management 2. Research updates in Snehana, Swedana, Vamana, Virechana, Basti, Nasya and Upakarma	3	5	2	2	5
Total Marks			**100**	**100**	**60**	**140**

Table 3 : Learning objectives of Course

Paper 1 (Panchakarma and Upakarma)										
A3 Course out come	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Fundamentals of Panchakarma (LH :6 NLHT: 2 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Define Panchakarma, Panchashodhana and describe the importance of Shodhana and its benefits .	CK	MK	K	L&PPT ,CBL	S-LAQ	F&S	I	-	LH
CO1, CO3	Enlist the types of Raktamokshana and explain its utility in diseases like Kushta, Vatarakta, Siragranthi and Gridhrasi .	CC	NK	KH	CBL,L_VC	CBA,QZ	F	I	-	NLHT1.1
CO1, CO3	Explain the concept of Panchakarma in Swastha and Atura.	CC	MK	KH	L_VC,PER	S-LAQ	F&S	I	-	LH
CO1, CO3	Explain Rutu Shodhana.	CC	MK	KH	TPW	M-POS,PRN	F&S	I	-	NLHT1.2
CO1, CO3	Explain the general indications and contraindications of Shodhana Karma	CC	MK	KH	CBL,DIS,L&PPT	CBA,S-LAQ	F&S	I	-	LH
CO1	Explain Agni and Koshta Pariksha in Panchakarma	CC	MK	KH	REC,L&PPT ,PrBL	CL-PR,S-LAQ,SBA	F&S	I	-	LH
CO1, CO3	Apply the assessment of Koshta and Agni Pariksha in Panchakarma clinically	CAP	MK	KH	CBL,BS	PP-Practical,CBA,T-OBT	F&S	I	-	NLHP1.1

CO1, CO3	Explain Doshagati and Upasthitha Dosha in Panchakarma	CC	MK	K	BL,L&PPT	S-LAQ	F&S	I	-	LH
CO1	Describe Prakruthi Praptha Purusha Lakshana and Ashtamahadoshakarabhava.	CK	DK	K	L&PPT,REC	M-POS,VV-Viva	F	I	-	LH
CO1	Reproduce the requirements of Panchakarma theatre.	PSY-GUD	DK	D	RP,L_VC,RLE,SIM,FV	CHK,M-CHT	F&S	I	-	NLHP1.2
CO1, CO7	Demonstrate recent developments in instrumentation in practice of Panchakarma and Upakarma	CAP	DK	KH	L_VC,D,FV	P-ID,M-POS,P-MOD	F	I	-	NLHP1.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 1.1	Utility of Raktamokshana in diseases	Group Discussion Students are divided into groups, each assigned a condition (Kushta, Vatarakta, Siragranthi, or Gridhrasi) with detailed case scenarios. Groups discuss symptoms, diagnostic criteria, Raktamoksha modalities, management challenges, and propose solutions. After 20-30 minutes, each group presents their findings, followed by a class discussion. The session concludes by emphasizing the importance of Raktamokshana, with assessments based on engagement and solution quality.
NLHT 1.2	Project work on Rutu Shodhana	Team Project Work Divide the students into six teams, assigning each team a specific season (Vasanta, Grishma, Varsha, Sharad, Hemanta, and Shishira). Instruct them to create a comprehensive plan for Rutu Shodhana tailored to their assigned season. Each project should include a title, clear objectives, detailed methodology, a timeline for implementation, necessary resources, and a risk management strategy to address potential challenges. Encourage creativity and thoroughness in their presentations to foster a deeper understanding of seasonal Ayurvedic practices.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 1.1	Koshta and Agni Pariksha in Panchakarma	Case Based Learning Introduce a case that necessitates Agni / Koshta Pariksha , focusing on patient presenting with symptoms of digestive discomfort, like bloating, irregular bowel movements, and fatigue. Provide details about their diet, lifestyle, and medical history. Participants analyze the case in small groups, assessing Agni and Koshta imbalances. Each group presents findings, followed by an instructor-led discussion. The session concludes with key takeaways on the clinical importance of Agni/Koshta Pariksha in Ayurveda.
NLHP 1.2	Panchakarma theatre requirements	Simulation Students simulate a Panchakarma theatre setup, identifying infrastructure needs, organizing equipment, and ensuring sterilization. They role-play as therapists and patients, practicing positioning, draping, and procedures while maintaining hygiene. Emergency scenarios are simulated to enhance crisis management skills. Through hands-on participation, students internalize spatial arrangements, workflow, and safety protocols for practical learning.
NLHP 1.3	Advancement in instrumentation in Panchakarma and Upakarma	Field visit The instructor guides students through a Panchakarma theatre or video demonstrations, explaining equipment and recent advancements. Students engage through observation, questions, and discussions on challenges. They summarize key points, enhancing their practical understanding of Panchakarma procedures and instrumentation.

Topic 2 Snehana Karma (LH :16 NLHT: 12 NLHP: 28)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Define Sneha and Snehana and describe the classification of	CK	MK	K	ML,L&	S-LAQ	F&S	I	-	LH

	Snehana Karma				PPT					
CO1	Explain the importance of Snehana Karma	CC	MK	KH	DIS,BS	T-OBT,PRN	F&S	I	-	NLHT2.1
CO1	Describe Guna of Sneha Dravya.	CK	MK	K	EDU,BL,L&PPT	T-OBT,M-CHT,QZ	F&S	I	-	LH
CO2	Describe the Indications of Ghrita.	CK	MK	K	TUT,REC,L&PPT	WP	F&S	I	V-RS,V-RS	LH
CO2	Describe the Indications of Taila.	CK	MK	K	L&PPT,PrBL,DA	T-OBT,QZ	F&S	I	V-RS,V-RS	LH
CO2	Demonstrate principles of selection of Sneha in Bahya Snehana according to Dosha, Satmya, Avastha and Vyadhi.	CAP	MK	KH	CBL,TUT	SBA,CBA	F&S	I	V-RS,V-RS	NLHT2.2
CO2	Demonstrate principles of selection of Sneha in Abhyantara Snehana according to Dosha, Satmya, Vyadhi and Avastha.	CAP	MK	KH	RP,CBL	CL-PR,P-EXAM	F&S	I	-	NLHT2.3
CO7	Describe classification of Lipids, Digestion, Absorption and Metabolism of Fat	CK	MK	K	L_VC,PER,L&GD,CBL	PRN,O-QZ	F	I	V-KS	LH
CO7	Comprehend metabolism of fat in the context of Abhyantara Snehana	CC	DK	KH	L&GD,TPW	CL-PR,QZ,SBA,CR-W	F	I	-	NLHT2.4
CO7	Distinguish Pharmacodynamics of Snehana through Oral, Rectal and Topical methods	CC	DK	KH	L&GD,CBL,BS	CL-PR,M-CHT,M-POS	F	I	-	NLHT2.5

CO1, CO2	Describe the importance and method of Deepana, Pachana and Rookshana in Snehana	CK	MK	K	PER,RLE,L&PPT	COM,CL-PR	F&S	I	-	LH
CO1, CO2	Describe the Guna of Rookshana dravya- Ushnodaka,Dhanyamla, Takra and Samyak Rookshana Lakshana	CK	MK	K	L&PPT ,TPW,L &GD	QZ ,PRN	F&S	I	V-DG	LH
CO3, CO4	Explain Udwartana, types and its benefits .	CC	MK	KH	FC	PP-Practical,DOAP,P-REC,CL-PR	F&S	I	-	NLHT2.6
CO3, CO4, CO5	Demonstrate the procedure of Udwartana	PSY-GUD	MK	SH	KL,PT, D-M,D	P-PRF,DOPS	F&S	I	-	NLHP2.1
CO3, CO4, CO5	Demonstrate the procedure of Udgharshana and Utsadana.	PSY-GUD	MK	SH	CBL,D-M	DOPS	F&S	I	-	NLHP2.2
CO3, CO4	Describe Indications and contra indications of Abhyantara Snehana	CK	MK	K	L,L&PPT ,PER	CL-PR,P-REC	F&S	I	-	LH
CO3, CO4	Explain Shodhanartha Snehapana, time of administration, Matra, Kala and Anupana.	CC	MK	KH	L&PPT ,L	S-LAQ,P-REC	F&S	I	-	LH
CO3, CO4	Explain Shamanartha Snehapana, Kala, Matra and Anupana.	CC	MK	KH	L&PPT	S-LAQ,PRN	F&S	I	-	LH
CO3, CO4	Comprehend Brumhana Sneha Kala, Matra and Anupana.	CC	MK	KH	L&PPT	S-LAQ	F&S	I	-	LH
CO3, CO4	Explain the Diet and Parihara Vishaya during Snehapana.	CC	MK	KH	L&GD, BL,TP	CL-PR	F&S	I	-	NLHT2.7

					W					
CO3, CO4	Distinguish Accha Sneha and Pravicharana Sneha.	CC	MK	KH	PER,BL ,L&GD	CBA,PRN, P-PRF	F&S	I	-	NLHT2.8
CO3, CO4	Demonstrate the procedure of Shodhanartha Snehapana.	CAP	MK	KH	CBL,D-BED	CBA,SP	F&S	I	-	NLHP2.3
CO3, CO4	Demonstrate Shodhanartha Snehapana in Kushta and Vatarakta	CAP	MK	KH	CBL,RP ,DIS	CBA	F&S	I	-	NLHP2.4
CO3, CO4	Demonstrate the procedure of Shamanartha Snehapana.	CAP	MK	SH	DIS,CBL	PM,CBA	F&S	I	-	NLHP2.5
CO3, CO4	Outline Shamanartha Snehapana in Kushta and Vatarakta	CAN	MK	KH	DIS,CBL,PBL	CBA,SBA	F&S	I	-	NLHP2.6
CO3, CO4	Identify Sneha Vyapat and discuss the Chikitsa	CAP	MK	KH	SY,PBL ,CBL	CBA,P-CASE	F&S	I	-	NLHP2.7
CO3, CO4	Distinguish Brumhana Snehapana and Sadyasnehana.	CAP	MK	KH	PBL,CBL	SBA	F&S	I	-	NLHP2.8
CO3, CO4	Describe definition, indications, contra indications and the benefits of Abhyanga.	CK	MK	KH	FC,L&PPT ,PL	CL-PR,P-REC	F&S	I	-	LH
CO3, CO4	Explain types of Massage and various Massage Techniques.	CC	MK	KH	L&PPT ,L_VC,IBL	COM,QZ	F&S	I	-	LH
CO3, CO4	Comprehend the concept of Murdha Taila and specific Indications.	CC	MK	KH	BS,L_VC,PER	M-POS,CL-PR,S-LAQ	F&S	I	-	LH
CO3, CO4	Interpret Shiropichu and Shirobasti.	CC	MK	KH	TBL,L &PPT ,DIS	S-LAQ,PRN	F&S	I	-	LH

CO3, CO4, CO5	Compare Abhyanga in Swastha and Atura.	CAN	MK	SH	BS,DIS	CL-PR	F&S	I	-	NLHT2.9
CO3, CO4, CO5	Demonstrate different Massaging Techniques	PSY-GUD	MK	SH	D-M,L_VC,D	P-RP,DOPS	F	I	-	NLHT2.10
CO2, CO3, CO5	Identify the clinical application of Murdhni Taila in Vatavyadhi .	CAN	DK	KH	CBL,BS,PBL	T-OBT,CL-PR	F&S	I	-	NLHT2.11
CO3, CO4, CO5	Demonstrate the procedure of Shiro Abhyanga	PSY-GUD	MK	SH	D-M	OSPE,DOPS	F&S	I	-	NLHP2.9
CO3, CO4, CO5	Demonstrate the procedure of Shirodhara with Taila	PSY-GUD	MK	SH	D-M	OSPE,P-PRF,DOPS	F&S	I	-	NLHP2.10
CO3, CO4	Demonstrate the procedure of Shiropichu .	PSY-GUD	MK	SH	D,D-M	DOPS	F&S	I	-	NLHP2.11
CO3, CO4	Demonstrate the procedure of Shirobasti.	PSY-GUD	MK	SH	D-M	DOPS,P-PRF	F&S	I	-	NLHP2.12
CO3, CO4	Demonstrate Kati Basti , Greeva Basti and Janu Basti.	PSY-GUD	MK	SH	D-M	DOPS,P-PRF,OSPE	F&S	I	-	NLHP2.13
CO3, CO4	Demonstrate Abhyanga .	PSY-GUD	MK	SH	D-M	OSPE,DOPS,P-PRF	F&S	I	-	NLHP2.14

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 2.1	Importance of Snehana Karma	Brainstorming Students are divided into groups to explore the utility of different types of Snehana in Ayurveda, with a particular focus on the roles of both Bahya Snehana and Abhyantara Snehana. Each group discusses the contribution of Snehana to the effectiveness of Panchakarma therapies, emphasizing how proper oleation enhances detoxification, improves circulation, and prepares the body for subsequent procedures. By brainstorming these key aspects, students deepen their understanding of how Snehana plays a critical role in achieving optimal therapeutic outcomes during Panchakarma treatments, ensuring a holistic approach to healing and rejuvenation.
NLHT 2.2	Selection of Bahya Sneha	Case Based Learning In this activity, students are divided into groups and presented with 3-4 patient scenarios, such as a Vata-dominant disorder, a Pitta-related skin condition, and Kapha-related obesity. Each scenario includes details on the patient's prakriti, vikriti, and clinical symptoms. Groups discuss and select an appropriate Taila for each case, justifying their choices based on the involved dosha, the disease nature, and the properties of the selected Taila. This approach aims to deepen understanding of Bahya Sneha and its applications in Ayurveda. Focus discussion on Dhanvantara Taila, Sahacharadi Taila, Pinda Taila, Ksheerabala Taila, Kottamchukkadi Taila,Mahanarayana Taila & Murivenna
NLHT 2.3	Selection of Abhyantara Sneha	CBL / Role play In this activity, students analyze 3-4 patient scenarios: a Vata-predominant patient with arthritis, a Pitta-predominant patient with acidity, and a Kapha-predominant patient with obesity. They determine the appropriate type of Sneha (e.g., Ghrita or Taila), dose, Anupana, and administration schedule for each case. A role play follows, where one student acts as the physician explaining Snehapana, another as the patient asking questions, and observers evaluate communication and content accuracy. The discussion also focuses on specific types of Ghrita and Taila, such as Dadimadi Ghrita, Indukanta Ghrita, Kalyanaka Ghrita, Guggulutiktaka Ghrita, Moorchita Tila Taila, and Moorchita Ghrita, to deepen understanding of Abhyantara Snehana in Ayurvedic practice.

NLHT 2.4	Fat metabolism	Group Discussion In this group discussion, participants explore changes in fat metabolism under conditions like fasting, exercise, hyperlipidemia, a ketogenic diet, and Chatussneha practices. Afterward, groups present their findings, with feedback and additional insights from the facilitator. Students also engage in a concept mapping activity, linking key aspects of fat metabolism, including digestion, transport mechanisms, storage, utilization, and hormonal regulation. This approach enhances understanding of the complex processes in fat metabolism.
NLHT 2.5	Snehana Pharmacodynamics	PBL In this activity, groups analyze clinical scenarios involving different applications of Snehana in Ayurveda. One group examines a patient with chronic constipation prescribed Sneha Basti, focusing on absorption and systemic effects. Another group discusses oral Snehapana for a patient with osteoarthritis, exploring how medicated ghee promotes joint lubrication. The third group evaluates a patient with dry skin conditions treated with topical Snehana, assessing local effects. Each group presents their findings, enhancing understanding therapeutic roles of Snehana in various conditions.
NLHT 2.6	Udwartana and its benefits.	Flipped Class room Students review learning materials on Udwartana, including textbook chapters, videos, and infographics before class. Guided questions prompt exploration of its types, benefits, indications, contraindications, and effects on conditions like obesity and skin health. In-class, a quick recap allows students to share insights before breaking into groups to discuss specific Udwartana types, key ingredients, dosha imbalances, and present their findings. This approach deepens understanding of Udwartana's applications in Ayurvedic practice
NLHT 2.7	Diet and Parihara Vishaya during Snehapana	Group Discussion In this group discussion activity, the class is divided into smaller groups, each assigned specific topics related to Snehapana. Topics include foods to avoid during Snehapana, such as heavy, cold, or spicy

		foods, along with the rationale behind each restriction. Another group focus on lifestyle modifications during Snehapana, discussing the importance of avoiding exertion, emotional stress, and exposure to extreme temperatures. Each group engages in thoughtful discussions and share their insights with the class. The activity concludes with a summary of key points and concluding remarks, reinforcing the significance of dietary and lifestyle considerations in optimizing the benefits of Snehapana therapy in Ayurvedic practice.
NLHT 2.8	Discussion on Accha sneha and Pravicharana sneha.	CBL / Group Discussion In this activity, students analyze case scenarios involving the use of different types of Sneha. For instance, one scenario features a patient requiring Accha Sneha for detoxification, while another involves a patient needing Pravicharana Sneha to address arthritis . Students identify the appropriate type of Sneha for each case, justifying their choices based on therapeutic principles, and outlining the method of administration. This exercise aims to deepen their understanding of the clinical applications and benefits of Sneha therapies in promoting health and wellness.
NLHT 2.9	Abhyanga in Swastha and Atura	Group Discussion Students are to be divided into teams to discuss the practice of Abhyanga as part of Dinacharya, focusing on its benefits for both healthy individuals and those with specific health concerns. Each group analyzes two case studies: one involving a healthy individual seeking Abhyanga for general well-being and the other involving a patient experiencing joint stiffness, fatigue, and pain. Students determine the appropriate oil for each case, considering factors such as dosha imbalances and therapeutic goals. They also discuss suitable techniques and strokes tailored to each individual's needs, along with the indications and contraindications for Abhyanga in these scenarios. After thorough analysis, groups present their conclusions, detailing the treatment approach for each case.
NLHT 2.10	Massaging Techniques	Video Demonstration Students watch video demonstrations or practice on mannequins, covering various massage techniques. These include Swedish Massage for relaxation, Deep Tissue Massage for muscle tension, Shiatsu for acupressure and energy flow, Hot Stone Massage for warmth and muscle relaxation, Aromatherapy Massage for emotional well-being, Sports Massage for injury prevention, Myofascial

		Release for fascia tension, and Reflexology for pressure points on the feet and hands. This exposure enhances students' understanding of diverse massage techniques and their benefits.
NLHT 2.11	Clinical application of Murdhni Taila	Case Based Learning Students are to be divided into small groups to discuss clinical cases where Murdhni Taila could be beneficial, such as chronic headaches, insomnia, or hair loss. Each group assesses the specific condition, evaluate the patient's Avastha ,and select the most suitable Murdhni Taila for their case. During their presentations, groups explain why Murdhni Taila is an effective treatment for the discussed condition, highlighting its therapeutic benefits such as enhancing brain function, promoting relaxation, and managing stress.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 2.1	Procedure of Udwartana.	Demonstration The instructor demonstrates Udwartana, covering preparation, herbal powder selection, and application techniques. Emphasizing strokes, pressure, and direction, students observe its effects on circulation and lymphatic drainage. Post-procedure care, including skin cleaning, follow-ups, and lifestyle advice, is explained. Students take notes to refine their understanding for future practice.
NLHP 2.2	Procedure of Udgharshana and Utsadana.	Demonstration (Same as Udwartana) • The instructor demonstrates the procedure, including: ◦ Preparation of medicated pastes. ◦ Patient positioning and sequence of application. ◦ Duration of paste retention and removal techniques

NLHP 2.3	Shodhanartha Snehapana procedure.	Case Based Learning Students present real or hypothetical cases of Shodhanartha Snehapana, analyzing the procedure, including Sneha selection, dosage, and observed outcomes. They evaluate Purva Karma, Sambhara Sangraha, and Atura Pariksha, focusing on Snehapana Matra Nirnaya, Snehapana Kala, and Sneha Anupana. The analysis includes Jeeryamana, Jeerna, and Ajeerna Lakshana, and oleation characteristics (Samyak, Asnigdha, and Ati Snigdha). Students discuss treatment for Asnigdha and Atisnigdha conditions and dietary considerations. The session concludes with a discussion on effectiveness and challenges in Snehapana.
NLHP 2.4	Shodhanartha Snehapana in Kushta and Vatarakta	Roleplay Students simulate consultations for Kushta or Vatarakta patients, focusing on dietary restrictions, lifestyle modifications, and Agni/Koshta assessment to determine the appropriate Sneha dose. They practice Sneha administration in pairs and design diet plans tailored to these conditions. A discussion on Samyak Snigdha Lakshana enhances their understanding of effective Ayurvedic treatment strategies. This activity equips students with the skills to manage these conditions effectively.
NLHP 2.5	Shamanartha Snehapana procedure.	CBL Students explore Shamanartha Snehapana through a clinical scenario, focusing on conditions like Vatarakta or Kushta. They begin with Purva Karma and Sambhara Sangraha, selecting appropriate medicated oils. During Atura Pariksha, they assess readiness with Atura Sidhata, determine Snehapana Matra , Snehapana Kala. Students practice administering the Sneha, observing oleation signs and potential adverse reactions. Post-procedure care includes dietary guidelines, lifestyle modifications, and identifying avoidances (Parihara Vishaya) to ensure effective treatment..

NLHP 2.6	Shamanartha Snehapana in Kushta and Vatarakta.	Debate Students are divided into two teams to debate whether Ghrita or Taila is more effective in treating Vatarakta. One team supports Ghrita for its nourishing properties and suitability for Pitta-dominant individuals, while the other favours Taila for its lubricating qualities and better absorption for Vata imbalances. The discussion covers properties, Dosha specificity, and patient tolerance. Similarly, the effectiveness of Shamanartha Snehapana in Kushta is also discussed.
NLHP 2.7	Sneha Vyapat and Chikitsa.	Symposium In this symposium on Sneha Vyapat, students analyze clinical case studies, such as nausea from excess Shamanartha Snehapana dosage and diarrhoea after Ghrita administration. Speakers highlight symptoms, errors in dosage, Sneha selection, and pre-procedure assessments. An interactive discussion follows, with students proposing treatment adjustments, dietary modifications, and corrective measures. Other Sneha Vyapat scenarios are also discussed, fostering critical thinking and emphasizing individualized treatment in Ayurveda
NLHP 2.8	Brumhana Snehapana and Sadya Snehana	Problem Based Learning Students are divided into groups to discuss Brumhana Snehapana with Ghrita or Taila, focusing on key steps like Purvakarma, Sambhara Sangraha, and Atura Pariksha to assess suitability. They determine appropriate dosage (Snehapana Matra Nirnaya), timing (Snehapana Kala), and Sneha Anupana for absorption. The Pradhanakarma involves careful administration, followed by Paschat Karma and dietary recommendations. Students also explore Sadya Snehana, discussing its types, dose, duration, and dietary guidelines, while assessing Samyak Snigdha Lakshana.
NLHP 2.9	Shiro Abhyanga Procedure	Demonstration Using illustrated charts and flipbooks, the instructor demonstrates Shiro Abhyanga without a live patient. Visual aids show step-by-step oil application, massage techniques, pressure points, and procedure duration. Labeled diagrams on a whiteboard or screen help students visualize the movements, while flipbooks guide them through each stage. Interactive discussions encourage students to analyze and explain key steps. This method enhances concept retention and understanding of Shiro

		Abhyanga fundamentals.
NLHP 2.10	Procedure of Shirodhara with Taila.	Demonstration The instructor guides students through the Taila Shirodhara procedure on a volunteer or mannequin. The session begins with Purva Karma, preparing the patient, recording vital signs, and performing a brief Abhyanga on the head, neck, and shoulders. During Pradhana Karma, the instructor demonstrates setting up the dhara pot and pouring warm medicated oil in a continuous stream over the forehead. In Paschat Karma, students learn to remove excess oil, apply Rasnadichurna, and advise the patient to rest post-treatment. This demonstration enhances understanding of Taila Shirodhara's therapeutic techniques.
NLHP 2.11	Shiropichu demonstration.	Demonstration The instructor guides students through the Shiropichu procedure on a volunteer or mannequin. The session begins with Purva Karma, preparing the patient, explaining the procedure, obtaining consent, and gathering materials like medicated oil and sterile cotton pads. During Pradhana Karma, the instructor demonstrates soaking the cotton pad in warm oil and placing it securely on the crown of the head. In Paschat Karma, students learn to remove the Pichu after 30-60 minutes and gently clean the scalp, providing post-treatment care instructions. The procedure may also be demonstrated using a pre-recorded video or 3D animation.
NLHP 2.12	Shirobasti demonstration	Demonstration The instructor guide students through the step-by-step procedure of Shirobasti. The session begins with Purva Karma, which involves patient preparation. During Pradhana Karma, the instructor demonstrates how to securely fit a leather cap on the patient's head, fill it with warm medicated oil, and maintain the temperature throughout the treatment. Finally, in the Paschat Karma phase, students observe how to properly remove the oil, conduct a gentle massage on the neck and shoulders, and advise the patient on post-treatment care.
NLHP 2.13	Sthanika Basti demonstration.	Demonstration

		The instructor illustrate the step-by-step procedure of Sthanika Basti on a volunteer or mannequin. The session begins with Purva Karma, which involves preparing the patient and the environment, including preparation of moulds and warming the medicated oil. During the Pradhana Karma, the instructor demonstrates the application of the warm medicated oil ensuring proper placement and duration for optimal therapeutic effects. Finally, in the Paschat Karma phase, students learn about post-procedure care, including observing the patient for any reactions and ensuring proper removal of any residual oil.
NLHP 2.14	Procedure of Abhyanga	Demonstration The instructor guides students through the Abhyanga procedure using a volunteer or mannequin. The session begins with Purva Karma, preparing the environment and warming the oil. During Pradhana Karma, the instructor demonstrates the massage technique, emphasizing long strokes on limbs and circular motions on joints. In Paschat Karma, students learn post-massage care, allowing the oil to absorb before taking a warm shower. This approach enhances students' practical skills and understanding of therapeutic effects of Abhyanga

Topic 3 Swedana Karma (LH :9 NLHT: 4 NLHP: 10)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Describe definition of Sweda,Swedana karma and classsification of Swedana karma with its Guna.	CK	MK	K	TBL,L &PPT	CL-PR,S-LAQ	F&S	I	-	LH
CO1	Describe Guna and Karma of Sweda and Swedopaga Dravya.	CK	MK	K	L&PPT ,ML	CL-PR,QZ ,S-LAQ	F&S	I	-	LH
CO2, CO3	Explain indications and contraindications of Swedana Karma.	CC	MK	KH	CBL,BL ,BS,L& PPT	CL-PR,S-LAQ	F&S	I	-	LH

CO3	Explain indications, contraindications and method of application of Chaturvidha Sweda.	CC	MK	KH	L&PPT,PER,DIS	COM,S-LAQ,CL-PR,QZ	F&S	I	-	LH
CO3	Distinguish the method of application of Sankara Sweda and Nadi Sweda procedure.	CC	MK	KH	PER,L_VC,TBL	COM,CL-PR	F&S	I	-	LH
CO2	Interpret the Samyak Swedana Lakshana, Ayoga Lakshana and Atiyoga Lakshana.	CC	MK	KH	L&PPT,PBL,TBL,PER	CL-PR,S-LAQ	F&S	I	-	LH
CO3	Analyze the principles of practice of Swedana Karma in the clinical conditions of Sandhigata Vata, Vatarakta, Pakshaghata, Ardita, Gridhrasi and Amavata.	CAN	MK	KH	PER,TBL,CBL	S-LAQ,M-POS,QZ	F&S	I	-	LH
CO2, CO3, CO4	Analyze the fitness of Sweda in a patient posted for the procedure.	CAN	MK	KH	D-BED,PER,L&GD,RP	CHK,CL-PR	F&S	I	-	LH
CO1, CO4	Explain Swedana Karmukata.	CC	MK	KH	L&PPT,PER,FC	S-LAQ	F&S	I	-	LH
CO4, CO7	Explain the Mechanism of Sweating and Thermoregulation in the context of Swedana	CC	MK	KH	L_VC,DIS,FC	CL-PR,S-LAQ	F	I	-	NLHT3.1
CO1, CO3	Discuss the indications of Sweda Karma .	CC	MK	KH	DIS,CBL	CL-PR	F&S	I	-	NLHT3.2
CO1, CO3	Discuss the contraindications of Sweda Karma	CC	MK	KH	BS,CBL	CBA,PRN	F&S	I	-	NLHT3.3
CO3, CO4,	Demonstrate Tapa Sweda.	PSY-GUD	MK	SH	KL,SIM,D-	DOPS,DOPS,CBA	F&S	I	-	NLHP3.1

CO5					M,TBL					
CO3, CO4, CO5	Demonstrate Upanaha Sweda.	PSY-GUD	MK	KH	D-M,SIM,KL	DOPS,PP-Practical	F&S	I	-	NLHP3.2
CO3, CO4, CO5	Demonstrate Parisheka Sweda.	PSY-GUD	MK	SH	D,D-M,KL	DOAP,DOPS,CBA	F&S	I	-	NLHP3.3
CO3, CO4, CO5	Demonstrate Avagaha Sweda.	PSY-GUD	MK	SH	D,PT	P-PRF,DOAP,DOPS	F&S	I	-	NLHP3.4
CO3, CO4, CO5	Demonstrate Nadi Sweda.	PSY-GUD	MK	SH	PT,D,KL	DOPS,OSPE	F&S	I	-	NLHP3.5
CO3, CO4, CO5	Demonstrate practice of Swedana Karma in Sandhigata Vata, Pakshaghata, Ardita,Gridhrasi and Amavata.	PSY-GUD	MK	SH	TBL,D,CBL,PER,KL	P-CASE,CBA,DOPS	F&S	I	-	NLHP3.6

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 3.1	Mechanism of sweating	Discussion (Concept Mapping) In this activity, students create a concept map on sweating and thermoregulation in small groups. They discuss key concepts like the role of sweat glands, neurotransmitters in thermoregulation, and the relationship between sweating and dosha balance in Ayurveda. Students explore how Swedana affects Kapha by generating heat and Vata by mobilizing toxins. After completing their maps, groups present their findings, fostering a collaborative learning environment that enhances understanding of both physiological and Ayurvedic perspectives.

NLHT 3.2	Indications of Sweda Karma	Case Based Learning Students engage in a collaborative activity where they are presented with clinical case scenarios, such as patients with obesity, joint pain, or skin disorders like eczema. In pairs or small groups, they discuss whether Sweda Karma would be appropriate for these conditions and the rationale behind their decisions. Students link each condition to specific dosha imbalances, exploring how Swedana can promote detoxification and balance the doshas. This discussion fosters critical thinking about applying Ayurvedic principles in clinical practice. By the end of the session, students gain a deeper understanding of how Sweda Karma can be effectively integrated into treatment plans for various health issues.
NLHT 3.3	Contraindications of Sweda Karma	Brainstorming Students are divided into small groups to brainstorm the contraindications for Swedana based on prior knowledge. Each group discusses conditions or situations where Swedana would be inappropriate, such as fever, dehydration, pregnancy, weakness, acute infections, skin disorders, and heart conditions. Afterward, each group shares their findings with the class, fostering collaboration and exploring the reasons behind these contraindications. This activity aims to enhance understanding of patient safety in Ayurvedic practices and the importance of careful assessment before administering therapeutic interventions.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 3.1	Tapa Sweda procedure.	Team Based Learning Students work in groups to practice the procedure with a volunteer, mannequin, or patient under the instructor's guidance. In the Purva Karma phase, teams prepare the patient and gather materials, discussing pre-treatment assessments. During Pradhana Karma, they apply heated materials like hot sand or stones to induce sweating, explaining how it alleviates conditions like Ama Vata. In Paschat Karma, teams discuss post-treatment care, including hydration and dietary recommendations. This activity promotes teamwork and practical understanding therapeutic applications of Tapa Sweda.

NLHP 3.2	Upanaha Sweda procedure	Simulation Students simulate the procedure using a volunteer, mannequin, or model limb under the instructor's guidance. They prepare a Vatahara herbal paste and ensure the skin is clean during Purva Karma. In Pradhana Karma, students apply the paste to the affected area, cover it with leaves, and secure it with a bandage to retain heat. During Paschat Karma, they remove the paste after the recommended duration, clean the area with lukewarm water, and discuss post-treatment care. This simulation enhances procedural skills and clinical understanding for real-world application.
NLHP 3.3	Parisheka Sweda procedure.	Kinaesthetic learning In the Parisheka Sweda activity, students participate in the procedure under the instructor's guidance. They assist in the Purva Karma phase by preparing the patient with Abhyanga. During Pradhana Karma, students take turns pouring warm medicated liquids to induce sweating, ensuring proper technique and temperature. In the Paschat Karma phase, they practice post-treatment care, including advice for bathing, hydration, and rest. This hands-on experience enhances students' understanding of Parisheka Sweda's therapeutic applications in Ayurveda.
NLHP 3.4	Avagaha Sweda procedure.	Demonstration The instructor demonstrates the Avagaha Sweda procedure using a volunteer, mannequin, or patient. In the Purva Karma phase, the patient undergoes Abhyanga to relax and warm the body. During Pradhana Karma, the patient is immersed in a tub filled with warm medicated liquid, ensuring comfort and effective sweating. The instructor monitors the temperature to maintain optimal conditions. In the Paschat Karma phase, the instructor guides post-treatment care, including skin cleansing and recommendations for hydration and rest. This demonstration provides students with practical insights into therapeutic applications of Avagaha Sweda.
NLHP 3.5	Nadi Sweda procedure.	Demonstration The instructor demonstrates the Nadi Sweda procedure using a volunteer, mannequin, or patient. In the

		Purva Karma phase, the patient undergoes Abhyanga to warm and relax the body. During Pradhana Karma, steam infused with therapeutic herbs is directed towards the affected body part using the Nadi Sweda Yantra, promoting sweating. In the Paschat Karma phase, the instructor guides the patient through post-treatment care, focusing on hydration and rest for recovery
NLHP 3.6	Clinical application of Sweda	Case Based Learning Students engage in an interactive session on Swedana Karma for conditions like Sandhigata Vata, Pakshaghata, Ardita, Gridhrasi, and Amavata. Divided into small groups, they discuss the pathophysiology of assigned conditions. The instructor then delivers a brief lecture on Swedana Karma's mechanism and therapeutic effects. Case studies provide practical context, followed by a live demonstration where the instructor explains procedural modifications for each condition. The session concludes with feedback emphasizing the importance of personalized Ayurvedic therapies.

Topic 4 Special Procedures: Sankara Sweda, Ksheeradhooma, Pizhichil, Dhanyamladhara, Takradhara, Thalam and Thalapothichil and Annalepa (LH :7 NLHT: 9 NLHP: 19)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3	Explain the definition, types, procedure and benefits of Sankara Sweda	CC	MK	KH	L&PPT	S-LAQ,COM,QZ	F	II	-	LH
CO2, CO3	Explain the definition, types, procedure and benefits of Ksheeradhooma	CC	MK	KH	L&PPT ,CBL	QZ ,S-LAQ	F	II	-	LH
CO2, CO3	Explain the definition, types, procedure and benefits of Pizhichil	CC	MK	KH	L_VC,L &PPT	CL-PR,S-LAQ	F	II	-	LH
CO2, CO3	Comprehend the definition, types, procedure and benefits of Dhanyamladhara	CC	MK	KH	L_VC,L &PPT	PRN	F	II	-	LH

CO2, CO3	Explain the definition, types, procedure and benefits of Takradhara	CC	MK	KH	L&PPT ,L_VC	CL-PR	F	II	-	LH
CO2, CO3	Explain the definition, types, procedure and benefits of Thalam and Thalapothichil	CC	MK	KH	L&PPT	CBA	F	II	-	LH
CO2, CO3	Interpret the definition, types, procedure and benefits of Annalepa	CC	MK	KH	L&PPT	DOPS,S-LAQ,DOPS	F	II	-	LH
CO3	Demonstrate the preparation, procedure of various Sankara Sweda with their therapeutic indications .	PSY-GUD	MK	SH	W,D-M, TPW,KL	DOPS,OSPE,P-PRF	F&S	II	-	NLHP4.1
CO3	Demonstrate the procedure of Ksheeradhooma with therapeutic indications .	PSY-GUD	MK	SH	D,SIM, PT,KL	DOPS,P-PRF	F&S	II	-	NLHP4.2
CO3	Demonstrate the procedure of Pizhichil with therapeutic indications	PSY-GUD	MK	SH	KL,D	P-PRF,OSPE,DOPS	F&S	II	-	NLHP4.3
CO3	Demonstrate the procedure and preparation of Dhanyamladhara with its therapeutic indications.	PSY-GUD	MK	SH	D	OSPE,DOPS,P-PRF	F&S	II	-	NLHP4.4
CO3, CO5	Demonstrate the procedure and preparation of Takradhara with its therapeutic indications.	PSY-GUD	MK	SH	D	DOPS,OSPE,P-PRF	F&S	II	-	NLHP4.5
CO3, CO5	Demonstrate the procedure and preparation of Thalam and Thalapothichil with their therapeutic indications .	PSY-GUD	MK	SH	D,KL,SIM	OSPE,DOPS	F&S	II	-	NLHP4.6
CO3, CO4, CO5	Demonstrate the procedure and preparation of Annalepa with its therapeutic indications .	PSY-GUD	MK	SH	KL,D-M	RK,DOPS, OSPE	F&S	II	-	NLHP4.7
CO1	Discriminate regional variations in practice of Pizhichil	CAN	MK	KH	LS,PL,IBL,PER	DEB,COM	F	II	-	NLHT4.1
CO1	Comprehend the concept of Sankara Sweda	CC	MK	KH	PL,TBL	CL-PR,INT	F	II	-	NLHT4.2

					,DIS	,COM				
CO1	Identify and categorise various drugs used for Thalam and Thalapothichil	CAN	MK	KH	PrBL,DIS,LS	COM,T-OBT,QZ	F	II	-	NLHT4.3
CO1, CO3	Comprehend the utility of Thalapothichil	CC	MK	KH	PBL,CBL	SP,P-PS	F	II	-	NLHT4.4
CO1, CO4	Comprehend the procedure of Takradhara	CC	MK	KH	PL,TBL,BL	M-POS,COM,PRN	F	II	-	NLHT4.5
CO1, CO3	Identify variations in practice of Takradhara	CAP	MK	KH	DIS,LS,TBL	CL-PR,COM	F	II	-	NLHT4.6
CO1, CO3	Infer the clinical utility of Dhanyamla	CAP	MK	KH	IBL,CBL,DIS	COM,DEB,CL-PR	F	II	-	NLHT4.7

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 4.1	Interactive learning on regional variations in practice of Pizhichil	Group Discussion Students discuss regional variations in the practice of Pizhichil. Each group explores differences in oil selection, therapist involvement, oil application methods, patient positioning, duration, and specific conditions treated. They present their findings, comparing how these variations influence the effectiveness of the therapy. A classroom discussion follows, where students analyze the benefits and challenges of each approach. The faculty concludes by summarizing key differences and explaining their clinical significance, helping students appreciate the adaptability of Pizhichil in different regions.
NLHT 4.2	Interactive learning on Sankara Sweda	Jigsaw learning The class divides into four groups, each focusing on a specific aspect of Sankara Sweda: materials and preparation, procedure and techniques, indications and benefits, and precautions and contraindications. Each group discusses their topic and prepares a summary. They then form mixed groups where each student teaches their topic to peers, ensuring collective learning and a comprehensive understanding of

		all aspects.
NLHT 4.3	Compilation of drugs used for Thalam and Thalapothichil	Team Based Learning Students form small groups and classify the drugs used for Thalam and Thalapothichil based on their type (herbs, oils, pastes, liquids, etc.), dosha specificity, and conditions treated (neurological, psychiatric, dermatological, etc.). Each group discusses their classification and prepares a summary. They then present their findings to the class, followed by a faculty-led discussion that clarifies doubts and highlights the clinical significance of different materials.
NLHT 4.4	Utilty of Thalapothichil	Case Based Learning Divide students into small groups.Each group receives a unique patient scenario, such as a patient with insomnia, migraine, or scalp disorders, and engages in a discussion to analyze the condition based on Ayurvedic principles. They identify the predominant dosha imbalance and determine whether Thalam or Thalapothichil is the most suitable therapy. Using their knowledge of medicinal herbs, oils, and pastes, they carefully select the appropriate materials, considering their therapeutic properties and mode of action. Groups then justify their choices by explaining the rationale behind ingredient selection, expected benefits, and potential modifications based on patient-specific factors. This process encourages critical thinking and a deeper understanding of formulation selection in clinical practice.
NLHT 4.5	Interactive discussion on the procedure of Takradhara	Peer learning The class divides into four groups, each focusing on a specific aspect of Takradhara: preparation of Takra , patient preparation and positioning, procedure and technique, and post-procedure care with indications and contraindications. Each group discusses their assigned topic, compiles key points, and prepares a summary. Afterward, the groups reorganize into mixed teams, where each student teaches their assigned aspect to their peers. This process ensures collective learning, allowing every student to gain a comprehensive understanding of the entire procedure through peer interaction and discussion.
NLHT 4.6	Variations in practice of Takradhara	Team Project work Students compare and contrast classical and regional variations of Takradhara, analyzing differences in

		formulations, procedural techniques, and therapeutic applications across Ayurvedic traditions. Keraleeya Panchakarma practices, application in different wings of Ayurveda like Kayachikitsa, Manas Roga, Shalakya Tantra , Koumarabhritya and Prassoti Tantra. By engaging in case-based discussions and analyzing real-world applications, students learn to adapt and apply these variations in clinical practice, ensuring optimal patient care based on individual needs.
NLHT 4.7	Clinical utility of Dhanyamla	Case Based Learning Divide students into small groups.Each group receives a patient case scenario, such as a patient with rheumatoid arthritis, psoriasis, or diabetic neuropathy, and analyzes the condition based on Ayurvedic principles. They determine the appropriateness of Dhanyamla for the given case and discuss the mode of application of Dhanyamla, selecting suitable mode of use based on the patient's dosha imbalance and pathology. The group explores necessary procedure modifications for Dhanyamladhara including temperature adjustments, duration, and method of application, to ensure patient safety and maximize therapeutic effectiveness. They also identify the expected benefits, potential contraindications, and necessary precautions during and after the therapy. Each group then presents their treatment approach to the class, followed by peer feedback and faculty insights, ensuring a deeper understanding of clinical decision-making and personalized patient care.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 4.1	Procedure of Sankara Sweda	Demonstration The instructor begins the demonstration by providing a brief overview of the Sankara Sweda procedure. The practical session follows a step-by-step approach, starting with material collection, where necessary herbs and ingredients are gathered. Next, the preparation of the patient is essential to ensure comfort and readiness for treatment. The teacher then demonstrates the preparation of materials, showcasing how to create different types of Pottali, including Choorna Pinda Sweda, Jambeera Pinda Sweda, Patrapotala Sweda, and Shahtika Sali Pinda Sweda. Following this, the application of the procedure is illustrated, emphasizing the correct techniques for administering the boluses. Finally, Paschat Karma instructions are provided to guide participants on post-treatment care

		and recommendations, ensuring a comprehensive understanding of the Sankara Sweda process.
NLHP 4.2	Demonstration of procedure of Ksheeradhooma	Kinaesthetic learning The instructor gives a brief overview of the Ksheeradhooma procedure. In the practical session, participants start by gathering the essential ingredients: milk and a suitable herbal decoction. They then prepare the patient, ensuring comfort and readiness. The instructor demonstrates how to make Ksheera, mixing milk with the herbal decoction to create a therapeutic infusion. Participants practice applying the procedure, following standard operating procedures to master the techniques for effective Ksheeradhooma. The session wraps up with Paschat Karma instructions, guiding participants on post-treatment care to enhance the benefits and ensure a complete understanding of the procedure.
NLHP 4.3	Demonstration of the procedure of Pizhichil	Kinaesthetic learning The instructor starts with a brief overview of Pizhichil. In the practical session, participants first collect the materials, including oil for Seka and Thalam, Rasnadi Choorna, muslin cloth, and vessels for heating the oil. They then prepare the patient, ensuring comfort and readiness. The instructor demonstrates how to heat the oil to the right temperature for optimal therapeutic effect. Participants practice applying the procedure according to standard operating procedures, learning the correct techniques for effective Pizhichil application. The session ends with Paschat Karma instructions, guiding participants on post-treatment care to maximize the benefits of this rejuvenating therapy.
NLHP 4.4	Demonstration of Dhanyamladhara procedure	Simulation The instructor begins with a brief introduction to the Dhanyamladhara procedure. In the simulation practical, participants first collect the materials, including Dhanyamla, Varshulika (pots), and Rasnadi Choorna. They then prepare the patient for comfort and readiness. The instructor demonstrates how to heat the Dhanyamla to the correct temperature for effective application. Participants practice applying the procedure following standard operating procedures, ensuring they learn the proper techniques. The session concludes with the instructor providing Paschat Karma instructions, guiding participants on post-treatment care and recommendations to maximize therapeutic benefits.

NLHP 4.5	Demonstration of Takradhara procedure	Demonstration The instructor provides a concise overview of the Takradhara procedure. The practical session begins with material collection, which includes essential items such as Ksheera , herbs for preparing Kashaya, and appropriate Dhara vessels. Following this, the preparation of the patient is emphasized to ensure comfort and readiness for the therapy. The teacher then demonstrates the preparation of Takra. The application of the procedure is conducted ensuring proper technique and effectiveness in delivering the treatment. Finally, the teacher provides Paschat Karma instructions, offering guidance on post-treatment care and recommendations to enhance the benefits of Takradhara, thus ensuring participants gain a comprehensive understanding of this therapeutic practice.
NLHP 4.6	Demonstration of Thalam and Thalapothichil procedure	Kinaesthetic Learning The instructor starts by providing a brief overview of the Thalam and Thalapothichil procedures. In the practical session, participants first collect the materials, including herbal powders, herbal decoction, and oil. They then prepare the patient for comfort and readiness. The instructor demonstrates how to prepare the herbal paste for both procedures. Participants follow along, learning to apply the paste to the scalp using the correct techniques. Finally, the instructor explains Paschat Karma, guiding participants on post-treatment care and recommendations for optimal benefits,
NLHP 4.7	Demonstration of Annalepa procedure	Demonstration The instructor begins with a brief overview of the Annalepa procedure. The practical session commences with material collection, which includes essential ingredients such as Shashtikashali , milk, and a suitable herbal decoction. Following this, the preparation of the patient is to be emphasized to ensure their comfort and readiness for the treatment. The teacher then demonstrates the preparation of the material, illustrating the process of making Annalepa, which involves combining the rice, milk, and herbal decoction to create a paste for application. The application of the procedure is to be conducted according to standard operating procedures , ensuring participants learn the correct techniques for administering Annalepa effectively. Finally, Paschat Karma instructions are to be provided, offering guidance on post-treatment care and recommendations to enhance the therapeutic effects of this nourishing treatment, thus ensuring a comprehensive understanding of the Annalepa procedure.

Topic 5 Physiotherapy (LH :6 NLHT: 1 NLHP: 7)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO7	Define Physiotherapy and describe the scope and importance of Physiotherapy in practice.	CK	MK	K	L&PPT	S-LAQ	F&S	II	-	LH
CO7	Explain the physiological benefits of Static exercises	CC	MK	KH	L&PPT	S-LAQ	F&S	II	-	LH
CO7	Explain the physiological benefits of Isotonic exercises.	CC	MK	KH	L&PPT	S-LAQ	F&S	II	-	LH
CO7	Distinguish the physiological effects of deep heating modalities & Superficial heating modalities	CC	MK	KH	L&PPT	S-LAQ	F&S	II	-	LH
CO7	Explain the clinical indications & physiological effects of Electrotherapy	CC	MK	KH	L&PPT	S-LAQ	F&S	II	-	LH
CO7	Interpret the specific applications & physiological effects of Manual therapy	CC	MK	KH	L&PPT ,BL	S-LAQ	F&S	II	-	LH
CO7	Demonstrate the Isotonic exercises,benefits and proper techniques to perform.	PSY-GUD	MK	KH	D-M,CBL,KL	OSPE,DOAP,P-PRF,CBA	F&S	II	-	NLHP5.1
CO7	Demonstrate Superficial heating modalities and Deep heating modalities.	PSY-GUD	DK	SH	KL,CBL	DOAP,OSCE,DOPS	F&S	II	-	NLHP5.2
CO7	Demonstrate Interferential Therapy (IFT) , Transcutaneous Electrical Nerve Stimulation (TENS) and Muscle Stimulation Therapy (MST)	PSY-GUD	DK	SH	KL,CBL	OSCE,DOAP	F&S	II	-	NLHP5.3
CO7	Demonstrate Manipulation techniques for Shoulder joint, Knee joint and Spine disorders	PSY-GUD	DK	SH	PT,KL,D	P-PRF,OSCE,DOPS	F&S	II	-	NLHP5.4
CO1, CO7	Relate the integration of Physiotherapy and Ayurvedic approaches	CAP	MK	KH	DIS,BS,CBL	Log book,PM	F&S	II	-	NLHT5.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 5.1	Discussion on Integration of Physiotherapy and Ayurvedic approaches	Brainstorming The class divides into small groups, each brainstorming on Ayurvedic and Physiotherapy approaches for musculoskeletal and neurological conditions. They explore common principles shared between the two disciplines, such as Marma therapy and trigger point therapy, or Kati Basti and lumbar traction, while also identifying differences in therapeutic goals and techniques. Each group compiles key insights and presents their findings, followed by a faculty-led discussion to refine understanding and highlight the integrative potential of both systems in patient care.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 5.1	Procedure of Isometric and Isotonic Exercise	Kinaesthetic learning The instructor chooses a spacious area and assumes the correct stance, ensuring proper alignment. They guide a volunteer through each movement, demonstrating the postures while explaining the benefits and techniques. The volunteer actively follows along, feeling the stretch and engagement of each muscle. After completing the exercises, they take a brief resting period to recover and reflect. The instructor then sets the number of repetitions, encouraging a gradual increase in intensity. This interactive approach allows participants to experience the exercises firsthand, enhancing their understanding through movement.
NLHP 5.2	Procedure of Superficial heating modalities and Deep Heating Modalities.	Simulation In a simulated session, a volunteer performs exercises as the instructor demonstrates movements, explaining posture and benefits. Participants observe, analyze form, provide feedback, and discuss corrections. After a brief rest, the instructor assigns repetitions, encouraging coaching practice. This structured approach integrates observation, analysis, and hands-on learning.

NLHP 5.3	Procedure of Interferential Therapy (IFT) , Transcutaneous Electrical Nerve Stimulation (TENS) and Muscle Stimulation Therapy (MST)	Demonstration The instructor demonstrates IFT, TENS, and MST procedures, beginning with patient assessment and reviewing medical history for safety. Essential materials, including electrodes and respective machines, are gathered before setup. For IFT, electrodes are placed near the pain area, delivering mild electrical currents for 20–30 minutes to stimulate nerves and muscles. In TENS, electrodes target pain distribution, administering impulses for about 20 minutes to relieve discomfort. MST involves electrode placement for muscle contraction, aiding rehabilitation and strength. Each demonstration concludes with post-treatment care instructions, emphasizing recovery, hydration, and follow-up exercises for optimal results.
NLHP 5.4	Procedure of Manual therapy	Demonstration The instructor demonstrates manual therapies on a volunteer, including basic massage techniques for relaxation and circulation, joint mobilization for the shoulder, knee, and spine, and myofascial release to reduce tension. Techniques such as scapular manipulation for shoulder dislocations and mobilization for knee and spinal joints are showcased to enhance flexibility and relieve stiffness. Emphasizing proper technique, patient comfort, and therapeutic benefits, the session provides participants with a practical understanding of effective manual therapy applications.

Topic 6 Vamana Karma (LH :13 NLHT: 7 NLHP: 15)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Define Vamana and describe the indications and contraindications of Vamana Karma	CK	MK	K	L&PPT ,REC,D IS	S-LAQ,P-REC	F&S	II	-	LH
CO1, CO3	Explain the indications and contraindications of Vamana Karma	CC	MK	KH	CBL,L &GD	PRN,QZ	F&S	II	-	NLHT6.1
CO2, CO4	Explain the Purva Karma of Vamana with Sambhara Sangraha & Atura Pariksha.	CC	MK	KH	CBL,L_ VC,L&	S-LAQ	F&S	II	-	LH

					PPT					
CO2, CO4	Explain Atura Siddhata including Abhyantara Snehapana, Vishrama Kala procedures and Vamaka Yoga preparation with anupana and dose	CC	MK	KH	L&PPT ,L_VC	S-LAQ,CL-PR	F&S	II	-	LH
CO2, CO4	Explain Pradhana Karma with administration of Vamana Yoga, analysis of Lakshana indicating Doshagati, management during Vamana Karma and observation of Vega	CC	MK	KH	L_VC	CBA,S-LAQ	F&S	II	-	LH
CO2, CO4	Explain the symptoms of Samyak, Ayoga, Atiyoga with Chikitsa of Ayoga and Atiyoga	CC	MK	KH	L_VC	S-LAQ,M-CHT	F&S	II	-	LH
CO2, CO4	Explain Paschat Karma including assessment of Shuddhi, Dhoomapana & Kavala, Samsarjana Krama and Parihara Vishaya of Vamana	CC	MK	KH	CBL,L &PPT ,PBL	CBA,S-LAQ	F&S	II	-	LH
CO4, CO6	Explain Vamana Vyapat and Chikitsa	CC	MK	KH	L&PPT	S-LAQ	F&S	II	-	LH
CO3	Explain the concept of Sadyo Vamana	CC	MK	KH	CBL,L &PPT ,L_VC	S-LAQ	F&S	II	-	LH
CO1, CO3	Explain Vamana Karmukata	CC	MK	KH	L&PPT ,L_VC	S-LAQ	F&S	II	-	LH
CO1, CO3	Analyze the principles of practice of Vamana in Kushta	CAN	MK	KH	CBL,PBL	PRN	F	II	-	LH
CO1, CO3	Analyze the principles of practice of Vamana in Shwasa	CAN	MK	KH	CBL,RP ,PBL	PRN	F	II	-	LH
CO1, CO3	Analyze the principles of practice of Vamana in Yuvanapidaka	CAN	MK	KH	PBL,CBL	PRN	F	II	-	LH

CO1, CO3	Analyze the principles of practice of Vamana in Amlapitta	CAN	MK	KH	CBL,ML,PBL	PRN	F	II	-	LH
CO2	Enlist and Identify Vamana and Vamanopaga dravya and describe the properties of Vamana drugs	CK	MK	KH	L&PPT,DG	P-ID	F&S	II	V-DG	NLHT6.2
CO3	Prepare a disease wise Vamana Purva Karma chart	CAP	MK	KH	CBL	PRN	F	II	-	NLHT6.3
CO4, CO8	Illustrating patient counselling for Vamana karma	CAN	MK	KH	RP,DL	CL-PR	F	II	-	NLHT6.4
CO4	Show comprehensive knowledge of Vamana Paschat Karma	CAP	MK	KH	PL,CBL,RP,DIS	PRN	F	II	-	NLHT6.5
CO3	Comprehend the concept of Sadyo Vamana	CC	MK	KH	PL,DIS	T-OBT,M-CHT	F	II	-	NLHT6.6
CO5	Demonstrate Purva Karma of Vamana	PSY-GUD	MK	SH	D	OSPE,DOPS	F&S	II	-	NLHP6.1
CO5	Demonstrate Pradhana Karma of Vamana	PSY-GUD	MK	SH	D,W,KL	OSPE	F&S	II	-	NLHP6.2
CO5	Demonstrate Paschat Karma of Vamana	PSY-GUD	MK	SH	D	OSPE	F&S	II	-	NLHP6.3
CO5	Demonstrate Sadyo Vamana	PSY-GUD	MK	SH	CBL,D	CBA,OSPE	F&S	II	-	NLHP6.4
CO5	Demonstrate Vamana Karma in Shwasa	PSY-GUD	MK	KH	D,CBL,L&PPT,PBL	DOPS,OSCE,CBA	F&S	II	-	NLHP6.5
CO5	Demonstrate Vamana Karma in Amlapitta	PSY-GUD	MK	SH	TBL,CBL,PBL,D	CBA,DOPS,OSCE	F&S	II	-	NLHP6.6

CO5	Demonstrate Vamana Karma in Kushta	PSY-GUD	MK	SH	D,CBL	DOPS,OSCE,CBA	F&S	II	-	NLHP6.7

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 6.1	Indications and contraindications of Vamana Karma	Case-Based Learning Students analyze clinical cases involving Kapha disorders and Medoroga, determining whether Vamana is indicated or contraindicated. Each group evaluates symptoms and medical history, justifying their conclusions. The instructor facilitates discussions, encouraging critical thinking. Groups present their findings, reinforcing clinical decision-making and the therapeutic applications of Vamana in practice.
NLHT 6.2	Identification of Vamana and Vamanopaga Dravya	Group Discussion Students work in small groups, each assigned a specific task. One group classifies Vamana Dravya, another explores Vamanopaga Dravya, and a third conducts a detailed study of Madanaphala, analyzing its Rasa, Guna, Veerya, Vipaka, and Prabhava. Groups organize findings using charts or digital tools and present their insights. The session concludes with a guided visit to the herbal garden or Dravyaguna museum for direct observation, reinforcing theoretical concepts through practical exposure.
NLHT 6.3	Preparation of disease wise Vamana Purva Karma chart	Making of Charts The Vamana Purvakarma chart outlines key preparatory steps for effective therapeutic emesis. It begins with Deepana-Pachana to enhance digestion, followed by Abhyantara Snehana with medicated ghee or oil and BahyaSnehana, Swedana and Dietary guidelines during Sneha Sweda and on the day prior to Vamana (Utklesha diet).The chart shall also include psychological preparation which helps patients stay relaxed and informed. This structured approach optimizes Vamana therapy outcomes.
NLHT 6.4	Roleplay on patient communication for Vamana	Roleplay

	Karma	Students role-play as Patient and Practitioner to practice patient counseling. The Practitioner establishes rapport, explains Vamana Karma—its purpose, indications (e.g., Kapha disorders), and Purva Karma preparation. They detail the procedure, expected outcomes, benefits (e.g., improved digestion, detoxification), and possible discomforts. Post-procedure care is outlined, and patient concerns are addressed with reassurance. The session concludes with obtaining written consent, reinforcing collaboration. This exercise enhances communication skills and deepens practical understanding of Vamana therapy.
NLHT 6.5	Interactive discussion on Paschat Karma	Group discussion Participants are divided into groups, each assigned specific topics: diet regimen (Samsarjana Krama), lifestyle modifications, and management of complications such as dehydration and fatigue. Each group will conduct research on their topic and then teach their findings to other participants, fostering a collaborative learning environment.
NLHT 6.6	Peer learning on the concept of Sadyo Vamana	Peer learning Participants will be assigned specific topics to prepare, including the definition and importance of Sadyo Vamana, indications and contraindications, steps of the procedure, complications and their management, and a comparison with classical Vamana. Following this, participants will be divided into small groups to discuss their topics and prepare presentations. The session will conclude with a summary of key takeaways, incorporating insights from all participants to enhance understanding of Vamana.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 6.1	Demonstration of Vamana Purva Karma in a patient	Kinaesthetic learning Students actively participate in each step of Vamana Purva Karma. They begin by collecting and organizing all necessary tools and herbal preparations. They then assess Agni and Koshta to determine the patient's readiness for Vamana therapy. Students perform Abhyantara Snehana and Swedana,

		applying oil and heat therapy to prepare the body. They engage in selecting an appropriate Vamaka Dravya based on the patient's condition, discussing its properties and effects. Finally, they collaborate in planning dietary guidelines to optimize patient readiness, ensuring hands-on learning and deeper understanding of Vamana Purva Karma.
NLHP 6.2	Pradhana Karma of Vamana in a patient	Kinaesthetic learning Students actively participate in gathering and organizing all necessary tools and medications. They engage in preparing the patient by explaining the procedure and obtaining informed consent. Students then set up and arrange the required medications for easy access. During the application of the procedure, they administer Vamana yoga and assist in Akanta pana to induce vomiting. They observe and assess Vega and Upavega, actively monitoring signs of Samyak, Ayoga, and Atiyoga. Throughout the process, they apply appropriate Chikitsa for any deviations, ensuring hands-on learning and a deeper understanding of the Vamana procedure .
NLHP 6.3	Demonstration of Paschat Karma of Vamana	Kinaesthetic learning Students participate by performing the assessment of Shuddhi to evaluate the purification achieved through Vamana and allied therapies, including monitoring the effectiveness of Dhoomapana and Kavala practices. They collaborate in providing dietary guidelines that support recovery. Students also engage in discussions about Parihara Vishaya, exploring lifestyle modifications to prevent disease recurrence. Finally, they actively discuss Vamana Vyapat and Chikitsa, focusing on the indications and treatment protocols for Vamana therapy, ensuring a hands-on understanding of the procedure and its impact on patient health.
NLHP 6.4	Demonstration of Sadyo Vamana in a patient	Workshop Students actively participate in a hands-on workshop on Sadyo Vamana under instructor supervision. They begin by assessing indications and contraindications, followed by material collection and patient preparation. In small groups, they administer emetic substances, observe vega and upavega, and identify samyak, ayoga, and atiyoga lakshana. Post-procedure, they practice Paschat Karma protocols, including dietary guidelines and recovery care. A debrief session follows, where students analyze outcomes, discuss complications, and refine their approach for real-world application.

NLHP 6.5	Demonstration of Vamana Karma in a Shwasa patient	Demonstration The instructor demonstrates the Vamana procedure by first collecting and sterilizing necessary tools. They explain the procedure to the patient and obtain informed consent. The materials for Vamana are prepared, and the procedure is demonstrated with attention to technique. The instructor observes for Samyak, Ayoga, and Atiyoga lakshana. Afterward, Paschat karma instructions for post-procedure care are provided, followed by an outcome and assessment to evaluate the procedure's success and any improvements needed.
NLHP 6.6	Demonstration of Vamana Karma in an Amlapitta patient	Same as for Shwasa
NLHP 6.7	Demonstration of Vamana Karma in a Kushta patient	Same as for Shwasa

Topic 7 Virechana Karma (LH :13 NLHT: 7 NLHP: 15)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Define Virechana and describe the indications and contraindications	CK	MK	KH	L&PPT	S-LAQ	F&S	II	-	LH
CO1	Describe the types of Virechana	CK	MK	KH	L&PPT	S-LAQ	F&S	II	-	LH
CO2	Apply the principles of selection of Virechana formulations - Trivrut Lehya. Avipathi Choorna, Abhayadi Modaka, Gandharveranda Taila	CAP	MK	KH	L&PPT	S-LAQ	F&S	II	-	LH
CO2, CO4	Describe the Sambhara Sangraha and Atura Pariksha	CK	MK	K	L&PPT	S-LAQ	F&S	II	-	LH
CO2, CO4	Explain Aatura Sidhata including Abhyantara Snehapana ,Vishrama Kala procedures and Virechana Yoga with Anupana and dose	CC	MK	KH	CBL,L &PPT	S-LAQ	F&S	II	-	LH

CO4	Explain the administration of Virechana Yoga and observation of Vega	CC	MK	KH	CBL,L &PPT	S-LAQ	F&S	II	-	LH
CO4, CO6	Infers the symptoms of Samyak, Ayoga, Atiyoga of Virechana with Chikitsa of Ayoga and Atiyoga	CAN	MK	KH	L&PPT ,CBL	S-LAQ	F&S	II	-	LH
CO4, CO6	Explain Paschat Karma of Virechana including assessment of Shuddhi, Samsarjana Krama and Parihara Vishaya of Virechana	CC	MK	KH	L&PPT ,CBL	S-LAQ	F&S	II	-	LH
CO4, CO6	Explain Virechana Vyapat and Chikitsa	CC	MK	KH	L&PPT ,CBL	S-LAQ	F&S	II	-	LH
CO1, CO3	Explain Virechana Karmukata	CC	MK	KH	CBL,L &PPT	S-LAQ	F&S	II	-	LH
CO3	Analyse principles of practice of Virechana Karma in Kushta	CAN	MK	KH	L&PPT ,CBL	PRN,S-LAQ	F	II	-	LH
CO3	Analyse principles of practice of Virechana Karma in Vatarakta	CAN	MK	KH	CBL,L &PPT	PRN	F	II	-	LH
CO3	Analyse principles of practice of Virechana Karma in Pakshaghata	CAN	MK	KH	CBL	PRN	F	II	-	LH
CO3	Analyse principles of practice of Virechana Karma in Prameha	CAN	MK	KH	CBL	PRN	F	II	-	LH
CO1	Explain Indications and contraindications of Virechana Karma	CC	MK	KH	L&GD	S-LAQ	F&S	II	-	NLHT7.1
CO2	Enlist and identify Virechana and Virechanopaga Dravya and describe the properties of Virechana Dravya	CK	MK	KH	L&PPT ,DG	P-ID	F&S	II	V-DG	NLHT7.2
CO3	Prepare a disease wise Virechana Purva Karma chart	CAN	MK	KH	CBL	PRN	F	II	-	NLHT7.3
CO3	Distinguish Nitya Virechana and Koshta Shodhana in patients	CC	MK	KH	CBL,TBL	COM	F	II	-	NLHT7.4

CO1, CO3	Analyze the principles of selection of formulations for Virechana	CAN	MK	KH	PBL,CBL	PRN	F	II	-	NLHT7.5
CO5	Demonstrate Purva Karma of Virechana	PSY-GUD	MK	SH	D	DOPS,OSPE	F&S	II	-	NLHP7.1
CO5	Demonstrate Pradhana Karma of Virechana	PSY-GUD	MK	SH	D	DOPS,OSPE	F&S	II	-	NLHP7.2
CO5	Demonstrate Paschat Karma of Virechana	PSY-GUD	MK	SH	D	CHK,DOPS,OSPE	F&S	II	-	NLHP7.3
CO5	Demonstrate Virechana Karma in Kushta	PSY-GUD	MK	SH	D,CBL	CBA	F&S	II	-	NLHP7.4
CO5	Demonstrate Virechana Karma in Vatarakta	PSY-GUD	MK	SH	CBL,D	CBA	F&S	II	-	NLHP7.5
CO5	Demonstrate Virechana Karma in Pakshaghata	PSY-GUD	MK	SH	CBL,D	CBA	F&S	II	-	NLHP7.6
CO5	Demonstrate Virechana Karma in Prameha	PSY-GUD	MK	SH	CBL,D	CBA	F&S	II	-	NLHP7.7

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 7.1	Indications and contraindications of Virechana Karma	Group Discussion Students are divided into small groups, each assigned topics like indications, contraindications, and factors influencing patient selection. Using clinical cases representing various doshic imbalances, groups evaluate whether Virechana is indicated and discuss the rationale behind their decisions. They explore potential risks of ignoring contraindications and the importance of patient assessment for safety and therapeutic efficacy. Key takeaways are summarized at the end to reinforce these concepts.

NLHT 7.2	Enlist and identify Virechana and Virechanopaga Dravya	Garden visit Students are divided into groups for an interactive session on Virechana and Virechanopaga Dravya. Each group focuses on classifying Virechana Dravya, Virechanopaga Dravya, and detailed study of Trivrit, including its properties and mode of action. Groups discuss the Rasa, Guna, Virya, Vipaka, and Prabhava of their assigned drugs using charts or digital tools. Students also explore Virechana and Virechanopaga drugs in the herbal garden or Dravyaguna museum. This activity enhances understanding of Ayurvedic pharmacology and its therapeutic applications.
NLHT 7.3	Preparation of a disease wise Virechana Purva Karma chart	Making of Charts Students create a comprehensive chart detailing Virechana Purva Karma, including Deepana and Pachana, Snehana (internal and external), Swedana, dietary guidelines, and psychological preparation. Each section outlines the definition, indications, formulations, procedures, and benefits of these practices. This activity enhances understanding of Ayurvedic principles and the importance of preparatory therapies for promoting health and well-being.
NLHT 7.4	Compilation on Nitya Virechana and Koshta Shodhana	Team-Based Learning Students are divided into groups to compile information on Nitya Virechana and Koshta Shodhana, focusing on their definitions, indications, formulations, procedures, and benefits. They explore formulations like Trivrut for Nitya Virechana and specific herbs for Koshta Shodhana. The discussion compares the two therapies, highlighting Nitya Virechana for routine detoxification and Koshta Shodhana for deeper cleansing, along with differences in intensity, frequency, drug choice, and outcomes.
NLHT 7.5	Analysis of selection of formulations for Virechana	PBL Students analyze the selection of Virechana drugs based on various factors, including the Dosha involved, Rogibala, Agnibala, Vaya, Vyadhi Avastha, and seasonal considerations (Rutu). They evaluate the Guna and Kalpana of each formulation to ensure compatibility with the patient's constitution. The discussion focuses on Trivrut Lehya, Avipathi Choorna, Abhayadi Modaka, and Gandharveranda Taila, tailoring each formulation to the patient’s specific constitution and health

		status for effective detoxification through Virechana therapy.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 7.1	Demonstration of Virechana Purva Karma	Kinaesthetic Learning In this hands-on demonstration of Virechana Purva Karma, students actively participate in preparing the patient for the procedure. They start by collecting all necessary tools and purgative substances. Next, they assess the patient's overall health and readiness for treatment, including evaluating Agni and Koshta to determine fitness for Virechana. Students then provide specific dietary guidelines, recommending a light diet before the procedure. Once the patient is adequately prepared, students select the appropriate Virechana Dravya based on individual needs. This interactive approach helps students engage with the steps of Virechana Purva Karma, reinforcing their understanding of the preparation required for effective detoxification.
NLHP 7.2	Demonstration of Pradhana karma of Virechana	Kinaesthetic Learning The procedure begins overnight to prepare for purgation. In the morning, students administer Virechana Yoga by giving carefully selected purgative drugs to induce controlled bowel movements. They closely monitor the patient for signs of Vega and Upavega, ensuring the process is proceeding as expected. Throughout the procedure, students make observations for Lakshana of Samyak, Ayoga, and Atiyoga, providing appropriate Chikitsa for any complications arising from Ayoga or Atiyoga. This hands-on approach allows students to engage directly in the detoxification process while prioritizing patient safety and comfort during Virechana.
NLHP 7.3	Demonstration of Paschat Karma of Virechana	Demonstration Paschat Karma instructions guide the patient on post-treatment care, emphasizing recovery. An assessment of Shuddhi evaluates the effectiveness of the purgation process. The instructor outlines dietary guidelines, recommending a light, easily digestible diet to support digestion. Pariharya Vishaya are discussed to prevent symptom recurrence and promote health. Finally, Virechana vyapat and

		Chikitsa are addressed, focusing on potential complications and their management . This approach ensures optimal care after Virechana therapy.
NLHP 7.4	Demonstration of Virechana in a Kushta patient	Demonstration Material collection gathers all necessary tools and purgative substances. Patient preparation includes assessing their condition and ensuring readiness. The material preparation involves selecting appropriate purgatives based on the patient's needs. During the procedure, the instructor administers the purgative while monitoring the patient for Samyak, Ayoga, and Atiyoga lakshana. After Virechana, Paschat karma instructions guide post-treatment care, including diet and lifestyle adjustments. Finally, a post-treatment assessment evaluates the patient's response and recovery.
NLHP 7.5	Demonstration of Virechana in a Vatarakta patient	Same as for Kushta
NLHP 7.6	Demonstration of Virechana in a Pakshaghata patient	Same as for Kushta
NLHP 7.7	Demonstration of Virechana in a Prameha patient	Same as for Kushta

Topic 8 Basti Karma (LH :18 NLHT: 10 NLHP: 25)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Describe the definition, synonyms and the classification of Basti according to Matra, Adhishtana and Krama	CK	MK	K	L&PPT	S-LAQ	F&S	III	-	LH
CO2	Describe the traditional and currently used instruments with their specifications for Niruha and Anuvasana Basti	CK	MK	K	L_VC,L &PPT	S-LAQ	F&S	III	-	LH
CO2	Enlist Anuvasana, Asthapana, Anuvasanopaga and Asthapanopaga Dravya	CK	DK	KH	FC	S-LAQ,QZ ,CL-PR	F	III	-	LH

CO1, CO3	Describe the indications and contraindications of Anuvasana Basti	CK	MK	KH	CBL,L &PPT ,EDU	S-LAQ	F&S	III	-	LH
CO3	Explain the Purva Karma of Anuvasana Basti including dose, diet and time of administration of Anuvasana Basti	CC	MK	KH	L_VC,L &PPT ,D	S-LAQ	F&S	III	-	LH
CO4, CO5, CO6	Explain the Pradhana Karma of Anuvasana Basti comprising of steps of administration, retention time,Apratyagamana of Sneha,Samyak Yoga, Ayoga and Atiyoga and Chikitsa of Ayoga and Atiyoga	CC	MK	KH	L&PPT ,CBL	S-LAQ	F&S	III	-	LH
CO4, CO5, CO6	Explain the Paschat karma of Anuvasana Basti comprising of diet and regimen after Anuvasana basti,Vyapat and Chikitsa	CC	MK	KH	L&PPT ,CBL,Pr BL	S-LAQ	F&S	III	-	LH
CO1	Describe the indications and contra indications of Niruha Basti	CK	MK	K	L&PPT ,CBL,P BL	S-LAQ	F&S	III	-	LH
CO4, CO5	Explain the Purva Karma of Niruha basti	CC	MK	KH	KL,L& PPT ,L_VC	S-LAQ	F&S	III	-	LH
CO4, CO5	Explain the Pradhana Karma of Niruha Basti comprising of the steps of administration, retention time, Apratyagamana of Niruha Dravya, Samyak Yoga, Ayoga and Atiyoga and Chikitsa of Ayoga and Atiyoga	CC	MK	KH	L&PPT ,L_VC	S-LAQ	F&S	III	-	LH
CO4, CO5, CO6	Explain the Paschat Karma of Niruha Basti comprising of the diet and regimen after Niruha Basti, Vyapat and Chikitsa	CC	MK	KH	CBL,PB L,L&PP T	S-LAQ	F&S	III	-	LH

CO1, CO3	Explain the mode of action of Niruha Basti and Anuvasana Basti	CC	MK	KH	L_VC,L &PPT	PRN	F&S	III	-	LH
CO2, CO3, CO6	Describe the ingredients, method of preparation and clinical application of Madhutailika Basti, Vaitarana Basti, Mustadi Yapana Basti, Ksheera Basti, Lekhana Basti, Eranda mooladi Basti, Pippalyadi Anuvasana Basti, Madhuyashtyadi Anuvasana Basti	CK	MK	SH	L&PPT ,BL	S-LAQ	F&S	III	-	LH
CO2, CO3, CO6	Analyse the principles of selection of Niruha Basti in Gridhrasi, Amavata and Anuvasana basti in Kateegraha	CAN	MK	KH	CBL,PB L	PRN	F	III	-	LH
CO2, CO7	Identify and compare traditional and conventional Basti Yantra, their components and applications	CAN	MK	SH	KL	RK,PP-Practical	F&S	III	-	NLHP8.1
CO2	Apply to calculate and customize the Matra of Niruha Basti and Anuvasana Basti according to age.	CAP	MK	KH	DIS	M-CHT	F&S	III	-	NLHT8.1
CO2	Enlist and identify Anuvasana and Anuvasanopaga, Asthapana and Asthapanopaga Dravya	CK	MK	KH	DG,L& PPT ,FV	P-ID	F&S	III	V-DG	NLHT8.2
CO3	Identify indications and contraindications of Anuvasana Basti	CK	MK	KH	PBL,CB L	PRN	F&S	III	-	NLHT8.3
CO5, CO8	Demonstrate Purva Karma of Anuvasana Basti	PSY-GUD	MK	SH	D	DOPS,OSP E	F&S	III	-	NLHP8.2
CO4, CO5	Demonstrate Pradhana Karma of Anuvasana Basti	PSY-GUD	MK	SH	D,KL	OSPE,DOP S	F&S	III	-	NLHP8.3
CO4, CO5, CO6	Demonstrate Paschat Karma of Anuvasana Basti	PSY-GUD	MK	KH	D	DOPS,CBA ,OSPE	F&S	III	-	NLHP8.4

CO3	Identify the therapeutic benefits of Niruha Basti	CK	MK	KH	CBL,DIS	PRN	F&S	III	-	NLHT8.4
CO1, CO3	Identify indications and contraindications for Niruha Basti	CK	MK	KH	FC,CBL	CL-PR	F&S	III	-	NLHT8.5
CO5, CO8	Demonstrate Purva Karma of Niruha Basti	PSY-GUD	MK	KH	DIS	OSPE,DOPS	F&S	III	-	NLHP8.5
CO4, CO5	Demonstrate Pradhana Karma of Niruha Basti	PSY-GUD	MK	SH	D	DOPS	F&S	III	-	NLHP8.6
CO4, CO5, CO6	Demonstrate Paschat Karma of Niruha Basti	PSY-GUD	MK	KH	D	OSPE,SBA, DOPS,PP-Practical	F&S	III	-	NLHP8.7
CO1, CO3	Analyse Karmukata of Niruha Basti and Anuvasana Basti	CAN	MK	KH	L_VC,TUT,L&GD	S-LAQ	F&S	III	-	NLHT8.6
CO2	Demonstrate the preparation , indications and application of Basti formulations in clinical scenario	PSY-GUD	MK	SH	D,CBL	P-PRF,DOAP	F&S	III	-	NLHP8.8
CO3	Analyse the role of Basti in Gridhrasi, Amavata and Kateegraha	CAN	MK	KH	CBL,L&GD	P-CASE,CBA	F&S	III	-	NLHT8.7
CO2, CO5	Explain the preparation of Basti Dravya	CC	MK	KH	IBL,L_VC	PRN,S-LAQ	F&S	III	-	LH
CO1	Describe the importance of Basti	CK	MK	K	L&PPT	S-LAQ	F&S	III	-	LH
CO1	Describe Niruha and Anuvasana Basti Matra according to age	CK	MK	K	L&GD	S-LAQ,VV-Viva	F&S	III	-	LH
Non Lecture Hour Theory										

S.No	Name of Activity	Description of Theory Activity
NLHT 8.1	Niruha and Anuvasana Basti Matra	Discussion In this activity, students discuss and prepare a chart outlining standard dosages for Niruha and Anuvasana Basti based on age. The facilitator introduces the importance of dosage customization in Ayurvedic practice. Students are divided into small groups to analyze age-specific dosages, calculating the appropriate Matra for each type of Basti. Each group presents their findings, explaining their reasoning and considerations. After presentations, the class engages in a discussion, allowing for questions and insights. The session concludes with a reflection on the importance of dosage customization in clinical practice.
NLHT 8.2	Anuvasana and Anuvasanopaga, Asthapana and Asthapanopaga Dravya	Field visit In this activity, students visit a herbal garden or museum to identify Anuvasana, Anuvasanopaga, Asthapana, and Asthapanopaga Dravya. A guided tour by an expert provides insights into the dravyas. Students explore and analyze the properties of each Dravya, including Rasa, Guna, Veerya, and Vipaka. They document their observations and complete a worksheet detailing each substance’s characteristics and uses. Groups then present their findings to the class, highlighting one or two (Madanaphala and Satahwa)identified Dravya and discuss their significance in Basti therapy.
NLHT 8.3	Indications and contra indications of Anuvasana Basti	Interactive learning and case discussion Students analyze the indications and contraindications of Anuvasana Basti through case discussions. The session begins with an overview of Anuvasana Basti's purpose and benefits. Students are divided into groups, each receiving a case study with patient details. Groups identify indications and contraindications based on the case, then present their findings to the class. After each presentation, a discussion facilitates further insights. The activity concludes with a reflection session on the clinical applications of Anuvasana Basti and the importance of patient assessment in Ayurvedic practice.
NLHT 8.4	Benefits of Niruha Basti	Case Based Learning In this activity, students discuss cases who have undergone Basti therapy. Each group reviews symptoms before and after treatment, assessing changes and therapeutic benefits. The activity

		promotes critical thinking as students identify patterns and outcomes. The instructor summarizes key findings, addresses common themes, and encourages deeper analysis of Basti's mechanisms and individualized treatment plans.
NLHT 8.5	Indications and contra indications of Niruha Basti	Case Based Learning In this Niruha Basti activity, students engage in case discussions to analyze its indications and contraindications. The instructor explains Niruha Basti's benefits for detoxification and treating Vata-related disorders. Students are divided into small groups, each reviewing a case study card detailing patient symptoms and health history. They identify indications and contraindications for Niruha Basti based on the case. After discussions, each group presents their case, followed by a class discussion to address questions and insights. The session concludes with a reflection on the clinical applications of Niruha Basti and the importance of thorough patient assessment. This activity promotes critical thinking, teamwork, and practical knowledge.
NLHT 8.6	Niruha Basti and Anuvasana Basti Karmukata	Group Discussion The session begins with a brief lecture on Anuvasana Basti and Niruha Basti , explaining their roles in detoxification and nourishment. Students then work in groups to analyze how each type functions and its therapeutic effects. A class discussion follows, comparing their modes of action and addressing practical challenges. The session concludes with a summary of key insights, reinforcing the clinical relevance of Basti therapy in Panchakarma
NLHT 8.7	Principles of practice of Basti	Discussion Students analyze Basti therapy for Gridhrasi, Amavata, and Kateegraha . After a brief discussion on each condition’s pathophysiology, groups explore suitable Basti formulations. Each group presents their findings, explaining how formulation selection aligns with the Sameekshya Bhava.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 8.1	Demonstration of Basti Yantra	Kinaesthetic learning This demonstration introduces students to the Basti Yantra, covering both traditional and modern versions. Students learn about its components and applications. The activity involves preparing materials, filling the Basti Putaka, lubricating the nozzle, positioning the mannequin, inserting the nozzle, administering the liquid, and ensuring proper aftercare. Students engage with questions throughout to deepen their understanding. The session concludes by emphasizing the evolution of Basti Yantra and its significance in both Ayurvedic therapies and modern healthcare.
NLHP 8.2	Purva Karma of Anuvasana Basti	Demonstration The demonstration of Purva Karma for Anuvasana Basti begins with Sambhara Sangraha. Atura Pariksha is conducted to assess the patient's fitness, followed by an explanation of the Anuvasana Basti kala(time of administration). Abhyanga and Swedana are performed to prepare the body, enhancing absorption. The dose fixation is calculated based on individual needs, and dietary recommendations are provided to optimize the therapeutic effects before administering the Basti.
NLHP 8.3	Pradhana Karma of Anuvasana Basti	Kinaesthetic learning In this activity, students practice administering Anuvasana Basti on a model or simulated patient. They observe and note the patient's response, including any Vega and monitor the evacuation of the Basti Dravya. Students learn to identify Ayoga, Samyakyoga, and Atiyoga Lakshana. They also track the Anuvasana Pratyagamana Kala and apply interventions for Apratyagamana, Ayoga, or Atiyoga as needed. This hands-on experience helps students integrate theoretical knowledge with practical skills for effective Anuvasana Basti administration.
NLHP 8.4	Paschat Karma of Anuvasana Basti	Demonstration In the Paschat Karma demonstration for Anuvasana Basti, the focus is on post-treatment care and dietary recommendations. After treatment, the patient’s buttocks are lightly patted, and they are encouraged to relax in a supine position with a raised foot end and a pillow under the head for comfort. Patients remain in this position for a specified duration and are advised to avoid activities or foods that could hinder recovery. The instructor discusses potential complications and management strategies.

		This demonstration highlights the importance of Paschat Karma in optimizing the therapeutic benefits of Anuvasana Basti.
NLHP 8.5	Purva Karma of Niruha Basti	Demonstration The instructor guides students through the preparatory steps for Niruha . The session starts with a discussion on Sambhara Sangraha, covering required materials, including Kashaya, Kalka and food after Basti. Atura Pariksha is emphasized to assess the patient's fitness. Students learn about Niruha Basti Kala for optimal timing and the preparation of the patient with Abhyanga and Swedana. Dietary considerations highlight the need for an empty stomach. Dose Fixation is covered to determine the correct volume of Basti dravya. Finally, students learn about Basti Samyojana Vidhi and how to prepare the Basti Dravya. This demonstration ensures students understand the Purva Karma process in Niruha Basti.
NLHP 8.6	Pradhana Karma of Niruha Basti	Kinaesthetic learning Students actively participate in the positioning of the patient and administration of the Basti using sterile Basti Yantra. They monitor the Basti Daata Dosha , ensure proper dosage, observe the evacuation process for signs of Vega, and note the Niruha Pratyagamana Kala. In case of Apratyagamana, students apply necessary measures for evacuation of Basti Dravya. They also assess Ayoga, Samyakyoga, and Atiyoga Lakshana, practicing interventions based on the therapy's effectiveness. This hands-on approach ensures students understand the key steps in performing Niruha Basti safely and effectively.
NLHP 8.7	Paschat Karma of Niruha Basti	Group Discussion Students engage in group discussions on post-treatment care, diet, and complications of Niruha. Groups explore: • Dietary Guidelines: Emphasizing light, digestible foods. • Parihara Vishaya: Avoiding strenuous activities, cold exposure, and incompatible foods.

		• Vyapat & Chikitsa: Identifying complications and their management.
NLHP 8.8	Clinical application of Basti formulations	Case Based Learning Students analyze clinical cases of Gridhrasi, Amavata, and Kateegraha to determine the appropriate Basti therapy. Each group receives a patient scenario, assesses Dosha involvement, and selects a suitable Basti formulation. They justify their choices based on pathophysiology, formulation properties, and expected therapeutic effects. After discussion, groups present their treatment plans, including preparation, administration, and post-care protocols. This interactive approach enhances clinical reasoning and practical application of Basti therapy. The discussion should focus on the following basti formulations • Madhutailika Basti • Vaitarana Basti • Mustadi Yapana Basti • Ksheera Basti • Lekhana Basti • Eranda mooladi Basti • Pippalyadi Anuvasana Basti • Madhuyashtyadi Anuvasana Basti

Topic 9 Nasya Karma (LH :10 NLHT: 6 NLHP: 12)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Define Nasya Karma and describe the Indications, contraindications and classification of Nasya based on Karma	CK	MK	K	L&PPT ,REC	S-LAQ,M-CHT	F&S	III	-	LH
CO2	Enlist Shirovirechana Gana and describe currently practiced Shirovirechana Dravya	CK	NK	K	L&PPT ,D	S-LAQ,QZ	F	III	V-DG	LH
CO2, CO4, CO5	Explain Purva Karma of Nasya comprising of Sambhara Sangraha, Atura Pariksha, Oushadha Nirnaya, Nasya Kala and Atura sidhata	CC	MK	KH	L&PPT	S-LAQ	F&S	III	-	LH

CO2, CO4, CO5	Infer Pradhana Karma of Nasya including administration of Nasya Dravya, Samyakyoga, Ayoga and Atiyoga Lakshana and Chikitsa	CC	MK	KH	L&PPT ,REC	S-LAQ	F&S	III	-	LH
CO4	Explain Paschat Karma of Nasya comprising of Padatala Hastadi Mardana, Dhumapana,Kavala, Diet, Parihara Vishaya, Nasya Vyapat and Chikitsa	CC	MK	KH	REC,L &PPT	S-LAQ	F&S	III	-	LH
CO2, CO3	Distinguish the ingredients and clinical application of Nasya formulations - Anutaila, Ksheerabala Taila, Karpasastyadi Taila, Shadbindu Taila, Kumkumadi Taila, Brahmi Ghrita, Rasnadi Churna and Tulasi Swarasa	CC	MK	KH	L&GD, L&PPT	S-LAQ	F&S	III	-	LH
CO1, CO3	Comprehend the mode of action of Nasya Karma	CC	MK	KH	L_VC,L &PPT	PRN,S-LAQ	F&S	III	-	LH
CO1, CO3	Explain and analyze the principles and practice of Nasya Karma in Pakshaghata, Apabahuka, Manyastambha and Ardita.	CAN	MK	KH	L&GD, PBL,CBL,L&PPT	S-LAQ,PRN	F&S	III	-	LH
CO2	Enlist and identify Shirovirechana Gana Dravya and describe their properties	CAP	MK	KH	DG,FV, L&PPT	P-ID	F&S	III	V-DG	NLHT9.1
CO3	Prepare Chart for Purva Karma of Nasya	PSY-GUD	MK	SH	LS,TBL ,DIS	CL-PR,PRN,M-CHT	F	III	-	NLHT9.2
CO4	Illustrate Pradhana Karma of Nasya	CAN	MK	KH	L&GD, FC,PER	PRN,CL-PR	F	III	-	NLHT9.3
CO5	Demonstrate Purva Karma of Nasya	PSY-GUD	MK	SH	D-M,D, KL,PT	OSPE,DOPS	F&S	III	-	NLHP9.1
CO5	Demonstrate Pradhana Karma of Nasya	PSY-GUD	MK	SH	KL,D,PT,SIM	P-RP,OSPE ,DOPS	F&S	III	-	NLHP9.2

CO5	Demonstrate Paschat Karma of Nasya	PSY-GUD	MK	SH	D,KL	DOPS,OSPE,P-PRF	F&S	III	-	NLHP9.3
CO1, CO3	Analyze the principles of selection of formulations for Nasya	CAN	MK	KH	PBL,LS,CBL	PRN,SBA	F&S	III	-	NLHP9.4
CO5	Demonstrate Nasya Karma in Pakshaghata	PSY-GUD	MK	SH	CBL	CBA	F&S	III	-	NLHP9.5
CO5	Demonstrate Nasya Karma in Apabahuka and Manyastambha,	PSY-GUD	MK	SH	D,CBL	CBA	F&S	III	-	NLHP9.6
CO5	Demonstrate Nasya karma in Ardita.	PSY-GUD	MK	SH	CBL,D	CBA	F&S	III	-	NLHP9.7
CO1, CO3	Discuss the pharmacodynamics of Nasya Karma	CC	DK	KH	LS,PER,DIS	O-QZ,T-OBT,M-POS	F	III	-	NLHT9.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 9.1	Identification of Shirovirechana Gana	Field visit Students are divided into teams to explore the classifications of Shirovirechana Gana. Each group analyzes assigned formulations, discussing attributes like Rasa, Guna, Virya, Vipaka, and Prabhava. Using charts or digital tools, they organize their findings for clarity. They also observe Shirovirechana and Shirovirechanopaga drugs in the herbal garden or Dravyaguna museum to enhance practical knowledge.
NLHT 9.2	Preparation of Chart for Purva Karma of Nasya	Team Based Learning Students are divided into groups of 2-4 to create a comprehensive checklist for the Purva Karma phase of Nasya. One group prepares a checklist for Sambhara Sangraha, detailing necessary materials like medicated oils, tools, and supportive items. Another group creates a checklist for Patient Preparation, covering hygiene, positioning, and obtaining consent. This activity enhances understanding of Nasya's

		preparatory processes while fostering teamwork and critical thinking skills.
NLHT 9.3	Discussion on Pradhana Karma of Nasya	Class presentation In this class presentation activity on the Pradhana Karma of Nasya, students are divided into groups, with one student from each group responsible for presenting. Each group focuses on different aspects of the Pradhana Karma phase, including techniques for instilling medication, patient positioning, and therapeutic benefits. After the presentations, the instructor summarizes key points, reinforcing Nasya's significance in Ayurvedic practice and its role in treating head and neck conditions. This collaborative approach enhances understanding and encourages student engagement.
NLHT 9.4	Nasya Karmukata	Discussion Students are introduced to the importance of Nasya Karma. They then break into small groups to discuss how nasal drugs affect doshas by engaging olfactory receptors and influencing brain functions, focusing on conditions above the clavicle like headaches and sinus issues. Each group summarizes key points, emphasizing insights into Nasya Karma's therapeutic potential and its clinical implications. This activity deepens understanding of Nasya Karma in Ayurvedic medicine.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 9.1	Demonstration of Purva Karma of Nasya	Demonstration The instructor guides students through the essential preparations for Nasya Karma, demonstrating on a volunteer or mannequin. The process begins with Sambhara Sangraha, collecting all necessary materials, including medicated oils and tools. The instructor emphasizes assessing the patient's fitness for Nasya Karma and preparing the patient by performing Mukha Abhyanga and Swedana to enhance therapeutic effectiveness. Students are also instructed on selecting appropriate Nasya Oushadha Dravya based on the patient's Dosha and health conditions. This approach ensures that students

		understand the critical preparatory steps for a successful Nasya therapy session.
NLHP 9.2	Demonstration of Pradhana Karma of Nasya in a patient	Demonstration The instructor guides students through the essential steps of Nasya Karma, focusing on the Pradhana Karma phase. The session begins with proper patient positioning in a supine position with the head tilted back and limbs apart. The instructor demonstrates the administration of Nasya Dravya, instilling it in a continuous stream into each nostril while closing the other. Students learn effective management techniques, including instructing the patient to avoid movements, speech, or disturbances. The instructor covers Samyak, Ayoga, and Atiyoga Lakshana, helping students recognize signs of effective treatment and complications. Strategies for managing Ayoga and Atiyoga are also discussed, equipping students with practical skills for Nasya Karma in clinical practice
NLHP 9.3	Demonstration of Paschat Karma of Nasya	Demonstration The instructor demonstrates the Paschat Karma phase of Nasya in a volunteer or Mannequin . After the administration of Nasya Dravya, gentle massage of head, cheeks, and neck to enhance circulation and relieve tension are shown. Additionally, practices such as Dhumapana and Kavala are demonstrated. Dietary restrictions and lifestyle modifications to be advised are also discussed. This comprehensive approach in Paschat Karma is crucial for optimizing the outcomes of Nasya therapy.
NLHP 9.4	Principles of selection of formulations for Nasya	PBL / Discussion Students analyze the selection criteria for Nasya Karma formulations, focusing on factors like Dosha, Rogibala, Vaidhi Avastha, Vayah, and Agnibala, as well as the Guna and Kalpana of medicinal substances. The session covers adjusting Matra based on patient characteristics and health status. Students examine specific formulations such as Anu Taila, Ksheerabala Taila, Karpasastyadi Taila, Shadbindu Taila, Kumkumadi Taila, Brahmi Ghrita, Rasnadi Churna, and Tulasi Swarasa. The discussion enhances their understanding of personalized Ayurvedic treatments and clinical application.
NLHP 9.5	Demonstration of Nasya in a Pakshaghata patient	Demonstration The instructor outlines a stepwise procedure starting with material collection, including medicated oils

		or powders, cotton pads, and towels. The patient is positioned comfortably, supine with the head tilted back, and informed consent is obtained. The Nasya dravya is warmed to a lukewarm temperature. During application, drops are administered into each nostril, with the patient instructed to inhale gently. In the Paschat Karma phase, post-care instructions are given.
NLHP 9.6	Demonstration of Nasya in Apabahuka and Manyastambha,	Bedside case discussion Same as for Pakshaghata and Ardita
NLHP 9.7	Demonstration of Nasya in an Ardita patient	Bed side case discussion The instructor discusses a case of Ardita at the bedside. First, the patient's condition is assessed, focusing on symptoms and the underlying Samprapti. The discussion then covers the selection of appropriate Nasya, including suitable Nasya dravya and Matra. Participants evaluate which formulations best address the dosha imbalances and symptoms. This approach enhances understanding of Nasya Karma's clinical application, helping formulate effective treatment strategies based on Ayurvedic principles.

Topic 10 Emergency management and Research updates in Panchakarma and Upakarma (LH :2 NLHT: 2 NLHP: 5)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO6, CO7	Describe common causes and symptoms of Water and Electrolyte imbalance , Hematemesis, Epistaxis and their management.	CK	DK	K	L&PPT	S-LAQ	F&S	III	-	LH
CO7	Explain and Integrate the recent advancements in Panchakarma	CC	DK	KH	L&PPT	QZ ,DEB	F&S	III	-	LH
CO7	Identify the signs and symptoms of Water and Electrolyte imbalance, Haematemesis, and Epistaxis, assess the severity, and select appropriate emergency interventions	CAN	NK	KH	GBL,CBL,RP	SBA, C-VC,QZ	F	III	H-SH	NLHT10.1

CO7	Evaluate recent advancements and scientific evidence supporting Snehana, Swedana and Upakarma	CE	DK	KH	LS,IBL, ML,DIS	M-CHT,CO M,DEB	S	III	-	NLHP10.1
CO3, CO7	Evaluate recent advancements and scientific evidence supporting Vamana Karma	CE	DK	KH	W,LS,D IS	CL-PR,DEB	F	III	-	NLHP10.2
CO3, CO7	Evaluate recent advancements and scientific evidence supporting Virechana Karma	CE	DK	KH	GBL,PL ,LS,PE R,DIS	DEB,CL-PR	S	III	-	NLHP10.3
CO3, CO7	Evaluate recent advancements and scientific evidence supporting Basti Karma	CE	DK	KH	GBL,E DU,TB L,LS	QZ ,CL-PR,DEB	S	III	-	NLHP10.4
CO3, CO7	Evaluate recent advancements and scientific evidence supporting Nasya Karma	CE	DK	KH	BL,LS, PL,DIS	PRN,DEB, M-POS	S	III	-	NLHP10.5

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 10.1	Emergency Management of Water and Electrolyte imbalance,Haematemesis and Epistaxis	Diagnose and Treat Students identify and manage signs and symptoms of water and electrolyte imbalances, hematemesis, and epistaxis. Each participant matches symptoms from cards to corresponding imbalances and selects appropriate management strategies from provided cards. This hands-on approach improves diagnostic skills and equips students with practical treatment strategies for these critical conditions.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 10.1	Review of research updates on Snehana, Swedana and Upakarma	Panchakarma Research Review Participants analyze recent research on Snehana, Swedana and Upakrma in small groups, each assigned a specific paper or article. Groups summarize key findings and discuss their impact on

		clinical practice or future research. This collaborative effort deepens their understanding of Panchakarma, improving their ability to critically evaluate research and apply insights to enhance Snehana, Swedana and Upakarma in clinical settings.
NLHP 10.2	Review of research updates on Vamana Karma	Group Discussion Participants engage in a comprehensive analysis of recent research updates related to Vamana Karma. Divided into small groups, each team is assigned a specific research paper or article that focuses on various aspects of Vamana Karma. Groups review their assigned material, summarize key findings, and discuss how these insights influence clinical practice or guide future research initiatives.
NLHP 10.3	Review of research updates on Virechana Karma	Game based learning Students are divided into teams and assigned a research paper on topics like efficacy, safety, or clinical applications. The game has three rounds: Abstract Scramble, where teams reorder a mixed-up research abstract; Fact vs. Fiction, where they defend or challenge study claims; and Peer Review Panel, where teams act as journal reviewers, identifying flaws and suggesting improvements. Points are awarded for analytical accuracy. This interactive format promotes active learning, teamwork, and real-world research evaluation skills.
NLHP 10.4	Review of research updates on Basti Karma	Library session Students engage in self-directed learning by exploring Ayurvedic texts like Charaka Samhita, Sushruta Samhita, and Ashtanga Hridaya. They focus on the etymology, types, indications, contraindications, and procedural aspects of Basti Karma, while also reviewing modern research. Activities such as guided reading, group discussions, literature reviews, and case analysis enhance engagement. Faculty guide students with references and prompts, encouraging critical evaluation of therapeutic mechanisms, formulations, and clinical applications, fostering independent research and evidence-based practice.
NLHP 10.5	Review of Research updates on Nasya Karma	Peer learning Students analyze recent studies in groups, focusing on aspects like pharmacology, clinical efficacy,

		and safety. They engage in discussions using methods such as journal clubs, jigsaw learning, fishbowl discussions, and case-based approaches to critically evaluate research and compare Ayurvedic concepts with modern findings. Structured frameworks like PICO and CONSORT guide their analysis, while peer feedback and group reflections enhance understanding. Through application tasks and documentation, students synthesize key insights, build a research repository, and strengthen their ability to integrate evidence-based knowledge with traditional wisdom

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
1.1	CO1,CO3	Utility of Raktamokshana in diseases
1.2	CO1,CO3	Project work on Rutu Shodhana
2.1	CO1	Importance of Snehana Karma
2.2	CO2	Selection of Bahya Sneha
2.3	CO2	Selection of Abhyantara Sneha
2.4	CO7	Fat metabolism
2.5	CO7	Snehana Pharmacodynamics
2.6	CO3,CO4	Udwartana and its benefits.
2.7	CO3,CO4	Diet and Parihara Vishaya during Snehapana
2.8	CO3,CO4	Discussion on Accha sneha and Pravicharana sneha.
2.9	CO3,CO4,CO5	Abhyanga in Swastha and Atura
2.10	CO3,CO4,CO5	Massaging Techniques
2.11	CO2,CO3,CO5	Clinical application of Murdhni Taila
3.1	CO4,CO7	Mechanism of sweating
3.2	CO1,CO3	Indications of Sweda Karma
3.3	CO1,CO3	Contraindications of Sweda Karma
4.1	CO1	Interactive learning on Sankara Sweda

4.2	CO1	Compilation of drugs used for Thalam and Thalapothichil
4.3	CO1	Interactive learning on regional variations in practice of Pizhichil
4.4	CO1,CO3	Utilty of Thalapothichil
4.5	CO1,CO4	Interactive discussion on the procedure of Takradhara
4.6	CO1,CO3	Variations in practice of Takradhara
4.7	CO1,CO3	Clinical utility of Dhanyamla
5.1	CO1,CO7	Discussion on Integration of Physiotherapy and Ayurvedic approaches
6.1	CO1,CO3	Indications and contraindications of Vamana Karma
6.2	CO2	Identification of Vamana and Vamanopaga Dravya
6.3	CO3	Preparation of disease wise Vamana Purva Karma chart
6.4	CO4	Interactive discussion on Paschat Karma
6.5	CO3	Peer learning on the concept of Sadyo Vamana
6.6	CO4,CO8	Roleplay on patient communication for Vamana Karma
7.1	CO1	Indications and contraindications of Virechana Karma
7.2	CO3	Preparation of a disease wise Virechana Purva Karma chart
7.3	CO2	Enlist and identify Virechana and Virechanopaga Dravya
7.4	CO3	Compilation on Nitya Virechana and Koshta Shodhana
7.5	CO1,CO3	Analysis of selection of formulations for Virechana
8.1	CO3	Benefits of Niruha Basti

8.2	CO2	Niruha and Anuvasana Basti Matra
8.3	CO1,CO3	Niruha Basti and Anuvasana Basti Karmukata
8.4	CO2	Anuvasana and Anuvasanopaga, Asthapana and Asthapanopaga Dravya
8.5	CO3	Indications and contra indications of Anuvasana Basti
8.6	CO1,CO3	Indications and contra indications of Niruha Basti
8.7	CO3	Principles of practice of Basti
9.1	CO2	Identification of Shirovirechana Gana
9.2	CO3	Preparation of Chart for Purva Karma of Nasya
9.3	CO4	Discussion on Pradhana Karma of Nasya
9.4	CO1,CO3	Nasya Karmukata
10.1	CO7	Emergency Management of Water and Electrolyte imbalance,Haematemesis and Epistaxis

Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Practical No*	CO No	Practical Activity details
1.1	CO1,CO3	Koshta and Agni Pariksha in Panchakarma
1.2	CO1	Panchakarma theatre requirements
1.3	CO1,CO7	Advancement in instrumentation in Panchakarma and Upakarma
2.1	CO3,CO4,CO5	Procedure of Udwartana.
2.2	CO3,CO4,CO5	Procedure of Udgharshana and Utsadana.
2.3	CO3,CO4	Shodhanartha Snehapana in Kushta and Vatarakta
2.4	CO3,CO4	Shodhanartha Snehapana procedure.
2.5	CO3,CO4	Shamanartha Snehapana procedure.
2.6	CO3,CO4	Shamanartha Snehapana in Kushta and Vatarakta.
2.7	CO3,CO4	Sneha Vyapat and Chikitsa.
2.8	CO3,CO4	Brumhana Snehapana and Sadya Snehana
2.9	CO3,CO4,CO5	Shiro Abhyanga Procedure
2.10	CO3,CO4,CO5	Procedure of Shirodhara with Taila.
2.11	CO3,CO4	Shiropichu demonstration.
2.12	CO3,CO4	Procedure of Abhyanga
2.13	CO3,CO4	Shirobasti demonstration
2.14	CO3,CO4	Sthanika Basti demonstration.

3.1	CO3,CO4,CO5	Nadi Sweda procedure.
3.2	CO3,CO4,CO5	Tapa Sweda procedure.
3.3	CO3,CO4,CO5	Upanaha Sweda procedure
3.4	CO3,CO4,CO5	Parisheka Sweda procedure.
3.5	CO3,CO4,CO5	Avagaha Sweda procedure.
3.6	CO3,CO4,CO5	Clinical application of Sweda
4.1	CO3	Procedure of Sankara Sweda
4.2	CO3	Demonstration of procedure of Ksheeradhooma
4.3	CO3	Demonstration of the procedure of Pizhichil
4.4	CO3	Demonstration of Dhanyamladhara procedure
4.5	CO3,CO5	Demonstration of Takradhara procedure
4.6	CO3,CO5	Demonstration of Thalam and Thalapothichil procedure
4.7	CO3,CO4,CO5	Demonstration of Annalepa procedure
5.1	CO7	Procedure of Superficial heating modalities and Deep Heating Modalities.
5.2	CO7	Procedure of Isometric and Isotonic Exercise
5.3	CO7	Procedure of Interferential Therapy (IFT) , Transcutaneous Electrical Nerve Stimulation (TENS) and Muscle Stimulation Therapy (MST)
5.4	CO7	Procedure of Manual therapy
6.1	CO5	Demonstration of Vamana Purva Karma in a patient
6.2	CO5	Pradhana Karma of Vamana in a patient
6.3	CO5	Demonstration of Paschat Karma of Vamana

6.4	CO5	Demonstration of Sadyo Vamana in a patient
6.5	CO5	Demonstration of Vamana Karma in a Shwasa patient
6.6	CO5	Demonstration of Vamana Karma in an Amlapitta patient
6.7	CO5	Demonstration of Vamana Karma in a Kushta patient
7.1	CO5	Demonstration of Paschat Karma of Virechana
7.2	CO5	Demonstration of Virechana in a Vatarakta patient
7.3	CO5	Demonstration of Virechana in a Pakshaghata patient
7.4	CO5	Demonstration of Virechana Purva Karma
7.5	CO5	Demonstration of Pradhana karma of Virechana
7.6	CO5	Demonstration of Virechana in a Prameha patient
7.7	CO5	Demonstration of Virechana in a Kushta patient
8.1	CO2,CO7	Demonstration of Basti Yantra
8.2	CO5,CO8	Purva Karma of Anuvasana Basti
8.3	CO4,CO5	Pradhana Karma of Anuvasana Basti
8.4	CO4,CO5,CO6	Paschat Karma of Anuvasana Basti
8.5	CO5,CO8	Purva Karma of Niruha Basti
8.6	CO4,CO5	Pradhana Karma of Niruha Basti
8.7	CO4,CO5,CO6	Paschat Karma of Niruha Basti
8.8	CO2	Clinical application of Basti formulations
9.1	CO5	Demonstration of Paschat Karma of Nasya

9.2	CO5	Demonstration of Nasya in a Pakshaghata patient
9.3	CO5	Demonstration of Nasya in Apabahuka and Manyastambha,
9.4	CO5	Demonstration of Purva Karma of Nasya
9.5	CO5	Demonstration of Nasya in an Ardita patient
9.6	CO5	Demonstration of Pradhana Karma of Nasya in a patient
9.7	CO1,CO3	Principles of selection of formulations for Nasya
10.1	CO7	Review of research updates on Snehana, Swedana and Upakarma
10.2	CO3,CO7	Review of research updates on Vamana Karma
10.3	CO3,CO7	Review of research updates on Virechana Karma
10.4	CO3,CO7	Review of research updates on Basti Karma
10.5	CO3,CO7	Review of Research updates on Nasya Karma

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (200)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-PK	1	100	100	70	-	30	200	300

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	3 PA & First TT	3 PA & Second TT	3 PA	**UE****

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
******University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 2	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

Topics for Periodic Assessments

PA	Paper 1
PA 1	Topic 1.1 to 1.6
PA 2	Topic 2.1 to 2.6
PA 3	Topic 3.1 to 3.6
Term Test 1	Entire Syllabus of Term 1
PA 4	Topic 4.1 to 4.7
PA 5	Topic 5.1 to 6.5
PA 6	Topic 6.6 to 7.7
Term Test 2	Entire Syllabus of Term 2
PA 7	Topic 8.1 to 8.12
PA 8	Topic 8.13 to 9.8
PA 9	Topic 8.1 to 10.2

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-PK
PAPER-I
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

6 F : Distribution of theory examination

Paper 1 (Panchakarma and Upakarma)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
1	**Fundamentals of Panchakarma**	8	Yes	Yes	No
2	**Snehana Karma**	12	Yes	Yes	Yes
3	**Swedana Karma**	12	Yes	Yes	Yes
4	**Special Procedures: Sankara Sweda, Ksheeradhooma, Pizhichil, Dhanyamladhara, Takradhara, Thalam and Thalapothichil and Annalepa**	10	Yes	Yes	Yes
5	**Physiotherapy**	5	No	Yes	No
6	**Vamana Karma**	10	Yes	Yes	Yes
7	**Virechana Karma**	10	Yes	Yes	Yes
8	**Basti Karma**	18	Yes	Yes	Yes
9	**Nasya Karma**	10	Yes	Yes	Yes
10	**Emergency management and Research updates in Panchakarma and Upakarma**	5	No	Yes	No
Total Marks		**100**			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 100-mark question paper shall contain:
   - 20 MCQs
   - 8 SAQs
   - 4 LAQs

7. MCQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 3.
   - Questions from the Nice to Know part of syllabus shall not exceed 2.

8. SAQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 1.
   - No questions shall be drawn from the Nice to Know part of syllabus.
   - SAQs shall assess understanding, application, and analysis, rather than simple recall.

9. LAQs:
   - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
   - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
   - Number of LAQs should not exceed one per topic unless maximum marks exceed 20 for the topic.

10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

S.No	Heads	Marks
1	Short case with Panchakarma protocol writing	30
2	Procedure skill assessment (4 procedures on mannequins or simulated patients in OSPE format)	40
3	Viva (2 examiners: 35marks/each examiner)	70
4	Logbook (Activity record)	10
5	Practical/Clinical Record	20
6	Internal Assesment	30
Total Marks		**200**

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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)

Shalya Tantra
(General Surgery)

(SUBJECT CODE : AYUG-ST)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

ncism

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BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026

NCISM

III Professional Ayurvedacharya (BAMS)

Subject Code : AYUG-ST

Shalya Tantra

(General Surgery)

Summary

Total number of Teaching hours: 375			
Lecture (LH) - Theory		**125**	**125(LH)**
Paper I	60		
Paper II	65		
Non-Lecture (NLHT)		**58**	**250(NLH)**
Paper I	20		
Paper II	38		
Non-Lecture (NLHP)		**192**	
Paper I	100		
Paper II	92		

Examination (Papers & Mark Distribution)

Item	Theory Component Marks	Practical Component Marks			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	70	-	30
Paper II	100				
Sub-Total	200	200			
Total marks	400				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

Shalya Tantra, the ancient Indian science of surgery, holds a distinguished place in Ayurveda due to its rich tradition of surgical excellence and innovation. Rooted in classical texts like Sushruta Samhita, this discipline emphasizes both fundamental principles and evolving surgical advancements. The undergraduate curriculum in Shalya Tantra is designed to provide students with a comprehensive understanding of surgical interventions, integrating traditional Ayurvedic techniques with contemporary surgical practices. This structured approach ensures that students develop the knowledge and skills necessary to diagnose and manage various surgical conditions effectively.

The syllabus encompasses a wide range of topics, including surgical anatomy, physiology, diagnostic methods, pre- and post-operative care, and therapeutic interventions for conditions such as anorectal disorders, abdominal surgery, orthopedic procedures, and plastic surgery. Additionally, emphasis is placed on wound management, tissue repair, and Ayurvedic pharmacology relevant to surgical practice. To enhance competency, the course integrates lecture-based learning with practical demonstrations, case studies, and group discussions. Students also receive hands-on training using simulators, ensuring they gain real-world surgical skills while adhering to evidence-based practice and research methodologies.

In the third professional year, Shalya Tantra plays a pivotal role in shaping a student's clinical acumen and surgical expertise. This stage bridges the gap between theoretical knowledge and practical application, preparing students to approach surgical conditions holistically. The integration of modern teaching-learning (TL) methods such as problem-based learning (PBL), clinical simulations, and interactive case discussions further refines their diagnostic and decision-making abilities. By fostering innovation and research orientation, the curriculum ensures that future Ayurvedic surgeons are well-equipped to uphold the legacy of Shalya Tantra while adapting to contemporary healthcare advancements

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Course Code and Name of Course

Course code	Name of Course
AYUG-ST	Shalya Tantra

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AYUG-ST At the end of the course AYUG-ST, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Apply knowledge, critical thinking, and analytical skills for diagnosis and management of Shalya Tantra conditions with relevant contemporary science.	PO1,PO2
CO2	Demonstrate the common surgical and parasurgical procedures competently	PO4
CO3	Demonstrate adequacy of patient care through effective communication and interpersonal skills.	PO8
CO4	Promote awareness of Ayurvedic surgical practices within the community, advocating for healthcare policies that integrate traditional and modern surgical practices	PO5,PO6,PO7,PO8,PO9
CO5	Select, and apply appropriate methods /procedures and resources in patient management related to computing technical tools with an understanding of the limitations of Ayurveda and modern medicine.	PO2,PO3,PO4
CO6	Recognize surgical emergencies and trauma cases, coordinate resuscitative measures and manage accordingly or by referral for expert care at the optimum time.	PO5,PO9
CO7	Demonstrate professionalism with high ethical standards, imbibing the leadership quality, and be committed to continuous improvement of skills and knowledge in the field of Shalya Tantra research.	PO3,PO7,PO9

Table 2 : Contents of Course

Paper 1 (Fundamentals of Shalya Tantra)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Introduction to Shalya Tantra (Introduction to development of surgery)** 1. Definition of Shalya, Shalya Tantra and its Importance. 2. Chronological development of surgery from ancient to present era. 3. General scheme of surgical case taking. 4. Special signs and symptoms pertaining to surgery.	1	15	1	1	4
2	**Yantra and Shastra (Blunt and sharp instruments)** 1. Yantra - Nirukti, Prakara, Guna, Prayog, Dosha, Karma, Upayantra and Relevant modern instruments. 2. Shastra - Nirukti, Prakara, Guna, Prayog, Dosha, Karma, Anushastra and Relevant modern instruments. 3. Demonstration (Comparison and classification with modern instruments)	1		2	0	2
3	**Nirjantukarana (Sterilization)** 1. Sterilization – Methods and Types. 2. Knowledge about Vranitagara. 3. Aseptic techniques, Sterilization and Disinfection of Surgical instruments, OT sterilization. 4. Hands on training - Hand washing techniques, Donning of Gloves and Gown.	1		1	1	4
4	**Sangyaharana (Anaesthesia)** 1. Sthaniya Sangyaharana (Local anaesthesia) – Medicines, Techniques, Indications, Contraindications, Complications and Management. 2. Kshetriya and Samanya Sangyaharana (Regional and General anaesthesia) -	1		2	2	4

	Medicines, Techniques, Indications, Contraindications, Complications and Management. 3. Principles of preoperative assessment. 4. Demonstration/Hands on Training - CPR. 5. Demonstration/Hands on Training - maintenance of an airway / endotracheal intubation in a mannequin. 6. Principles of safe General Surgery and Surgical Ethics.					
5	**Trividha Karma (Pre, Operative and Post Operative care)** 1. Trividha Karma – Purva Karma (in relation to instruments, patient and procedure), Pradhana Karma – Ashtavidha Shastra Karma (Surgical/Parasurgical procedures), Paschat Karma – Post operative care of patient. 2. Steps to obtain informed consent for a procedure in a patient/simulated environment. 3. Observe common surgical procedures and assist in minor surgical procedures; Observe emergency lifesaving surgical procedures.	1		1	1	2
6	**Shastra Karma (Operative procedure)** 1. Ashtavidha Shastra Karma - Nirukti, Yogya, Ayogya, Prakara with modern correlations of Chhedan, Bhedan and Lekhan. 2. Ashtavidha Shastra Karma – Nirukti, Yogya, Ayogya, Prakara with modern correlations of Eshana, Aaharan and Visravan. 3. Ashtavidha Shastra Karma – Nirukti, Yogya, Ayogya, Prakara with modern correlations of Vedhan and Seevan. 4. Hands on training on Prathamopachara.(First Aid) 5. Demonstration of Chhedan (Excision), Bhedan (Incision), Lekhan (Scraping) on patient/simulator. 6. Demonstration of Vedhan and Visravan (Paracentesis of Ascitic fluid, Hydrocele-Tapping, Pleural effusion-Thoracocentesis) on the patient/simulator.	1		3	0	10

	7. Demonstration of Aharan and Eshan (Extraction and Probing) on the patient/simulator. 8. Demonstration of Seevan (Suturing and Knots) and minor surgical procedures on the patient/simulator.					
7	**Yogya (Experimental Surgical Training)** 1. Importance of Simulation-based teaching in surgical practice (Yogya Vidhi). 2. Perform Basic Surgical Skills - Hands on training on Simulators with relevant modern techniques. 3. IV canulation, IM/IV/Subcutaneous/Intradermal Injection. 4. Ryle's tube and Drains insertion. 5. Urinary catheterization.	1		1	0	8
8	**Marma (Vital points)** 1. Marma – Nirukti, Prakara and Individual Marma Viddha Lakshanas. 2. Marmaghata Chikitsa and its surgical importance. 3. Marma identification and manipulation techniques in musculoskeletal disorders (Avabahuka-Frozen shoulder, Snayugata Vata-Tennis Elbow, Gridhrasi-Sciatica, Cervical Spondylosis, etc.) and Sports Injuries.	1	5	2	0	2
9	**Kshara Karma** 1. Kshara and Kshara Karma - Nirukti, Pradhanata, Guna, Dosha, Karma, Prakara, Yogya, Ayogya, Vidhi, Upadrava and Chikitsa. 2. Clinical application of Kshara Sutra, Pratisaraneeya Kshara, Kshara Taila, Kshara Varti and Ksharodaka in different surgical conditions. 3. Video demonstration of Kshara, Kshara Sutra – Preparation and Method of application. 4. Demonstration of handling of patient with Kshara Sutra changing. 5. Demonstration and hands on training of Ksharodaka, Kshara Taila, Kshara Varti, Kshara Pichu in Dushtavrana.	1	15	2	2	4

	6. Demonstration and hands on training of Kshara Karma in Anorectal disorders. (Arsha, Bhagandara, Nadivrana etc.)					
10	**Agnikarma** 1. Agnikarma - Mahatva, Upakarana, Vidhi, Akrutibheda, Yogya, Ayogya and Upadrava Chikitsa. 2. Dhumopahat & Ushna Vatatap Dagdha Lakshan and Chikitsa. Contemporary techniques and tools of Agnikarma. 3. Hands on experience of Agnikarma in the Pain management of any one disease (Gridhrasi, Avabahuka etc.). 4. Hands on experience of Agnikarma as disease modifying management of any one surgical disease (Arsha, Charmakeel etc.).	1		2	0	4
11	**Raktamokshana** 1. Raktamokshana - Mahatva, Prakara. Siravedha - Yogya, Ayogya, Vidhi, Upadrava and Chikitsa. 2. Pracchanna, Shringa, Alabu - Yogya, Ayogya, Vidhi, Upadrava and Chikitsa. 3. Jaloukavacharana – Yogya, Ayogya, Vidhi, Upadrava and Chikitsa. 4. Hands on experience of Siravedha as disease modifying management of any one surgical disease (Grudhrasi, Uttan Vatarakta etc.). 5. Hands on experience of Alabu as disease modifying management of any one surgical disease (Katigraha, Manya Graha etc.). 6. Hands on experience of Jaloukavacharana (Leech Therapy) as disease modifying management of any one surgical disease (Vidradhi, Dushtavrana, Koth etc.).	1		3	0	6
12	**Bandha Vidhi** 1. Bandha Vidhi – Prayojana, Dravya (Pichu, Plota, Kavalika and Vikeshika), Yogya, Ayogya, Prakara and Upadrava. 2. Hands on training on Simulator with relevant modern techniques of Bandaging. 3. Brief knowledge of Splints (Ayurveda and Modern). 4. Transportation of injured patient (Double	1	6	1	1	4

	Human Crutch, Fireman's Lift, Two-handed seat etc.) and recovery position.					
13	**Pranashta Shalya** 1. Pranashta Shalya and Nirharana Upaya (Identification and Principles of management). 2. Heimlich Maneuver- Hands on training (Choking).	1		1	0	2
14	**Fluid, Electrolyte, Acid Base Balance and Nutrition in surgical practice** 1. Introduction to Physiology of Fluids and Electrolytes. 2. Dehydration and Over hydration. 3. Specific electrolyte loss, Acidosis, Alkalosis, Symptomatology and Management. 4. Parenteral Nutrition. 5. Calculations and Selections of fluids in various conditions like Dehydration, Shock, Burns etc. 6. Acid Base Balance in various conditions like perforation, vomiting etc.	1	5	3	1	4
15	**Rakta** 1. Rakta Mahatva and Rakta - Chaturtha Dosha. 2. Raktasrava - Prakara and Lakshana. Haemorrhage and its management. 3. Raktastambhana - Haemostasis. 4. Raktadhan (Blood Transfusion) - Blood groups, Compatibility, Indications, Contraindications and Complications with Management. Component Therapy.	1		2	2	0
16	**Life Saving and Emergency Medicines in surgical practice (Prana Rakshaka and Atyayika Dravya)** 1. Jeevanurodhak Dravya (Antibiotics)- Classification, Indications, Contraindications and Dose**.** 2. Vedanaprashamana and Shothaprashamana Dravya (Analgesics and Anti-inflammatory Drugs) - Classification, Indications, Contraindications and Dose.	1	4	3	0	0

	3. Atyayik Dravya (Emergency Drugs) - Atropine, Adrenaline, Dopamine Mephentine Hydrochloride, Hydrocortisone, Dexamethasone, Antiemetic drugs - Indications, Contraindications and Dose in surgical practice.					
17	**Naidanik Vidhi (Diagnostic techniques)** 1. Chhaya Vikiran (X-Ray), Avayava Pariksha (Ultrasonography, CAT Scan, MRI) – Principles, Method, Indications and Contraindications. 2. Kosha Pariksha (Biopsy/Cytological study) - Principles, Method, Indications and Contraindications. 3. Chhaya Vikiran (X-rays) of Chest, Abdomen, Urology and Musculoskeletal diseases. (Interpretation) 4. Demonstration of CT, MRI of Chest, Abdomen, Urology, Bones and Joints. 5. Different types of Biopsy. (Hands-on training)	1		2	0	6
18	**Shat Kriyakala in surgical practice** 1. Shat Kriyakala in surgical practice. 2. Shat Kriyakala of Arsha, Bhagandara with a special focus on infective pathology, e.g., Unduka Pucha Shotha (Appendicitis), Pittashaya Shotha (Cholecystitis) etc.	2	5	1	0	2
19	**Samanya Vyadhi Parichaya** 1. Vranashotha (Inflammation) - Nirukti, Nidana, Samprapti, Prakara, Lakshana, Sadhya-Asadhyata, Upadrava and Chikitsa. 2. Vidradhi (Abscess) and Pidika (Boils) - Nidana, Samprapti, Prakara, Lakshana, Sadhya-Asadhyata, Upadrava and Chikitsa. 3. Pramada Dagdha/Dagdha Vrana (Burn) - Etiopathogenesis, Classification, Assessment of Burn, Complications and Management of Burn. 4. Marmaghata (Shock) - Definition, Classification, Etiopathogenesis, Clinical features, Diagnosis and Management of	2	10	6	3	6

	Hypovolaemic, Traumatic and Neurogenic Shock. 5. Cardiogenic & Septic Shock and Crush syndrome - Etiopathogenesis, Clinical features, Diagnosis and Management. 6. Kotha (Gangrene) – Etiopathogenesis, Types, Clinical features, Investigations, Differential Diagnosis, Complications and Management. 7. Granthi (Dermoid Cyst and Sebaceous Cyst) - Nidana, Prakara, Samprapti, Lakshana and Chikitsa. 8. Arbuda - Nidana, Prakara, Samprapti, Lakshana and Chikitsa. 9. Tumour - Definition, Classification, Clinical features, Complications and Management. 10. Examination of Granthi (lump or swelling). 11. Emergency management in different types of Shock (Case presentation/PBL/Roleplay). 12. Assessment and documentation of Pramada Dagdha (Burn case).					
20	**Vrana** 1. Vrana – Nirukti, Prakara, Nidana, Samprapti, Vrana Vastu, Prakara, Lakshana, Vrana Pariksha and Vrana Sadhya-Asadhyata. 2. Vrana Avastha - Dustavrana, Shuddha Vrana, Ruhyamana Vrana, Samyak Roodha Vrana, Pathya-Apathya and Vrana Upadrava. 3. Vrana Chikitsa –Shashti Upakrama – first 21 Upakramas. 4. Shashti Upakrama –22 to 40 Upakramas. 5. Shashti Upakrama – 41 to 60 Upakramas except Ashtavidha Shastra Karma. 6. Ulcer – Definition, Types, Wound healing stages and Management. 7. Prameha Pidaka - Diabetic carbuncle and wounds. 8. Sadhyo Vrana (Traumatic wounds) – Nidana, Prakara, Lakshana, Upadrava and Chikitsa. 9. Examination of an Ulcer. 10. Examination of the Peripheral nerve lesions. 11. Surgical site infection.	2	10	7	2	6

	12. Demonstration of wound dressings.					
21	**Kshudra Roga** 1. Kshudra Roga - Clinical features. 2. Kshudra Roga - Management. 3. Examination of the Hand.	2	3	2	0	2
22	**Manya Vikara** 1. Galaganda, Gandamala, Apachi - Nidana, Samprapti, Lakshana and Chikitsa. 2. Pashanagardabha (Parotitis) – Etiopathogenesis, Clinical features, Investigations, Differential Diagnosis, Complications and Management. 3. Thyroid gland - Surgical anatomy and Physiology. 4. Galaganda (Goitre)- Etiopathogenesis, Clinical features, Investigations, Differential Diagnosis, Complications and Management. 5. Toxic Goitre, Thyroiditis - Clinical features and Management. 6. Neoplasms of Thyroid - Clinical features and Management. 7. Examination of Thyroid gland. 8. Examination of the Gala (Neck). 9. Examination of a Lymphatic system.	2	5	3	3	6
23	**Sira Vikara (Venous Disorders)** 1. Surgical Anatomy and Pathology. 2. Superficial and Deep Venous Thrombosis - Etiopathogenesis, Clinical features, Investigations, Differential Diagnosis, Complications and Management. 3. Sira Granthi (Varicose veins) - Etiopathogenesis, Clinical features, Investigations, Differential Diagnosis, Complications and Management. 4. Clinical examination of Sira Granthi (Varicose veins). 5. Clinical examination of Siraja Vrana (Venous Ulcers). 6. Examination and differential diagnosis of unilateral and bilateral Lower Limb Oedema.	2	10	3	1	4
24	**Dhamani Vikara (Arterial disorders)**	2		3	0	2

	1. Dhamani Granthi (Aneurysm)– Etiopathogenesis, Clinical features, Investigations, Differential Diagnosis, Complications and Management. 2. Buerger's Disease - Etiopathogenesis, Clinical features, Investigations, Differential Diagnosis, Complications and Management. 3. Raynaud's Disease - Etiopathogenesis, Clinical features, Investigations, Differential Diagnosis, Complications and Management. 4. Examination of the Dhamani Vikara (Arterial disorders).					
25	**Snayu Vikara (Diseases of tendons and ligaments)** 1. Snayu Shotha (Tendonitis), Pratan Shotha (Tenosynovitis), Pratan Granthi (Ganglion), Dupuytren's Contracture - Etiopathogenesis, Clinical features, Investigations and Management. 2. Amputation –Definition, Classification, Indications, Contraindications and Complications. 3. Techniques of Amputation With examples of individual amputation – Video Demonstration/Hands-on training on simulator. 4. Examination of Diseases of Snayu Vikara (Diseases of tendons and ligaments).	2	5	2	0	4
26	**AIDS - HIV and Hepatitis (B and C)** 1. Etiopathogenesis, Diagnosis and Management. 2. Demonstration of safety precautions and care needs to be taken in the infected patients.	2	2	1	0	2
Total Marks			**100**	**60**	**20**	**100**

Paper 2 (Shalya Tantra Chikitsa Siddhanta)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours**	**E2 Non-Lecture hours**

					Theory	Practical
27	**Bhagna (Skeletal Injuries)** 1. Asthi Bhagna/Kanda Bhagna (Fracture) - Nidana, Prakara, Lakshana, Upadrava and Chikitsa. 2. Ansaphalaka Bhagna (Scapula Fracture), Akshakasthi Bhagna (Clavicle Fracture) - Clinical features, Diagnosis, Complications and Management. 3. Pragandasthi Bhagna (Humerus Fracture), Bahiprakoshthasthi Bhagna (Radius Fracture), Antaprakoshthasthi Bhagna (Ulna Fracture) - Clinical features, Diagnosis, Complications and Management. 4. Urvasthi Bhagna (Femur Fracture), Janwasthi Bhagna (Patella), Antar Janghasthi and Bahir Janghasthi Bhagna (Tibia and Fibula Fracture) - Clinical features, Diagnosis, Complications and Management. 5. Sroni Bhagna (Fracture of the Pelvis) - Clinical features, Diagnosis, Complications and Management. 6. Sandimoksha (Dislocation) - Nidana, Prakara, Lakshana, Upadrava and Chikitsa. 7. Ansa Sandhimoksha (Shoulder joint Dislocation), Kurpara Sandhimoksha (Elbow joint Dislocation) - Clinical features, Diagnosis, Complications and Management. 8. Vankshana Sandhimoksha (Hip joint Dislocation) - Clinical features, Diagnosis, Complications and Management. 9. Examination of the Asthi Abhighata (Bone Injuries). 10. Examination of Sandhi Abhighata (Joint Injuries). 11. Hands on training - Immobilisation, Traction - skin and skeletal. 12. Hand on training - First Aid in cases of Bhagna and Sandimoksha (Fracture and Dislocation).	2	10	3	5	8
28	**Asthi Sandhi Vikara (Diseases of Bone and Joints)**	2	5	2	2	6

	1. Asthi Vidradhi (Osteomyelitis) - Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 2. Asthi Granthi and Arbuda (Bone Cysts and Tumours) - Clinical features, Diagnosis and Management. 3. Asthi Kshaya (Bone Tuberculosis) - Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 4. Asthi Shosha (Osteoporosis), Paget's Disease - Clinical features, Diagnosis and Management. 5. Examination of the Diseases of Bone. 6. Examination of Pathological Joints.					
29	**Shirobhighata (Cranio-cerebral Injurie/ Disorders)** 1. Shirobhighata (Scalp injury and Skull fracture) – Clinical features and Management. 2. Mastulunga Abhighata (Brain injury) - Cerebral Concussion, Contusion and Laceration. Haemorrhage - Clinical features, Diagnosis and Management. 3. Mastishka Arbuda (Benigh and Malignant tumours of Brain) – Clinical features, Diagnosis and Management. 4. Examination of Shirobhighata (Cranio-cerebral Injuries/Disorders).	2	6	2	1	2
30	**Kasheruka Vikara (Diseases of Spine)** 1. Kasheruka Kshaya (Spinal Tuberculosis) - Etiopathogenesis, Classification, Investigations, Complications and Primary Management. 2. Ankylosing Spondylitis - Etiopathogenesis, Classification, Investigations, Complications and Primary Management. 3. Examination of Kasheruka Abhighata (Spinal Injuries) and Abnormalities. 4. Clinical examination of non-traumatic spinal disorders. 5. Three stage stabilization with Logroll hands on training.	2		1	1	4
31	**Stana Roga (Diseases of Breast)**	2	5	1	2	2

	1. Stana Vidradhi (Breast abscess) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 2. Stana Granthi (Fibroadenoma) and Fibroadenosis - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 3. Stana Arbuda (Benign and Malignant tumours of Breast) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 4. Examination of the Breast - Patient education for 'Self Examination of Breast'.					
32	**Urah Vikara (Diseases of Chest)** 1. Urah Abhighata - Chest Injury (Parshukasthi Bhagna - Fracture of Ribs, Pneumothorax, Haemothorax, Stove in Chest, Flail Chest and Surgical Emphysema) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 2. Phupusavarana Shotha (Pleurisy), Phupusavarana Vidradhi (Pleural Abscess), Pleural Effusion, Phupusa Granthi (Cysts of Lung), Phupusa Arbuda (Benign and Malignant tumours of Lung) - Etiopathogenesis, Classification, Clinical features, Diagnosis and Management. 3. Examination of Urah Abhigata (Injuries of the Chest). 4. Examination of Urah Vikara (Diseases of the Chest).	2	3	1	1	4
33	**Anna Nalika Vikara (Diseases of Oesophagus)** 1. Sahaja Vikara (Congenital Anomalies), Anna Nalika Shotha (Oesophagitis) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 2. Anna Nalika Raktasrava (Oesophageal Varices) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 3. Anna Nalika Arbuda (Benign and Malignant tumours of Oesophagus) -	2	2	2	1	2

	Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 4. Examination of Dysphagia.					
34	**Gulma Roga** 1. Gulma Roga - Nidana, Prakara, Lakshana, Upadrava and Chikitsa.	2	2	1	0	0
35	**Shoola Vyadhi** 1. Shoola - Nidana, Prakara, Lakshana, Upadrava and Chikitsa. 2. Examination of Acute Abdomen.	2		1	0	2
36	**Udara Roga** 1. Udara Roga (Yakritodar, Pleehodar, Chhidrodar, Baddhagudodar) - Nidana, Prakara, Samprapti, Lakshana and Chikitsa. 2. Jalodara (Ascites) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 3. Peritonitis - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management.	2	5	1	2	2
37	**Aamashaya Evam Adho-Aamashaya Vikara (Diseases of Stomach and Duodenum)** 1. Annadrava Shoola and Parinama Shoola (Peptic Ulcer) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management.. 2. Pyloric stenosis – Clinical Diagnosis and Management. 3. Aamashaya Arbuda (Benign and Malignant tumours of Stomach) - Clinical Diagnosis and Management. 4. Examination of Abdominal Lump.	2	12	2	1	2
38	**Kshudrantra Vikara (Diseases of Small Intestine)** 1. Kshudrantra Kshaya Janya Vikara (Tuberculosis of Intestine) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 2. Blind Loop Syndrome, Short Bowel	2		4	2	1

	Syndrome and Typhoid Enteritis - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 3. Kshudrantra Arbuda (Benign and Malignant tumours of Intestine) - Clinical features, Diagnosis and Management. 4. Baddhagudodar (Intestinal Obstruction) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 5. Antrantara Pravesha (Intussusception) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 6. Chidrodara (Perforation) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 7. Per Abdominal Examination.					
39	**Brihadantra Vikara (Diseases of Large Intestine)** 1. Grahani (Crohn's Disease and Ulcerative Colitis) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 2. Unduka Puchha Shotha (Appendicitis) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management 3. Brihadantra Arbuda (Benign and Malignant tumours of Colon) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 4. Examination of Chronic Abdomen.	2		2	1	1
40	**Guda Vikara (Diseases of Rectum and Anal Canal)** 1. Surgical Anatomy and Physiology. 2. Gudabhramsha (Prolapse of the rectum) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 3. Guda Vidradhi (Anorectal Abscesses) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management.	3		5	4	4

	4. Bhagandara (Fistula-in-ano) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 5. Arsha - Nidana, Prakara, Samprapti, Lakshana and Chikitsa. 6. Haemorrhoids - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 7. Parikartika (Fissure-in-ano) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 8. Guda Arbuda (Benign and Malignant tumours of Rectum and Anal Canal) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 9. Shalyaja Nadi Vrana (Pilonidal Sinus), Guda Paka (Proctitis), Guda Kandu (Pruritis Ani) and Guda Abhighata (Injuries of Anorectal Region) –Clinical features and Management. 10. Examination of a Nadivrana (Sinus) and Bhagandara (Fistula). 11. Examination of Anorectal Cases.					
41	**Udarabhighata (Abdominal Injuries)** 1. Udarabhighata (Abdominal Injuries) – Clinical features and Management. 2. Examination of Udarabhighata (Abdominal Injuries).	3		1	0	2
42	**Yakrit Vikara (Diseases of Liver)** 1. Yakrit Abhighata (Liver Injury) - Etiology, Clinical features, Diagnosis and Emergency management. 2. Yakrit Vidradhi (Liver Abscess) and Yakrit Granthi (Cysts of Liver) - Etiology, Clinical features, Diagnosis and Management. 3. Yakrit Arbuda (Benign and Malignant tumours of Liver) - Etiology, Clinical features, Diagnosis, Classification and Management. 4. Demonstration of Surgical anatomy of the Liver, Acute Liver Injury on the	3	15	3	1	10

	patient/simulator. 5. Videographic demonstration of diagnosis and evaluation of Surgical Jaundice on the patient/simulator. 6. Group Discussion on the case of Yakrit Abhighata (Acute Liver Injury). 7. Practical / Videographic demonstration of Yakritodara (Hepatomegaly) and Yakrit Vidradhi (Liver Abscess) on the patient/simulator. 8. Videographic demonstration of Case of Portal Hypertension on the patient/simulator. 9. Videographic demonstration of Surgical Management of Portal Hypertension.					
43	**Pittashaya Vikara (Diseases of Gall Bladder)** 1. Surgical Anatomy and Physiology, Sahaja Vikara (Congenital Anomalies). 2. Choledochal Cyst and Congenital Biliary Atresia, Pittashaya Ashmari (Cholelithiasis) - Etiology, Clinical features, Diagnosis, Complications and Management. 3. Pittashaya Shotha (Cholecystitis) and Choledocholithiasis - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 4. Videographic demonstration of Biliary atresia and its complications on patient/simulation. 5. Videographic demonstration of MRCP and ERCP on the patient/simulator. 6. Demonstration of Pittashaya Shotha (Cholecystitis) on the patient/simulator. 7. Class discussion/Case presentation /Video demonstration/Roleplay/Clinical Diagnosis of Hepatobiliary Diseases.	3		2	1	8
44	**Agnyashaya Vikara (Diseases of Pancreas)** 1. Surgical Anatomy and Physiology, Sahaja Vikara (Congenital Anomalies). 2. Agnyashaya Shotha (Pancreatitis) - Etiopathogenesis, Classification, Clinical features, Investigations, Diagnosis, Complications and Management. 3. Agnyashaya Granthi (Cysts and Pseudocyst of Pancreas) - Etiopathogenesis, Clinical features, Diagnosis and Management.	3	5	3	1	6

	4. Agnyashaya Arbuda (Benign and Malignant tumours of Pancreas), Insulinoma and Zollinger Ellisson Syndrome - Clinical features, Diagnosis and Management. 5. Class discussion/Case presentation/Video demonstration/Roleplay of Agnyashaya Abhighata (Pancreatic Injury) and Agnyashaya Shotha (Pancreatitis) on the patient/simulator. 6. Presentation/Video demonstration/Roleplay of demonstration of Pseudo Pancreatic cyst on the patient/simulator. 7. Class discussion/Case presentation/Video demonstration/Roleplay of demonstration of Agnyashaya Arbuda (Benign and Malignant tumours of Pancreas).					
45	**Pleeha Vikara (Diseases of Spleen)** 1. Surgical Anatomy and Physiology, Sahaja Vikara (Congenital Anomalies). 2. Pleeha Abhighata (Rupture of Spleen) - Etiopathogenesis, Classification, Clinical features, Investigations and Management. 3. Hypersplenism and Pleeha Vridhi (Splenomegaly) - Etiopathogenesis, Classification, Clinical features and Management. 4. Class discussion/Case presentation/Video demonstration/Roleplay for Demonstration of Pleeha Vridhi (Splenomegaly) on the patient/simulator.	3		3	0	2
46	**Vrikka Evam Mutravahini Vikara (Diseases of Kidney and Ureters)** 1. Surgical Anatomy and Physiology, Sahaja Vikara (Congenital Anomalies). 2. Vrikka Granthi (Polycystic Kidney), Horse shoe Kidney - Etiopathogenesis, Clinical features, Diagnosis and Management. 3. Vrikka Evam Mutravahini Vikara Abhighata (Injuries to Kidneys and Ureters) – Clinical features and Management. 4. Hydronephrosis - Etiopathogenesis, Classification, Clinical features and Management. 5. Pyelonephritis - Etiopathogenesis, Classification, Clinical features and	3	15	5	4	2

	Management. 6. Vrikka Vidradhi (Perinephric Abscess and Renal Abscess) - Etiopathogenesis, Clinical features and Management. 7. Vrikka Ashmari (Renal Calculus) - Etiopathogenesis, Types, Clinical features, Investigations, Complications and Management. 8. Mutravahini Ashmari (Ureteric Calculus) - Etiopathogenesis, Classification, Clinical features, Investigations and Management. 9. Vrikka Arbuda (Benign and Malignant tumours of the Kidney) - Etiopathogenesis, Classification, Clinical features and Management. 10. Class discussion/Case presentation/ Video demonstration/Roleplay of case of Chronic Kidney Disease.					
47	**Mutrashaya Vikara (Diseases of Urinary bladder)** 1. Surgical Anatomy and Physiology, Sahaja Vikara (Congenital Anomalies). 2. Mutrashaya Shotha (Cystitis) - Etiopathogenesis, Clinical features, Diagnosis and Management. 3. Mutrashmari (Vesical Calculus) - Etiopathogenesis, Clinical features, Diagnosis, Investigations and Management. 4. Mutrashaya Arbuda (Benign and Malignant tumours of Urinary Bladder) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 5. Video demonstration of the process of Cystoscopy, PCNL and ESWL on the patient/simulator. 6. Raktamutrata (Haematuria), Mutra Kshaya (Oliguria), Mutra Sankshaya (Anuria), Neurogenic Bladder - Case evaluation/Class presentation/Roleplay/Group discussion. 7. Examination of Urinary case.	3		3	2	4
48	**Mutraghata and Mutrakrichra** 1. Mutrakrichra (Dysuria) - Nidana, Samprapti, Prakara, Lakshana, Upadrava and Chikitsa.	3		2	0	2

	2. Mutraghata (Retention of Urine) - Nidana, Samprapti, Prakara, Lakshana, Upadrava and Chikitsa. 3. Video demonstration of Suprapubic Catheterization.					
49	**Paurusha Granthi Vikara (Diseases of Prostate)** 1. Surgical Anatomy and Physiology. 2. Paurusha Granthi Shotha (Prostatitis), Paurusha Granthi Vidradhi (Prostatic Abscess) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 3. Mutrashtheela/Vatashtheela (Benign Prostatic Hyperplasia) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 4. Paurusha Granthi Arbuda (Benign and Malignant tumours of Prostate) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 5. Demonstration of Prostatic Enlargement through Digital rectal examination on the patient/simulator. 6. Video demonstration of TURP on the patient/simulator.	3		3	1	4
50	**Mutramarga Vikara (Diseases of Urethra)** 1. Mutramarga Sahaja Vikara (Congenital Anomalies of Urethra) – Etiopathogenesis, Diagnosis and Treatment. 2. Mutramarga Shotha (Urethritis) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 3. Mutramarga Abhighata (Injuries to Urethra) and Mutramarga Sankocha (Urethral Stricture) - Clinical features and Management.	3		2	1	0
51	**Medhra Vikara (Diseases of Penis)** 1. Sahaja Vikara - Congenital Anomalies (Hypospadias, Epispadias and Ectopia Vesicae) - Clinical features, Diagnosis, Complications and Management.	3	15	3	2	2

	2. Parivartika (Paraphimosis), Avapatika (Preputial Tear) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 3. Niruddha Prakasha (Phimosis) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 4. Medhra Paka (Balanoposthitis) - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 5. Medhra Arbuda (Benign and Malignant tumours of Penis), Peyronie's Disease and Granuloma Inguinale - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 6. Examination of Male External Genitalia.					
52	**Mushka Evum Vrishan Vikara (Diseases of Scrotum and Testis)** 1. Vrishan Shotha (Epididymo-orchitis), Vrishan Granthi (Epididymal Cyst), Vrishan Siraja Granthi (Varicocele), Spermatocele, Scrotal Filariasis - Etiopathogenesis, Clinical features, Diagnosis, Complications and Management. 2. Avatarita Vrishan (Undescended Testis), Asthanik Vrishan (Ectopic Testis), Vrishan Vivartan (Torsion of Testis), Vrishan Arbuda (Benign and Malignant tumours of Testis) - Etiopathogenesis, Clinical features, Investigations, Diagnosis, Complications and Management. 3. Examination of Mushka (Scrotum) and Vrishan (Testis). 4. Examination of Inguino-Scrotal Swelling.	3		2	0	4
53	**Vriddhi Roga** 1. Vriddhi Roga - Nidana, Prakara, Lakshana and Chikitsa. Mutravriddhi (Hydrocele)-Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 2. Examination and Differential Diagnosis of Mutravriddhi (Hydrocele).	3		1	0	2

54	**Antravriddhi (Hernia)** 1. Surgical Anatomy of Inguinal Canal. Hernia (In general) - Definition, Etiology, Classification and Diagnosis. 2. Antravriddhi (Inguinal Hernia) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 3. Vankshanstha Vriddhi (Femoral Hernia) - Surgical Anatomy of Femoral Canal, Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 4. Epigastric Hernia - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 5. Nabhigata Vriddhi (Umbilical Hernia and Para umbilical Hernia) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 6. Shastrotar Vriddhi (Incisional Hernia) - Etiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. 7. Examination of Antravriddhi (Inguinal Hernia), Nabhigata Vriddhi (Umbilical Hernia) and Shastrotar Vriddhi (Incisional Hernia) on the patient/simulator. 8. Video demonstration of Hernia Surgery.	3		4	2	4
Total Marks			**100**	**65**	**38**	**92**

Table 3 : Learning objectives of Course

Paper 1 (Fundamentals of Shalya Tantra)										
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Introduction to Shalya Tantra (Introduction to development of surgery) (LH :1 NLHT: 1 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Define Shalya, Shalya Tantra, and its importance.	CK	DK	K	L&PPT ,REC,L	DEB,PUZ, C-INT,QZ ,P-REC	F&S	I	-	LH
CO1	Explain Chronological Development of Surgery from ancient to present era	CK	DK	K	PER,L& PPT ,L	P-EXAM,QZ ,DEB,P-VIVA	F&S	I	-	NLHT1.1
CO1, CO3	Perform a comprehensive patient assessment, systematically examine, identify key clinical findings, and effectively communicate them for accurate diagnosis and management.	CK	MK	KH	L,CBL, PT,CD, L&PPT	VV-Viva,P-EXAM,CBA,SBA,Log book	F&S	I	-	NLHP1.1
CO1, CO3, CO4	Describe clinical identification and assessment of pain, cyanosis, and clubbing, is crucial for diagnosing various medical conditions.	CK	MK	KH	D-BED, CBL,CD,PT,L &PPT	P-EXAM,CBA,PP-Practical,P-CASE,DOAP	F&S	I	-	NLHP1.2

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 1.1	History of surgery	Compilation & Presentation

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 1.1	Surgical case taking	**Steps** 1. Patient History: Chief Complaint: Ask the patient to describe their primary concern or symptom. History of Present Illness: Gather detailed information about the onset, duration, and nature of the symptoms. Ask about any aggravating or relieving factors and associated symptoms. Past Medical History: Inquire about previous illnesses, surgeries, hospitalizations, and ongoing medical conditions. Medication History: List all medications the patient is currently taking, including dosages and duration. Family History: Ask about any relevant medical conditions in the patient's family. Social History: Explore lifestyle factors such as smoking, alcohol,tobacco chewing. Review of Systems: Conduct a systematic inquiry about symptoms related to different organ systems to identify any other issues. 2. Physical Examination: General Examination: Assess the patient's general appearance, vital signs, and overall condition. Inspection: Observe the area of concern for any visible abnormalities such as swelling, discoloration, or deformities. Palpation: Feel the area for tenderness, masses, or other abnormalities. Percussion: Tap the area to assess underlying structures. Auscultation: Use a stethoscope to listen to any abnormal sounds related to the surgical conditions. Special Tests: Perform specific tests relevant to the suspected condition. 3. Diagnostic Investigations: Order relevant laboratory tests, imaging studies, or other diagnostic procedures to confirm the diagnosis. 4. Case Presentation: Summarize the patient's history, physical examination findings, and results of diagnostic investigations.

		Discuss the differential diagnosis and rationale for the suspected condition. Outline the proposed management plan, including surgical and non-surgical options. **Recapitulation:** Thorough Assessment: A comprehensive history and physical examination are crucial for accurate diagnosis and effective management of surgical cases. Interdisciplinary Approach: Collaboration with other healthcare professionals ensures a holistic approach to patient care. Patient Communication: Clear and empathetic communication with the patient is essential for building trust and ensuring adherence to the treatment plan.
NLHP 1.2	Special signs and symptoms pertaining to surgery	**Steps:** 1. Identification of Pain: • Objective: ◦ Understand the types and characteristics of pain. • Procedure: ◦ Interview the patient to gather a detailed pain history (location, intensity, duration, quality, and factors that alleviate or worsen it). ◦ Use pain assessment scales (e.g., Visual Analog Scale, Numeric Rating Scale) to quantify pain. ◦ Observe non-verbal clues and physical signs of pain such as grimacing, guarding, or changes in vital signs. 2. Identification of Cyanosis: • Objective: ◦ Recognize cyanosis as a sign of decreased oxygenation in blood. • Procedure: ◦ Inspect areas with thin skin (lips, nail beds, earlobes) for bluish discoloration. ◦ Observe for central cyanosis (tongue, oral mucosa) vs. peripheral cyanosis (fingers, toes). ◦ Perform pulse oximetry to measure oxygen saturation levels.

- Consider underlying conditions causing cyanosis (e.g., respiratory or cardiovascular issues).

3. Identification of Clubbing:
   - Objective:
     - Identify the physical changes in fingernails and fingers indicating clubbing.
   - Procedure:
     - Inspect the patient's fingers for the characteristic rounded and bulbous appearance of clubbing.
     - Perform the Schamroth's window test (placing the dorsal side of both index fingers together to check for a small diamond-shaped window; absence indicates clubbing).
     - Note changes in the angle between the nail and nailbed and thickening of the terminal phalanges.
     - Evaluate for underlying conditions associated with clubbing (e.g., chronic lung disease, heart disease).
4. Post-Assessment Care:
   - Document findings accurately in patient records.
   - Provide patient education on the significance of these signs and symptoms.
   - Plan for further diagnostic tests or referrals based on clinical findings.
5. Student Practice:
   - Allow students to practice the assessment techniques on simulators or peers under supervision.
   - Provide constructive feedback and guidance to ensure proper technique and accurate diagnosis.

Topic 2 Yantra and Shastra (Blunt and sharp instruments) (LH :2 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Define Types, Guna, Uses, Dosha, Karma of Yantra, and Upayantra along with relevant modern instruments.	CK	MK	K	L,L&PPT	P-VIVA,P-EXAM,PP-Practical,S-LAQ	F&S	I	-	LH

CO1, CO2, CO5	Define Types, Guna, Uses, Dosha, Karma of Shastra, and Anushastra along with relevant modern instruments	CK	MK	K	L,L&PPT	P-EXAM,P-VIVA,PP-Practical,Log book,INT	F&S	I	-	LH
CO1, CO2	Identify, use, and compare Yantras (traditional Ayurvedic surgical instruments) with modern surgical instruments.	CK	MK	K	D,L&PPT ,L	P-PRF,PP-Practical,P-VIVA,VV-Viva,P-EXAM	F&S	I	-	NLHP2.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 2.1	Demonstration, Comparison & classification of instruments	**Steps:** 1. Introduction to Yantras: • Provide an overview of various Yantras used in Ayurvedic surgery. • Highlight the historical significance and traditional uses of these instruments. 2. Identification of Yantras: • Display different types of Yantras such as: ◦ Swastika ◦ Sandansha ◦ Taal ◦ Nadi ◦ Shalaka ◦ Upyantra • Explain the specific uses of each Yantra in traditional surgical practices.

		3. Comparison with Modern Surgical Instruments: • Probes and Catheters: ◦ Compare traditional probes with modern flexible catheters and their advanced materials. • Forceps: ◦ Highlight the differences between Swastika Yantra and modern hemostatic forceps. • Surgical Instruments for Intestinal Surgeries: ◦ Discuss the advancements in modern laparoscopic instruments compared to Antra Yantra. • Tubes and Drains: ◦ Analyze the evolution from Nadi Yantra to sophisticated suction and drainage systems used today. 4. Practical Hands-On Training: • Allow students to practice using Yantras on simulators or models. • Supervise and provide feedback to ensure proper handling and understanding of techniques. • Demonstrate the use of corresponding modern instruments for comparison.

Topic 3 Nirjantukarana (Sterilization) (LH :1 NLHT: 1 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO7	Describe Methods & Types of sterilisation	CK	MK	K	L,L&PPT	P-PS,QZ ,P-VIVA,CL-PR	F&S	I	-	LH
CO1, CO7	Explain about Vranitagara	CC	MK	K	L&GD, L_VC,TUT,DIS, PER	M-MOD,P-EXAM,PRN,CL-PR,P-PRF	F&S	I	-	NLHT3.1
CO1, CO2,	Discuss aseptic techniques, sterilization methods, and OT sterilization while emphasizing infection control in surgical	CC	MK	SH	FV,FC, PT,D,D-	PP-Practical,P-MOD,P-	F&S	I	-	NLHP3.1

CO3	settings.				M	EXAM,P-VIVA,INT				
CO1, CO2, CO4	Demonstrate proper hand hygiene, PPE usage, and the correct techniques for donning and doffing gloves and gowns to ensure infection control.	PSY-GUD	MK	SH	DIS,L&GD,D,PT,PER	PRN,P-PRF,PP-Practical,SBA,DOPS	F&S	I	-	NLHP3.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 3.1	Vranitagara	Compile the information regarding Vranitagara and compare it with Ideal Surgical Ward

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 3.1	Aseptic techniques, sterilization and disinfection of Surgical instruments, OT sterilization	**Steps** Aseptic Techniques Hand Hygiene: Perform hand washing with antiseptic soap or use an alcohol-based hand sanitizer before and after patient contact. Use of Personal Protective Equipment (PPE) (if Available) Wear sterile gloves, masks, gowns, and eye protection to prevent contamination. Preparation of the Surgical Site: Clean the surgical site with antiseptic solutions, such as chlorhexidine or povidone-iodine. Maintenance of a Sterile Field: Use sterile drapes and instruments. Ensure all items in the sterile field remain uncontaminated. Aseptic Handling of Instruments: Avoid contact between sterile instruments and non-sterile surfaces. Use sterile technique when passing instruments.

		Sterilization and Disinfection of Surgical Instruments Cleaning: Rinse and scrub instruments with water and detergent to remove organic material. Disinfection: Use chemical disinfectants (e.g., glutaraldehyde, hydrogen peroxide) to reduce microbial load on instruments. Sterilization Methods: Autoclaving: Use steam under pressure at 121-134°C to sterilize heat-resistant instruments. Ethylene Oxide Gas: Suitable for heat-sensitive instruments. Requires aeration post-sterilization. Dry Heat: Use high temperatures (160-180°C) for instruments that can withstand dry heat. Chemical Sterilization: Use liquid chemicals like glutaraldehyde for instruments sensitive to heat and moisture. OT Sterilization Cleaning the Operating Room: Clean all surfaces, including floors, walls, and furniture, with disinfectant solutions. Air Sterilization: Use high-efficiency particulate air (HEPA) filters and ultraviolet (UV) light to sterilize the air. Sterilization of Equipment: Ensure all equipment used in the OT is sterilized or disinfected before use. Environmental Control: Maintain a controlled environment with appropriate temperature, humidity, and ventilation to prevent microbial growth.
NLHP 3.2	Hand washing techniques, Donning of Gloves & Gown	**Steps :** Hand Washing Techniques Preparation: Remove any jewelry (rings, watches). Wet hands with clean, running water. Apply Soap:

Apply enough soap to cover all hand surfaces.
Scrub Thoroughly:
Rub hands together to create lather.
Scrub all surfaces, including the back of hands, between fingers, and under nails, for at least 20 seconds.
Focus on thumbs, fingertips, and wrists.
Rinse:
Rinse hands thoroughly under clean, running water.
Dry Hands:
Use a clean towel or air dry hands.
Use the towel to turn off the tap if applicable.
Donning Gloves
Preparation:
Perform hand hygiene before donning gloves.
Select Appropriate Gloves:
Choose the right size and type of gloves for the task.
Don Gloves:
Hold the glove at the wrist and insert the opposite hand.
Pull the glove on, ensuring a snug fit.
Repeat for the other hand.
Donning Gown
Preparation:
Perform hand hygiene before donning the gown.
Open the Gown:
Hold the gown by the shoulders and allow it to unfold.
Don the Gown:
Insert arms into the sleeves one at a time.
Fasten the gown at the neck and waist to ensure full coverage.
Ensure Proper Fit:
Adjust the gown to cover your clothing completely.

		Make sure the gown is comfortable and allows for movement.

Topic 4 Sangyaharana (Anaesthesia) (LH :2 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4, CO5	Describe Local Anaesthetic Drugs, Techniques, Indications, Contraindications, Complications, and their Management.	CK	MK	K	L&PPT ,L,L_VC	P-VIVA,M-POS,PP-Practical,CL-PR,QZ	F&S	I	-	LH
CO1, CO3, CO5	Explain Regional and General anaesthesia- Drugs, Techniques, Indications, Contraindications, Complications and their Management	CC	MK	K	L,L&PPT ,L&GD	P-PRF,VV-Viva,QZ ,PP-Practical, P-EXAM	F&S	I	-	LH
CO1, CO2, CO3, CO5	Describe principles of Preoperative assessment	CC	MK	K	L&GD, FC,D-BED,CD, L_VC	P-EXAM,VV-Viva,PRN	F&S	I	-	NLHT4.1
CO1, CO2, CO4, CO5, CO7	Describe Principles of safe General Surgery	CK	MK	K	L_VC,TUT,DIS, L&GD, BS	P-CASE,DEB,P-ID,P-EXAM,S-LAQ	F&S	I	-	NLHT4.2
CO1, CO2, CO4, CO6	Elaborate the basic principles of CPR.Perform effective chest compressions and rescue breaths.Recognize the signs of cardiac arrest.	CAP	MK	KH	KL,D-M,L_VC,SIM, TBL	SP,P-PRF, CHK,P-VIVA,DOPS	F&S	I	-	NLHP4.1
CO1, CO2,	Demonstrate airway management techniques, including endotracheal intubation, while emphasizing the importance of	CAP	MK	KH	SIM,D-M,L_V	P-EXAM,CHK,P-VIV	F&S	I	-	NLHP4.2

CO4, CO6	maintaining a clear airway through hands-on practice.				C,L&G D,W	A,PP-Practical,DOPS					

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 4.1	Preoperative assessment	1. Patient interview and medical history collection 2. Physical assessment (vital signs, cardiovascular, respiratory, neurological) 3. Laboratory results review and documentation 4. Medication reconciliation 5. Allergy banding and sensitivity testing 6. Patient education (surgery, anesthesia, postoperative care) 7. Informed consent verification 8. Preoperative checklist completion
NLHT 4.2	Safe General Surgery	Preoperative Principles 1. Informed consent: Patient understanding of risks, benefits, and alternatives. 2. Accurate diagnosis: Confirm diagnosis before surgery. 3. Proper patient preparation: Optimize medical conditions, fasting, and medication. 4. Surgical site marking: Verify correct site and side. Intraoperative Principles 1. Asepsis and sterilization: Maintain sterile environment. 2. Proper anesthesia: Monitor and adjust anesthesia as needed. 3. Surgical team communication: Clear communication among team members. 4. Hemostasis: Control bleeding promptly. 5. Tissue handling: Minimize tissue trauma. Surgical Technique Principles 1. Respect tissue planes: Dissect along natural tissue planes. 2. Minimize dissection: Limit tissue damage. 3. Precise incisions: Make accurate, controlled incisions. 4. Gentle tissue retraction: Avoid excessive force.

		5. Secure closure: Ensure proper wound closure. Postoperative Principles 1. Monitoring: Observe patient's vital signs and condition. 2. Pain management: Optimize pain relief. 3. Fluid management: Monitor and adjust fluid balance. 4. Wound care: Ensure proper wound dressing and closure. 5. Early mobilization: Promote timely recovery. General Safety Principles 1. Patient identification: Verify patient identity. 2. Medication safety: Ensure accurate medication administration. 3. Fire safety: Prevent surgical fires. 4. Electrical safety: Prevent electrical shock. 5. Infection control: Maintain proper infection control measures. Teamwork and Communication Principles 1. Clear communication: Ensure effective team communication. 2. Collaborative care: Foster teamwork among healthcare professionals. 3. Respect for patient autonomy: Prioritize patient-centered care. 4. Continuous learning: Encourage ongoing education and improvement. 5. Debriefing: Conduct postoperative debriefing sessions. Quality Improvement Principles 1. Monitor outcomes: Track surgical outcomes. 2. Identify errors: Analyze and learn from errors. 3. Implement changes: Improve processes based on data. 4. Continuous quality improvement: Regularly assess and improve care. 5. Patient feedback: Encourage patient feedback. Surgical Safety Checklist 1. Distribute a surgical safety checklist (e.g., WHO Surgical Safety Checklist). 2. Ask students to review and explain each item. 3. Role-play scenarios to demonstrate checklist usage

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 4.1	Demonstration of BLS (Basic life support)	**Steps** 1. Assess the Situation: Ensure the scene is safe for both the rescuer and the victim. Check the victim for responsiveness by gently tapping and shouting. 2. Call for Help: If the victim is unresponsive, call for emergency medical services (EMS) immediately. If possible, ask a bystander to call EMS and fetch an Automated External Defibrillator (AED). 3. Check for Breathing: Look, listen, and feel for normal breathing for no more than 10 seconds. If the victim is not breathing or only gasping, begin CPR. 4. Chest Compressions: Position yourself over the victim's chest. Place the heel of one hand in the center of the chest, between the nipples. Place your other hand on top. Interlock your fingers and keep your arms straight. Push hard and fast, compressing the chest at least 2 inches deep at a rate of 100-120 compressions per minute. Allow the chest to fully recoil between compressions. 5. Rescue Breaths:After 30 compressions, give 2 rescue breaths. Tilt the victim's head back and lift the chin to open the airway. Pinch the nose shut and make a seal over the victim's mouth with yours. Deliver each breath over 1 second, watching for chest rise. Continue the cycle of 30 compressions and 2 breaths. 6. Using an AED: When the AED arrives, turn it on and follow the voice prompts. Attach the pads to the victim's bare chest as indicated. Ensure no one is touching the victim while the AED analyzes the heart rhythm. If a shock is advised, clear the area and press the shock button.

		Resume CPR immediately after the shock.
NLHP 4.2	Maintenance of an airway / Endotracheal intubation in a mannequin	**Steps** 1. Preparation: Ensure the mannequin is in a supine position. Gather all necessary equipment: laryngoscope, endotracheal tube, stylet, suction device, bag-valve-mask (BVM), and monitoring devices. 2. Assessment of the Airway: Check for any obstructions in the mouth and throat. Position the head to open the airway using the head-tilt-chin-lift maneuver or jaw-thrust maneuver if cervical spine injury is suspected. 3. Pre-oxygenation: Use a BVM to provide high-flow oxygen to the mannequin for several minutes to ensure adequate oxygenation before intubation. 4. Laryngoscopy: Hold the laryngoscope in your left hand and insert the blade into the mannequin's mouth, sweeping the tongue to the left. Visualize the vocal cords using the laryngoscope. 5. Endotracheal Tube Insertion: Hold the endotracheal tube with a stylet (if used) in your right hand. Guide the tube through the vocal cords into the trachea. Remove the stylet once the tube is in place. Inflate the cuff to secure the tube and prevent air leakage. 6. Confirmation of Tube Placement: Listen for bilateral breath sounds using a stethoscope. Observe chest rise and fall with each breath. Confirm placement with a capnography device to measure exhaled CO2. 7. Securing the Tube: Secure the endotracheal tube to the mannequin's mouth using tape or a commercial tube holder. Attach the tube to a ventilator or BVM for continued ventilation.

		8. Post-Intubation Care: Monitor the mannequin for any signs of complications, such as desaturation or abnormal breath sounds. Ensure proper maintenance of the airway and equipment.

Topic 5 Trividha Karma (Pre, Operative and Post Operative care) (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4	Describe the importance of Purva Karma -Preoperative procedure , Pradhana Karma – Astavidha shastra karma (in brief) , Paschat Karma – Post operative care of patient	CK	MK	K	L&PPT ,L,L&GD	PP-Practical,VV-Viva, S-LAQ,T-CS,PRN	F&S	I	-	LH
CO1, CO7	Explain the principles of informed consent and effective communication skills to obtain informed consent.	CK	MK	K	SIM,D, L&GD, D-BED,RP	T-CS,P-CASE,P-VIVA ,P-EXAM,P-PRF	F&S	I	-	NLHT5.1
CO1, CO2, CO5, CO6	Demonstrate proficiency in assisting and evaluating common and emergency minor surgical procedures while adhering to standard techniques and protocols.	CE	MK	KH	TBL,CBL,PT,D, KL	PP-Practical,CHK,DOPS,T-CS,P-EXAM	F&S	I	-	NLHP5.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 5.1	Informed consent in a simulated environment	1. Conduct a simulated patient encounter to obtain informed consent. 2. Role-play different patient scenarios (e.g., emergency, elective, pediatric). 3. Practice clear and concise explanation of: - Diagnosis - Treatment options - Risks and benefits

		- Alternatives 4. Address patient questions and concerns. 5. Document informed consent accurately
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 5.1	Common minor surgical procedures (Excision of Corn, Cysts, Lipoma, etc)	**Steps** Observing and Assisting in Common Surgical Procedures Preparation: Review the patient's medical history and procedure details. Ensure all necessary instruments and materials are sterilized and ready. Wear appropriate PPE and maintain aseptic technique. Excision of Corn: Observation: Watch how the surgeon cleans and anesthetizes the area. Observe the use of a scalpel to excise the corn, ensuring minimal damage to surrounding tissue. Assistance: Hand instruments to the surgeon, help with hemostasis, and assist with dressing the wound. Excision of Cyst: Observation: Note the steps of incision, dissection, and removal of the cyst. Observe the careful handling to avoid rupture. Assistance: Provide retraction, suction, and help with suturing the incision post-excision. Excision of Lipoma: Observation: Watch the incision and blunt dissection techniques used to remove the lipoma. Pay attention to maintaining clear margins. Assistance: Assist with retraction, instrument handling, and closing the incision with sutures. Observing Emergency Lifesaving Surgical Procedures Preparation: Be prepared for rapid decision-making and action. Ensure all emergency equipment and instruments are readily available.

		Emergent Incision and Drainage: Observation: Observe the identification and drainage of an abscess. Note the steps of incision, drainage, and packing. Assistance: Provide instruments, manage suction, and help with wound dressing. Emergency Airway Management (e.g., Tracheostomy): Observation: Watch how the surgeon identifies landmarks, makes the incision, and inserts the tracheostomy tube. Assistance: Help maintain a sterile field, handle instruments, and secure the tracheostomy tube.

Topic 6 Shastra Karma (Operative procedure) (LH :3 NLHT: 0 NLHP: 10)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Define, indication Contraindications,Types with modern correlations of Chedan, Bhedana, Lekhana	CK	MK	K	L,L&PPT	P-EXAM,QZ,P-VIVA,DEB,CL-PR	F&S	I	-	LH
CO1	Define Indications, Contraindications, and Types with modern correlations of Eshana, Aaharana, visravana	CK	MK	K	L,L&PPT ,PER, L_VC	T-CS,PP-Practical,VV-Viva,INT,DEB	F&S	I	-	LH
CO1	Define Indications Contraindications, and Types with modern correlations of Vedhana, Seevana	CK	MK	K	L&PPT ,L,L_VC	QZ ,PP-Practical,T-CS, VV-Viva,DEB	F&S	I	-	LH
CO1, CO2, CO5, CO6	Explain the principles and importance of first aid.Identify common emergencies requiring first aid,	CC	MK	KH	PT,KL, D-M,D,RP	DEB,VV-Viva,DOPS,P-CASE,SP	F&S	I	-	NLHP6.1

CO1, CO2, CO4	Explain the techniques and principles behind Chhedan, Bhedan, and Lekhan.Demonstrate the steps for each procedure on a simulator.	CC	MK	KH	BL,DIS, TUT,D, SIM	SP,VV-Viva,P-EXAM, P-PRF,DOPS	F&S	I	-	NLHP6.2
CO1, CO2, CO4	Demonstrate necessary practical skills regarding the procedure of Vedhan & Visravan (tapping of the abdomen, hydrocele, and insertion of an ICD) using a simulator	PSY-GUD	MK	KH	D,D-M, SIM,KL ,TUT	DOPS,CHK,P-VIVA, PRN,DEB	F&S	I	-	NLHP6.3
CO1, CO2, CO4	Demonstrate necessary practical skills to perform Aharana (extraction) and Eshana (probing) using a simulator.	PSY-GUD	MK	KH	D-M,DIS,KL,D, SIM	M-MOD,PRN,CHK,P-PRF,DOPS	F&S	I	-	NLHP6.4
CO1, CO2, CO4	Demonstrate the essential skills Seevan (suturing and knots) and minor surgical procedures.	PSY-GUD	MK	KH	PER,D-M,SIM, PT,D	P-VIVA,DOPS,CHK, P-EXAM,SP	F&S	I	-	NLHP6.5

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 6.1	First aid	**Steps** 1. Assess the Situation: Ensure Safety: Make sure the area is safe for both the rescuer and the victim. Check for Responsiveness: Tap the victim and shout to see if they respond. 2. Call for Help: If the victim is unresponsive or requires immediate medical attention, call emergency services right away.

		Provide clear information about the location and nature of the emergency. 3. Perform Basic First Aid Techniques: a. CPR (Cardiopulmonary Resuscitation): Compression: Perform chest compressions at a rate of 100-120 per minute, compressing at least 2 inches deep. Breaths: Give two rescue breaths after 30 compressions. Continue: Keep performing CPR until help arrives or the victim regains consciousness. b. Control Bleeding: Apply Pressure: Use a sterile cloth or bandage to apply pressure directly to the wound. Elevate: Raise the injured area above the level of the heart if possible. Wrap: Secure the dressing with a bandage or clean cloth. c. Treat Burns: Cool the Burn: Run cool (not cold) water over the burn for at least 10 minutes. Cover: Use a sterile, non-adhesive bandage or clean cloth to cover the burn. Do Not: Avoid applying creams, ointments, or ice directly to the burn. d. Handle Choking: Abdominal Thrusts: For conscious adults and children, perform abdominal thrusts (Heimlich maneuver) to dislodge the object. Back Blows: For infants, alternate 5 back blows and 5 chest thrusts. e. Manage Fractures: Immobilize: Keep the injured limb as still as possible using splints or padding. Elevate: Raise the limb to reduce swelling. Apply Ice: Use ice packs to minimize swelling and pain, but avoid direct contact with the skin.
NLHP 6.2	Demonstartion of Chhedan(Excision), Bhedan(Incision), Lekhan(scraping) on simulator	**Steps** **Chhedan (Excision)** Preparation: Ensure all instruments are sterilized. Position the simulator appropriately and secure it.

		Identify the area for excision. Procedure: Use a scalpel to make precise cuts around the lesion or tissue to be removed. Excise the tissue completely, ensuring clear margins. Control bleeding using hemostatic techniques. Close the wound with sutures if necessary. **Bhedan (Incision)** Preparation: Sterilize instruments and position the simulator. Identify the site for incision. Procedure: Use a scalpel to make a controlled incision in the identified area. Ensure the incision is of appropriate length and depth. Observe the response of the underlying tissues. Manage any bleeding and close the incision with sutures or staples. **Lekhan (Scraping)** Preparation: Sterilize instruments and position the simulator. Identify the area requiring scraping. Procedure: Use a curette or scraping instrument to gently remove abnormal tissue or debris. Apply consistent pressure to avoid damage to underlying healthy tissues. Collect and inspect the removed material. Clean and dress the treated area.
NLHP 6.3	Demonstration of Vedhan & Visravan (Tapping Of abdomen, Hydrocele, ICD) on simulator	**Steps:** 1. **Preparation:**

		• Ensure all necessary equipment (needles, simulators, antiseptic solutions, gloves, etc.) is sterilized and ready. • Brief the students on the procedure and safety protocols. 2. **Vedhan Procedure:** • **Tapping of Abdomen:** ◦ Identify the appropriate anatomical landmarks. ◦ Clean the area with an antiseptic solution. ◦ Insert the needle at the correct angle and depth. ◦ Collect the fluid sample. • **Hydrocele Tapping:** ◦ Identify the hydrocele sac. ◦ Disinfect the area thoroughly. ◦ Insert the needle and aspirate the fluid. • **ICD (Intercostal Drainage):** ◦ Locate the intercostal space. ◦ Clean the site and administer local anesthesia. ◦ Make a small incision. ◦ Insert the ICD at the correct angle to drain fluid or air. 3. **Post-Procedure Care:** • Remove the needle or catheter carefully. • Apply a sterile dressing to the site. • Monitor for any immediate complications. 4. **Student Practice:** • Allow students to practice the procedures on the simulator under supervision. • Provide feedback and correction as needed
NLHP 6.4	Demonstration of Aharana and Eshana (extraction and probing)on simulator	**Steps:** 1. **Preparation:** • Gather all necessary equipment (probes, extraction tools, simulators, antiseptic solutions, gloves, etc.).

		• Brief the students on the procedure and emphasize the importance of maintaining aseptic conditions. 2. **Aharana (Extraction) Procedure:** • Identify the target area for extraction • Clean the area with an antiseptic solution. • Use the extraction tool carefully to remove the material or object. • Ensure complete extraction to prevent complications. 3. **Eshana (Probing) Procedure:** • Identify the anatomical landmarks and the area to be probed. • Disinfect the area thoroughly. • Gently insert the probe to explore and identify obstructions or abnormalities. • Be mindful of depth and angle to avoid causing harm. 4. **Post-Procedure Care:** • Remove the probe or extraction tool with care. • Apply a sterile dressing to the site. • Monitor the simulator for any immediate complications or reactions. 5. **Student Practice:** • Allow students to practice the procedures on the simulator under supervision. • Provide feedback, highlighting correct techniques and areas for improvement.
NLHP 6.5	Demonstration of Seevan(Suturing & Knots) and minor surgical procedures in patient / simulated environment	**Steps:** 1. **Preparation:** • Collect all required tools (suture materials, needles, forceps, scissors, antiseptic solutions, gloves, etc.). • Brief the students on the different types of sutures and knots, including their indications and techniques. 2. **Suturing Procedure:** • **Wound Assessment:** ◦ Examine the wound to determine the appropriate suture type and technique. • **Preparation of the Wound:**

- Clean the wound thoroughly with an antiseptic solution.
- Administer local anesthesia if needed.

- **Suturing:**
  - Choose the appropriate needle and suture material.
  - Begin suturing using the selected technique Vellitaka, Gophanika, Tunna Sevani and Rujugranthi etc. (simple interrupted, continuous, mattress, etc.).
  - Ensure each knot is secure and that tension is appropriate to avoid tissue strangulation.

3. **Knots Procedure:**
   - **Types of Knots:**
     - Teach students various types of surgical knots (square knot, surgeon's knot, etc.).
   - **Practice:**
     - Have students practice tying knots with different techniques and materials.
     - Emphasize the importance of secure, reliable knots in preventing wound complications.
4. **Minor Surgical Procedures:**
   - **Incision and Drainage:**
     - Perform minor procedures like incision and drainage under supervision.
     - Emphasize aseptic techniques and patient safety.
   - **Biopsy:**
     - Teach students how to perform minor biopsies, including handling and preserving tissue samples.
5. **Post-Procedure Care:**
   - Remove sutures if applicable, following proper timing and technique.
   - Apply a sterile dressing and provide wound care instructions to the patient or simulation.
6. **Student Practice:**
   - Allow students to practice the procedures on simulators or under the supervision of patients.
   - Provide immediate feedback and guidance to ensure proper technique and confidence.

Topic 7 Yogya (Experimental Surgical Training) (LH :1 NLHT: 0 NLHP: 8)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO3, CO5	Appreciate the importance of simulation based teaching in surgical practice (Yogya Vidhi)	CK	MK	K	L&PPT ,L&GD, L	P-EXAM,DEB,PRN,QZ ,PP-Practical	F&S	I	-	LH
CO1, CO2, CO4, CO5, CO6	Demonstrate the necessary skills and knowledge to perform catheterization safely and effectively on patients	PSY-GUD	MK	KH	PT,D-M ,D,SDL, L_VC	P-RP,PP-Practical,DOPS,CHK,M-MOD	F&S	I	-	NLHP7.1
CO1, CO2, CO6	Demonstrate the essential skills of performing IM and IV cannulation, as well as intradermal and subcutaneous injections	PSY-GUD	MK	KH	W,CBL, PT,SDL ,SIM	PRN,PP-Practical,DOPS,P-CASE, P-VIVA	F&S	I	-	NLHP7.2
CO1, CO2, CO4, CO6	Demonstrate the practical skills necessary to perform the insertion of Ryle's tube, ensuring proficiency and patient safety.	PSY-GUD	MK	KH	PT,L_VC,D,D-BED,W	P-EXAM,DOPS,P-REC,P-MOD, P-PRF	F&S	I	-	NLHP7.3
CO1, CO2, CO4, CO6	Explain indications for surgical drain insertion along with the proper technique for surgical drain insertion.Describe post-operative care for surgical drains.	CC	MK	KH	SIM,KL ,D,L_VC,TUT	VV-Viva,P-PRF,DOPS, P-VIVA,SP	F&S	I	-	NLHP7.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 7.1	Catheterization -Hands-on training on Simulators	**Steps:** 1. **Preparation:** • Gather all required equipment (catheters, lubricants, antiseptic solutions, gloves, sterile drapes, etc.). • Educate students on the indications, contraindications, and potential complications of catheterization. 2. **Catheterization Procedure:** • **Patient Preparation:** ◦ Explain the procedure to the patient and obtain informed consent. ◦ Position the patient comfortably and ensure privacy. ◦ Clean the genital area with an antiseptic solution to reduce infection risk. • **Insertion of Catheter:** ◦ Choose the appropriate size and type of catheter. ◦ Lubricate the catheter tip generously. ◦ Gently insert the catheter into the urethra, guiding it towards the bladder. ◦ Ensure urine flow into the catheter before inflating the balloon (if using a Foley catheter). ◦ Secure the catheter in place and attach the drainage bag. • **Post-Insertion Care:** ◦ Secure the catheter tubing to prevent accidental dislodgment. ◦ Monitor the patient for any discomfort or complications. ◦ Educate the patient on catheter care and signs of potential issues. 3. **Catheter Removal:** • Deflate the balloon (if using a Foley catheter). • Gently withdraw the catheter, ensuring minimal discomfort to the patient. • Inspect the catheter for any abnormalities or signs of infection.

		4. **Post-Procedure Care:** • Clean the area around the urethra. • Provide instructions on hydration and hygiene. • Monitor the patient for any immediate complications. 5. **Student Practice:** • Allow students to practice the procedure on simulators or under the supervision of patients. • Provide constructive feedback and guidance to ensure correct technique and patient safety.
NLHP 7.2	IV canulation, IM / IV / Subcutaneous / Intradermal Injection	**Steps:** 1. **Preparation:** • Collect all necessary equipment (needles, syringes, cannulas, antiseptic solutions, gloves, sterile drapes, etc.). • Educate students on the indications, contraindications, and potential complications of each procedure. 2. **IM (Intramuscular) Injection:** • **Site Selection:** ◦ Choose the appropriate muscle (deltoid, gluteus, vastus lateralis, etc.). • **Preparation:** ◦ Clean the injection site with an antiseptic solution. ◦ Prepare the syringe and needle with the prescribed medication. • **Injection:** ◦ Insert the needle at a 90/45degree angle. ◦ Aspirate to ensure the needle is not in a blood vessel. ◦ Inject the medication slowly and steadily. ◦ Remove the needle and apply a sterile dressing. 3. **IV (Intravenous) Cannulation:** • **Site Selection:** ◦ Identify a suitable vein, typically in the forearm or hand.

- **Preparation:**
    - Clean the site with an antiseptic solution.
    - Apply a tourniquet to engorge the vein.
- **Cannulation:**
    - Insert the cannula at a shallow angle, ensuring blood flashback.
    - Advance the cannula into the vein and remove the needle.
    - Secure the cannula and attach the IV line or cap.

4. **Intradermal Injection:**
    - **Site Selection:**
        - Typically performed on the forearm or upper back.
    - **Preparation:**
        - Clean the site with an antiseptic solution.
        - Prepare the syringe with a fine needle and the prescribed substance.
    - **Injection:**
        - Insert the needle at a 10-15 degree angle, just under the skin.
        - Inject a small amount of the substance, forming a small bleb.
        - Remove the needle and avoid massaging the area.
5. **Subcutaneous Injection:**
    - **Site Selection:**
        - Common sites include the abdomen, thigh, or upper arm.
    - **Preparation:**
        - Clean the site with an antiseptic solution.
        - Prepare the syringe and needle with the prescribed medication.
    - **Injection:**
        - Pinch the skin to create a subcutaneous fold.
        - Insert the needle at a 45-degree angle.
        - Inject the medication slowly and steadily.
        - Remove the needle and apply a sterile dressing.
6. **Post-Procedure Care:**
    - Monitor the patient for any immediate adverse reactions.
    - Provide instructions on care and potential side effects.
7. **Student Practice:**

		• Allow students to practice the procedures on simulators or under the supervision of patients. • Provide constructive feedback and guidance to ensure correct technique and patient safety.
NLHP 7.3	Hands On Training- Ryle's tube Insertion	**Steps:** 1. **Preparation:** • Gather all necessary equipment (Ryle's tube, lubricants, antiseptic solutions, gloves, sterile drapes, etc.). • Educate students on the indications, contraindications, and potential complications of each procedure. 2. **Ryle's Tube Insertion:** • **Patient Preparation:** ◦ Explain the procedure to the patient and obtain informed consent. ◦ Position the patient in a semi-upright position. ◦ Clean the nostril with an antiseptic solution. • **Insertion Procedure:** ◦ Lubricate the tip of Ryle's tube ◦ Gently insert the tube through the nostril, directing it downwards and backward. ◦ Encourage the patient to swallow to facilitate passage of the tube into the stomach. ◦ Verify the position of the tube by aspirating stomach contents or injecting air and listening with a stethoscope. Secure the tube to the patient's nose with adhesive tape. **3. Removal of Ryle's tube :** ◦ Explain the procedure to patients

		◦ Remove slowly & smoothly using an aseptic technique. Clean the surrounding area 1. **Post-Procedure Care:** • Monitor the patient for any immediate complications. • Ensure the tubes and drains are functioning correctly. • Provide instructions on care and monitoring of the tubes
NLHP 7.4	Hands-on training -Drains	**Steps for Surgical Drain Insertion:** Pre-Insertion 1. Assess the patient's need for a surgical drain. 2. Choose the appropriate drain type (e.g., Penrose, Jackson-Pratt). 3. Prepare equipment and sterile field. Insertion 1. Make a small incision (1-2 cm) at desired site. 2. Bluntly dissect tissue to create a tract. 3. Insert drain through the tract, ensuring proper placement. 4. Secure the drain with sutures or staples. Post-Insertion 1. Connect the drain to the collection device. 2. Document drain insertion and patient's response. 3. Provide post-operative care and instructions. Potential Complications: 1. Infection 2. Hemorrhage 3. Damage to surrounding structures 4. Drain occlusion or malfunction Post-Operative Care: 1. Monitor drain output and adjust as needed.

		2. Maintain drain patency. 3. Provide wound care. 4. Remove the drain when indicated.

Topic 8 Marma (Vital points) (LH :2 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO7	Explain Marma-Nirukti and the classifications of Marma in detail.Explain Individual Marma Viddhalakshana.	CC	MK	K	L&GD, L,L&PPT	DOPS,VV-Viva,DOPS ,QZ ,P-EXAM	F&S	I	-	LH
CO1, CO6, CO7	Explain Marmaghata chikitsa and its surgical importance	CC	MK	K	L&GD, D,L&PPT ,L_VC,PER	VV-Viva,PP-Practical, T-CS,CBA, P-EXAM	F&S	I	-	LH
CO1, CO3, CO7	Identify Marma points and their manipulation techniques for treating musculoskeletal disorders (Frozen shoulder, tennis elbow, intervertebral disc prolapse, cervical spondylosis) and sports injuries.	CC	DK	KH	D-M,L &PPT , W,SIM, PT	PP-Practical,P-EXAM, P-CASE,P-VIVA,DEB	F&S	I	-	NLHP8.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 8.1	Marma identification and manipulation techniques in musculoskeletal disorders and Sports injuries	**Steps:**

1. **Preparation:**
    - Gather necessary materials (anatomical charts, markers, massage oils, gloves, etc.).
    - Brief students on the significance of Marma points and their role in Ayurveda for musculoskeletal and sports-related conditions.
2. **Identification of Marma Points:**
    - **Frozen Shoulder:**
        - Locate the vital Marma points around the shoulder girdle, such as Amsa Marma.
    - **Tennis Elbow:**
        - Identify Marma points around the elbow region, focusing on Kurpara Marma.
    - **Intervertebral Disc Prolapse:**
        - Determine the Marma points along the spine, particularly Kati and Pristha Marma.
    - **Cervical Spondylosis:**
        - Pinpoint Marma points in the neck region, including Griva Marma.
    - **Sports Injuries:**
        - Identify relevant Marma points specific to the injury location, ensuring a holistic approach to treatment.
3. **Manipulation Techniques:**
    - **Massage Techniques:**
        - Apply gentle pressure and circular motions on the identified Marma points using massage oils.
        - Demonstrate various massage strokes that stimulate blood flow and reduce inflammation.
    - **Pressure Application:**
        - Teach students how to apply the right amount of pressure on Marma points without causing discomfort.
        - Emphasize the importance of patient feedback during manipulation.
    - **Stretching and Mobilization:**
        - Combine Marma point manipulation with gentle stretching and joint mobilization exercises.
        - Focus on improving range of motion and reducing muscle tension.

		4. **Practical Demonstration:** • Allow students to practice Marma point identification and manipulation techniques on simulators or peers. • Supervise and provide feedback on their technique and approach. 5. **Post-Procedure Care:** • Advice on post-manipulation care, including rest, hydration, and gentle exercises. • Monitor for any immediate adverse reactions or discomfort.

Topic 9 Kshara Karma (LH :2 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Describe Nirukti, Pradhanyata, Guna, Dosha, Karma, Prakara of KsharaExplain Arhata, Anarhata, Pradhan karma, Upadrava, and Chikitsa of Ksharkarma	CK	MK	K	L,L&PPT	PRN,P-ID, P-VIVA,INT,PP-Practical	F&S	I	-	LH
CO1, CO2	Describe the clinical application of Ksharasutra, Kshara Pratisaran, Ksharataila, Ksharavarti, and Ksharodaka in different surgical conditions.	CK	MK	K	L,L_VC,L&PPT	P-EXAM,P-PRF,T-CS, PP-Practical,VV-Viva	F&S	I	V-RS,V-RS	LH
CO1, CO2, CO7	Appraise and demonstrate Kshar and Ksharsutra preparation along with its application in Ayurveda	CE	MK	KH	D,TUT, L&PPT ,CBL,DIS	CL-PR,P-EXAM,VV-Viva,PP-Practical,INT	F&S	I	-	NLHT9.1
CO1, CO2, CO4, CO7	Describe the proper handling and care of a patient undergoing Kshrasutra therapy and the importance of sterile techniques during Kshrasutra changing.	CE	MK	KH	L_VC,SIM,TUT ,D	DOPS,PRN ,QZ ,T-CS,P-PRF	F&S	I	-	NLHT9.2
CO1, CO2,	Appraise the concepts and indications of Ksharodaka, Kshartaila, Ksharvarti, and Ksharpichu, including their preparation methods,	CE	MK	KH	L_VC,FC,TUT,	DOPS,PRN ,P-VIVA,V	F&S	I	V-RS,V-RS	NLHP9.1

CO4, CO7	uses, dosages, and application techniques.				TBL,D	V-Viva,P-EXAM				
CO1, CO2, CO4, CO7	Elaborate on the concept and technique of Kshar Karma in Anorectal disorders.	CC	MK	KH	D,SIM, D-BED, TUT,PT	P-VIVA, C-VC,T-CS,P P-Practical	F&S	I	-	NLHP9.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 9.1	Demonstration of Kshar & Kshara Sutra – Preparation, and Method of Application	Kshar : Activities: 1. Lecture: Introduction to Kshar, its history, and principles. 2. Demonstration: Preparation of Kshar using different materials (e.g., Apamarga, Ark). 3. Hands-on training: Students prepare Kshar under supervision. 4. Discussion: Quality control measures, safety precautions, and storage. 5. Practical exercise: Identify and analyze different types of Kshar. Ksharsutra : Activities: 1. Lecture: Introduction to Ksharsutra, its history, and principles. 2. Demonstration: Preparation of Ksharsutra using different threads (e.g., Snuhi, Apamarga). 3. Hands-on training: Students prepare Ksharsutra under supervision. 4. Discussion: Thread selection, preparation, and quality control. 5. Practical exercise: Apply Ksharsutra on a dummy model Common Activities: 1. Visit to a pharmacy or manufacturing unit. 2. Interaction with experts in Kshar and Ksharsutra preparation. 3. Group discussion: Case studies, indications, contraindications. 4. Written examination: Theory and practical application.
NLHT 9.2	Ksharsutra changing	**Steps-**

		Pre-Demonstration 1. Lecture: Overview of Kshrasutra therapy, indications, and contraindications. 2. Review of patient selection and preparation. 3. Discussion of necessary equipment and materials. Demonstration 1. Patient positioning and draping. 2. Sterile technique demonstration. 3. Kshrasutra removal and inspection. 4. Cleaning and preparation of the site. 5. Re-insertion of new Kshrasutra. 6. Securement and dressing application. 7. Patient education and post-procedure instructions. Post-Demonstration 1. Discussion: Common challenges and complications. 2. Hands-on practice: Students practice Kshrasutra changing under supervision. 3. Debriefing: Review of key takeaways and Q&A. Key Takeaways: 1. Maintain sterile technique throughout the procedure. 2. Ensure proper patient positioning and draping. 3. Inspect the Kshrasutra and site before removal. 4. Clean and prepare the site thoroughly. 5. Re-insert the new Kshrasutra with precision. 6. Secure and dress the site properly. 7. Provide clear patient education and post-procedure instructions. 8. Monitor for potential complications.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 9.1	Application of Ksharodaka, Kshartaila,	**Steps -**

	Ksharvarti, Ksharpichu in Dushtavrana	1. Demonstration: Preparation of Ksharodaka, Kshartaila, Ksharvarti, and Ksharpichu. 2. Hands-on training: Application techniques. 3. Practice: Students apply therapies under supervision. 4. Group discussion: Challenges and solutions. **Key Points:** 1. Ksharodaka: Liquid Kshar for wound cleansing. 2. Kshartaila: Medicated oil for wound healing. 3. Ksharvarti: Kshar impregnated thread for wound closure. 4. Ksharpichu: Kshar-soaked cotton swab for wound cleaning.
NLHP 9.2	Demonstration and Hands-on training of Kshar karma in Anorectal disorders (Arsha, Bhagandara, Nadivrana)	**Steps -** Practical 1. Demonstration: Preparation of Kshar for Arsha, Bhagandara, and Nadivrana. 2. Hands-on training: Application techniques for Kshar Karma. 3. Practice: Students apply Kshar Karma under supervision. 4. Group discussion: Challenges and solutions. Clinical 1. Live patient demonstration: Kshar Karma application. 2. Observational learning: Students observe expert application. 3. Interactive session: Q&A and discussion.

Topic 10 Agnikarma (LH :2 NLHT: 0 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO4, CO5	Describe the Mahatva, Upakarana, Vidhi, Akrutibheda, Yogya, Ayogya, and Upadrava Chikitsa of Agnikarma.	CK	MK	KH	L,DIS,D ,L&PPT	P-MOD,Log book,M-CHT,CBA, C-VC	F&S	I	-	LH

CO1, CO2, CO4	Explain Pramad Dagdha, Dhumopahat & Ushna vatatatap dagdha lakshan & Chikitsa	CK	MK	KH	PER,L, L_VC,L &PPT	PM,PRN,C L-PR, C-VC,P-REC	F&S	I	-	LH
CO1, CO2, CO4, CO7	Discuss practical skills in performing Agnikarma for pain management in Gridhrasi (sciatica) and Avabhavuka (neuralgia).	CC	MK	KH	D,PrBL, D-M,D-BED,D L	VV-Viva,P-EXAM,P-SUR,P-VIVA,SP	F&S	I	-	NLHP10.1
CO1, CO2, CO4, CO7	Discuss practical skills in performing Agnikarma for the management of surgical diseases such as Arsha (Hemorrhoids) and Charmakeel (warts).	CC	MK	KH	PT,SIM, L&GD, D-M	VV-Viva,P-PRF,PP-Practical,P-CASE,M-MOD	F&S	I	-	NLHP10.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 10.1	Hands-on experience with Agnikarma in the pain management of any one disease (Gridhrasi, Avabahuka, etc)	**Preparation Steps:** Patient History and Assessment 1. Collect detailed patient history, including the onset, duration, and nature of pain. Document any previous treatments and their outcomes. 2. Physical Examination: Perform a thorough examination to assess the affected area, noting any tenderness, swelling, or restricted movement. 3. Informed Consent: Explain the Agnikarma procedure to the patient, including its benefits and potential risks, and obtain informed consent. 4. Equipment Setup: Prepare the necessary equipment, including the Agnikarma instrument

		Agnikarma Procedure 1. Sterilization: Sterilize the Shalaka and the area to be treated. 2. Application of Heat: Heat the Shalaka until it becomes red-hot. 3. Application to the Skin: Gently touch the heated Shalaka to the skin over the affected area, creating a small burn1. Repeat this process as needed to ensure minimal discomfort to the patient. 4. Post-procedure Care: Apply a soothing ointment and cover the treated area with a sterile dressing. Provide post-procedure care instructions to the patient. Hands-on Practice with Simulators 1. Simulator Setup: Use a simulator to practice the Agnikarma technique, ensuring participants become familiar with the procedure and handling of the equipment. 2. Practice Sessions: Allow participants to practice the Agnikarma technique on the simulator, focusing on precision and minimizing discomfort. 3. Feedback and Debriefing: Provide constructive feedback and conduct a debriefing session to discuss findings and areas for improvement.
NLHP 10.2	Demonstration of Agnikarma in the management of any one surgical disease (Arsha, Charmakeel, etc)	**Preparation Steps:** Patient History and Assessment 1. Gather History: Collect detailed patient history, including the onset, duration, and nature of the condition. Document any previous treatments and their outcomes. 2. Physical Examination: Perform a thorough examination to assess the affected area, noting the size, location, and characteristics of the lesions**.** **Preparation for Agnikarma**

		1. Informed Consent: Explain the Agnikarma procedure to the patient, including its benefits and potential risks, and obtain informed consent. 2. Equipment Setup: Prepare the necessary equipment, including the Agnikarma instrument (Shalaka), a heat source (e.g., flame), and sterile materials. 3. Patient Positioning: Position the patient comfortably, ensuring easy access to the affected area. **Agnikarma Procedure** 1. Sterilization: Sterilize the Shalaka and the area to be treated. 2. Application of Heat: Heat the Shalaka until it becomes red-hot. 3. Application to the Skin: Gently touch the heated Shalaka to the lesions on the affected area for a fraction of a second or as required. Repeat this process as needed, ensuring minimal discomfort to the patient. 4. Post-Procedure Care: Apply Ghrit Kumari pulp over the treated area, and cover it with a sterile dressing. Provide postprocedure care instructions to the patient. **Hands-on Practice with Simulators** 1. Simulator Setup: Use a simulator to practice the Agnikarma technique, ensuring participants become familiar with the procedure and handling of the equipment. 2. Practice Sessions: Allow participants to practice the Agnikarma technique on the simulator, focusing on precision and minimizing discomfort.

Topic 11 Raktamokshana (LH :3 NLHT: 0 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	**Describe** Raktamokshana Mahatva and Prakara of Siravedha,	CK	MK	KH	L&PPT ,L	T-CS,CL-PR	F&S	I	-	LH

CO1, CO2, CO4	Explain Pracchanna, Shringa, Alabu procedure, Yogya, Ayogya, Upadrava and Chikitsa.	CK	MK	KH	L&PPT ,L	Log book,CL-PR,T-CS	F&S	I	-	LH
CO1, CO2, CO4	Explain Jaloukavacharana - Yogya, Ayogya, Procedure, Upadrava and Chikitsa.	CK	MK	KH	L&PPT ,L	T-CS,CL-PR	F&S	I	-	LH
CO1, CO2, CO4, CO7	Describe siravedha (venesection) with its indications, techniques, and therapeutic benefits for disease-modifying management of conditions such as Gridhrasi (sciatica) and Uttan Vatarakta (acute gout).	CC	MK	KH	PT,D-M ,W,SIM, L&PPT	P-PRF,P-EXAM,M-CHT,SP,P-VIVA	F&S	I	-	NLHP11.1
CO1, CO2, CO4, CO7	Explain the Alabu (cupping) procedure along with its indications, techniques, and therapeutic benefits for disease-modifying management of conditions such as Kati-graha (lower back stiffness) and Manya-graha (neck stiffness).	CC	MK	KH	PT,L&PPT ,SIM ,D-M	P-POS,P-CASE,P-VIVA,M-MOD, P-EXAM	F&S	I	-	NLHP11.2
CO1, CO2, CO4, CO7	Discuss Jaloukavacharana (Leech therapy) along with its indications, techniques, and therapeutic benefits for disease-modifying management of conditions like Vidhradi (abscess) and Kushta (skin disorders).	CC	MK	KH	SIM,D-M,PT,L &PPT	P-RP,PM,P-CASE,P-MOD,RK	F&S	I	-	NLHP11.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 11.1	Siravedha in the management of any one surgical disease (Grudhrasi, Uttan Vatarakta, etc)	**Preparation Steps:** **Patient History and Assessment**

1. Gather History: Collect detailed patient history, including the onset, duration, and nature of symptoms. Document any previous treatments and their outcomes.
2. Physical Examination: Perform a thorough examination to assess the affected area, noting any tenderness, swelling, or restricted movement.

Preparation for Siravedha

1. Informed Consent: Explain the Siravedha procedure to the patient, including its benefits and potential risks, and obtain informed consent.
2. Equipment Setup: Prepare the necessary equipment, including a sterile lancet or needle, a tourniquet, antiseptic solution, and sterile dressings.
3. Patient Positioning: Position the patient comfortably, ensuring easy access to the selected venesection site.

Siravedha Procedure

1. Sterilization: Clean the selected site with an antiseptic solution.
2. Application of Tourniquet: Apply a tourniquet above the selected site to engorge the veins.
3. Venesection: Use a sterile lancet or needle to puncture the vein, allowing a controlled amount of blood to flow out. Monitor the patient closely during the procedure.
4. Post-Procedure Care: Remove the tourniquet, apply pressure to the site, and cover it with a sterile dressing. Provide post-procedure care instructions to the patient.

Hands-on Practice with Simulators

1. Simulator Setup: Use a simulator to practice the Siravedha technique, ensuring participants become familiar with the procedure and handling of the equipment.
2. Practice Sessions: Allow participants to practice the Siravedha technique on the simulator,

		focusing on precision and minimizing discomfort. 3. Feedback and Debriefing: Provide constructive feedback and conduct a debriefing session to discuss findings and areas for improvement.
NLHP 11.2	Alabu (cupping) procedure in the management of any one surgical disease (Kati Graham, Manya Graha, etc)	**Preparation Steps:** **Patient History and Assessment** 1. Gather History: Collect detailed patient history, including the onset, duration, and nature of symptoms. Document any previous treatments and their outcomes. 2. Physical Examination: Perform a thorough examination to assess the affected area, noting any tenderness, stiffness, or restricted movement. Preparation for Alabu 1. Informed Consent: Explain the Alabu procedure to the patient, including its benefits and potential risks, and obtain informed consent. 2. Equipment Setup: Prepare the necessary equipment, including cupping glasses, a heat source, antiseptic solution, and sterile materials. 3. Patient Positioning: Position the patient comfortably, ensuring easy access to the affected area. Alabu Procedure 1. Sterilization: Clean the selected site with antiseptic solution. 2. Heating the Cupping Glasses: Heat the inside of the cupping glasses using a flame to create a vacuum.

		3. Application to the Skin: Quickly place the heated cupping glasses on the affected area, allowing the vacuum to draw the skin into the glass. This enhances blood flow and alleviates stiffness. 4. Duration: Leave the cupping glasses in place for about 10-15 minutes, monitoring the patient for any discomfort. 5. Removal: Gently remove the cupping glasses and clean the treated area. Apply a soothing Taila / Lepa / Ghrit-kumari pulp. Hands-on Practice with Simulators 1. Simulator Setup: Use a simulator to practice the Alabu technique, ensuring participants become familiar with the procedure and handling of the equipment. 2. Practice Sessions: Allow participants to practice the Alabu technique on the simulator, focusing on precision and patient comfort. 3. Feedback and Debriefing: Provide constructive feedback and conduct a debriefing session to discuss findings and areas for improvement.
NLHP 11.3	Jaloukavcharana (Leech Therapy) in the management of any one surgical disease (Vidradhi, Dushtavrana, Koth, etc)	**Preparation Steps:** Patient History and Assessment 1. Gather History: Collect detailed patient history, including the onset, duration, and nature of symptoms. Document any previous treatments and their outcomes. 2. Physical Examination: Perform a thorough examination to assess the affected area, noting any signs of inflammation, infection, or skin changes. Preparation for Jaloukavacharana 1. Informed Consent: Explain the Jaloukavacharana procedure to the patient, including its benefits and potential risks, and obtain informed consent.

		2. Equipment Setup: Prepare the necessary equipment, including medicinal Leeches, antiseptic solution, and sterile materials. 3. Patient Positioning: Position the patient comfortably, ensuring easy access to the affected area. Jaloukavacharana Procedure 1. Sterilization: Clean the selected site to make it sterile. 2. Application of Leeches: Gently place medicinal Leech on the affected area, ensuring they attach properly. Leech begins to suck blood. 3. Duration: Allow the Leech to remain attached until they detach naturally, or if pricking pain / itching starts. 4. Post-Procedure Care: Remove the Leech and sprinkle Haridra powder over the treated area. Apply a sterile dressing. Provide post-procedure care instructions to the patient, including monitoring for any signs of infection. Hands-on Practice with Simulators 1. Simulator Setup: Use a simulator to practice the Jaloukavacharana technique, ensuring participants become familiar with the procedure and handling of the equipment. 2. Practice Sessions: Allow participants to practice the Jaloukavacharana technique on the simulator, focusing on precision and patient comfort. 3. Feedback and Debriefing: Provide constructive feedback and conduct a debriefing session to discuss findings and areas for improvement.

Topic 12 Bandha Vidhi (LH :1 NLHT: 1 NLHP: 4)

A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**

CO1, CO4, CO5	Describe BandhaVidhi – Prayojana, Dravya (Pichu, Plota, Kavalika, and Vikeshika), Yogya, Ayogya, Prakara and Upadrava	CK	MK	KH	L&PPT ,L_VC, L	Log book,P RN,CL-PR	F&S	I	-	LH
CO1, CO2, CO4, CO5	Analyze Ayurvedic and modern splinting techniques, materials, and applications while integrating evidence-based practice for optimized injury management.	PSY-MEC	DK	KH	L&PPT ,L	PRN,P-MO D,P-PRF,C L-PR,P-RP	F&S	I	-	NLHT12.1
CO1, CO2, CO4	Demonstrate modern techniques of bandaging for different types of wounds and injuries. Enhance participants' confidence and proficiency in basic surgical and bandaging skills through hands-on training.	PSY-ORG	MK	SH	D-M,D,PT	M-CHT,P-EXAM,P-POS,M-POS, M-MOD	F&S	I	-	NLHP12.1
CO1, CO3, CO5	Demonstrate skills in bandaging in safely transporting injured patients using various techniques.	PSY-GUD	DK	KH	D,D-M,PT	P-RP,P-MO D,P-PRF	F&S	I	-	NLHP12.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 12.1	Training of Bandaging on Simulators with relevant modern techniques	Practical Activities 1. **Patient Demonstrations:** ◦ Demonstrate splint application on patients with different types of injuries. ◦ Highlight the differences and similarities between Ayurvedic and modern splinting techniques. ◦ **Role-Playing:**

		▪ Create role-playing scenarios where participants can practice diagnosing injuries and applying appropriate splints. ▪ Encourage feedback and discussion to improve techniques and understanding.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 12.1	Perform training of Bandaging on Simulators with relevant modern techniques	**Preparation Steps:** **Patient History and Assessment** 1. Gather History: Collect detailed patient history relevant to the surgical procedure and injury. 2. Physical Examination: Perform a thorough examination to assess the affected area, noting any signs of infection, inflammation, or other complications. **Preparation for Surgical Skills Training** 1. Informed Consent: Explain the procedure and training objectives to the participants. 2. Equipment Setup: Prepare the necessary equipment, including surgical instruments, sterile gloves, antiseptic solution, bandages, and simulators. 3. Participant Positioning: Ensure participants are comfortably positioned to perform the surgical skills and bandaging techniques. **Basic Surgical Skills Training** 1. **Hemostasis:**

		• Technique: Demonstrate methods for achieving hemostasis by adequate pressure bandaging. • Hands on Practice Allow participants to practice hemostasis techniques on simulators. • Feedback: Provide constructive feedback on effectiveness and safety. **Modern Bandaging Techniques** 1. Types of Bandages: • Demonstration: Show different types of bandage and their appropriate uses. • Hands-on Practice: Allow participants to practice applying various bandages on simulators. 2. Specialized Bandaging Techniques: • Hands-on Practice: Allow participants to practice compression bandaging on simulators. 3. Immobilization Bandaging: • Splinting and Immobilization: Demonstrate the application of splints and immobilization bandages for fractures or joint injuries. • Hands-on Practice: Allow participants to practice splinting and immobilization techniques on simulators. **Recapitulation:** Mastering basic surgical skills and modern bandaging techniques is essential for effective patient care. Hands-on practice with simulators enhances proficiency and confidence in these skills.
NLHP 12.2	Demonstration of the Transportation of injured patients (Double Human Crutch, Fireman's Lift, Two-handed Seat, etc) & Recovery Position	**Preparation Steps:** **Patient Transportation Techniques**

1. Double Human Crutch
    - Objective: Provide support to a patient who can partially bear weight but needs assistance walking.
    - Preparation: Ensure the patient is calm and inform them about the procedure.
    - Steps:
        a. Position yourself and another person on either side of the patient.
        b. Have the patient place their arms around your shoulders.
        c. Support the patient by holding them firmly around their waist or hips.
        d. Move together in a coordinated manner, with the patient taking small steps.
2. Fireman’s Lift
    - Objective: Transport an unconscious or severely injured patient over a short distance.
    - Preparation: Check the patient's responsiveness and ensure the scene is safe.
    - Steps:
        a. Lift the patient's arms and place them over your shoulders.
        b. Bend down, grasp the patient's wrist, and pull them across your shoulders.
        c. Stand up, balancing the patient’s weight evenly.
        d. Walk carefully to the desired location, ensuring the patient’s airway remains clear.
3. Two-Handed Seat
    - Objective: Provide a stable seat for an injured patient who cannot walk but can sit upright.
    - Preparation: Communicate with the patient and ensure they are ready for the move.
    - Steps:
        a. Sit the patient on the ground.
        b. Have one person stand on either side of the patient.
        c. Each person grabs their own wrist and the other's wrist, forming a seat.
        d. Lift the patient onto the seat by pulling them upwards.
        e. Move in unison to transport the patient.

Recovery Position

		1. Objective: Position an unconscious but breathing patient safely to maintain an open airway and prevent aspiration. 2. Preparation: Ensure the patient is breathing and check for any life-threatening injuries. 3. **Steps:** a. Kneel beside the patient. b. Extend the patient's arm nearest to you at a right angle to their body, with the palm facing up. c. Place the other arm across their chest, with the back of their hand against their cheek. d. Bend the knee farthest from you to a right angle. e. Carefully roll the patient onto their side by pulling on the bent knee. f. Adjust the top leg so that both the hip and knee are bent at right angles. g. Tilt the patient's head back to ensure an open airway and monitor their breathing.

Topic 13 Pranashta Shalya (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	Describe Pranashta Shalya and NirharanaUpaya (Identification & Principles of management).	CK	MK	KH	L_VC,PER,L&PPT ,L	INT,T-CS,CL-PR,C-VC,Log book	F&S	I	-	LH
CO1, CO3, CO5	Perform skills of the Heimlich maneuver effectively along with the indications and techniques for relieving choking.	PSY-MEC	NK	SH	TBL,RP,W,PrBL	P-PRF,P-MOD,P-VIVA	F&S	I	-	NLHP13.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 13.1	Heimlich maneuver- Hands-on training (Choking)	**Preparation Steps:** **Understanding Choking** 1. Recognize Signs of Choking: • Inability to speak or breathe • Coughing or gagging • Clutching the throat (universal choking sign) • Cyanosis (bluish skin color) **Preparation for Heimlich Maneuver** 1. Equipment Setup: Use a simulator designed for practicing the Heimlich maneuver. 2. Participant Positioning: Ensure participants are comfortably positioned to perform the maneuver on the simulator. **Hands-on Practice with Simulators:** **Heimlich Maneuver Procedure** • Stand Behind the Person: Position yourself behind the choking person. • Make a Fist: Place your fist just above the person's navel (belly button). • Grasp Your Fist: With your other hand, grasp your fist. • Perform Abdominal Thrusts: Deliver quick, upward thrusts into the person's abdomen. Repeat until the object is expelled or the person becomes unconscious.

Topic 14 Fluid, Electrolyte, Acid Base Balance and Nutrition in surgical practice (LH :3 NLHT: 1 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2, CO4, CO5	Explain the physiology of fluids and electrolytes and Dehydration and over Hydration	CK	MK	KH	L_VC,L &PPT ,L	CL-PR,PM, C-VC,T-CS	F&S	I	-	LH
CO1, CO2, CO3, CO4	Describe Specific electrolyte loss,Acidosis, Alkalosis, Symptomatology and Management	CK	DK	K	PER,L, L&PPT ,L_VC	CL-PR, C-VC,PM,T-CS,PRN	F&S	I	-	LH
CO1, CO3, CO4, CO5	Describe the Parental Nutrition.	CK	MK	K	L,L&PPT ,L_VC	T-CS,Log book,CL-PR, C-VC	F&S	I	-	LH
CO1, CO2, CO3, CO4	Evaluate electrolyte imbalances by identifying clinical manifestations, analyzing their systemic effects, and formulating appropriate management strategies for restoration.	CS	DK	KH	L_VC,PBL,DIS, L&GD	P-PS,PM,P-EXAM,P-CASE,P-PRF	F&S	I	-	NLHT14.1
CO1, CO3, CO6	Critically evaluate fluid therapy selection by calculating requirements based on physiological needs and clinical decision-making in conditions like dehydration, shock, and burns.	CE	DK	KH	PT,L&PPT ,L,RP	P-EXAM,P-RP,P-PS,P-VIVA,P-CASE	F&S	I	-	NLHP14.1
CO1, CO3, CO6	Integrate knowledge of physiological mechanisms and clinical implications to assess, diagnose, and manage acid-base imbalances using arterial blood gas (ABG) analysis and targeted interventions.	CC	DK	KH	PT,PBL ,CD,L_VC,D	P-PS,P-EXAM,P-VIVA,P-MOD	F&S	I	-	NLHP14.2

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 14.1	Electrolyte loss	Present real-life scenarios of patients with electrolyte imbalance. Assign students topics like "Importance of Sodium" or "Dangers of Potassium Deficiency." Electrolyte imbalance role-play: Divide students into patient and healthcare provider roles. Electrolyte solution preparation: Have students prepare electrolyte solutions.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 14.1	Calculations & selections of fluids in various conditions like Dehydration, Shock& Burns	**Preparation Steps:** **Understanding Fluid Therapy** 1. **Types of Fluids:** • Crystalloids: Normal saline, Ringer's lactate, D5W (5% dextrose in water). • Colloids: Albumin, Dextran, etc. 2. **Indications:** • Dehydration: Assess severity (mild, moderate, severe) to determine fluid needs. • Shock: Differentiate between hypovolemic, cardiogenic, septic, and anaphylactic shock. • Burns: Calculate fluid requirements using formulas like the Parkland formula. **Calculation and Selection of Fluids** 1. Dehydration: • Assessment: Evaluate symptoms (dry mouth, skin turgor, hypotension, tachycardia)

and laboratory findings (serum electrolytes, BUN, S. creatinine).

- Calculation:
  - Mild: Oral rehydration solutions.
  - Moderate: IV fluids at a rate of 50-100 mL/kg over 4-6 hours.
  - Severe: Rapid IV fluids, e.g., 20 mL/kg bolus of normal saline.

2. Shock:
   - Assessment: Monitor vital signs (BP, heart rate), urine output, and perfusion status.
   - Calculation:
     - Hypovolemic shock: 20 mL/kg bolus of crystalloid, reassess and repeat as needed.
     - Septic shock: Initial 30 mL/kg of crystalloid within the first 3 hours.
     - Cardiogenic shock: Use smaller fluid boluses (250 mL) cautiously, consider inotropes.
     - Anaphylactic shock: Epinephrine first, then 1-2 L of crystalloid rapidly.
3. **Burns:**
   - Assessment: Calculate total body surface area (TBSA) burned.
   - Calculation:
     - Parkland formula: 4 mL/kg per %TBSA burned of Ringer's lactate for the first 24 hours.
     - Administer half of the total in the first 8 hours and the remaining half over the next 16 hours.

Hands-on Practice with Simulators

1. Simulator Setup: Use simulators to replicate clinical scenarios for dehydration, shock, and burns.
2. Practice Sessions: Allow participants to perform fluid calculations and administer fluids on the simulators.

NLHP 14.2	Acid Base Balance in various conditions like perforation, vomiting, etc	**Preparation Steps:** **Understanding Acid-Base Balance** 1. **Basic Concepts**: • pH, PCO2, HCO3- levels, and their normal ranges. 2. **Types of Imbalances:** • Metabolic Acidosis: Low pH, low HCO3- (e.g., due to renal failure, lactic acidosis). • Metabolic Alkalosis: High pH, high HCO3- (e.g., due to vomiting, diuretic use). • Respiratory Acidosis: Low pH, high PCO2 (e.g., due to COPD, hypoventilation). • Respiratory Alkalosis: High pH, low PCO2 (e.g., due to hyperventilation, anxiety). **Assessment and Diagnosis** 1. Patient History: • Gather detailed history relevant to the condition (e.g., history of gastrointestinal perforation, episodes of vomiting). • Document any medications or underlying medical conditions. 2. Physical Examination: • Perform a thorough physical examination to assess signs of dehydration, respiratory distress, or other relevant symptoms. 3. Laboratory Tests: • Order arterial blood gas (ABG) analysis to determine pH, PCO2, HCO3-, and other parameters. • Conduct additional tests such as serum electrolytes, blood urea nitrogen (BUN), and creatinine. **Group Discussion and Case Studies**

		1. **Case Presentation**: • Present real-life scenarios for conditions like perforation and vomiting. • Discuss the initial assessment, ABG interpretation, and management plan. 2. **Interactive Discussion:** • Encourage participants to share their approaches and reasoning. • Facilitate a discussion on different strategies and best practices in managing acid-base imbalances. **Hands-on Practice with Simulators** 1. Simulator Setup: Use simulators to replicate clinical scenarios of acid-base disturbances. 2. Practice Sessions: Allow participants to perform ABG interpretation and implement corrective measures on the simulators.

Topic 15 Rakta (LH :2 NLHT: 2 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	Describe Rakta Mahatwa, and Rakta as chuturta dosa	CK	MK	K	L_VC,PER,L&PPT ,L	CL-PR, C-VC,T-CS	F&S	I	-	LH
CO1, CO2, CO4	Explain Raktasrava , Prakara and Lakshana. along with Haemorrhage and its management	CK	MK	K	L,L&PPT ,L_VC,PER	T-CS,CL-PR,PRN	F&S	I	-	LH
CO1, CO2, CO4	Formulate comprehensive haemostasis management by evaluating bleeding and thrombotic disorders, determining intervention urgency, assessing treatment response, and optimizing long-term care strategies.	PSY-ADT	DK	KH	PT,D	SP,P-EXAM,P-VIVA	F&S	I	-	NLHT15.1
CO1, CO2,	Define blood transfusion and its indicationsAssess patients for blood transfusion needs.	PSY-GUD	MK	SH	SIM,TBL,PER,	P-CASE,P-EXAM,CL-	F&S	I	-	NLHT15.2

CO4, CO6	Explain the importance of compatibility testing. Recognize the risks and benefits of blood transfusion.				DIS,PBL	PR,PRN				

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 15.1	Describe Rakta stambhana and methodsof Haemostasis.	Simulate a patient with bleeding disorder. . Simulate a patient with thrombotic disorder. . Simulate haemostasis laboratory tests.
NLHT 15.2	Describe Blood Transfusion –Blood groups, Compatibility, Indications, Contraindications, Complications, Management. along with Component therapy	Present real-life scenarios of patients requiring blood transfusion Divide students into patient and healthcare provider roles. Have students identify and label different blood components. Simulate Blood Transfusion Reactions.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 16 Life Saving and Emergency Medicines in surgical practice (Prana Rakshaka and Atyayika Dravya) (LH :3 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4, CO6, CO7	Describe Antibiotics- Classification ,Dose, Indications & Contraindications	CC	MK	K	L_VC,L	CHK,T-CS, C-VC,RK,Log book	F&S	I	-	LH

CO1, CO2, CO4, CO5, CO6	Describe Analgesics, anti-inflammatory medicines with Classification , Dose ,Indications & Contraindications	CK	MK	KH	L&PPT ,L,L_V C	PRN,CHK, CL-PR,T-CS	F&S	I	-	LH
CO1, CO2, CO4, CO5, CO6	Describe Emergency medicines**,** viz. Atropine, Adrenaline, Dopamine, Mephentine hydrochloride, Hydrocortisone, Dexamethasone, Antiemetics, Dose, Indications & Contraindications, in surgical practice.	CK	MK	K	L_VC,L ,L&PPT	CHK,PRN, T-CS,CL-PR	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 17 Naidanik Vidhi (Diagnostic techniques) (LH :2 NLHT: 0 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4, CO5, CO6, CO7	Describe Diagnostic imaging techniques, viz. Chhaya Vikiran (X-ray), Avayava Pariksha (Ultrasonography, CAT Scan, MRI) - Principles, Method, Indications and Contraindications.	CK	MK	K	X-Ray, L&PPT ,L_VC, L	C-VC,CL-PR,T-CS,PRN	F&S	I	-	LH
CO1, CO3, CO5, CO6	Explain Biopsy / Cytological study.	CK	MK	K	L&PPT ,L,L_V C	CHK,CL-PR,T-CS, C-VC	F&S	I	-	LH

CO1, CO3, CO6	Define X-rays and their application in medical imaging and their role in diagnostic decision-making.Identify different types of X-ray examinations .	CK	MK	SH	L&PPT ,PT,X-Ray,L_VC,CD	QZ ,P-VIVA,CL-PR,P-EXAM,PP-Practical	F&S	I	-	NLHP17.1
CO1, CO3, CO5, CO6	Describe Principles and applications in medical imaging and its role in diagnostic decision-making. Recognize the limitations and contraindications of medical imaging.	CK	NK	K	D,PT,PL,RP,SIM	CL-PR,PRN,CHK	F&S	I	-	NLHP17.2
CO1, CO5, CO6	Demonstrate proficiency in biopsy procedures by selecting appropriate equipment, ensuring patient preparation, executing safe techniques, managing specimens, and identifying potential complications.	CK	NK	K	D,SIM	P-EXAM	F&S	I	-	NLHP17.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 17.1	Demonstration of Chhaya vikiran (X-ray) of Chest, Abdomen, Urology. and Musculoskeletal organs	**steps to learn and demonstrate Chhaya Vikiran (X-ray) of Chest, Abdomen, Urology and Musculoskeletal:** Steps to Learn and Demonstrate Chhaya Vikiran (X-ray) **Chest X-ray** **1. Normal Anatomy:** Learn to identify normal structures such as lungs, heart, mediastinum, diaphragm, and ribcage. **2. Abnormal Findings**: Recognize common abnormalities such as lung nodules, pneumonia, pleural effusion, and cardiomegaly. **3. Systematic Approach:** Develop a systematic approach to interpreting chest X-rays, including evaluating the lungs, heart, mediastinum, and diaphragm. **4. Practice:** Practice interpreting chest X-rays using online resources, textbooks, or with a radiologist.

		Abdominal X-ray **1. Normal Anatomy**: Learn to identify normal structures such as the liver, spleen, kidneys, and intestines. **2. Abnormal Findings**: Recognize common abnormalities such as kidney stones, bowel obstruction, and free air. **3. Systematic Approach**: Develop a systematic approach to interpreting abdominal X-rays, including evaluating the liver, spleen, kidneys, and intestines. **4. Practice:** Practice interpreting abdominal X-rays using online resources, textbooks, or with a radiologist. **Urology X-ray** **1. Normal Anatomy:** Learn to identify normal structures such as the kidneys, ureters, and bladder. **2. Abnormal Findings:** Recognize common abnormalities such as kidney stones, ureteral obstruction, and bladder tumors. **3. Systematic Approach:** Develop a systematic approach to interpreting urology X-rays, including evaluating the kidneys, ureters, and bladder. **4. Practice:** Practice interpreting urology X-rays using online resources, textbooks, or with a radiologist. **Musculoskeletal X-ray** **1. Normal Anatomy**: Learn to identify normal structures such as bones, joints, and soft tissues. **2. Abnormal Findings:** Recognize common abnormalities such as fractures, osteoporosis, and joint effusions. **3. Systematic Approach:** Develop a systematic approach to interpreting musculoskeletal X-rays, including evaluating bones, joints, and soft tissues. **4. Practice:** Practice interpreting musculoskeletal X-rays using online resources, textbooks, or with a radiologist.
NLHP 17.2	Avayava pariksha (CT,MRI) of Chest, abdomen, Urology bones & joints	**Steps to learn CT and MRI of Abdomen:** **Step 1: Review Patient's Clinical History and Indications** - Understand the patient's symptoms, medical history, and reasons for the CT scan - Familiarize yourself with the CT scan protocol and parameters

Step 2: Systematically Evaluate Abdominal Organs

- Liver:
  - Evaluate size, shape, and density
  - Look for lesions, cysts, or tumors
- Spleen:
  - Evaluate size and density
  - Look for lesions or infarcts
- Pancreas:
  - Evaluate size, shape, and density
  - Look for lesions, cysts, or tumors
- Kidneys:
  - Evaluate size, shape, and density
  - Look for lesions, cysts, or stones
- Gastrointestinal Tract:
  - Evaluate bowel wall thickness, density, and patency
  - Look for lesions, obstruction, or free fluid

Step 3: Evaluate Vascular and Lymphatic Structures

- Aorta and Major Branches:
  - Evaluate size, shape, and density
  - Look for aneurysms, stenosis, or dissection
- Portal and Hepatic Veins:
  - Evaluate size, shape, and density
  - Look for thrombosis or obstruction
- Lymph Nodes:
  - Evaluate size, shape, and density
  - Look for enlargement or abnormal morphology

Step 4: Look for Additional Findings

- Free Fluid or Hemorrhage:
  - Evaluate location, extent, and density
- Bone or Soft Tissue Lesions:

		- Evaluate size, shape, and density - Look for destruction or erosion **Step 5: Correlate Findings with Clinical History and Indications** - Integrate imaging findings with patient's symptoms, medical history, and laboratory results - Consider alternative diagnoses and differential diagnoses **Step 6: Document and Communicate Findings** - Clearly document imaging findings in a structured report - Communicate findings to the referring physician or radiologist **Similar to this, steps to learn CT and MRI of Chest, Urology, Bones and Joints-** **Chest** **1. CT Chest:** Show a CT scan of the chest, pointing out the lungs, heart, and major blood vessels. **2. MRI Chest**: Show an MRI scan of the chest, highlighting the mediastinum, lungs, and chest wall. **3. Normal and Abnormal Findings:** Compare normal and abnormal findings, such as lung nodules, pleural effusion, or mediastinal masses. **Urology:** **1. CT Urography:** Show a CT urogram, pointing out the kidneys, ureters, and bladder. **2. MRI Urography**: Show an MRI urogram, highlighting the kidneys, ureters, and bladder. **3. Normal and Abnormal Findings:** Compare normal and abnormal findings, such as kidney stones, ureteral obstruction, or bladder tumors. **Bones and Joints:** **1. CT Bones:** Show a CT scan of the bones, pointing out the spine, pelvis, and long bones. **2. MRI Bones**: Show an MRI scan of the bones, highlighting the bone marrow, joints, and surrounding soft tissues. **3. Normal and Abnormal Findings:** Compare normal and abnormal findings, such as bone fractures, osteoporosis, or joint effusions.
NLHP 17.3	Hands on training of different types of Biopsy	The steps for training undergraduates in different types of biopsies: **Fine Needle Aspiration Biopsy (FNAB)** 1. Theoretical foundation: Understand the principles and indications of FNAB. 2. Simulation training: Practice FNAB on simulated models or phantoms.

		3. Observation: Observe experienced practitioners performing FNAB. 4. Assisted practice: Assist experienced practitioners during FNAB procedures. **Core Needle Biopsy (CNB)** 1. Theoretical foundation: Understand the principles and indications of CNB. 2. Simulation training: Practice CNB on simulated models or phantoms. 3. Observation: Observe experienced practitioners performing CNB. 4. Assisted practice: Assist experienced practitioners during CNB procedures. **Incisional Biopsy** 1. Theoretical foundation: Understand the principles and indications of incisional biopsy. 2. Simulation training: Practice incisional biopsy on simulated models or phantoms. 3. Observation: Observe experienced practitioners performing incisional biopsy. 4. Assisted practice: Assist experienced practitioners during incisional biopsy procedures. **Excisional Biopsy** 1. Theoretical foundation: Understand the principles and indications of excisional biopsy. 2. Simulation training: Practice excisional biopsy on simulated models or phantoms. 3. Observation: Observe experienced practitioners performing excisional biopsy. 4. Assisted practice: Assist experienced practitioners during excisional biopsy procedures. **Endoscopic Biopsy** 1. Theoretical foundation: Understand the principles and indications of endoscopic biopsy. 2. Simulation training: Practice endoscopic biopsy on simulated models or phantoms. 3. Observation: Observe experienced practitioners performing endoscopic biopsy. 4. Assisted practice: Assist experienced practitioners during endoscopic biopsy procedures.

Topic 18 Shat Kriyakala in surgical practice (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4,	Explain Shat Kriyakala in surgical practice.	CK	MK	KH	L_VC,L ,L&PPT	CL-PR,T-CS	F&S	II	-	LH

CO5										
CO1, CO4, CO7	Integrate the principles of Shatkriyakala to assess disease progression and implement appropriate surgical interventions for conditions like Arsha, Bhagandara, appendicitis, and cholecystitis.	CC	MK	K	L&PPT ,CBL,DIS	P-EXAM	F&S	II	V-KS	NLHP18.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 18.1	Surgical intervention according to Shatkriyakala - Special focus on Arsha, Bhagandara, and infective pathology ex.Appendicitis, Cholecystitis, etc.	**Steps** Shatkriyakala (Six Stages of Disease Progression and stages of treatment) Preparation: Review the patient’s medical history and symptoms. Determine the stage of the disease based on Shatkriyakala principles. Plan the surgical intervention accordingly. **Surgical Intervention:** Stage 1 (Sanchaya): Early intervention to prevent disease progression. Stage 2 (prakopa): Addressing the initial symptoms and preventing complications. Stage 3 (prasara): Treating the disease before it becomes chronic. Stage 4 (sthanasamshraya): Managing the acute phase of the disease. Stage 5 (vyakta): Differentiating between similar diseases and targeting the specific one. Stage 6 (bedha): Treating the fully developed disease and preventing recurrence. Arshabhagandhara (Piles and Fistula-in-Ano) **Preparation:** Review the patient’s symptoms and medical history. Perform diagnostic tests to confirm the condition. Plan the surgical procedure based on the severity of the condition .**Surgical Intervention:**

		Piles: Perform procedures like hemorrhoidectomy or stapled hemorrhoidopexy to remove or reduce hemorrhoids. Fistula-in-Ano: Perform fistulotomy or seton placement to treat the fistula. Infective Pathologies (Appendicitis and Cholecystitis) **Preparation**: Review the patient's symptoms, medical history, and diagnostic tests. Plan the surgical intervention based on the severity of the infection. Surgical Intervention: Appendicitis: Perform an appendectomy (laparoscopic or open) to remove the inflamed appendix. Cholecystitis: Perform a cholecystectomy (laparoscopic or open) to remove the inflamed gallbladder.

Topic 19 Samanya Vyadhi Parichaya (LH :6 NLHT: 3 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	Describe the importance of the body's response to injury or infectionIdentify the signs and symptoms along with different stages of Vranashotha	CK	MK	K	D,SIM, L&PPT ,D-M,PER	P-POS,PRN,P-MOD, P-EXAM,P-CASE	F&S	II	-	NLHT19.1
CO1, CO2, CO4	Explain Nidana, Samprapti, Prakara, Lakshana, Sadhya-asadhyata, Upadrava and Chikitsa of Vidhradi (Abscess) & Pidika (Boils)	CK	MK	K	L&PPT ,L_VC, L	Log book,CL-PR,M-MOD,COM, C-VC	F&S	II	-	LH
CO1, CO2, CO4	Describe Etiopathogenesis, Classifications, Complications & Management of DagdhaVrana (Burns and Scalds)	CK	MK	K	L_VC,L &PPT ,L,PER	M-CHT,M-MOD,M-POS,CL-PR,T-CS	F&S	II	-	LH
CO1,	Explain Marmaghata (shock) Definition, Classification,	CK	MK	K	L_VC,L	C-VC,CL-	F&S	II	-	LH

CO2, CO4, CO6	Etiopathogenesis, Clinical features, Diagnosis & management				&PPT ,PER,L	PR,PRN,T-CS				
CO1, CO2, CO4, CO6	Explain Etiopathogenesis Clinical features Diagnosis & management of Cardiogenic & Septic Shock & crush syndrome	CK	MK	K	L,L&PPT ,L_VC	T-CS,CL-PR,PRN	F&S	II	-	LH
CO1, CO2, CO5, CO6	Identify causes, risk factors, signs and symptoms and the importance of KothaUnderstand the role of bacterial infection in Kotha (Gangrene)	CK	MK	SH	PER,L,D,L_VC ,D-M	M-POS,DEB,PRN,M-CHT,CL-PR	F&S	II	-	NLHT19.2
CO1, CO2, CO4	Explain Nidana, types, Samprapti, Lakshana and Chikitsa of Granthi (Dermoid Cyst &Sabacious Cyst)	CK	MK	K	L_VC,L ,L&PPT	CL-PR,T-CS	F&S	II	-	LH
CO1, CO2, CO4	Explain the Nidana, types, Samprapti, Lakshana and Chikitsa of Arbuda	CK	MK	K	L,L&PPT ,L_VC	T-CS	F&S	II	-	LH
CO1, CO2, CO4	Illustrate the risk factors for tumor developmentDescribe tumor classification systemsExplain the importance of early detection and diagnosis	CAP	MK	K	L&PPT ,PER,DIS,TUT,D	PP-Practical,P-VIVA,PRN,VV-Viva,CL-PR	F&S	II	-	NLHT19.3
CO1, CO2, CO4	Define the characteristics of lumps or swellings along with a systematic examination to evaluate lumps or swellings.Differentiate between benign and malignant lumps.	CK	MK	K	RP,PER ,L_VC, TPW,D-BED	CHK,CL-PR,Mini-CEX,P-VIVA, VV-Viva	F&S	II	-	NLHP19.1
CO1, CO2,	Explain the pathophysiology of shock. Identify risk factors and causes of shock.	CK	MK	K	L&GD, PT,SIM,	SP,P-RP,P-VIVA	F&S	II	-	NLHP19.2

CO4, CO6	Describe the signs and symptoms of shock with its stages				PSM,RP					
CO1, CO3, CO6	Explain the principles of assessing and examining burn injuries with a systematic approach to evaluate burn cases.	CK	MK	K	L_VC,PER,D,PT,SIM	P-POS,PRN,P-MOD,P-VIVA,P-RP	F&S	II	-	NLHP19.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 19.1	Vranashotha-Nirukti, Nidana, Samprapti, Prakara, Lakshana, Sadhya-asadhyata, Upadrava and Chikitsa	Create a simulated patient scenario where students have to assess and manage inflammation. Quiz on Inflammation
NLHT 19.2	Explain etiopathogenesis, types, Clinical Features, Investigations, Differential Diagnosis, complications and management of Kotha (Gangrene)	Present real-life scenarios of patients with gangrene. Practice wound care and debridement techniques.
NLHT 19.3	Definition, Classification, Clinical features, Complications of Tumour	Lecture and Discussion Activities 1. Case studies: Present real-life scenarios of patients with tumors. 2. Debate: Assign students topics like "The Role of Genetics in Tumor Development" or "The Benefits and Risks of Tumor Surgery". 3. Tumor biology lecture: Provide an overview of tumor biology and pathogenesis. Interactive Activities 1. Tumor simulation: Create a simulated patient scenario where students have to diagnose and manage tumors. 2. "Tumor Jeopardy": Create a game show-style quiz. 3. Tumor puzzle: Create a puzzle where students match tumor types with corresponding symptoms. Group Activities 1. Create a poster or infographic: Assign groups a type of tumor to research and illustrate.

		2. Tumor role-play: Divide students into patient and healthcare provider roles. 3. "Tumor Challenge": Divide students into teams to solve tumor-related problems. Hands-on Activities Assessment Activities 1. Tumor quiz. 2. Case study analysis and presentation. 3. Reflective journaling: Ask students to reflect on their learning.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 19.1	Examination of Granthi (lump or Swelling)	**Steps** 1. Patient History: Ask about the duration and onset of the lump/swelling. Inquire about associated symptoms such as pain, fever, weight loss, or changes in size. Review any past medical history, including previous lumps or related conditions. Ask about family history of cancers or other relevant diseases. 2. Inspection: Position the patient comfortably and ensure good lighting. Observe the size, shape, and location of the lump. Note any changes in skin color or the presence of scars, ulcers, or visible pulsations. 3. Palpation: Wash your hands thoroughly before examination. Use the pads of your fingers to palpate the lump gently. Assess the following characteristics: Size: Measure the lump in two dimensions (length and width). Shape: Determine if it is round, oval, or irregular. Surface: Check if it is smooth, nodular, or irregular. Consistency: Identify if it is soft, firm, hard, or rubbery.

		Tenderness: Note any pain or discomfort on palpation. Mobility: Check if the lump is mobile or fixed to underlying structures. Temperature: Feel for any warmth over the lump, indicating inflammation. Fluctuation: Determine if the lump contains fluid by gently pressing on it. 4. Transillumination (if applicable): Darken the room and use a flashlight or penlight to shine through the lump. Fluid-filled lumps (e.g., cysts) may transilluminate, while solid masses will not. 5. Auscultation (if applicable): Use a stethoscope to listen for any bruits or abnormal sounds over the lump, especially if it is pulsatile. 6. Special Tests: Needle Aspiration or Biopsy: Perform if indicated to obtain a sample for cytological or histological examination. 7. Documentation: Record all findings meticulously, including the patient's history, examination findings, and any special tests performed. Note the characteristics of the lump and any associated symptoms.
NLHP 19.2	Emergency management in different types of shock	Steps Case Presentation/PBL/Role Play Hypovolemic Shock Case Presentation: Scenario: A patient presents with severe blood loss following a traumatic injury. They exhibit signs of tachycardia, hypotension, cold and clammy skin. Steps: Assessment: Evaluate the airway, breathing, and circulation (ABCs). Fluid Resuscitation: Administer crystalloids (normal saline or Ringer's lactate) rapidly. Stop the Bleeding: Apply pressure to external wounds, consider surgical intervention if necessary. Monitoring: Continuously monitor vital signs, urine output, and mental status. Cardiogenic Shock

Case Presentation:
Scenario: A patient with a history of myocardial infarction presents with chest pain, dyspnea, hypotension, and jugular venous distention.
Steps:
Assessment: Evaluate the ABCs, obtain a 12-lead ECG.
Oxygen Therapy: Administer high-flow oxygen.
Medications: Initiate inotropes (e.g., dobutamine) to improve cardiac output.
Revascularization: Prepare for possible percutaneous coronary intervention (PCI) or thrombolytic therapy.
Distributive Shock (Septic Shock)
Case Presentation:
Scenario: A patient with a severe infection presents with fever, hypotension, warm skin, and altered mental status.
Steps:
Assessment: Evaluate the ABCs, obtain blood cultures.
Antibiotics: Administer broad-spectrum antibiotics as soon as possible.
Fluid Resuscitation: Administer crystalloids to restore perfusion.
Vasopressors: Initiate vasopressors (e.g., norepinephrine) if hypotension persists despite fluid resuscitation.
Distributive Shock (Anaphylactic Shock)
Case Presentation:
Scenario: A patient presents with a sudden onset of hives, swelling, wheezing, and hypotension after exposure to an allergen.
Steps:
Assessment: Evaluate the ABCs.
Epinephrine: Administer intramuscular epinephrine immediately.
Oxygen Therapy: Provide supplemental oxygen.
Medications: Administer antihistamines (e.g., diphenhydramine) and corticosteroids (e.g., methylprednisolone).
Fluid Resuscitation: Administer crystalloids to maintain blood pressure.

		Obstructive Shock Case Presentation: Scenario: A patient with a history of deep vein thrombosis presents with sudden chest pain, dyspnea, and hypotension. Steps: Assessment: Evaluate the ABCs, obtain imaging (e.g., chest CT) to identify the obstruction. Oxygen Therapy: Administer high-flow oxygen. Relieve Obstruction: Consider thrombolytic therapy or surgical intervention to remove the obstruction. Monitoring: Continuously monitor vital signs and oxygen saturation.
NLHP 19.3	Assessment, examination, and documentation of Pramada Dagda (Burn) case	**Steps** **1. Initial Assessment:** Ensure Safety: Ensure the safety of both the patient and healthcare providers. Primary Survey: Airway: Check for airway patency, inhalation injury, or soot around the nose/mouth. Breathing: Assess respiratory rate and effort, listen for breath sounds, and check oxygen saturation. Circulation: Check heart rate, blood pressure, and signs of shock. Establish IV access. Disability: Evaluate neurological status using the AVPU scale (Alert, Verbal, Pain, Unresponsive). Exposure: Remove clothing and jewelry to assess the extent of burns. Maintain body temperature. **2. Secondary Assessment:** History Taking: Mechanism of Injury: Determine the cause (thermal, chemical, electrical, etc.). Time of Injury: Establish the time since the burn occurred. Past Medical History: Inquire about previous medical conditions, medications, and allergies. Tetanus Status: Check the patient's tetanus immunization history. Physical Examination: Extent of Burns: Use the Rule of Nines or Lund-Browder chart to estimate the total body surface area (TBSA) affected. Depth of Burns: Classify burns as superficial, partial-thickness, or full-thickness based on appearance

		and sensation. Associated Injuries: Assess for other injuries related to the burn incident (e.g., fractures, head injury). **3. Documentation:** Patient Information: Record the patient's demographics, medical history, and details of the burn incident. Burn Assessment: Location and Extent: Document the location, size, and percentage of TBSA affected. Depth: Note the depth and classification of burns. Symptoms: Record pain, blisters, edema, or any signs of infection. Interventions: Initial Treatment: Note any pre-hospital care provided. Medications: Record analgesics, antibiotics, and other medications administered. IV Fluids: Document the type and amount of fluids given. Follow-Up Plan: Outline the plan for ongoing care, dressing changes, and referral to a burn unit if necessary.

Topic 20 Vrana (LH :7 NLHT: 2 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO3, CO4, CO5	Explain the Nirukti ,Prakara,Nidana, Samprapti, , Prakara, Lakshana, Vrana Pariksha, Vrana Sadhya Asadhyatha of vrana and vrana vastu	CK	MK	K	L&PPT ,L,L_VC	CL-PR,T-CS	F&S	II	-	LH
CO1, CO2, CO4	Explain the Vrana Avastha of Dustavrana, Shuddha Vrana, Ruhyamana Vrana, Samyak Roodha Vrana and Vrana Upadrava	CK	MK	K	L,L_VC ,L&PPT	T-CS,CL-PR	F&S	II	-	LH
CO1, CO2,	Explain Vrana Chikitsa, Pathya-apathya and Shashti Upakrama – first 21 upakramas (poorva karma to vrana)	CK	MK	K	L_VC,L &PPT	PRN,CL-PR,T-CS	F&S	II	-	LH

CO4					,L					
CO1, CO2, CO4	Explain Shashti Upakrama –22- 40 upakramas	CK	MK	K	L&PPT ,L,L_V C	T-CS,CL-PR,PRN	F&S	II	-	LH
CO1, CO2, CO4	Explain Shashti Upakramas – 40 - 60 upakramas	CK	MK	K	L&PPT ,L,L_V C	CL-PR,PRN,T-CS	F&S	II	-	LH
CO1, CO2, CO4	Describe Ulcer – Definition, types, and wound healing stages and management	CK	MK	K	L&PPT ,L,L_V C	M-MOD,M-CHT,T-CS ,CL-PR,COM	F&S	II	-	LH
CO1, CO2, CO4	Explain Prameha pidaka - carbuncle and Diabetic wounds/ulcer	CK	MK	K	L&PPT ,L,L_V C	M-CHT,CL-PR,COM, T-CS,M-POS	F&S	II	-	LH
CO1, CO2, CO4	Identify wound healing phase & risk factors for wound complications (e.g., infection, dehiscence). Describe wound assessment techniques (e.g., visual inspection, measurement) & wound care principles	CK	MK	K	RP,PER ,D,SIM, D-M	PRN,DEB, CL-PR,INT	F&S	II	-	NLHT20.1
CO1, CO2, CO4	Identify the characteristics and causes of an ulcer and thorough examination to evaluate the ulcer.Differentiate between various types of ulcers.	CK	MK	K	CD,PT, RP,PER ,D-M	P-VIVA,P-EXAM,PRN,P-MOD,P-PS	F&S	II	-	NLHP20.1
CO1, CO2, CO4, CO5	Explain the function of the peripheral nervous system, Identify any abnormalities, and localize potential lesions accordingly.	CC	MK	K	PT,PER	PRN,P-EXAM,P-VIVA	F&S	II	-	NLHP20.2

CO1, CO2, CO4	Analyze the pathogenesis, risk factors, microbial causes, prevention strategies, and clinical presentation of Surgical Site Infections (SSIs) to enhance early diagnosis and effective management.	CC	MK	K	SIM,PER,RP	P-VIVA,PUZ,QZ ,VV-Viva,P-EXAM	F&S	II	-	NLHT20.2
CO1, CO2, CO4	Demonstrate the students on the correct procedure for wound dressing, ensuring optimal healing and preventing infection for training purpose	PSY-GUD	MK	KH	D-BED,TUT,PT,DIS,D	C-VC,OSPE,P-VIVA,CHK,INT	F&S	II	-	NLHP20.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 20.1	Sadhyovrana -(Traumatic wounds) – Nidana, Prakara, Lakshana, Upadrava and Chikitsa.	Present real-life traumatic wound cases. Analyze wound management decisions Develop treatment plans. Develop a wound management checklist. Role-play traumatic wound scenarios.
NLHT 20.2	Surgical site infection.	Present real-life SSI cases for group discussion. Analyze SSI prevention measures and outcomes. Develop SSI prevention plans.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 20.1	Examination of an Ulcer	**Steps** 1. Patient History: Onset and Duration: Ask when the ulcer first appeared and how long it has been present.

		Symptoms: Inquire about pain, discharge, bleeding, itching, and any other associated symptoms. Medical History: Review any underlying medical conditions such as diabetes, vascular diseases, or previous ulcers. Lifestyle Factors: Discuss smoking, alcohol use, diet, and any recent trauma or injury. 2. Inspection: Location and Size: Measure the ulcer and note its exact location on the body. Shape and Edges: Describe the shape (round, oval, irregular) and the edges (punched-out, undermined, rolled, or sloping). Base: Look at the base of the ulcer to see if it is clean, granulating, sloughy, or necrotic. Surrounding Skin: Examine the skin around the ulcer for redness, swelling, warmth, and any signs of infection or dermatitis. Discharge: Note the type (serous, purulent, bloody) and amount of any discharge. 3. Palpation: Tenderness: Check for tenderness around and on the ulcer. Induration: Assess for induration (hardness) around the ulcer, which can indicate chronic inflammation or malignancy. Temperature: Feel the temperature of the surrounding skin to detect any increased warmth. 4. Special Tests: Swab for Culture: If there is discharge, take a swab for microbiological examination to identify infection. Biopsy: If the ulcer appears suspicious or fails to heal, perform a biopsy to rule out malignancy. Doppler Ultrasound: Assess blood flow if a vascular cause is suspected.
NLHP 20.2	Examination of the peripheral nerve lesions	**Preparation steps:** 1. Gather Equipment: Reflex hammer, tuning fork (128 Hz), cotton wool, safety pin, and a neurotip. 2. Patient Preparation: Ensure the patient is comfortable and explain the procedure to gain consent.

		3. Environment: A quiet room with good lighting and privacy. **Steps for Examination** 1. Inspection: ◦ Observe for muscle wasting, fasciculations, and abnormal movements of both side. ◦ Look for any scars or deformities. 2. Tone: ◦ Assess muscle tone by passively moving the patient's limbs. ◦ Check for hypertonia or hypotonia. 3. Power: ◦ Test muscle strength in various muscle groups. ◦ Use the Medical Research Council (MRC) scale (0-5) to grade power. 4. Reflexes: ◦ Test deep tendon reflexes (e.g., biceps, triceps, knee jerk). ◦ Note any hyperreflexia or hyporeflexia. 5. Sensation: ◦ Test light touch, pain, and temperature sensation using cotton wool and a neurotic. ◦ Assess vibration sense with a tuning fork, starting distally and moving proximally if needed. 6. Coordination: ◦ Perform tests like finger-to-nose and heel-to-shin to assess coordination. ◦ Check for dysdiadochokinesis (inability to perform rapid alternating movements
NLHP 20.3	Demonstration of wound dressings	**Steps:** 1. Preparation: • Gather essential materials: Sterile gloves, Vrana Shodhana/ Ropan medicines, instruments, saline solution, gauze, adhesive tape, antibiotic ointment, and non-stick dressing.

		• Wash hands thoroughly. 2. Initial Inspection: • Assess the wound for size, shape, discharge, site, depth, and signs of infection. 3. Cleaning/debridement/: • Rinse the wound with saline solution/ kwatha. • Pat dry with sterile gauze. 4. Application of Ointment/oil/ lepa: • Apply a thin layer of antibiotic / Ointment/oil / lepa on the wound. 5. Dressing the Wound: • Place a non-stick dressing over the wound. • Secure it with gauze and adhesive tape. 6. Final Inspection: • Ensure the dressing is secure but not too tight/loose. • Check for any immediate allergic reactions or discomfort.

Topic 21 Kshudra Roga (LH :2 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO4, CO5	Define Kshudrarogas:Clinical features and management of first 20 disorders i.e Ajagalika to Sharkararbhuda	CK	MK	K	L,L&GD,D,L&PPT ,PT	P-VIVA,PP-Practical,PRN,VV-Viva,P-EXAM	F&S	II	-	LH
CO1, CO4, CO5	Define Kshudrarogas: Clinical features and management of last 23 disorders i.e Pama to Gudhabramsha	CK	MK	K	L,PL,L&GD,PER,L&PPT	T-OBT,VV-Viva,SA,T-CS,P-REC	F&S	II	-	LH
CO1, CO2, CO4	Demonstrate the proper techniques for a comprehensive hand examination, evaluating structure and function, and identifying any abnormalities.	PSY-GUD	MK	KH	SDL,D-BED,DIS,TUT, CBL	PA,P-VIVA,VV-Viva ,INT,PP-Practical	F&S	II	-	NLHP21.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 21.1	Examination of the Hand	**Steps:** **Preparation:** Gather materials: Examination gloves, a penlight, measuring tape, and a reflex hammer. Ensure the patient's hand is clean and free from any hindrances. **Initial Observation:** Inspect the hand for swelling, redness, deformities, or any skin abnormalities. Note the condition of the nails and the presence of any scars or atrophy. **Palpation:** Gently palpate the bones, joints, and soft tissues. Check for tenderness, swelling, and temperature differences. **Range of Motion:** Ask the patient to perform active movements such as flexion, extension, abduction, adduction, and opposition. Assess the range and note any pain or limitation. **Strength Testing:** Evaluate the muscle strength by asking the patient to perform specific hand grips and movements against resistance. Compare strength in both hands. **Special Tests:** Perform tests like Tinel's sign, Phalen's test, and Finkelstein’s test to check for carpal tunnel syndrome, De Quervain's tenosynovitis, etc. Note any positive signs and their implications. **Neurological Examination:** Check sensation across the dermatomes of the hand.

		Evaluate reflexes using the reflex hammer. **Final Assessment:** Summarize findings and document any abnormalities or concerns. Discuss further steps or refer to a specialist if necessary.

Topic 22 Manya Vikara (LH :3 NLHT: 3 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	Define Nidana, Samprapti, Lakshana and Chikitsa of Gandamala and Apachi -Lymphadenitis.	CK	DK	K	L&PPT ,L	P-VIVA,P-REC,T-CS, PRN,CL-PR	F&S	II	-	LH
CO1, CO2, CO4	Define Pashanagardhabha – Etiopathogenesis, Clinical Features, Investigations, Differential Diagnosis, Complications, and Management of Parotitis.	CK	MK	KH	L,L_VC ,L&PPT	CL-PR,P-VIVA,PRN, VV-Viva,T-CS	F&S	II	-	LH
CO1, CO2, CO4	Examine the anatomical structure, vascular and neural connections, physiological functions, and pathological conditions of the thyroid gland to understand its role in metabolism, growth, and endocrine regulation.	CAP	MK	K	L&PPT ,L,DIS, PL	P-VIVA,T-CS,P-EXAM,VV-Viva	F&S	II	V-RS,V-KS,V-RS	NLHT22.1
CO1, CO2, CO4	Define Etiopathogenesis, Clinical feature , Investigations, Diffrential Diagnosis , complications, and management of Galaganda (Goitre)	CC	MK	K	L&PPT ,L_VC, L&GD, L	T-CS,CL-PR,PRN, C-VC	F&S	II	-	LH
CO1, CO2, CO4	Analyze the pathophysiology, clinical presentation, complications, and management of toxic goiter and thyroiditis, integrating diagnostic approaches and treatment modalities for effective clinical decision-making.	CAP	MK	K	SIM,DIS,CBL, L_VC,SDL	P-VIVA,CL-PR,PRN, VV-Viva,P-CASE	F&S	II	-	NLHT22.2

CO1, CO2, CO4	Evaluate the etiology, risk factors, and pathophysiology of thyroid neoplasms, distinguishing between benign and malignant types, while integrating the Ayurvedic perspective on the pathogenesis of Galaganda.	CAN	MK	K	DIS,RP, L_VC,L RI,PER	C-VC,P-VI VA,CL-PR,PRN	F&S	II	-	NLHT22.3
CO1, CO2, CO4	Demonstrate accurately the thyroid gland for any abnormalities, i ncluding enlargement, nodules, or signs of thyroid dysfunction	CAP	MK	K	L&GD, D-M,D, PL,L_V C	Mini-CEX, P-EXAM,P -VIVA,P-CASE,PRN	F&S	II	-	NLHP22.1
CO1, CO2, CO4	Demonstrate accurately the neck for structural abnormalities, lymph node enlargement, thyroid or vascular anomalies, etc.	CAP	MK	K	L_VC,C BL,DIS, CD,PER	CHK,VV-V iva,P-EXA M,INT,P-VIVA	F&S	II	-	NLHP22.2
CO1, CO2, CO4	Demonstrate and learn to assess the lymphatic system for signs of lymphadenopathy or other associate pathological conditions	CAP	MK	K	PT,D,DI S,TUT, L&GD	P-VIVA,O SCE, C-VC ,Mini-CEX, P-EXAM	F&S	II	-	NLHP22.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 22.1	Thyroid gland - anatomy & physiology	**Anatomy Dissection**: Use a virtual dissection tool or models to explore the thyroid gland's anatomy. Have students label the anatomical parts and discuss the blood supply and innervation. **Clinical Case Studies**: Present case studies of patients with thyroid disorders. Students diagnose the condition, describe the physiological basis of the symptoms, and suggest treatments. **Interactive Quizzes and Flashcards**: Develop quizzes and flashcards for key terms and concepts related to thyroid anatomy and physiology.

		Use apps or platforms that allow students to test their knowledge in a fun and engaging way. **Group Discussions and Presentations**: Assign topics related to thyroid gland physiology (e.g., the impact of iodine deficiency on thyroid function) for group research and presentations. Encourage students to ask questions and debate different perspectives.
NLHT 22.2	Toxic goiter, Thyroiditis	**Pathophysiology Diagrams**: Students create detailed diagrams showing the development and pathophysiological mechanisms of toxic goiter and thyroiditis. Use these diagrams to present to the class and explain the processes involved. **Clinical Case Discussions**: Provide case studies of patients with toxic goiter and different types of thyroiditis. Students diagnose, explain the clinical symptoms, suggest diagnostic tests, and propose treatment plans. **Laboratory Tests Analysis**: Analyze lab results for thyroid function tests (e.g., TSH, T3, T4 levels) in patients with toxic goiter and thyroiditis. Interpret the results and discuss their implications. **Group Presentations**: Assign groups to research and present on specific types of thyroiditis, detailing their etiology, clinical features, and treatment. Encourage discussions and Q&A sessions to foster deeper understanding. **Patient Education Role-play**: Students role-play as healthcare providers explaining the condition, treatment options, and lifestyle modifications to a patient with toxic goiter or thyroiditis. Focus on effective communication skills and patient-centric care.
NLHT 22.3	Neoplasm of Galaganda (thyroid) -Nidana, Samprapti, Lakshana and Chikitsa	**Etiology Analysis**: Students create a chart or mind map outlining the different causes and risk factors for thyroid

		neoplasms. Group discussion on how these factors are viewed in both modern medicine and Ayurveda. **Clinical Case Presentations**: Provide case studies of patients with thyroid neoplasms. Students diagnose the condition, describe the clinical features, and suggest both modern and Ayurvedic treatment plans. **Treatment Debate**: Organize a debate on the pros and cons of conventional versus Ayurvedic treatment modalities for thyroid neoplasms. Encourage students to research and present evidence-based arguments.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 22.1	Examination of Galaganda (thyroid gland)	**Steps:** **Preparation:** Gather materials: Stethoscope, a glass of water, and gloves. Ensure the patient is comfortably seated with the neck exposed. **Inspection:** Observe the neck for any visible swelling, asymmetry, or scars. Ask the patient to swallow a sip of water while you watch for upward movement of the thyroid gland. **Palpation:** Stand behind the patient and place your fingers on either side of the trachea. Ask the patient to swallow again and feel for the thyroid gland's consistency and movement. Gently palpate for any nodules or tenderness. Assess each lobe individually and the isthmus for size and texture. **Auscultation:** Using the stethoscope, listen over the thyroid gland for any bruits, which could indicate increased vascularity.

		Special Tests: Perform Pemberton's sign by asking the patient to raise their arms above their head for a few minutes. Observe for facial congestion or cyanosis, indicating thoracic inlet obstruction. **Evaluation:** Note any findings such as goiter, nodules, or irregularities and any systemic findings. Document the size, texture, and presence of any abnormalities. **Discussion:** Explain the findings to the patient and discuss any necessary further tests or referrals.
NLHP 22.2	Examination of the Gala (Neck)	**Steps:** **Preparation:** Gather materials: Stethoscope, gloves, and a flashlight. Ensure the patient is comfortably seated with neck exposed. **Inspection:** Observe the neck for symmetry, swelling, scars, or visible pulsations. Note any abnormalities such as masses or skin changes. **Palpation:** Palpate the lymph nodes: Start with preauricular, posterior auricular, occipital, submental, submandibular, cervical, and supraclavicular nodes. Check for tenderness, size, consistency, and mobility. Palpate the thyroid gland by placing your fingers on either side of the trachea and asking the patient to swallow. Assess the carotid arteries for pulse and any abnormal thrills. **Auscultation:** Use a stethoscope to listen over the carotid arteries for bruits, indicating turbulent blood flow. Listen over the thyroid gland for any vascular sounds. **Range of Motion:** Ask the patient to perform neck movements: flexion, extension, lateral bending, and rotation. Note any pain, limitation, or discomfort.

		Neurological Examination: Check for muscle strength and tone in the neck muscles. Assess the cranial nerves by testing functions such as shrugging shoulders (CN XI - Accessory nerve). **Documentation:** Record all findings, noting any abnormalities or asymmetries. Discuss potential next steps or referrals if needed.
NLHP 22.3	Examination of a Lymphatic system	**Steps:** **Preparation:** Gather materials: Gloves, a stethoscope, and a measuring tape. Ensure the patient is comfortably seated or lying down. **Inspection:** Observe the skin for any swelling, redness, or visible lymph nodes. Note any asymmetry or obvious abnormalities. **Palpation:** Systematically palpate the lymph nodes: cervical, axillary, inguinal, supraclavicular, mammary, and popliteal. Check for size, shape, size, consistency, mobility, tenderness, and warmth. Document any enlarged lymph nodes. **Special Techniques:** For deep lymph nodes, such as the retroperitoneal, consider imaging studies like ultrasound or CT scan. Assess the spleen as it is part of the lymphatic system by palpating the left upper quadrant of the abdomen. **Auscultation:** Use a stethoscope to listen over the lymph nodes for any abnormal bruits, which could indicate vascular anomalies. **Assessment of Associated Structures:** Evaluate the tonsils, spleen, and thymus if accessible. Check for signs of systemic infection or lymphatic diseases.

		Documentation: Record all findings, including any abnormalities in size, shape, or tenderness of the lymph nodes. Plan further investigations if any pathological findings are noted.

Topic 23 Sira Vikara (Venous Disorders) (LH :3 NLHT: 1 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	Define Surgical anatomy and pathology of key surgical regions (e.g., abdomen, thorax, pelvis, limbs) and their role in the diagnosis and management of Venous diseases. Discuss the principles of biopsy, excision, and histopathological e valuation.	CK	MK	K	PL,L&GD,PER,L_VC	PA, C-VC, T-CS,SA,VV-Viva	F&S	II	V-RS,V-KS,V-RS	NLHT23.1
CO1, CO2, CO4	Define Etiopathogenesis, Clinical feature, Investigations, Differential Diagnosis, complications and management of Superficial and Deep venous Thrombosis	CK	MK	K	L&PPT,L	PA,P-VIVA,VV-Viva,PRN	F&S	II	-	LH
CO1, CO2, CO4	Define Etiopathogenesis, Clinical Features, Investigations, Differential Diagnosis, complications, and management of Varicose veins	CK	MK	K	PL,SDL,LRI,FC,L_VC	CL-PR,M-CHT,VV-Viva,P-VIVA,PRN	F&S	II	-	LH
CO1, CO2, CO4	Demonstrate varicose veins, evaluate their severity, and their implications for treatment and patient care.	PSY-GUD	MK	K	PL,TUT,DIS,PT,CD	Mini-CEX, CHK,P-MOD,P-VIVA, CL-PR	F&S	II	-	NLHP23.1
CO1, CO2, CO4	Describe Etiopathogenesis, Clinical features, Investigations, Differential Diagnosis, Complications (Varicose eczema, Lipodermosclerosis), and Management of Siraja Vrana (Venous Ulcers).	CK	MK	K	L_VC,L,L&PPT,PER	INT,T-CS, C-VC,C-INT,P-VIVA	F&S	II	-	LH

CO1, CO2, CO4	Differentiate between unilateral and bilateral lower limb edema, identifying underlying causes and appropriate management strategies.	CAN	MK	KH	PT,SDL,CD,CBL,L_VC	PRN, C-VC,CL-PR,P-VIVA,P-EXAM	F&S	II	-	NLHP23.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 23.1	Surgical Anatomy & Surgical Pathology	**Cadaveric Dissection**: Engage students in hands-on dissection to explore surgical anatomy. Highlight critical anatomical landmarks and discuss their relevance in surgical procedures. **Surgical Case Studies**: Present real-life surgical cases. Have students diagnose conditions based on anatomical and pathological findings and suggest surgical interventions. **Pathology Reports Analysis**: Review and analyze pathology reports from biopsy and surgical specimens. Discuss the implications of the findings and their impact on patient management. **Anatomy and Pathology Correlation**: Create charts or models showing the correlation between anatomical structures and pathological processes. Discuss how anatomical variations can influence disease presentation and surgical outcomes.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 23.1	Examination of Varicose Vein	**Steps:** Preparation: Gather materials: Tape measure, stethoscope, gloves, and a Doppler ultrasound (if available). Ensure the patient is standing up during the inspection and palpation for a more accurate assessment.

		Inspection: Observe the legs for visible signs of varicose veins, noting the location, size, and pattern. Look for skin changes such as discoloration, ulcers, or dermatitis. Palpation: Gently palpate the varicose veins to assess for tenderness, temperature, and firmness. Check for any signs of thrombosis or skin changes around the veins. Special Tests: Trendelenburg Test: Elevate the patient's leg, apply a tourniquet to the thigh, and have the patient stand up. Observe for rapid filling of veins which indicates valvular incompetence. Doppler Ultrasound: If available, use to evaluate venous flow and valve function. Measure and Document: Measure the circumference of the affected areas at different levels of the leg to track swelling and varicosity changes. Document findings including the severity, pattern, and any associated symptoms. Patient Discussion: Explain the findings to the patient. Discuss lifestyle changes, compression stockings, and potential medical or surgical treatments if necessary.
NLHP 23.2	Examination and differential diagnosis of unilateral and bilateral lower limb edema	**Steps:** **Preparation:** Gather materials: Measuring tape, stethoscope, and gloves. Ensure the patient is comfortably seated or lying down with legs exposed. **Initial History:** Take a thorough history including onset, duration, and associated symptoms (pain, redness, warmth, shortness of breath). Ask about medical history (heart failure, liver disease, kidney disease, venous insufficiency, or recent trauma). **Inspection:** Observe both lower limbs for swelling, asymmetry, discoloration, skin changes (ulceration, redness,

cyanosis).
Note any visible varicose veins, surgical scars, or signs of infection.
Palpation:
Gently palpate the swollen area to assess pitting (press the skin for a few seconds and observe the indentation).
Compare temperature between limbs to identify increased warmth (suggesting infection or inflammation).
Assess for tenderness, firmness, and extent of edema.
Measurement:
Measure the circumference of both lower limbs at fixed points (ankles, calves, and thighs).
Compare measurements to identify asymmetry and severity of swelling.
Auscultation:
Listen over the femoral and popliteal arteries for bruits, indicating vascular abnormalities.
Special Tests:
Homan's Sign: Dorsiflex the foot to check for calf pain (suggesting deep vein thrombosis).
Venous Doppler Ultrasound: If available, use to assess venous flow and identify obstruction or reflux.
Differential Diagnosis:
Unilateral Edema:
Deep vein thrombosis
Cellulitis or infection
Trauma or injury
Venous insufficiency
Tumor or obstruction
Bilateral Edema:
Heart failure
Chronic kidney disease
Liver cirrhosis
Chronic venous insufficiency
Hypoalbuminemia

Topic 24 Dhamani Vikara (Arterial disorders) (LH :3 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	Define Etiopathogenesis, Clinical Features, Investigations, Differential diagnosis, complications, and management of Aneurysm.	CK	MK	K	L_VC,L&GD,L&PPT,L	CL-PR,P-VIVA,PRN,T-CS,VV-Viva	F&S	II	-	LH
CO1, CO2, CO4	Define Etiopathogenesis, CF, Investigations, DD, Complications and management of Burger's disease	CK	MK	K	L&GD, L,L&PPT,DIS,CD	P-VIVA,CL-PR,PA,M-POS,VV-Viva	F&S	II	-	LH
CO1, CO2, CO4	Define Etiopathogenesis, CF, Investigations, DD, Complications and management of Raynaud's disease	CK	MK	K	L,L_VC,L&PPT,L&GD	VV-Viva,CL-PR,P-VIVA,T-CS,COM	F&S	II	-	LH
CO1, CO2, CO4	Demonstrate accurate assessment for peripheral vascular diseases, including arterial and venous disorders, and differentiate between them for appropriate diagnosis and management.	PSY-GUD	MK	K	SIM,D-M,D,CD,DIS	P-VIVA,INT,P-EXAM, C-VC,C-INT	F&S	II	-	NLHP24.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

NLHP 24.1	Examination of the Dhamani Vikara (peripheral vascular diseases)	**Steps:** **Preparation:** Gather materials: Stethoscope, Doppler ultrasound (if available), measuring tape, and gloves. Ensure the patient is comfortably seated or lying down with the legs exposed. **Initial History:** Take a thorough history including symptoms (pain, cramping, discoloration), duration, and any aggravating or relieving factors. Ask about medical history (diabetes, hypertension, smoking, hyperlipidemia). **Inspection:** Observe the skin for color changes, ulcers, hair loss, and atrophy. Note any visible varicose veins, edema, or signs of infection. **Palpation:** Palpate pulses (radial, femoral, popliteal, posterior tibial, and dorsalis pedis) and compare bilaterally. Assess the temperature of the skin, checking for cold extremities which may indicate arterial insufficiency. Palpate for tenderness, particularly in the calf muscles. **Measurement:** Measure limb circumference at fixed points (ankles, calves, and thighs) to assess for swelling or asymmetry. **Special Tests:** **Ankle-Brachial Index (ABI):** Compare blood pressure in the ankle with the arm using a Doppler to detect peripheral artery disease. **Buerger's Test:** Elevate the legs and observe for pallor. Lower the legs and check for reactive hyperemia. **Venous Doppler Ultrasound:** If available, use to assess for venous reflux or deep vein thrombosis. **Capillary Refill Time:** Press on the nail bed and observe the time taken for color to return; prolonged refill time may indicate poor perfusion. **Auscultation:** Listen for bruits over major arteries which may indicate stenosis. **Documentation and Differential Diagnosis:**

		Record all findings, noting any abnormalities in pulses, color, temperature, or swelling. Consider differential diagnoses such as peripheral artery disease, chronic venous insufficiency, lymphedema, or deep vein thrombosis.

Topic 25 Snayu Vikara (Diseases of tendons and ligaments) (LH :2 NLHT: 0 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	Define Diseases of tendons and ligaments – Tendonitis, tenosynovitis, ganglion and their management Dupuytren's contracture	CK	MK	K	L&PPT ,L&GD, PL,L,B L	PP-Practica l,P-EXAM, T-CS,PRN, CL-PR	F&S	II	-	LH
CO1, CO2, CO4	Define Amputation, Classifications, Indication & Contraindications	CK	MK	K	L&GD, L_VC,L &PPT ,L	T-CS,PA,P RN,SA,VV-Viva	F&S	II	-	LH
CO1, CO2, CO3, CO4, CO5	Demonstration of peripheral vascular diseases, perform amputatio ns when necessary, and manage potential complications.	PSY-MEC	MK	K	CBL,T UT,DIS, RLE,PS M	SBA,VV-V iva,DEB,P RN,P-EXAM	F&S	II	-	NLHP25.1
CO1, CO2, CO4	Demonstrate the diagnosis of diseases affecting the muscles, liga ments, tendons, and fascia, understanding their function, and identifying any pathological conditions.	PSY-MEC	DK	K	PER,DI S,D,CD, D-BED	VV-Viva,M -MOD,CL-PR,Log book,OSCE	F&S	II	-	NLHP25.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 25.1	Techniques of Amputation & Complications with examples of individual amputation	**Steps:** Preparation: Gather materials: Stethoscope, Doppler ultrasound, measuring tape, gloves, and surgical instruments. Ensure the patient is comfortably positioned with the affected limb exposed. Initial History: Take a thorough history including symptoms (pain, cramping, discoloration), duration, and any aggravating or relieving factors. Ask about medical history (diabetes, hypertension, smoking, hyperlipidemia). Inspection: Observe the skin for color changes, ulcers, hair loss, and atrophy. Note any visible varicose veins, edema, or signs of infection. Palpation: Palpate pulses (radial, femoral, popliteal, posterior tibial, and dorsalis pedis) and compare bilaterally. Assess the temperature of the skin, checking for cold extremities which may indicate arterial insufficiency. Palpate for tenderness, particularly in the calf muscles. Measurement: Measure limb circumference at fixed points (ankles, calves, and thighs) to assess for swelling or asymmetry. Special Tests: Ankle-Brachial Index (ABI): Compare blood pressure in the ankle with the arm using a Doppler to detect peripheral artery disease. Buerger’s Test: Elevate the legs and observe for pallor. Lower the legs and check for reactive hyperemia. Venous Doppler Ultrasound: If available, use it to assess for venous reflux or deep vein thrombosis. Capillary Refill Time: Press on the nail bed and observe the time taken for color to return; prolonged refill time may indicate poor perfusion. Auscultation:

		Listen for bruits over major arteries which may indicate stenosis. Amputation Techniques: Preoperative Planning: Assess the viability of the limb, plan the level of amputation, and prepare the patient. Surgical Procedure: Perform the amputation with an aseptic technique, ensuring proper hemostasis and shaping the stump for prosthetic fitting. Postoperative Care: Monitor for complications, manage pain, and initiate rehabilitation. Complications: Infection: Monitor for signs of infection and treat promptly with antibiotics. Phantom Limb Sensation: Educate the patient about phantom limb sensations and provide appropriate interventions. Residual Limb Pain: Manage pain with medications and physical therapy. Joint Contractures: Prevent contractures with proper positioning and physical therapy. Deep Vein Thrombosis (DVT): Use anticoagulants and compression therapy to prevent DVT.
NLHP 25.2	Examinations of Diseases of Snayu Vikara (Muscle, Ligaments, Tendon and Fascia)	**Steps:** Preparation: Gather materials: Stethoscope, measuring tape, goniometer, gloves, and reflex hammer. Ensure the patient is comfortably seated or lying down, with the affected area exposed. Initial History: Take a thorough history, including symptoms (pain, stiffness, weakness, swelling), onset, and any aggravating or relieving factors. Ask about medical history (trauma, overuse injuries, occupational stress, systemic diseases like rheumatoid arthritis or lupus). Inspection: Observe the affected area for swelling, redness, bruising, atrophy, or deformity. Note any changes in posture or gait. Palpation: Gently palpate the muscles, ligaments, tendons, and fascia for tenderness, swelling, warmth, and abnormalities.

		Assess muscle tone, bulk, and tenderness. Check for crepitus (a crackling sound) in the tendons during movement. Range of Motion: Ask the patient to perform active and passive movements to assess the range of motion. Use a goniometer to measure joint angles accurately. Note any limitations, pain, or discomfort during movement. Strength Testing: Evaluate muscle strength using a grading system (0-5) by asking the patient to resist your movements. Compare strength in both limbs to identify asymmetry. Special Tests: Muscle: Perform tests like manual muscle testing (MMT) and electromyography (EMG) if available. Ligament: Conduct stress tests (e.g., Lachman test for ACL integrity) to assess ligament stability. Tendon: Use the Thompson test for Achilles tendon rupture and other specific tests for different tendons. Fascia: Check for signs of plantar fasciitis by palpating the sole and assessing for pain. Neurological Examination: Assess reflexes using a reflex hammer. Check for sensation and motor function in the affected area. Imaging and Further Tests: Recommend imaging studies like X-rays, MRI, or ultrasound to confirm the diagnosis and assess the extent of injury. Documentation: Record all findings, noting any abnormalities in muscle strength, degree of motion, and special tests. Discuss potential diagnoses and further investigations if needed.

Topic 26 AIDS - HIV and Hepatitis (B and C) (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1,	Describe Care of AIDS - HIV and hepatitis infected (Hepatitis B	CC	MK	K	CD,L_V	C-VC,T-C	F&S	II	V-RN	LH

CO2, CO3, CO4	and C) patients.				C,SDL, L&PPT ,L	S,PA,VV-Viva,SA				
CO1, CO3, CO4	Demonstrate to ensure the safety of healthcare workers and patients by implementing appropriate infection control measures when dealing with HIV and Hepatitis B and C infected patients.	PSY-GUD	MK	KH	L_VC,DIS,SDL, PER,PT	PRN,SA,PA,P-VIVA, VV-Viva	F&S	II	-	NLHP26.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 26.1	Safety Precautions in the patient of HIV and hepatitis infected Hepatitis B and C Patients	**Steps:** Preparation: Gather materials: Personal protective equipment (PPE) including gloves, masks, gowns, and eye protection. Ensure availability of hand hygiene supplies (hand sanitizer, soap, and water). Hand Hygiene: Perform hand hygiene before and after patient contact. Use alcohol-based hand rub or wash hands with soap and water for at least 20 seconds. Use of Personal Protective Equipment (PPE): Wear gloves when coming into contact with blood, body fluids, secretions, or contaminated items. Use masks, gowns, and eye protection if there is a risk of splashes or sprays of blood or body fluids. Safe Injection Practices: Use sterile, single-use needles and syringes for injections. Dispose of needles and syringes in puncture-resistant sharps containers immediately after use. Environmental Cleaning: Clean and disinfect surfaces and equipment that may have come into contact with blood or body fluids. Use appropriate disinfectants and follow the manufacturer's instructions for use.

		Patient Placement: Place patients with known or suspected infectious diseases in private rooms or cohorts with patients with the same infection. Limit patient movement within the facility to reduce the risk of transmission. Respiratory Hygiene and Cough Etiquette: Encourage patients to cover their mouth and nose with a tissue when coughing or sneezing. Provide tissues and no-touch receptacles for disposal. Safe Handling of Linen and Waste: Handle soiled linen with minimal agitation to avoid contamination of air, surfaces, and persons. Dispose of medical waste, including contaminated linen, in designated containers. Education and Training: Educate healthcare workers on infection control practices and the importance of adhering to safety precautions. Provide training on the proper use of PPE and safe handling of potentially infectious materials. Reporting and Follow-Up: Report any exposure incidents (needlestick injuries, splashes) immediately to the designated person or health care professional. Follow up with appropriate post-exposure prophylaxis and medical evaluation.

Paper 2 (Shalya Tantra Chikitsa Siddhanta)										
A3 Course out come	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 27 Bhagna (Skeletal Injuries) (LH :3 NLHT: 5 NLHP: 8)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**

CO1, CO2, CO4	Describe Prakara of Bhagna including pathological fracture, Samanya Lakshana, Upadrava, and Chikitsa of Bhagna	CC	MK	K	X-Ray, L&GD, L&PPT ,L,CD	VV-Viva,CL-PR,PP-Practical,COM,PRN	F&S	II	-	LH
CO1, CO2, CO4	Analyze the anatomical structure, biomechanical mechanisms, clinical presentation, diagnosis, and management of scapular and clavicular fractures.	CC	MK	K	X-Ray,SDL,DIS, D-M,L_VC	VV-Viva,SA,P-CASE,Logbook,PP-Practical	F&S	II	-	NLHT27.1
CO1, CO2, CO4	Define Clinical features, Diagnosis, Complications, and Management - humerus, radius, ulna,	CK	MK	K	L,L_VC ,D,TUT, X-Ray	VV-Viva,PRN,P-EXAM,PP-Practical,P-VIVA	F&S	II	-	LH
CO1, CO2, CO4	Analyze the anatomical structure, fracture mechanisms, clinical presentation, diagnosis, management, and rehabilitation strategies for femur and patella fractures.	CC	MK	K	L&GD, PBL,SIM,PER, PL	P-VIVA,Logbook,SA,PRN,PA	F&S	II	-	NLHT27.2
CO1, CO2, CO4	Examine the anatomical features, assess fracture mechanisms, interpret clinical presentations, formulate diagnostic approaches, implement management strategies, and integrate rehabilitation and physiotherapy principles for tibia and pelvis fractures.	CK	MK	K	X-Ray, CBL,DIS,RP,PER	P-VIVA,COM,P-EXAM,SA,PRN	F&S	II	-	NLHT27.3
CO1, CO2, CO4	Describe the signs and symptoms of joint dislocations. Identify common joints prone to dislocation (e.g., shoulder, knee, hip) and discuss their signs and symptoms, types, diagnostic techniques, management, and complications.	CC	MK	K	X-Ray, D,SY,PER,L_VC	VV-Viva,PA,DEB,PP-Practical, C-VC	F&S	II	-	NLHT27.4
CO1,	Analyze the anatomical structures, investigate the mechanisms,	CAN	MK	K	PER,L_	VV-Viva,P	F&S	II	-	NLHT27.5

CO2, CO4	classify the types, interpret the clinical signs, apply diagnostic techniques, devise management strategies, evaluate complications, and integrate rehabilitation and physiotherapy for shoulder and elbow dislocations.				VC,TUT,PL,SDL	P-Practical, INT,P-EXAM,PRN				
CO1, CO2, CO4	Explain how to assess accurately and diagnose bone and joint injuries, ensuring appropriate diagnosis and treatment.	PSY-GUD	MK	K	DIS,TUT	PRN,P-EXAM,P-ID	F	II	-	NLHP27.1
CO1, CO2, CO4	Explain how to assess accurately and diagnose injuries of the Wrist, Elbow, Shoulder, Ankle, Knee, and Hip joints, ensuring appropriate diagnosis and treatment.	CAN	MK	KH	PER,DIS,CD,SIM,D-BED	PRN,P-VIVA,CL-PR, Mini-CEX,CHK	F&S	II	-	NLHP27.2
CO1, CO2, CO4	Demonstrate and provide hands-on training on the application of skin and skeletal traction, ensuring proper technique and safety measures.	PSY-GUD	MK	KH	D-BED, PER,BL,RP,D	DEB,CL-PR,VV-Viva, P-VIVA,PRN	F&S	II	-	NLHP27.3
CO1, CO2, CO4	Demonstrate and provide immediate and appropriate first aid care to patients with fractures, minimizing complications and ensuring proper stabilization until further treatment can be obtained.	PSY-GUD	MK	K	CBL,SDL,DIS,PER,SIM	P-EXAM,P-VIVA, C-VC,INT,PRN	F&S	II	-	NLHP27.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 27.1	Fracture of scapula & clavicle	**Anatomy Lab**: Hands-on sessions with anatomical models to study the scapula and clavicle. Identify and label anatomical landmarks important for understanding fractures. Mechanism of Injury Workshop: Use case studies to explore different injury mechanisms. Students discuss and simulate scenarios that could lead to fractures. Clinical Examination Practice: Role-play patient scenarios to practice identifying signs and symptoms of fractures. Discuss differential diagnoses based on clinical presentations.

		Radiology Session: Review and interpret X-rays and CT scans of scapula and clavicle fractures. Discuss how to identify different types of fractures and their implications. Treatment Planning: Develop treatment plans for various fracture scenarios. Discuss the pros and cons of conservative vs. surgical management. Rehabilitation Planning: Create rehabilitation plans for patients post-fracture. Discuss the timeline and goals of physiotherapy sessions.
NLHT 27.2	Clinical features, Diagnosis, Complications, and Management of Femur & Patella	**Anatomy Lab**: Hands-on sessions with anatomical models or cadaveric specimens to study the femur and patella. Identify and label anatomical landmarks important for understanding fractures. **Mechanism of Injury Workshop**:Use case studies to explore different injury mechanisms. Students discuss and simulate scenarios leading to fractures. **Clinical Examination Practice**:Role-play patient scenarios to practice identifying signs and symptoms of fractures. Discuss differential diagnoses based on clinical presentations. **Radiology Session**:Review and interpret X-rays, MRIs, and CT scans of femur and patella fractures. Discuss how to identify different types of fractures and their implications. **Treatment Planning**:Develop treatment plans for various fracture scenarios. Discuss the pros and cons of conservative vs. surgical management. **Rehabilitation Planning**:Create rehabilitation plans for patients post-fracture. Discuss the timeline and goals of physiotherapy sessions.
NLHT 27.3	Clinical features, Diagnosis, Complications, and Management of Tibia and Pelvic bones	**Clinical Examination Workshops**: Practice physical examination techniques to identify signs and symptoms of tibia and pelvis conditions. Use mannequins or simulated patients for hands-on learning.

		Radiology Sessions: Review and interpret radiographic images of tibia and pelvis fractures and pathologies. Discuss case studies to apply diagnostic criteria. **Case Studies and Group Discussions**: Present real-life case studies with detailed histories and diagnostic data. Group discussions to develop diagnosis, treatment plans, and management strategies. **Complication Analysis**: Analyze potential complications from case studies. Discuss management strategies for preventing and addressing these complications. **Treatment Planning**: Develop detailed treatment plans for various scenarios involving tibia and pelvis fractures or diseases. Debate the pros and cons of conservative vs. surgical management options. **Rehabilitation Workshops**: Create and discuss rehabilitation protocols for post-fracture care. Hands-on sessions on physiotherapy techniques and their importance in recovery.
NLHT 27.4	Dislocation of joints	**Anatomy and Physiology Review**: Conduct hands-on sessions with anatomical models to study the joints and understand their structures. Highlight key anatomical features relevant to dislocation. **Clinical Examination Practice**: Role-play patient scenarios to identify clinical signs and symptoms of various joint dislocations. Discuss the differential diagnosis based on clinical presentation. **Radiology Interpretation**: Review X-rays and MRIs of joint dislocations. Practice interpreting these images to diagnose different types of dislocations. **Case Study Analysis**: Present real-life case studies of joint dislocations. Students analyze the cases to identify clinical features, diagnostic methods, and possible complications.

NLHT 27.5	Management of Shoulder & Elbow Dislocation	**Anatomy Review Sessions**: Use anatomical models or cadaveric specimens to study the shoulder and elbow joints. Identify key anatomical landmarks relevant to dislocation and reduction. **Clinical Examination Practice**: Role-play scenarios to practice recognizing signs and symptoms of shoulder and elbow dislocations. Discuss differential diagnoses and perform physical examinations. **Radiology Workshops**: Review and interpret X-rays and MRIs of shoulder and elbow dislocations. Practice identifying different types of dislocations and associated injuries. **Reduction Technique Demonstrations**: Demonstrate various reduction techniques on mannequins or models. Students practice these techniques under supervision to ensure proper understanding and execution. **Case Study Discussions**: Analyze case studies of patients with shoulder and elbow dislocations. Develop comprehensive management plans, including reduction, post-reduction care, and rehabilitation.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 27.1	Examination of the Bone and Joint injuries	**Steps:** **Preparation:** Gather materials: Gloves, stethoscope, measuring tape, goniometer, and reflex hammer. Ensure the patient is comfortably seated or lying down, with the affected area exposed. **Initial History:** Take a thorough history, including the mechanism of injury, symptoms (pain, swelling, deformity), and any previous injuries or conditions. Ask about medical history, including bone or joint disorders (e.g., osteoporosis, arthritis). **Inspection:**

		Observe the affected area for swelling, bruising, deformity, or any visible wounds. Note any asymmetry compared to the unaffected side. **Palpation:** Gently palpate the bone and joint for tenderness, swelling, and temperature. Assess for crepitus (grating sensation) which may indicate a fracture. Check for joint effusion (fluid buildup). **Range of Motion:** Ask the patient to perform active and passive movements to assess the range of motion. Use a goniometer to measure joint angles accurately. Note any limitations, pain, or instability during movement. **Strength Testing:** Evaluate muscle strength around the affected joint using a grading system (0-5). Compare strength in both limbs to identify asymmetry. **Special Tests:** Perform specific tests for different joints: e.g., Lachman test for ACL injuries in the knee, Hawkins-Kennedy test for shoulder impingement. Assess for ligamentous stability, meniscal injuries, and other soft tissue damage. **Neurological Examination:** Assess sensory and motor function to rule out nerve involvement. Check reflexes using a reflex hammer. **Imaging and Further Tests:** Recommend imaging studies such as X-rays, MRI, or CT scans to confirm diagnosis and assess the extent of the injury. Consider blood tests if infection or inflammatory conditions are suspected. **Documentation:** Record all findings, noting any abnormalities in bone alignment, joint stability, and range of motion. Discuss potential diagnoses and further investigations if needed.
NLHP 27.2	Examination of Injuries about Individual Joints	**wrist Joint**

Steps:

1. **Preparation:**
    - Gather materials: Gloves, measuring tape, goniometer, and reflex hammer.
    - Ensure the patient is comfortably seated with the wrist exposed.
2. **Inspection:**
    - Observe for swelling, bruising, deformity.
    - Note any asymmetry or skin changes.
3. **Palpation:**
    - Palpate the wrist for tenderness, swelling, and crepitus.
    - Check for temperature differences.
4. **Range of Motion:**
    - Assess active and passive range of motion (flexion, extension, radial/ulnar deviation).
5. **Special Tests:**
    - Finkelstein's test for De Quervain's tenosynovitis.
    - Tinel's sign and Phalen's test for carpal tunnel syndrome.

Elbow Examination

Steps:

1. **Preparation:**
    - The patient is seated with the elbow exposed.
2. **Inspection:**
    - Check for swelling, deformity, and scars.
    - Note asymmetry.
3. **Palpation:**
    - Palpate for tenderness, and swelling around the joint.
    - Check for temperature differences.
4. **Range of Motion:**

- Assess flexion, extension, supination, pronation.

5. **Special Tests:**
    - Varus and valgus stress tests for ligament integrity.
    - Tinel's sign for ulnar nerve compression.

Shoulder Examination
Steps:

1. **Preparation:**
    - The patient is seated with their shoulder exposed.
2. **Inspection:**
    - Observe for atrophy, asymmetry, and deformity.
3. **Palpation:**
    - Palpate for tenderness in the Shoulder girdle and acromioclavicular joint.
    - Check for warmth and swelling.
4. **Range of Motion:**
    - Assess active/passive movements: flexion, extension, abduction, adduction, internal/external rotation.
5. **Special Tests:**
    - Hawkins-Kennedy test for impingement.
    - Apprehension test for instability.
    - Drop arm test for rotator cuff tear.

Knee Examination
Steps:

1. **Preparation:**
    - Patient seated or lying with knee exposed.
2. **Inspection:**

- Check for swelling, deformity, and scars.
- Note asymmetry.

3. **Palpation:**
    - Palpate for tenderness, warmth, and swelling.
4. **Range of Motion:**
    - Assess flexion and extension.
5. **Special Tests:**
    - Lachman test for ACL integrity.
    - McMurray test for meniscal injury.
    - Varus and valgus stress tests for ligament stability.

Hip Examination

Steps:

1. **Preparation:**
    - The patient is lying down with the hip exposed.
2. **Inspection:**
    - Observe for asymmetry, atrophy, and deformity.
3. **Palpation:**
    - Palpate for tenderness in the hip joint, greater trochanter.
    - Check for warmth and swelling.
4. **Range of Motion:**
    - Assess flexion, extension, abduction, adduction, internal/external rotation.
5. **Special Tests:**
    - Trendelenburg test for gluteal muscle strength.
    - FABER test for hip joint pathology.

Ankle Examination

Steps:

		1. **Preparation:** • Patient seated or lying with ankle exposed. 2. **Inspection:** • Check for swelling, bruising, and deformity. • Note asymmetry. 3. **Palpation:** • Palpate for tenderness, warmth, and swelling. 4. **Range of Motion:** • Assess dorsiflexion, plantarflexion, inversion, eversion. 5. **Special Tests:** • Anterior drawer test for ankle stability. • Thompson test for Achilles tendon rupture.
NLHP 27.3	Hands on training on traction (skin and skeletal)	**Steps:** 1. **Preparation:** • Gather materials: Traction equipment (skin traction setup, skeletal traction setup), gloves, gauze, bandages, weights, and a traction table. • Ensure the patient is comfortably positioned on the traction table. 2. **Skin Traction:** • **Preparation:** ◦ Explain the procedure to the patient and obtain informed consent. ◦ Gather all necessary materials and ensure they are sterile. • **Application:** ◦ Clean and dry the skin area where traction will be applied. ◦ Apply adhesive tape to the skin to create a secure base. ◦ Attach the traction bandage to the adhesive tape and connect it to the traction setup. ◦ Gradually apply weights to achieve the desired traction force. ◦ Monitor the patient for any signs of discomfort or complications. 3. **Skeletal Traction:**

		• **Preparation:** ◦ Explain the procedure to the patient and obtain informed consent. ◦ Gather all necessary materials and ensure they are sterile. • **Application:** ◦ Position the patient on the traction table and align the affected limb. ◦ Insert a pin or wire into the bone under sterile conditions. ◦ Attach the traction setup to the pin or wire and gradually apply weights to achieve the desired traction force. ◦ Monitor the patient for any signs of discomfort or complications. 4. **Monitoring and Care:** • Regularly check the traction setup to ensure it is functioning correctly. • Monitor the patient for signs of infection, pressure sores, or nerve damage. • Adjust weights and traction as needed based on the patient's condition and progress. 5. **Documentation:** • Record all steps taken during the application of traction, including weights used, patient positioning, and any complications encountered. • Document the patient's response to traction and any changes in their condition.
NLHP 27.4	First aid management of fracture cases	**Steps:** 1. **Preparation:** • Gather materials: First aid kit, sterile gauze, bandages, splints (or improvised splints like cardboard), cold packs, gloves. • Ensure the patient is in a safe and stable environment. 2. **Initial Assessment:** • Perform a primary survey (ABCs: Airway, Breathing, Circulation) to ensure no life-threatening conditions. • Assess the patient for signs of shock (pale skin, rapid pulse, shallow breathing). 3. **Immobilization:** • **Identify the fracture:** Look for swelling, deformity, bruising, laceration etc or abnormal movement.

- **Support the injured area:** If possible, support the fracture with your hands to prevent further movement.
- **Apply a splint:** Use a splint to immobilize the joints above and below the fracture site.
    - For an upper limb fracture, support the arm in a sling.
    - For a lower limb fracture, splint the leg in a straight position using rigid materials.
- **Secure the splint:** Use bandages or cloth strips to secure the splint without cutting off circulation.

4. **Pain Management:**
    - Apply a cold pack to the affected area to reduce swelling and pain. Do not apply ice directly to the skin; use a cloth or towel as a barrier.
5. **Wound Care (if open fracture):**
    - Cover any open wounds with sterile gauze to prevent infection.
    - Avoid trying to push any protruding bones back into place.
6. **Monitor and Reassure:**
    - Continuously monitor the patient's vital signs and condition.
    - Keep the patient calm and reassured.
7. **Transport to Medical Facility:**
    - Arrange for transport to a medical facility as quickly and safely as possible.
    - Avoid unnecessary movement of the injured limb during transport.

Topic 28 Asthi Sandhi Vikara (Diseases of Bone and Joints) (LH :2 NLHT: 2 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO5	Describe Aetiopathogenesis, Classification, Clinical features, Diagnosis, and Complications of Osteomyelitis	CAP	MK	K	L&PPT ,L	OSPE,P-CASE,PRN, OSCE,P-EXAM	F&S	II	H-KC,V-RN	LH
CO1, CO2, CO4	Explain Aetiopathogenesis, Classification, Clinical features, Diagnosis, Treatment and Complications of Cysts, Tumours	CC	DK	K	L_VC,L &GD,PT,TUT,	P-VIVA,P-EXAM,OSPE,CL-PR,	F&S	II	-	NLHT28.1

					CD	C-VC				
CO1, CO2, CO4	Explain Aetiopathogenesis, Classification, Clinical features, Diagnosis, Treatment, and Complications of Tuberculosis of bone.	CC	MK	K	L&PPT ,L	CL-PR,P-VIVA,QZ ,INT,PRN	F&S	II	-	LH
CO1, CO2, CO5	Explain Aetiopathogenesis, Classification, Clinical features, Diagnosis, Treatment, and Complications of Osteoporosis, Paget’s disease	CC	MK	K	FC,PBL ,SDL,C BL,D-BED	P-VIVA,P-PS,RK,VV-Viva,P-EXAM	F&S	II	-	NLHT28.2
CO1, CO2, CO4	Explain how to assess accurately and diagnose diseases affecting t he bones, ensuring proper diagnosis and management.	CC	MK	K	PBL,RP ,X-Ray, TUT,DI S	P-RP,QZ ,PRN, C-V C,P-EXAM	F&S	II	-	NLHP28.1
CO1, CO3, CO5	Explain how to assess accurately and diagnose joints for signs of pathology such as inflammation, degeneration, or structural abnormalities, enabling accurate diagnosis and effective treatment.	CC	MK	K	X-Ray, D-BED, CBL,PT ,DIS	OSPE,PRN, P-EXAM,P -VIVA,P-CASE	F&S	II	-	NLHP28.2
CO1, CO3, CO5	Explain how to assess accurately and diagnose the foot for any ab normalities, injuries, or conditions affecting the bones, joints, mus cles, tendons, and skin	CC	MK	K	D-M,PL ,DIS,X-Ray,PE R	VV-Viva,OSPE, C-VC,P-EX AM,PP-Practical	F&S	II	-	NLHP28.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 28.1	Diagnosis, Treatment & Complications of Cysts, Tumours of bones	1. **Case Study Analysis:** ◦ Provide detailed case studies of patients with bone cysts and tumors.

- Students identify and explain the aetiopathogenesis, classification, clinical features, diagnosis, and potential complications.
- Encourage group discussion and collaborative learning to explore different aspects of each case.

2. **Anatomical Models and Specimens:**
   - Use anatomical models and specimens to show the locations and structures of common bone cysts and tumors.
   - Allow students to examine these models to better understand the anatomical context.
3. **Interactive Presentations:**
   - Assign each student or group a specific type of bone cyst or tumor.
   - Have them create and present comprehensive reports covering all aspects, including visual aids like diagrams and slides.
4. **Diagnostic Imaging Workshops:**
   - Conduct workshops on the interpretation of diagnostic imaging (X-ray, CT scan, MRI, bone scans).
   - Provide sample images of bone cysts and tumors for analysis.
   - Discuss the role of imaging in diagnosing and differentiating between different types of lesions.
5. **Role-Playing and Simulation:**

- Use patient simulators or role-playing exercises to practice clinical examination techniques.
- Simulate scenarios where students must diagnose and suggest treatment plans for patients presenting with bone cysts or tumors.
- Provide feedback and discuss the decision-making process.

6. **Group Discussions and Debates:**
   - Organize group discussions or debates on topics related to bone cysts and tumors, such as treatment options and prognosis.
   - Encourage critical thinking and evidence-based argumentation.
7. **Problem-Based Learning (PBL):**
   - Implement PBL sessions where students are given clinical problems related to bone cysts or tumors.
   - Have them research and present their findings and proposed solutions.
   - Facilitate discussions to reinforce learning points.
8. **Guest Lectures and Expert Talks:**
   - Invite orthopedic oncologists and radiologists to give lectures on their experiences with bone cysts and tumors.
   - Allow students to ask questions and interact with the experts.

NLHT 28.2	Osteoporosis and Paget's disease	1. **Case Study Analysis:** ◦ Provide detailed case studies of patients with Osteoporosis and Paget’s disease. ◦ Students analyze and identify the clinical features, diagnosis, and potential complications. ◦ Facilitate group discussions to explore different aspects of each case. 2. **Interactive Presentations:** ◦ Assign each student or group a specific topic related to Osteoporosis or Paget’s disease. ◦ Have them create and present comprehensive reports covering clinical features, diagnostic methods, and complications, using visual aids like diagrams and slides. 3. **Group Discussions and Debates:** ◦ Organize group discussions or debates on topics related to Osteoporosis and Paget’s disease, such as prevention strategies and treatment options. ◦ Encourage critical thinking and evidence-based argumentation. 4. **Problem-Based Learning (PBL):** ◦ Implement PBL sessions where students are given clinical problems related to Osteoporosis and Paget’s disease. ◦ Have them research and present their findings and proposed solutions. ◦ Facilitate discussions to reinforce learning points.

		5. **Guest Lectures and Expert Talks:** ◦ Invite endocrinologists and orthopedic specialists to give lectures on their experiences with Osteoporosis and Paget's disease. ◦ Allow students to ask questions and interact with the experts. 6. **Complication Analysis:** ◦ Provide scenarios where students must identify and manage complications of Osteoporosis (e.g., fractures) and Paget's disease (e.g., bone deformities, arthritis). ◦ Discuss the long-term implications and management strategies
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 28.1	Demonstrate Examination of the diseases of bone	**Steps:** 1. **Preparation:** • Gather materials: Gloves, measuring tape, stethoscope, reflex hammer, and imaging requisition forms. • Ensure the patient is comfortably seated or lying down, with the affected area exposed. 2. **Initial History:** • Take a thorough history including symptoms (pain, swelling, deformity), duration, and any aggravating or relieving factors. • Ask about medical history, including osteoporosis, fractures, infections, or metabolic bone diseases. 3. **Inspection:**

- Observe the affected area for swelling, deformity, redness, or atrophy.
- Note any asymmetry, visible scars, or previous surgical marks.

4. **Palpation:**
    - Gently palpate the bones for tenderness, swelling, warmth, and irregularities.
    - Assess for crepitus (grating sensation) which may indicate fractures or degenerative changes.
5. **Range of Motion:**
    - Assess the range of motion in adjacent joints to check for any limitations or pain.
    - Use a goniometer to measure joint angles accurately.
6. **Strength Testing:**
    - Evaluate the strength of muscles attached to the affected bones by asking the patient to perform specific movements against resistance.
    - Compare strength on both sides.
7. **Special Tests:**
    - Perform specific tests to assess bone integrity:
        - **Percussion:** Tap the bone gently to check for tenderness or pain.
        - **Compression Test:** Apply gentle pressure along the bone axis to assess for pain indicating a fracture.
        - **Long Bone Palpation:** Palpate the entire length of long bones to identify any abnormalities or discontinuities.
8. **Neurological Examination:**
    - Assess sensation and motor function in the affected limb to rule out nerve involvement.
    - Check reflexes using a reflex hammer.
9. **Imaging and Further Tests:**
    - Recommend imaging studies such as X-rays, MRI, CT scans, or bone scans to confirm diagnosis and assess the extent of the disease.
    - Consider bone density testing (DEXA scan) for osteoporosis.
    - Conduct relevant blood tests to check for metabolic bone diseases (e.g., calcium, phosphate, alkaline phosphatase levels).
10. **Documentation:**
    - Record all findings, noting any abnormalities in structure, function, or movement.

		• Discuss potential diagnoses and further investigations if needed.
NLHP 28.2	Examination of pathological joints	**Steps:** 1. **Preparation:** • Gather materials: Gloves, measuring tape, goniometer, reflex hammer, and a penlight. • Ensure the patient is comfortably seated or lying down, with the affected joint exposed. 2. **Initial History:** • Take a thorough history, including symptoms (pain, stiffness, swelling), duration, and any aggravating or relieving factors. • Ask about medical history, including arthritis, trauma, infections, or autoimmune diseases. 3. **Inspection:** • Observe the joint for swelling, redness, deformity, or atrophy. • Note any asymmetry between joints. • Check for skin changes such as rashes or nodules. 4. **Palpation:** • Gently palpate the joint for tenderness, warmth, and swelling. • Assess for crepitus (grating sensation) which may indicate degenerative changes. • Evaluate the surrounding muscles and soft tissues for abnormalities. 5. **Range of Motion:** • Ask the patient to perform active movements, noting any pain or limitations. • Perform passive movements and measure the range of motion using a goniometer. • Compare the range of motion with the unaffected joint. 6. **Strength Testing:** • Evaluate muscle strength around the joint by asking the patient to perform specific movements against resistance. • Compare strength in both limbs. 7. **Special Tests:** • Perform specific tests based on the joint being examined:

		◦ **Knee:** Lachman test for ACL integrity, McMurray test for meniscal injuries. ◦ **Shoulder:** Hawkins-Kennedy test for impingement, Apprehension test for instability. ◦ **Elbow:** Varus and valgus stress tests for ligament integrity. ◦ **Wrist:** Phalen's test for carpal tunnel syndrome, Finkelstein's test for De Quervain's tenosynovitis. ◦ **Hip:** Trendelenburg test for gluteal muscle strength, FABER test for hip pathology. 8. **Neurological Examination:** • Assess sensation and motor function in the affected limb to rule out nerve involvement. • Check reflexes using a reflex hammer. 9. **Imaging and Further Tests:** • Recommend imaging studies such as X-rays, MRI, or CT scans to confirm diagnosis and assess the extent of joint pathology. • Consider blood tests to check for inflammatory markers or autoimmune diseases (e.g., ESR, CRP, rheumatoid factor). 10. **Documentation:** • Record all findings, noting any abnormalities in structure, function, or movement. • Discuss potential diagnoses and further investigations if needed.
NLHP 28.3	Examination of foot	**Steps:** 1. **Preparation:** • Gather materials: Gloves, measuring tape, goniometer, reflex hammer, and a flashlight. • Ensure the patient is comfortably seated or lying down with feet exposed. 2. **Initial History:** • Take a thorough history including symptoms (pain, swelling, numbness), duration, and any aggravating or relieving factors. • Ask about medical history including diabetes, arthritis, or previous foot injuries. 3. **Inspection:**

- Observe the feet for swelling, redness, bruising, deformities, or skin changes.
- Note any asymmetry between the feet.
- Check the condition of the nails and the presence of any calluses or ulcers.

4. **Palpation:**
   - Gently palpate the foot for tenderness, warmth, and swelling.
   - Assess the bones, joints, and soft tissues for any abnormalities.
   - Check for the presence of any masses or deformities.
5. **Range of Motion:**
   - Ask the patient to perform active movements such as dorsiflexion, plantarflexion, inversion, and eversion.
   - Assess the range of motion and note any pain or limitations.
   - Use a goniometer to measure joint angles accurately.
6. **Strength Testing:**
   - Evaluate the muscle strength of the foot and ankle by asking the patient to perform specific movements against resistance.
   - Compare strength in both feet.
7. **Special Tests:**
   - **Thompson Test:** Squeeze the calf muscle to assess for Achilles tendon rupture.
   - **Tinel's Sign:** Tap over the tarsal tunnel to check for nerve irritation.
   - **Homan's Sign:** Dorsiflex the foot to check for deep vein thrombosis.
   - **Windlass Test:** Dorsiflex the big toe to assess for plantar fasciitis.
8. **Neurological Examination:**
   - Assess sensation in different areas of the foot to check for neuropathy.
   - Test reflexes using a reflex hammer.
9. **Gait Analysis:**
   - Observe the patient's walking pattern to identify any structural or functional abnormalities.
   - Note any limping, uneven wear on shoes, or altered gait mechanics.
10. **Documentation:**
    - Record all findings, noting any abnormalities in structure, function, or movement.
    - Discuss potential diagnoses and further investigations if needed.

Topic 29 Shirobhighata (Cranio-cerebral Injurie/ Disorders) (LH :2 NLHT: 1 NLHP: 2)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO3, CO5	Explain Scalp injuries and Skull Fracture and their management	CC	MK	K	L,L&PPT	VV-Viva,CL-PR,PRN	F&S	II	-	LH
CO1, CO3, CO5	Explain Brain injury (Mastulunga Abhighaata) - Cerebral concussion, Contusion and Laceration. Haemorrhage & its management - Acute Extradural haematoma, Acute Intracerebral and Chronic Subdural Haematoma	CC	MK	K	L,L&PPT	VV-Viva,P-RP,PRN,INT,QZ	F&S	II	-	LH
CO1, CO3, CO5	Elaborate on Brain tumuors and their management	CC	DK	K	BS,BL,RP,TUT,DIS	VV-Viva,QZ ,DEB,P-VIVA	F&S	II	-	NLHT29.1
CO1, CO3, CO5, CO6	Explain how to assess accurately and diagnose Head injuries, ensuring their appropriate primary management and treatment to prevent complications.	CC	DK	KH	CD,PBL,DIS,TUT,BL	VV-Viva,SP,P-ID,P-RP,PRN	F&S	II	-	NLHP29.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 29.1	Brain tumours and their management	1. **Interactive Presentations**: Use slideshows or videos to explain what brain tumors are, their types, symptoms, diagnosis, and treatment options1. You can include real-life case studies to make it more relatable. 2. **Role-Playing Scenarios**: Have students role-play as doctors, patients, and family members to understand the emotional and medical challenges associated with brain tumors. This can help develop empathy and communication skills.

		3. **Guest Speakers**: Invite healthcare professionals who specialize in neurology or oncology to speak about their experiences and advancements in brain tumor treatment. 4. **Simulation Exercises**: Use medical simulation tools or apps to allow students to perform virtual brain surgeries or diagnostic tests, giving them hands-on experience in a controlled environment. 5. **Discussion and Reflection**: Facilitate group discussions where students can share their thoughts and feelings about what they've learned. Encourage them to reflect on how they can support individuals affected by brain tumors.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 29.1	Examination of Head Injuries (Shirobhighaata)	**Steps:** 1. Preparation: • Gather materials: Gloves, penlight, stethoscope, reflex hammer, sterile gauze, and bandages. • Ensure the patient is lying down or seated comfortably with good lighting. 2. Initial History: • Take a detailed history, including the mechanism of injury, time of injury, and any immediate symptoms (loss of consciousness, headache, dizziness, nausea). • Ask about previous head injuries or underlying medical conditions. 3. Initial Assessment: • Perform a primary survey (ABCs: Airway, Breathing, Circulation) to ensure no life-threatening conditions. • Check the patient’s Glasgow Coma Scale (GCS) score to assess the level of consciousness.

4. Inspection:
    - Observe the head and face for visible injuries, swelling, bruising, or deformities.
    - Look for signs of external bleeding or cerebrospinal fluid leakage from the ears or nose.
    - Check for any scalp lacerations or hematomas.
5. Palpation:
    - Gently palpate the skull for tenderness, depression, or crepitus.
    - Assess the facial bones for any fractures or deformities.
6. Neurological Examination:
    - Assess the pupils for size, equality, and reactivity to light.
    - Test cranial nerve function, including eye movement, facial sensation, and muscle strength.
    - Evaluate motor and sensory function in the limbs to check for any deficits.
    - Assess reflexes using a reflex hammer.
7. Cognitive and Memory Assessment:
    - Ask the patient questions to assess orientation (time, place, person).
    - Test short-term and long-term memory by asking about recent events and past information.
8. Balance and Coordination:
    - Perform tests to assess balance and coordination, such as the Romberg test and finger-to-nose test.
    - Observe for any signs of ataxia or unsteadiness.
9. Imaging and Further Tests:
    - Recommend imaging studies such as CT scans or MRI if there is suspicion of intracranial injury.
    - Conduct additional tests if indicated, such as blood tests to check for metabolic or hematologic abnormalities.
10. Documentation:
    - Record all findings, noting any abnormalities in structure, function, or cognitive status.
    - Discuss potential diagnoses and further investigations if needed.

Topic 30 Kasheruka Vikara (Diseases of Spine) (LH :1 NLHT: 1 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4, CO5	Explain the Mechanism, Pathology, Classification, Investigations, Complications and management of Tuberculosis of the spine	CC	MK	K	L&PPT ,L,DIS	T-CS,QZ , C-VC,OSCE,PRN	F&S	II	-	LH
CO1, CO3, CO5	Demonstrate the Mechanism, Pathology, Classification, Investigations, Complications and management of Ankylosing Spondylitis	PSY-GUD	MK	K	PBL,TUT,BS,RLE,X-Ray	VV-Viva,T-CS,QZ ,P-VIVA,PRN	F&S	II	H-PK	NLHT30.1
CO1, CO2, CO4, CO6	Demonstrate accurate assessment and diagnosis of spinal injuries and abnormalities, ensuring appropriate management and treatment to prevent further complications.	PSY-GUD	MK	K	TUT,DIS,CBL, X-Ray,SIM	DEB,INT,P-VIVA,SP, PRN	F&S	II	H-KC,H-PK	NLHP30.1
CO1, CO3, CO4	Explain the skills to stabilize neck fractures using the log roll technique ensuring safety and proper spinal alignment during patient transfer.	CC	MK	KH	RP,X-Ray,CBL, EDU,PER	P-EXAM,PRN,QZ , C-VC,P-VIVA	F&S	II	-	NLHP30.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 30.1	Ankylosing Spondylitis	1. **Case Study Analysis**: Provide students with a detailed case study of a patient with Ankylosing Spondylitis. Ask them to analyze the patient's symptoms, medical history, and diagnostic tests to understand the pathology and classification of the disease. 2. **Role-Playing**: Have students role-play as rheumatologists and patients. The "rheumatologists" can conduct a mock patient interview, perform a physical examination, and discuss potential

		management plans. 3. **Diagnostic Test Simulations**: Use simulation tools or apps to allow students to perform virtual diagnostic tests, such as X-rays or MRIs, to identify signs of Ankylosing Spondylitis. 4. **Group Discussions**: Facilitate group discussions where students can share their thoughts on the challenges of diagnosing and managing Ankylosing Spondylitis. Encourage them to think critically about the latest research and treatment options. 5. **Guest Speakers**: Invite healthcare professionals who specialize in rheumatology to speak about their experiences and advancements in the treatment of Ankylosing Spondylitis. 6. **Poster Presentations**: Have students create posters summarizing the key points about Ankylosing Spondylitis, including its mechanism, pathology, classification, investigations, complications, and management. They can present these posters to the class.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 30.1	Examination of Spinal Injuries and Abnormalities	**Steps:** 1. **Preparation:** • Gather materials: Gloves, measuring tape, reflex hammer, penlight, and stethoscope. • Ensure the patient is comfortably seated or lying down with the spine exposed. 2. **Initial History:** • Take a detailed history, including the mechanism of injury, duration of symptoms (pain, numbness, weakness), and any aggravating or relieving factors. • Ask about previous spinal injuries or surgeries and any underlying medical conditions. 3. **Inspection:** • Observe the spine for visible deformities, swelling, bruising, or muscle atrophy.

		• Note the patient's posture, alignment, and any abnormal curvatures (scoliosis, kyphosis, lordosis). 4. **Palpation:** • Gently palpate the spine from the cervical to the lumbar region, checking for tenderness, swelling, or muscle spasms. • Assess the spinous processes and paraspinal muscles for any abnormalities. 5. **Range of Motion:** • Ask the patient to perform movements such as flexion, extension, lateral bending, and rotation. • Evaluate the range of motion and note any pain or limitations. 6. **Neurological Examination:** • **Sensation:** Assess sensory function by testing light touch, pinprick, and vibration in the dermatomes. • **Motor Function:** Evaluate muscle strength in the upper and lower extremities using a grading system (0-5). • **Reflexes:** Check deep tendon reflexes (biceps, triceps, patellar, Achilles) and note any abnormalities. • **Special Tests:** Perform tests like the straight leg raise (for sciatica) and Spurling's test (for cervical radiculopathy). 7. **Gait and Balance:** • Observe the patient's walking pattern to identify any abnormalities. • Perform tests like the Romberg test to assess balance and coordination. 8. **Imaging and Further Tests:** • Recommend imaging studies such as X-rays, MRI, or CT scans to confirm diagnosis and assess the extent of the injury or abnormality. • Conduct additional tests like electromyography (EMG) if nerve damage is suspected. 9. **Documentation:** • Record all findings, noting any abnormalities in structure, function, or movement. • Discuss potential diagnoses and further investigations if needed.
NLHP 30.2	Hands-on training on 3 stages of neck fracture stabilization with logroll	**Steps:** Stage 1: Preparation

		1. Assess the patient: Confirm the patient's responsiveness, breathing, and address any severe bleeding. 2. Gather a team: Ensure you have at least three assistants to perform the log roll safely. 3. Position the patient: Have the patient lie flat on their back. Stage 2: Immobilization 1. Manual traction: The person at the patient's head stabilizes the neck by applying gentle traction. 2. Cervical collar: If available, apply a cervical collar to further immobilize the neck. 3. Prepare for log roll: Clearly explain each team member's role in the maneuver. Stage 3: Execution 1. Coordinate the roll: On a count of three, the team rolls the patient towards themselves, maintaining alignment of the head, neck, and spine. 2. Transfer to a spine board: Once rolled, carefully transfer the patient to a spine board for further stabilization and transport.

Topic 31 Stana Roga (Diseases of Breast) (LH :1 NLHT: 2 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO5	Explain Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Sthana Vidradhi - Breast abscess	CC	MK	K	SIM,DIS,L_VC,TUT,PER	COM,PP-Practical,CL-PR,P-VIVA,P-EXAM	F&S	II	-	NLHT31.1
CO1,	Explain Aetiopathogenesis, Classification, Clinical Features,	CK	MK	K	SIM,CD	CL-PR,P-E	F&S	II	-	NLHT31.2

CO3, CO5	Diagnosis, Complications and Management of Fibroadenoma and Fibroadenosis				,L&PPT ,D-BED ,DIS	XAM,P-CA SE,P-VIVA ,VV-Viva				
CO1, CO3, CO4, CO5	Define Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications, and Management of Stana Arbuda & Breast tumours and their Management.	CK	MK	K	BL,L&P PT ,L_VC, L	DEB,PUZ, QZ ,VV-Viva,T-CS	F&S	II	-	LH
CO1, CO3, CO4, CO5	Demonstrate the skills to conduct a clinical breast examination, educate patients on how to perform self-breast examinations at home & promote early detection of breast abnormalities.	PSY-GUD	MK	K	BL,PBL ,TUT,D IS,PER	P-EXAM,S P,C-INT, C-VC,QZ	F&S	II	-	NLHP31.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 31.1	Sthana Vidradhi - Breast abscess	1. **Interactive Case Studies**: Present detailed case studies that cover the aetiopathogenesis, classification, clinical features, diagnosis, complications, and management of breast abscesses. Have students analyze and discuss these cases in small groups. 2. **Hands-On Workshops**: Use medical models or simulations to teach students about the physical examination of the breast and techniques for diagnosing and managing abscesses. This practical approach can be very enlightening. 3. **Guest Lectures**: Invite medical professionals such as surgeons or infectious disease specialists to speak about their experiences and advancements in the treatment of breast abscesses. 4. **Poster Sessions**: Have students create educational posters that summarize the key aspects of breast abscesses, including aetiopathogenesis, classification, clinical features, diagnosis, complications, and management. They can present these posters in a mini-conference format. 5. **Debate Sessions**: Organize debates on controversial or emerging topics related to breast

		abscesses, such as antibiotic resistance or new surgical techniques. This can encourage critical thinking and engagement.
NLHT 31.2	Fibroadenoma and Fibroadenosis	1. **Case Studies**: Present detailed case studies covering the aetiopathogenesis, classification, clinical features, diagnosis, complications, and management of both fibroadenoma and fibroadenosis. Have students analyze and discuss these in small groups to compare and contrast. 2. **Role-Playing**: Conduct role-playing exercises where students act as healthcare professionals and patients. This can involve diagnostic interviews, physical examinations, and discussions on management plans. 3. **Histopathology Workshops**: If possible, provide slides of histopathological samples of fibroadenomas and fibroadenosis. Teach students to identify characteristic features under the microscope. 4. **Expert Talks**: Invite guest speakers, such as pathologists or oncologists, to discuss their experiences and advancements in the diagnosis and management of these conditions. 5. **Patient Education Material**: Encourage students to create brochures or videos aimed at educating patients about fibroadenoma and fibroadenosis, their diagnosis, and management options. 6. **Clinical Simulation**: Utilize medical simulation tools or apps to allow students to virtually practice diagnostic and treatment procedures for fibroadenoma and fibroadenosis.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 31.1	Examination of the breast and patient education	**Steps:**

	for ‘self-examination of breast.	Self-Examination of Breast Education 1. Explain the importance: Stress the importance of regular self-examinations for early detection of Breast abnormalities. 2. Demonstrate the technique: Show the patient how to perform a self-examination using a step-by-step approach. • Visual inspection: In front of a mirror, look for changes in size, shape, and skin texture. • Palpation in the shower: Using a soapy hand, gently palpate the breast and armpit area. • Palpation lying down: Place a pillow under the shoulder, raise the arm, and use the opposite hand to palpate the breast. 3. Frequency: Recommend performing the self-examination once a month, ideally a week after the menstrual period ends.

Topic 32 Urah Vikara (Diseases of Chest) (LH :1 NLHT: 1 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO5, CO6	Explain Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications, and Management of Chest injury, Fracture of Ribs, Pneumothorax, Haemothorax, Stove in Chest, Flail Chest & Surgical Emphysema.	CC	MK	K	L&PPT ,L	CL-PR,INT ,T-CS,PRN, VV-Viva	F&S	II	-	LH
CO1, CO3, CO5, CO6	Discuss the Aetiopathogenesis, Classification, Clinical Features, & management Diagnosis of Pleurisy, Pleural Abscess, Pleural Effusion, and Tumours of the Lung.	CC	MK	K	TPW,C D,L_VC ,RP,X-Ray	P-MOD,OS CE,PRN,O SPE,P-EXAM	F&S	II	-	NLHT32.1
CO1, CO3, CO5, CO6	Demonstrate the systematic examination of chest injuries and Elaborate on diagnostic and management skills for trauma patients.	CAP	MK	KH	D,RP,E DU,ML, PT	P-VIVA, C-VC,CL-PR, INT,P-PRF	F&S	II	-	NLHP32.1

CO1, CO3, CO5, CO6	Demonstrate the skills to perform a thorough examination of chest diseases, Identify common and uncommon chest diseases through physical examination and history taking, and elaborate on diagnostic and management skills for patients with chest diseases.	PSY-GUD	MK	K	CBL,X-Ray,DIS,CD,TUT	VV-Viva, C-VC,P-EXAM,PRN,INT	F&S	II	-	NLHP32.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 32.1	Examination of Pleurisy, Pleural Abscess, Pleural Effusion, Tumours of the Lung	1. **Case Study Analysis**: Break students into small groups and give each group a detailed case study involving one of the conditions (Pleurisy, Pleural Abscess, Pleural Effusion, or Lung Tumors). They'll analyze the aetiopathogenesis, classification, clinical features, diagnosis, and management. This can encourage teamwork and critical thinking. 2. **Diagnostic Role-Playing**: Students can take turns role-playing as doctors and patients. The "doctors" can interview "patients" to diagnose their condition, discussing symptoms and possible diagnostic tests. This will help students practice communication skills and clinical reasoning. 3. **Interactive Simulations**: Utilize medical simulation software or apps to let students practice diagnosing and managing these conditions in a virtual setting. This can provide a hands-on learning experience. 4. **Guest Lectures**: Invite pulmonologists, thoracic surgeons, or oncologists to share their clinical experiences and discuss advancements in the treatment of these conditions. 5. **Group Discussions**: Facilitate group discussions on the complications and management strategies for these conditions. Encourage students to share their thoughts and ask questions.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 32.1	Examination of injuries of the chest (Urah abhigatha)	**Steps** Initial Assessment 1. Scene Safety: Ensure the environment is safe for both the patient and healthcare providers. 2. Primary Survey: Follow the ABCDE approach (Airway, Breathing, Circulation, Disability, Exposure) to assess and stabilize the patient. 3. Obtain Consent: Explain the procedure to the patient and obtain their consent, if they are conscious and able to provide it. Detailed Examination 1. Inspection: Visually inspect the chest for signs of injury such as bruising, swelling, open wounds, or deformities. 2. Palpation: Gently palpate the chest wall to identify areas of tenderness, crepitus (a crackling sensation), or step-offs in the rib contour. 3. Percussion: Tap on the chest wall to assess for dullness or hyperresonance, indicating possible fluid accumulation or pneumothorax. 4. Auscultation: Listen to breath sounds using a stethoscope to detect any abnormalities such as absent breath sounds, which might suggest pneumothorax or hemothorax. Supplementary Assessment 1. Imaging: If available, order a chest X-ray or ultrasound to get a clearer picture of the injuries. 2. Vitals Monitoring: Continuously monitor the patient's vital signs (heart rate, respiratory rate, blood pressure, oxygen saturation) to detect any deterioration.
NLHP 32.2	Examination of Diseases of the Chest	**Steps:**

		Initial Assessment 1. Patient History: Gather a comprehensive history, including symptoms such as cough, chest pain, shortness of breath, and past medical history. 2. Consent and Explanation: Explain the procedure to the patient and obtain their consent. 3. Position the Patient: Have the patient sit upright or lie down in a comfortable position. Physical Examination 1. Inspection: Observe the chest for any visible abnormalities, such as deformities, use of accessory muscles, or asymmetry. 2. Palpation: Check for tenderness, chest wall deformities, and tactile fremitus by placing hands on the chest and feeling for vibrations when the patient speaks. 3. Percussion: Tap on the chest wall to assess for areas of dullness or hyperresonance, indicating possible fluid or air in the pleural space. 4. Auscultation: Use a stethoscope to listen to breath sounds. Note any abnormal sounds such as wheezes, crackles, or diminished breath sounds. Supplementary Assessment 1. Vital Signs: Monitor vital signs, including heart rate, respiratory rate, blood pressure, and oxygen saturation. 2. Imaging: If available, order chest X-ray, CT scan, or other relevant imaging studies for further evaluation.

Topic 33 Anna Nalika Vikara (Diseases of Oesophagus) (LH :2 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3

CO1, CO3, CO5	Explain aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies and Reflux Oesophagitis	CC	MK	K	L,L&GD,L&PPT	T-CS,QZ ,P-EXAM,P-VIVA	F&S	II	-	LH
CO1, CO3, CO5, CO6	Describe Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and management of Oesophageal Varices	CC	MK	K	PT,D,L_VC,DIS,CBL	PRN,COM,INT,QZ ,P-VIVA	F&S	II	-	NLHT33.1
CO1, CO3, CO5	Define Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and management of – CA of Oesophagus and their management	CK	DK	K	L,L&PPT	PP-Practical,PRN,VV-Viva,T-CS,P-EXAM	F&S	II	-	LH
CO1, CO3, CO5	Demonstrate the skills to assess and diagnose dysphagia, Identify the various causes of dysphagia through comprehensive examination techniques, and explain appropriate management and referral for patients with dysphagia.	PSY-GUD	DK	KH	TUT,CBL,W,D-BED,DIS	P-VIVA,P-RP,P-EXAM,OSCE,PRN	F&S	II	-	NLHP33.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 33.1	Examination of Oesophageal Varices	1. **Case Study Analysis**: Present detailed patient case studies, covering the aetiopathogenesis, classification, clinical features, diagnosis, complications, and management of oesophageal varices. Students can work in groups to analyze and discuss each case. 2. **Role-Playing**: Students can role-play as gastroenterologists and patients. The "doctors" can conduct mock patient interviews and physical exams, discussing potential diagnostic tests and management plans. 3. **Endoscopy Simulation**: Use videos or simulation tools to show how an endoscopy is performed and how oesophageal varices are identified and treated during the procedure.

		4. **Guest Speakers**: Invite gastroenterologists or hepatologists to speak about their experiences in diagnosing and treating oesophageal varices. They can also discuss the latest research and advancements. 5. **Group Discussions**: Facilitate group discussions on the complications and management strategies for oesophageal varices. Encourage students to share their thoughts and ask questions.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 33.1	Examination of Dysphagia	**Preparation Steps:** Patient History • Gather History: Ask about the onset, duration, and nature of swallowing difficulties. Enquire about associated symptoms like weight loss, coughing during meals, or pain while swallowing. • Medical History: Document past medical history, including any neurological disorders, head and neck surgeries, or recent infections. • Physical Examination • Oral Examination: Inspect the oral cavity for abnormalities such as lesions, dry mouth, or dental issues. • Neck Examination: Palpate the neck for any masses or lymphadenopathy. • Cranial Nerve Assessment: Evaluate the function of cranial nerves involved in swallowing (V, VII, IX, X, XII). • Swallowing Assessment: Observe the patient as they swallow water and solid food, noting any difficulties or signs of aspiration. • Supplementary Assessment

		• Videofluoroscopic Swallow Study (VFSS): If available, this imaging technique can provide detailed information on the mechanics of swallowing. • Esophagogastroduodenoscopy (EGD): For a more indepth examination of the esophagus and stomach if structural abnormalities are suspected. • Manometry: Measure the pressure within the esophagus to evaluate its function (if possible/available)

Topic 34 Gulma Roga (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Explain Nidana, Prakara, Lakshana, Upadrava, and Chikitsa of Gulma	CC	MK	K	L,L&PPT	T-CS,PRN, VV-Viva	F&S	II	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 35 Shoola Vyadhi (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4	Define Nidana, Prakara, Lakshana, Upadrava and Chikitsa of Shoola	CK	DK	K	L,L&PPT	P-VIVA,VV-Viva,T-CS,PRN	F&S	II	-	LH
CO1, CO3, CO5, CO6	Demonstrate comprehensive assessment of patients presenting with acute abdominal pain, and explain potential life-threatening conditions and various causes of acute abdomen, and diagnostic and management skills for emergencies.	PSY-GUD	MK	KH	PSM,RLE,SIM,X-Ray, PER	PRN,T-CS, OSCE,CL-PR,P-VIVA	F&S	II	-	NLHP35.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 35.1	Examination of Acute Abdomen	**Steps:** Initial Assessment 1. Patient History: Collect a detailed history of the pain, including onset, location, duration, and character. Enquire about associated symptoms like nausea, vomiting, fever, or changes in bowel habits. 2. General Observation: Assess the patient's general appearance and vital signs. Look for signs of distress, pallor, or diaphoresis. Physical Examination 1. Inspection: Observe the abdomen for distension, scars, hernias, or visible peristalsis. 2. Palpation: Perform gentle and then deeper palpation to identify areas of tenderness, rebound tenderness, guarding, or masses. 3. Percussion: Percuss the abdomen to detect areas of tenderness, dullness, or tympany. 4. Auscultation: Listen to bowel sounds in all quadrants. Note any abnormalities like hyperactive, hypoactive, or absent sounds. • Specific Signs: Check for specific signs like Murphy's sign, McBurney's point tenderness, and Rovsing's sign. Supplementary Assessment

		1. Laboratory Tests: Order relevant blood tests (e.g., complete blood count, electrolytes, liver enzymes, amylase, lipase) to aid in diagnosis. 2. Imaging: If indicated, obtain imaging studies such as abdominal X-rays, ultrasound, or CT scan to further evaluate the underlying cause.

Topic 36 Udara Roga (LH :1 NLHT: 2 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Define Nidan, Prakar, Samprapti, Laxan, Chikitsa Of Udara, Yakritpleehodar,Chidrodar, Baddhagudodar	CK	MK	K	L,L&PPT	T-CS,P-VIVA,VV-Viva,P-EXAM	F&S	II	-	LH
CO1, CO3, CO4	Discuss Aetiopathogenesis, Clinical, Features, Diagnosis, Complications, and Management of Ascites	CC	MK	K	DIS,PSM,LRI, D-BED, CBL	PRN,OSPE, QZ ,DEB, C-VC	F&S	II	H-KC	NLHT36.1
CO1, CO3, CO4, CO5	Discuss Aetiopathogenesis, Clinical, Features, Diagnosis of Peptic Ulcer Complications, and Management of Peritonitis	CC	MK	K	CBL,PT ,BL,X-Ray,PER	CL-PR,P-EXAM, C-VC,PRN,T-CS	F&S	II	H-KC	NLHT36.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 36.1	Examination of Ascites	1. **Interactive Case Studies**: Present case studies detailing patients with ascites, focusing on aetiopathogenesis, clinical features, diagnosis, complications, and management. Have students analyze and discuss these in small groups. 2. **Role-Playing**: Have students role-play as healthcare professionals and patients. The "doctors" can conduct mock patient interviews, perform physical exams, and discuss diagnostic tests and management plans for ascites.

		3. **Ultrasound Workshops**: Use videos or simulation tools to demonstrate how to perform an ultrasound for detecting ascites. Teach students to identify key features and assess the extent of fluid accumulation. 4. **Hands-On Simulations**: Use medical simulation tools or models to allow students to practice diagnostic and therapeutic procedures related to ascites, such as paracentesis. 5. **Group Discussions**: Facilitate group discussions on the challenges and complexities of managing ascites, encouraging students to ask questions and share insights.
NLHT 36.2	Examination of Peritonitis	1. **Detailed Case Studies**: Provide comprehensive patient case studies covering aetiopathogenesis, clinical features, diagnosis, complications, and management of peritonitis. Have students dissect and discuss these in small groups. 2. **Role-Playing Exercises**: Get students to role-play as healthcare professionals and patients. The "doctors" can conduct mock patient interviews and physical exams, diagnosing and discussing management strategies for peritonitis. 3. **Diagnostic Simulations**: Use simulation tools or apps to let students practice diagnostic procedures, such as performing a physical examination or ordering and interpreting imaging tests and lab results. 4. **Guest Lectures**: Bring in surgeons or gastroenterologists to discuss their clinical experiences and advancements in the diagnosis and management of peritonitis. 5. **Group Discussions**: Facilitate discussions on the challenges and strategies for managing peritonitis, encouraging students to share their insights and questions.
Non Lecture Hour Practical		

S.No	Name of Practical	Description of Practical Activity

Topic 37 Aamashaya Evam Adho-Aamashaya Vikara (Diseases of Stomach and Duodenum) (LH :2 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2	Explain Etiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management Peptic Ulcer	CK	MK	K	L&PPT ,L	QZ ,CL-PR ,VV-Viva,T -OBT,PP-Practical	F&S	II	-	LH
CO1, CO3, CO5	Describe Carcinoma of Stomach in detail	CK	MK	K	L,L&PPT	CBA,INT,PRN,Log book,PP-Practical	F&S	II	-	LH
CO1, CO3, CO6	Discuss the Aetiopathogenesis, Clinical Features, Diagnostic criteria, Management strategies (medical and surgical), and Complications of Pyloric Stenosis.	CC	MK	K	TUT,L &GD,IBL,FC,PBL	Log book,CBA,T-CS,QZ ,DEB	F&S	II	-	NLHT37.1
CO1, CO2, CO4	Demonstrate the skills to systematically assess, diagnose and manage abdominal lumps. Differentiate between various types of abdominal lumps based on clinical examination.	PSY-GUD	MK	K	TUT,L &GD,D, L&PPT ,SIM	PP-Practical,VV-Viva, SP,P-VIVA,T-CS	F&S	II	-	NLHP37.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 37.1	Examination of Pyloric Stenosis	**Steps-** Theory 1. Lecture: Aetiopathogenesis and classification. 2. Discussion: Clinical features and diagnostic criteria.

		3. Case studies: Diagnosis and management. 4. Group discussion: Complications and prevention. 5. Interactive session: Q&A. Practical 1. Clinical demonstration: Examination techniques. 2. Hands-on training: Diagnostic procedures (e.g., ultrasound). 3. Case presentation: Students present cases. Clinical 1. Live patient demonstration: Diagnosis and management. 2. Observational learning: Students observe expert consultations. 3. Interactive session: Q&A and discussion.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 37.1	Examination of Abdominal lump	**Steps:** **Patient History** 1. Gather History: Ask about the onset, duration, and progression of the lump. Enquire about associated symptoms like pain, changes in bowel habits, weight loss, or fever. 2. Medical History: Document past medical history, including any surgeries, gastrointestinal conditions, or family history of cancer. **Physical Examination** 1. Inspection: Observe the abdomen for visible lumps, asymmetry, or skin changes. 2. Palpation:

		• Surface Palpation: Gently palpate the lump to determine its location, size, shape, and surface characteristics. • Deep Palpation: Assess the consistency (soft, firm, hard), mobility, and tenderness of the lump. • Assessing for Pulsation: Determine if the lump is pulsatile, which could indicate a vascular origin like an abdominal aortic aneurysm. 3. Percussion: • Dullness: Percuss over the lump to identify areas of dullness, which can indicate solid or cystic masses. • Resonance: Note any areas of resonance, which might suggest a gaseous component. 4. Auscultation: • Listen over the lump for bowel sounds or bruits, which can provide clues about its nature. **Supplementary Assessment** 1. Imaging: Order appropriate imaging studies such as ultrasound, CT scan, or MRI to further evaluate the lump. 2. Laboratory Tests: Conduct relevant blood tests (e.g., complete blood count, tumor markers) to aid in diagnosis.

Topic 38 Kshudrantra Vikara (Diseases of Small Intestine) (LH :4 NLHT: 2 NLHP: 1)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4, CO6	Describe the Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications, and management of Tuberculosis of the Small Intestine	CK	MK	K	L&PPT ,L	PRN,PP-Practical,VV-Viva,CHK, T-CS	F&S	II	H-KC	LH
CO1, CO3,	Explain the Pathophysiology, Clinical features, Diagnostic criteria, and Management strategies of Blind loop syndrome,	CC	DK	K	TUT,CD,L&PP	P-VIVA,DOPS,VV-Vi	F&S	II	H-KC	NLHT38.1

CO4, CO7	Short Bowel Syndrome & Typhoid Enteritis				T ,D-BED,L&GD	va,DEB,PP-Practical				
CO1, CO3, CO4	Describe Aetiopathogenesis, Classification, Clinical Features, Examinations, Investigations & Diagnosis, Complications and Management of Intestinal Obstruction.	CC	MK	K	L,L&PPT	P-VIVA,DEB,PP-Practical,Log book,P-EXAM	F&S	II	-	LH
CO1, CO3, CO6	Explain the Pathophysiology, Clinical features, Diagnostic criteria, Management strategies, and Complications with Prevention methods of Intussusception.	CC	DK	K	L&GD, RP,FC, L_VC,CD	INT,DEB,T-CS,P-VIVA,PRN	F&S	II	-	NLHT38.2
CO1, CO3, CO6	Enumerate Etiopathogenesis, Classification, Clinical Features, investigations, Diagnosis, Complications and management of intestinal perforation	CK	MK	K	L&PPT ,L	CL-PR,P-EXAM,Log book,QZ ,T-CS	F&S	II	-	LH
CO1, CO3	Explain the Pathophysiology, Clinical features, Diagnostic criteria, Management strategies, and Complications with Prevention methods of Benign and Malignant neoplasms of the intestine.	CK	NK	K	L,L&PPT	P-EXAM,PP-Practical, INT,T-CS,PRN	F&S	II	-	LH
CO1, CO2, CO4	Demonstrate the skills to conduct a thorough abdominal examination with its Diagnosis and Management, identifying various abdominal pathologies.	PSY-GUD	MK	KH	DIS,PER,PT,CBL,SIM	T-CS,INT,P-EXAM,CBA	F&S	II	-	NLHP38.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 38.1	Demonstration of Blind loop syndrome, Short	**Activities -**

	Bowel Syndrome & Typhoid Enteritis	Blind Loop Syndrome- 1. Case study presentation: Students present a case of Blind Loop Syndrome. 2. Group discussion: Causes, symptoms, and complications. 3. Interactive lecture: Pathophysiology and diagnosis. 4. Clinical Description: Students analyze and discuss case scenarios. 5. Radiology session: Interpretation of imaging studies (e.g., CT scans). Short Bowel Syndrome 1. Lecture: Pathophysiology and classification. 2. Case study presentation: Students present a case of Short Bowel Syndrome. 3. Group discussion: Nutritional management and complications. 4. Problem-based learning: Students develop a treatment plan. 5. Guest lecture: Expert discussion on intestinal transplantation. Typhoid Enteritis 1. Interactive lecture: Pathophysiology and epidemiology. 2. Case study presentation: Students present a case of Typhoid Enteritis. 3. Group discussion: Complications and prevention. 4. Microbiology session: Laboratory diagnosis and antibiotic resistance. 5. Public health session: Vaccination and prevention strategies.
NLHT 38.2	Examination of Intussusception	Activities: Lecture and Discussion 1. Introduction to intussusception: definition, epidemiology, and pathophysiology. 2. Clinical features and diagnostic criteria: symptoms, signs, and imaging studies. 3. Management strategies: non-surgical (e.g., enema) and surgical. Case Studies and Group Discussion 1. Case study presentation: students present a case of intussusception. 2. Group discussion: diagnosis, management, and complications. 3. Problem-based learning: students develop a treatment plan. Practical and Clinical Sessions

		1. Clinical vignettes: students analyze and discuss case scenarios. 2. Radiology session: interpretation of imaging studies (e.g., ultrasound, CT scans). 3. Simulation-based training: students practice diagnosing and managing intussusception. Interactive and Online Sessions 1. Online lecture: expert discussion on intussusception management. 2. Interactive quiz: assessment of knowledge. 3. Virtual patient simulation: students practice diagnosing and managing intussusception.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 38.1	Per abdominal Clinical Examination.	**Steps:** Patient History 1. Gather History: Ask about symptoms such as pain, nausea, vomiting, bowel habits, and appetite changes. 2. Medical History: Document past medical history, including any gastrointestinal conditions, surgeries, or relevant family history. Physical Examination 1. Inspection: • Observe the abdomen for any visible abnormalities like scars, distension, or asymmetry. • Note any signs such as jaundice, spider angiomas, or visible peristalsis. 2. Palpation: • Perform light and deep palpation to assess for tenderness, masses, or organomegaly.

		• Check for rebound tenderness, guarding, and rigidity. • Evaluate liver size and tenderness (Murphy's sign), spleen, kidneys, and aorta. 3. Percussion: • Percuss all areas of the abdomen to assess for tympany or dullness. • Identify areas of abnormal resonance, indicating possible fluid, air, or mass presence. 4. Auscultation: • Use a stethoscope to listen to bowel sounds in all four quadrants. • Note any abnormal sounds like hyperactive, hypoactive, or absent bowel sounds. Supplementary Assessments 1. Laboratory Tests: Order relevant blood tests (e.g., liver function tests, amylase, lipase) based on clinical findings. 2. Imaging: If indicated, obtain imaging studies such as ultrasound or CT scan to further evaluate abdominal pathology.

Topic 39 Brihadantra Vikara (Diseases of Large Intestine) (LH :2 NLHT: 1 NLHP: 1)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO6	Enumerate Aetiopathogenesis, Classification, Clinical Features, Examinations, Investigations & Diagnosis, Complications, and Management of Crohn's Disease and Ulcerative Colitis	CK	DK	K	L&PPT ,L	DEB,PRN, P-VIVA,V V-Viva,PP-Practical	F&S	II	-	LH
CO1, CO2, CO3, CO4	Enumerate Aetiopathogenesis, Classification, Clinical Features, Examinations, Investigations & Diagnosis, Complications, and Management of Appendicitis (Undukapuchashotha).	CK	MK	K	L,L&PPT	CL-PR,INT,QZ ,P-PRF,PRN	F&S	II	-	LH

CO1, CO3	Explain the clinical presentation, diagnosis, staging, epidemiology, and risk factors of Carcinoma Colon with its management options (surgery, chemotherapy, radiation). Elaborate on the importance of screening and prevention.	CC	NK	K	PER,CBL,D,W,RLE	T-CS,CBA,PP-Practical,PRN,VV-Viva	F&S	II	-	NLHT39.1
CO1, CO2, CO4	Demonstrate the skills to assess, diagnose, and manage Chronic abdominal conditions. Differentiate between various Chronic abdominal pathologies through a systematic examination.	PSY-GUD	MK	K	RP,REC,CD,PT,TUT	PP-Practical,P-PRF,INT,P-VIVA,VV-Viva	F&S	II	-	NLHP39.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 39.1	Diagnosis of Carcinoma of Colon	**Activities:** Lecture and Discussion 1. Introduction to Carcinoma Colon: epidemiology, risk factors, and pathophysiology. 2. Clinical presentation and diagnosis: symptoms, signs, and diagnostic tests. 3. Management options: surgery, chemotherapy, radiation, and targeted therapy. Case Studies and Group Discussion 1. Case study presentation: students present a case of Carcinoma Colon. 2. Group discussion: diagnosis, management, and complications. 3. Problem-based learning: students develop a treatment plan. Practical and Clinical Sessions (7-9) 1. Clinical vignettes: students analyze and discuss case scenarios. 2. Endoscopy session: observation of colonoscopy procedure. 3. Radiology session: interpretation of imaging studies (e.g., CT scans). Interactive and Online Sessions 1. Online lecture: expert discussion on Carcinoma Colon management. 2. Interactive quiz: assessment of knowledge. 3. Virtual patient simulation: students practice diagnosing and managing Carcinoma Colon.

		Hands-on Activities 1. Colonoscopy simulation: students practice performing colonoscopy. 2. Surgical demonstration: observation of colectomy procedure. 3. Pathology session: examination of colon cancer specimens.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 39.1	Examination of Chronic Abdomen	**Steps:** Patient History 1. Gather History: Ask about the onset, duration, and nature of abdominal pain or discomfort. Inquire about associated symptoms such as weight loss, changes in bowel habits, nausea, and vomiting. 2. Medical History: Document past medical history, including any gastrointestinal conditions, surgeries, medications, and family history. Physical Examination 1. Inspection: • Observe the abdomen for visible abnormalities such as scars, distension, or skin changes. • Look for signs such as jaundice, spider angiomas, or masses. 2. Palpation: • Perform light and deep palpation to assess for tenderness, masses, or organomegaly. 3. Percussion: • Percuss all areas of the abdomen to assess for tympany or dullness. • Identify areas of abnormal resonance, indicating possible fluid, air, or mass presence.

		• Check for rebound tenderness, guarding, and rigidity. • Evaluate liver size and tenderness (Murphy's sign), spleen, kidneys, and aorta. 4. Auscultation: • Use a stethoscope to listen to bowel sounds in all four quadrants. • Note any abnormal sounds like hyperactive, hypoactive, or absent bowel sounds. Supplementary Assessments 1. Laboratory Tests: Order relevant blood tests (e.g., , Complete blood count, RBS, Liver function tests, Kidney function tests, S.amylase, S. lipase) based on clinical findings. 2. Imaging: If indicated, obtain imaging studies such as ultrasound, CT scan, or MRI to further evaluate abdominal pathology. 3. Endoscopy: Consider endoscopic examinations like upper GI endoscopy or colonoscopy if gastrointestinal tract involvement is suspected.

Topic 40 Guda Vikara (Diseases of Rectum and Anal Canal) (LH :5 NLHT: 4 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO5	Explain the surgical anatomy of the anus and rectum, the physiology of defecation and continence, anatomical landmarks, and relationships relevant to anorectal surgery. Discuss common anorectal conditions (e.g., hemorrhoids, fistulas, fissures) and skills in examining and diagnosing anorectal conditions.	CC	MK	K	L_VC,D-BED,L&GD,PER,CD	VV-Viva,PRN,T-CS,C-VC,P-VIVA	F&S	III	V-RS,V-RS	NLHT40.1
CO1, CO3	Describe Aetiopathogenesis, Classification, Clinical Features, Investigations, Diagnosis, Complications, and management of Prolapse of the rectum (Gudabramsha)	CK	NK	K	L&GD, L,L&PPT	T-OBT,VV-Viva,T-CS,Log book,PP-Practical	F&S	III	-	LH

CO1, CO4	Describe Aetiopathogenesis, Classification, Clinical Features, Examinations, Investigations & Diagnosis, Complications and Management of Anorectal Abscesses (Guda Vidradhi) and Bhagandara (Fistula-in-ano).	CK	MK	K	L&GD, L&PPT ,X-Ray, PSM,PT	PRN,VV-Viva,T-CS,INT,P-VIVA	F&S	III	-	NLHT40.2
CO1, CO2, CO3, CO7	Describe Aetiopathogenesis, Classification, Clinical Features, Investigations, Diagnosis, Complications, and management of Fistula in ano	CK	MK	K	L&PPT ,L	CBA,PRN, T-CS,PP-Practical,VV-Viva	F&S	III	-	LH
CO1, CO2, CO3, CO6, CO7	Describe Aetiopathogenesis, Classification, Clinical Features, Investigations, Diagnosis, Complications, and Management of Haemorrhoids.	CK	MK	K	L,L&PPT	P-CASE,PP-Practical,Log book,T-CS,VV-Viva	F&S	III	-	LH
CO1, CO2, CO3, CO4, CO6	Enumerate Nidan, Prakara, Samprapti, Laxana and Chikitsa of Arshas	CK	MK	K	L&PPT ,L	VV-Viva,PRN,DEB,T-CS,INT	F&S	III	-	LH
CO1, CO2, CO3, CO7	Describe Aetiopathogenesis, Classification, Clinical Features, Examinations, Investigations & Diagnosis, Complications and Management of Fissure-in-Ano.	CK	MK	K	L&PPT ,PER,L &GD,CD,D	T-CS,Log book,INT,P-EXAM,P-VIVA	F&S	III	-	NLHT40.3
CO1, CO3, CO6	Describe Etiopathogenesis, Classification, Clinical Features, Investigations, Diagnosis, Complications and management of Carcinoma of Rectum And Anal canal	CK	MK	K	L&GD, L,L&PPT	VV-Viva,P-EXAM,P-VIVA,PP-Practical,T-CS	F&S	III	-	LH
CO1, CO2,	Describe Aetiopathogenesis, Classification, Clinical Features, Examinations, Investigations & Diagnosis, Complications and	CK	NK	K	L&PPT ,SIM,T	PP-Practical,SP,P-VIV	F&S	III	-	NLHT40.4

CO4	Management of Pilonidal Sinus, Proctitis, Pruritis Ani & Injuries of Anorectal region				UT,CBL,L_VC	A,T-CS,VV-Viva				
CO1, CO2, CO4, CO5	Demonstrate the skills to identify, examine, diagnose, and manage sinus tracts and fistulas, and distinguish various types of sinuses, and fistulas.	PSY-GUD	MK	KH	PBL,L&PPT ,PER,CBL, DIS	DOPS,CHK,DOPS,T-CS,PP-Practical	F&S	III	-	NLHP40.1
CO1, CO2, CO3	Demonstrate the skills to conduct a thorough examination, Diagnosis, and management of rectal cases and distinguish various types of Rectal Pathologies	PSY-GUD	MK	K	FC,DIS, SIM,D-M,L&GD	T-CS,P-EXAM,SP,Mini-CEX,DOPS	F&S	III	-	NLHP40.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 40.1	Surgical Anatomy & physiology of Ano Rectal Conditions	**Activities:** Lecture and Discussion 1. Surgical anatomy of the anus and rectum. 2. Physiology of defecation and continence. 3. Anatomical relationships and landmarks. Dissection and Practical Sessions 1. Cadaveric dissection: students explore anorectal anatomy. 2. Prosection demonstration: detailed examination of anorectal structures. 3. Identification of anatomical landmarks and relationships. Case Studies and Group Discussion 1. Case study presentation: students present anorectal conditions. 2. Group discussion: diagnosis, management, and complications. 3. Problem-based learning: students develop treatment plans. Clinical and Endoscopy Sessions 1. Clinical examination: students practice examining patients. 2. Endoscopy demonstration: observation of anoscopy and sigmoidoscopy.

		3. Radiology session: interpretation of imaging studies (e.g., MRI, CT scans). Interactive and Online Sessions 1. Online lecture: expert discussion on anorectal surgery. 2. Interactive quiz: assessment of knowledge. 3. Virtual patient simulation: students practice diagnosing and managing anorectal conditions.
NLHT 40.2	Examination of Anorectal Abscesses (Guda Vidradhi) and Bhagandara (Fistula-in-ano)	**Activities:** Lecture and Discussion 1. Introduction to Anorectal Abscesses (Guda Vidradhi): definition, etiology, and pathophysiology. 2. Clinical presentation and diagnosis: symptoms, signs, and diagnostic tests. 3. Management options: medical, surgical, and Ayurvedic. Case Studies and Group Discussion 1. Case study presentation: students present Anorectal Abscesses or Bhagandara cases. 2. Group discussion: diagnosis, management, and complications. 3. Problem-based learning: students develop treatment plans. Practical and Clinical Sessions 1. Clinical examination: students practice examining patients with Anorectal Abscesses or Bhagandara. 2. Surgical demonstration: observation of abscess drainage or fistulotomy procedures. 3. Radiology session: interpretation of imaging studies (e.g., MRI, CT scans). Ayurvedic Perspective 1. Lecture: Ayurvedic perspective on Anorectal Abscesses (Guda Vidradhi) and Bhagandara. 2. Discussion: Ayurvedic management options (e.g., Kshar Sutra, herbal remedies). 3. Case study presentation: Ayurvedic management of Anorectal Abscesses or Bhagandara. Interactive and Online Sessions 1. Online lecture: expert discussion on Anorectal Abscesses and Bhagandara management. 2. Interactive quiz: assessment of knowledge. 3. Virtual patient simulation: students practice diagnosing and managing Anorectal Abscesses and Bhagandara.

NLHT 40.3	Examination of Fissure in Ano (Parikartika)	**Activities:** Lecture and Discussion 1. Etiopathogenesis and classification of Fissure-in-Ano. 2. Clinical features: symptoms, signs, and stages. 3. Investigations: diagnostic criteria and modalities (e.g., anoscopy, MRI). Case Studies and Group Discussion 1. Case study presentation: students present Fissure-in-Ano cases. 2. Group discussion: diagnosis, management, and complications. 3. Problem-based learning: students develop treatment plans. Practical and Clinical Sessions 1. Clinical examination: students practice examining patients with Fissure-in-Ano. 2. Proctoscopy demonstration: observation of fissure visualization. 3. Radiology session: interpretation of imaging studies (e.g., MRI, CT scans). Interactive and Online Sessions 1. Online lecture: expert discussion on Fissure-in-Ano management. 2. Interactive quiz: assessment of knowledge. 3. Virtual patient simulation: students practice diagnosing and managing Fissure-in-Ano.
NLHT 40.4	Examination of Pilonidal Sinus, Proctitis, Pruritis Ani & Injuries of Anorectal region	Pilonidal Sinus Activities: 1. Lecture: definition, etiology, and pathophysiology. 2. Case study presentation: students present Pilonidal Sinus cases. 3. Group discussion: diagnosis, management, and complications. 4. Surgical demonstration: observation of Pilonidal Sinus excision. Proctitis Activities: 1. Lecture: definition, etiology, and pathophysiology. 2. Case study presentation: students present Proctitis cases. 3. Group discussion: diagnosis, management, and complications.

		4. Proctoscopy demonstration: observation of Proctitis visualization. Pruritis Ani Activities: 1. Lecture: definition, etiology, and pathophysiology. 2. Case study presentation: students present Pruritis Ani cases. 3. Group discussion: diagnosis, management, and complications. 4. Dermatology session: examination of Pruritis Ani specimens. Injuries of Anorectal Region Activities: 1. Lecture: types and causes of anorectal injuries. 2. Case study presentation: students present anorectal injury cases. 3. Group discussion: diagnosis, management, and complications. 4. Surgical demonstration: observation of anorectal injury repair.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 40.1	Examination of a Sinus or Fistula and Hands-on training on Simulators	**Steps:** Patient History 1. Gather History: Ask about the onset, duration, and nature of symptoms. Inquire about discharge, pain, and any prior surgeries or infections. 2. Medical History: Document past medical history, including any relevant systemic conditions like Crohn's disease, tuberculosis, or diabetes. Physical Examination

		1. Inspection: • Examine the area for visible signs of a sinus or fistula, such as an external opening, discharge, or skin changes. • Note the location, size, and appearance of any external openings. 2. Palpation: • Gently palpate the surrounding tissue to assess for tenderness, induration, or signs of infection. • Determine the tract's direction by feeling induration along the pathway. 3. Probing: • Use a sterile malleable probe to gently explore the sinus or fistula tract. • Note the depth, direction, and any resistance or obstructions. 4. Imaging (if available): • Consider using MRI, or fistulography to visualize the tract and assess its extent and connections. Supplementary Assessments 1. Special Tests: Consider tests for underlying conditions that may contribute to sinus or fistula formation, such as inflammatory markers or tuberculosis tests. Hands-on Training with Simulators 1. Simulator Setup: Ensure the simulator accurately represents the anatomy and pathology of a sinus or fistula. 2. Practice Sessions: Allow participants to practice inspection, palpation, and probing techniques on the simulator. 3. Feedback and Debriefing: Provide constructive feedback and conduct a debriefing session to discuss findings and areas for improvement.
NLHP 40.2	Examination of Rectal case and Hands-on training	**Steps:**

	on Simulators	Patient History 1. Gather History: Ask about symptoms such as pain, bleeding, changes in bowel habits, and discharge. Inquire about duration, onset, and any associated symptoms like weight loss or systemic issues. 2. Medical History: Document past medical history, including any gastrointestinal conditions, surgeries, medications, and family history of colorectal diseases. Physical Examination 1. Inspection: • Observe the perianal area for visible abnormalities such as skin tags, fissures, hemorrhoids, or external masses. • Look for signs of inflammation, discharge, or bleeding. 2. Digital Rectal Examination (DRE): • Preparation: Explain the procedure to the patient, ensuring privacy and comfort. Use gloves and lubrication. • Technique: Gently insert a lubricated, gloved finger into the rectum. Assess for tenderness, masses, and the tone of the anal sphincter. Feel for any abnormalities within the rectal wall. • Note Findings: Document findings such as masses, tenderness, and stool characteristics (e.g., blood, mucus). Supplementary Assessments 1. Proctoscopy or Anoscopy: If available, use a proctoscope or anoscope to visualize the rectal mucosa and identify any lesions or abnormalities. 2. Laboratory Tests: Collect stool samples for occult blood testing and culture if indicated.

		3. Imaging: Consider ordering imaging studies such as an abdominal X-ray, CT scan, or MRI if further evaluation is needed. Hands-on Training with Simulators 1. Simulator Setup: Ensure the simulator accurately represents rectal anatomy and pathology. 2. Practice Sessions: Allow participants to practice the digital rectal examination and use of proctoscopy or anoscopy on the simulator. 3. Feedback and Debriefing: Provide constructive feedback and conduct a debriefing session to discuss findings and areas for improvement.

Topic 41 Udarabhighata (Abdominal Injuries) (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO4, CO6	Explain abdominal injuries and their management	CK	NK	K	L&PPT ,L&GD, L	T-CS,DOPS,PP-Practical,DOPS, VV-Viva	F&S	III	-	LH
CO1, CO3, CO4, CO6	Demonstrate the skills to conduct a thorough examination, Diagnosis, and management of Abdominal injuries & Trauma patients and distinguish various types of Abdominal injuries.	PSY-MEC	NK	K	PT,FC,SIM,W,L &PPT	T-OBT,DOPS,T-CS,DOPS,CHK	F&S	III	-	NLHP41.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 41.1	Examination of Abdominal Injuries	**Steps:**

		Initial Assessment 1. Scene Safety: Ensure the environment is safe for both the patient and healthcare providers. 2. Primary Survey: Follow the ABCDE approach (Airway, Breathing, Circulation, Disability, Exposure) to assess and stabilize the patient. 3. Obtain Consent: Explain the procedure to the patient and obtain their consent, if they are conscious and able to provide it. Physical Examination 1. Inspection: Observe the abdomen for signs of injury such as bruising, swelling, open wounds, or deformities. 2. Palpation: Gently palpate the abdomen to identify areas of tenderness, distension, guarding, or rigidity. 3. Percussion: Tap on the abdomen to assess for dullness or tympany, which might indicate internal bleeding or air. 4. Auscultation: Listen to bowel sounds using a stethoscope to detect any abnormalities such as absent bowel sounds, which can suggest peritonitis or intestinal obstruction. Supplementary Assessments 1. Vital Signs Monitoring: Continuously monitor the patient's vital signs (heart rate, respiratory rate, blood pressure, oxygen saturation) to detect any deterioration. 2. Imaging: If available, order imaging studies such as abdominal X-ray, ultrasound, or CT scan to further evaluate the injuries. 3. Laboratory Tests: Order relevant blood tests (e.g., Complete blood count, electrolytes, liver function tests, S.amylase, S.lipase) based on clinical findings.
Topic 42 Yakrit Vikara (Diseases of Liver) (LH :3 NLHT: 1 NLHP: 10)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO4, CO5	Explain the Aetiology, Clinical features, Diagnosis, and Emergency Management of Liver injury.	CK	NK	K	L&GD, L&PPT ,L	QZ ,DEB,INT,P-VIVA,PP-Practical	F&S	III	-	LH
CO1, CO5	Explain the Aetiology, Clinical features, Diagnosis, and Management of Hydatid Cyst and Liver Abscess	CK	DK	K	L,L&PPT	T-CS,VV-Viva,INT,PP-Practical, P-CASE	F&S	III	-	LH
CO1, CO4, CO5	Explain the Aetiology, Clinical features, Diagnosis, and Management of Hepatomegaly and Carcinoma of the Liver	CK	NK	K	L,L&PPT	PP-Practical,DEB,INT, T-CS,VV-Viva	F&S	III	-	LH
CO1, CO2, CO4	Demonstrate the skills to learn the Surgical Anatomy of the Liver and conduct a thorough examination, Diagnosis, and Management of Acute Liver Injuries.	CK	MK	K	TUT,L_VC,L&PPT ,CBL,L&GD	P-EXAM,QZ ,VV-Viva,PP-Practical, COM	F&S	III	-	NLHP42.1
CO1, CO2, CO4	Demonstrate the skills to diagnose and manage surgical jaundice and explain the use of Endoscopic Retrograde Cholangiopancreatography (ERCP) in the evaluation and treatment of Biliary Obstructions.	CC	NK	K	L&PPT ,CBL,CD,L&GD,D	QZ ,VV-Viva,P-EXAM,CBA,PP-Practical	F&S	III	-	NLHP42.2
CO1, CO3, CO6	Explain the pathophysiology, Risk factors, clinical features, diagnostic criteria, management strategies, and treatment options of Acute Liver Injury (ALI).	CC	DK	K	L&GD, FC,TBL ,BL,D-M	CBA,PP-Practical,P-EXAM,DEB, PUZ	F&S	III	-	NLHT42.1
CO1,	Demonstrate the skills to examine and diagnose Hepatomegaly an	CAP	MK	K	PER,D-	QZ ,OSCE,	F&S	III	-	NLHP42.3

CO2, CO4	d the procedure for Percutaneous Aspiration, Injection, and Respir ation (PAIR) in treating liver abscesses.				BED,L &GD,C D,FC	CL-PR,SB A,PRN				
CO1, CO2, CO4, CO6	Demonstrate the skills to perform Paracentesis safely and effectively in the management of Ascites and the steps involved in the procedure using patients or simulator s.	PSY-GUD	NK	K	SDL,D-M,DIS, TUT,L_ VC	P-CASE,V V-Viva, C-VC,P-ID,P P-Practical	F&S	III	-	NLHP42.4
CO1, CO2, CO4	Discuss surgical management options for Portal Hypertension and the steps involved in various surgical procedures.	CC	NK	K	CBL,C D,SDL, PT,D	P-REC,P-C ASE,INT,P RN,P-EXAM	F&S	III	-	NLHP42.5

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 42.1	Examination of the case of Acute Liver Injury	**Activities:** Lecture and Discussion 1. Introduction to ALI: definition, epidemiology, and pathophysiology. 2. Causes and risk factors: toxins, medications, viruses, and metabolic disorders. 3. Clinical features and diagnostic criteria: symptoms, signs, and laboratory tests. Case Study Presentation 1. Students present ALI case studies. 2. Group discussion: diagnosis, management, and complications. 3. Problem-based learning: students develop treatment plans. Practical and Clinical Sessions 1. Clinical examination: students practice examining patients with ALI. 2. Laboratory session: interpretation of liver function tests (LFTs) and other diagnostic tests. 3. Imaging session: interpretation of ultrasound, CT, or MRI scans. Interactive and Online Sessions

		1. Online lecture: expert discussion on ALI management. 2. Interactive quiz: assessment of knowledge. 3. Virtual patient simulation: students practice diagnosing and managing ALI. Hands-on Activities 1. Simulation-based training: students practice managing ALI scenarios. 2. Pathology session: examination of liver biopsy specimens. 3. Patient education: students develop patient education materials. Small Group Discussions 1. Discussion of ALI-related topics: - Toxin-induced liver injury - Viral hepatitis - Autoimmune hepatitis - Liver transplantation 2. Case-based discussions: students analyze ALI cases. 3. Journal club: discussion of recent research articles.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 42.1	Demonstration of Surgical anatomy of the liver, Acute Liver Injury in patients, or simulator.	**Steps:** Surgical Anatomy of the Liver 1. Anatomical Overview: • Liver Lobes: Right lobe, left lobe, caudate lobe, and quadrate lobe. • Surfaces: Diaphragmatic surface (superior) and visceral surface (inferior). • Ligaments: Falciform ligament, coronary ligaments, and triangular ligaments. • Blood Supply: Hepatic artery, portal vein, and hepatic veins. • Biliary System: Bile ducts, gallbladder, and cystic duct.

		Examination and Management of Acute Liver Injury 1. Initial Assessment: • History Taking: Gather information on the mechanism of injury, symptoms like pain and jaundice, and any pre-existing liver conditions. • Physical Examination: Inspect for signs of trauma, palpate for tenderness and hepatomegaly, and assess for peritoneal signs. 2. Diagnostic Tests: • Laboratory Tests: Liver function tests, Complete blood count, coagulation profile, and Serum amylase/ S.lipase. • Imaging Studies: Ultrasound, CT scan, or MRI to evaluate the extent of injury. 3. Management Techniques: • NonOperative Management: Indications for conservative management, monitoring protocols, and follow-up imaging. • Surgical Intervention: Indications for surgery, types of surgical procedures (e.g., repair, resection), and post-operative care.
NLHP 42.2	Demonstration of Diagnosis & Management of Surgical Jaundice with ERCP on patients /simulator.	**Steps:** Patient History 1. Gather History: Ask about the onset, duration, and nature of jaundice. Inquire about associated symptoms such as pruritus, dark urine, pale stools, and abdominal pain. 2. Medical History: Document past medical history, including any liver diseases, gallstones, pancreatitis, or previous surgeries. Physical Examination 1. Inspection: Observe the skin and sclera for jaundice. Look for signs of liver disease such as spider angiomas, palmar erythema, and ascites.

		2. Palpation: Check for hepatomegaly and tenderness in the right upper quadrant. 3. Auscultation: Listen for bowel sounds and any abnormal vascular sounds. Diagnostic Tests 1. Laboratory Tests: Order liver function tests, complete blood count, and coagulation profile. 2. Imaging Studies: Perform ultrasound, CT scan, or MRI, or ERCP to evaluate the biliary tree and liver.
NLHP 42.3	Examination of Hepatomegaly & PAIR in Liver Abscess and Hands-on Practice.	**Steps:** 1. Patient History: • Gather history of symptoms such as abdominal pain, fatigue, jaundice, and weight loss. • Inquire about past medical history, including liver disease, infections, and alcohol consumption. 2. Physical Examination: • Inspection: Observe the abdomen for distension and any visible masses. • Palpation: ◦ Position the patient supine with knees slightly bent. ◦ Start palpation from the right iliac fossa moving towards the right costal margin. ◦ Note the size, surface, consistency, and tenderness of the liver. • Percussion: Percuss the liver borders to determine its span and confirm hepatomegaly. PAIR in Liver Abscess 1. Preparation: • Explain the procedure to the patient and obtain informed consent.

		• Ensure aseptic technique and gather necessary equipment (e.g., needles, syringes, antiseptic solution). 2. Procedure: • Ultrasound Guidance: Use ultrasound to locate the abscess. • Aspiration: ◦ Insert the needle into the abscess cavity under ultrasound guidance. ◦ Aspirate the abscess content and send it for microbiological analysis. • Injection: Inject a scolicidal agent (e.g., hypertonic saline) into the abscess cavity. • Re-aspiration: Re-aspirate the contents to remove the injected agent and debris. 3. Post-Procedure Care: • Monitor the patient for any complications such as bleeding or infection. • Follow up with repeat ultrasound to assess the resolution of the abscess.
NLHP 42.4	Demonstration of Paracentesis inpatient or simulator.	**Steps:** Patient History and Assessment 1. Gather History: Ask about symptoms such as abdominal distension, pain, and shortness of breath. Enquire about past medical history including liver disease, heart failure, and cancer. 2. Physical Examination: Assess for signs of ascites, including abdominal distension, fluid wave, and shifting dullness. Procedure Preparation 1. Consent: Explain the procedure to the patient and obtain informed consent. 2. Preparation: Ensure aseptic technique, and gather necessary equipment (e.g., sterile gloves, antiseptic solution, needles, syringes, collection bottles). 3. Positioning: Position the patient comfortably, usually in a semi-upright position to allow fluid to accumulate in the lower abdomen. Performing Paracentesis

		1. Site Selection: • Identify the site of fluid accumulation, typically in the lower quadrant. • Use ultrasound guidance if available to minimize the risk of complications. 2. Sterilization: Clean the selected site with an antiseptic solution and drape the area with sterile drapes. 3. Local Anesthesia: Administer local anesthesia to numb the area. 4. Needle Insertion: • Insert the needle perpendicular to the skin and advance it slowly while aspirating until fluid is obtained. • Attach a syringe to collect the fluid for diagnostic analysis or therapeutic removal. 5. Fluid Collection: Collect fluid in sterile containers for laboratory analysis (e.g., cell count, protein, culture). 6. Post-Procedure Care: • Remove the needle and apply a sterile dressing to the site. • Monitor the patient for any complications such as bleeding or infection. • Send collected fluid for laboratory analysis.
NLHP 42.5	Surgical management of Portal Hypertension	**Steps:** Educational Content: Prepare detailed scripts and visual aids to explain the surgical steps, indications, and post-operative care. A thorough understanding of the surgical management of portal hypertension is essential for effective treatment. Videographic demonstrations and hands-on practice with simulators enhance proficiency and confidence in performing these complex procedures. Regular practice and staying updated with the latest surgical techniques are crucial for successful outcomes in patients with portal hypertensio**n**

Topic 43 Pittashaya Vikara (Diseases of Gall Bladder) (LH :2 NLHT: 1 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1,	Discuss the gross & microscopic anatomy and histology of the	CC	MK	K	L_VC,S	P-ID,360D,	F&S	III	V-RS,V-	NLHT43.1

CO4, CO5	Gall Bladder with its anatomical relationships and landmarks, and congenital anomalies, diagnostic criteria, surgical procedures, complications, and post-operative care in Gall Bladder Diseases. Explain the role of laboratory tests, Liver function tests (LFTs), other relevant investigations with their Interpretation, and imaging studies in gallbladder disease.				IM,CBL ,DIS,L &GD	PP-Practica l,T-CS,INT			RS	
CO1, CO4, CO5	Explain Aetiopathogenesis, Classification, Clinical Features, Investigations, Diagnosis, Complications, and management of Choledochal Cyst & Congenital Biliary Atresia	CC	DK	K	L,L&PP T	P-VIVA,V V-Viva,PP-Practical,T-CS,PRN	F&S	III	-	LH
CO1, CO2, CO3, CO6	Describe Aetiopathogenesis, Classification, Clinical Features, Investigations, Diagnosis, Complications, and management of Cholecystitis (Pittashaya Shotha) and Choledocholithiasis	CC	MK	K	L&PPT ,L	Log book,P -PRF,PRN, OSCE,T-CS	F&S	III	-	LH
CO1, CO2, CO4, CO6	Demonstrate skills in taking patient history and performing physic al examinations, diagnosis, treatment and communication skills for cholecystitis and Choledocho lithiasis	CK	DK	K	CD,PER ,PT,D,R P	T-OBT,OS CE,T-CS,O SPE,VV-Viva	F&S	III	-	NLHP43.1
CO1, CO2, CO4	Explain the concept and the diagnostic and therapeutic techniques of Magnetic Resonance Cholangiopancreatography (MRCP) and Endoscopic Retrograde Cholangiopancreatography (ERCP) in Biliary and Pancreatic Disorders	CK	NK	K	L&PPT ,FC,L& GD,BL, PT	DOAP,OSP E,P-VIVA, T-OBT,PP-Practical	F&S	III	-	NLHP43.2
CO1, CO2, CO4	Demonstrate skills in taking patient history, diagnostic and comm unication skills, and performing physical examinations for cholecystitis.	PSY-SET	DK	K	PER,L& GD,L& PPT ,C D,L_VC	P-VIVA,P-CASE,SP,T-OBT,P-MOD	F&S	III	-	NLHP43.3
CO1, CO2,	Demonstrate skills in clinical presentation, diagnostic techniques, etc. through various interactive methods for Gall Bladder cancer	PSY-GUD	DK	K	D,PT,IB L,CD,L	P-VIVA,P-EXAM,OS	F&S	III	-	NLHP43.4

CO4	fostering effective communication and teamwork skills in a clinical setting.				&PPT	CE,CBA,P-REC					

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 43.1	Surgical anatomy of Gall Bladder, congenital anomalies of Gall Bladder & Basic Investigations	**Surgical anatomy of Gall Bladder** Activities: 1. Lecture: gross anatomy and microscopic anatomy. 2. Dissection demonstration: gallbladder dissection. 3. Histology lab: examination of gallbladder tissue. 4. Case study presentation: students present gallbladder surgery cases. 5. Interactive session: 3D visualization of gallbladder anatomy. **Congenital Anomalies of the Gallbladder** Activities: 1. Lecture: classification and types of congenital anomalies. 2. Case study presentation: students present congenital anomaly cases. 3. Radiology session: interpretation of imaging studies (e.g., ultrasound, CT). 4. Surgical demonstration: observation of surgical correction. 5. Group discussion: management and post-operative care. **Basic Investigations** Activities: 1. Lecture: laboratory tests and LFTs. 2. Case study presentation: students interpret investigation results. 3. Radiology session: interpretation of imaging studies. 4. Group discussion: diagnostic criteria and investigation protocols. 5. Practical session: students practice ordering and interpreting investigations

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 43.1	Cholecystitis and Choledocholithiasis Examination	**Steps:** Group Discussion 1. Topic Introduction: Start with a brief overview of cholecystitis, its causes, and clinical presentation. 2. Case Presentation: Present a typical case scenario of a patient with cholecystitis. Include details such as patient demographics, symptoms, and medical history. 3. Discussion Questions: • What are the common symptoms of cholecystitis? • What differential diagnoses should be considered? • What are the key elements in the patient's history that suggest cholecystitis? 4. Interactive Discussion: Encourage participants to share their thoughts and experiences. Facilitate a guided discussion to explore various aspects of diagnosis and management. Role Play 1. Scenario Setup: Create role play scenarios where participants take turns playing the roles of the patient, doctor, and observer. 2. Patient Role: The "patient" presents with symptoms suggestive of cholecystitis (e.g., right upper quadrant pain, nausea, fever). 3. Doctor Role: The "doctor" conducts a thorough history taking and physical examination, focusing on signs and symptoms of cholecystitis. 4. Observer Role: The "observer" provides feedback on the interaction, focusing on communication skills, examination techniques, and clinical reasoning. 5. Debriefing: Conduct a debriefing session to discuss the role play experience, highlighting strengths and areas for improvement.

		Case Taking and Examination 1. Patient History: • Gather a detailed history of the present illness, including the onset, duration, and nature of pain. • Ask about associated symptoms such as nausea, vomiting, fever, and changes in bowel habits. • Document past medical history, including any previous episodes of similar pain, surgeries, and family history of gallbladder disease. 2. Physical Examination: • Inspection: Observe the abdomen for any visible signs such as distension or jaundice. • Palpation: Perform gentle and then deeper palpation of the abdomen, focusing on the right upper quadrant. Check for Murphy's sign (pain upon palpation of the gallbladder). • Percussion: Percuss the abdomen to identify areas of tenderness or fullness. • Auscultation: Listen for bowel sounds and any abnormalities.
NLHP 43.2	MRCP & ERCP Demonstration	**Steps:** MRCP (Magnetic Resonance Cholangiopancreatography) 1. Patient Preparation: • History and Consent: Explain the procedure to the patient, obtain informed consent, and document relevant medical history. • Fasting: Ensure the patient fasts for 4-6 hours before the procedure. • Positioning: Position the patient supine on the MRI table. 2. Procedure – By Radiologist ERCP (Endoscopic Retrograde Cholangiopancreatography)

		1. Patient Preparation: • History and Consent: Explain the procedure to the patient, obtain informed consent, and document relevant medical history. • Fasting: Ensure the patient fasts for 6-8 hours before the procedure. • Sedation: Administer appropriate sedation and monitor the patient's vital signs. 2. Procedure – By Expert Videographic Demonstration Educational Content: Prepare scripts and visual aids to explain the indications, steps, and potential complications of MRCP and ERCP. Hands-on Training with Simulators 1. Simulator Setup: Ensure the simulator accurately represents the anatomy and pathology of the biliary and pancreatic systems. 2. Practice Sessions: Allow participants to practice MRCP and ERCP techniques on the simulator. 3. Feedback and Debriefing: Provide constructive feedback and conduct a debriefing session to discuss findings and areas for improvement.
NLHP 43.3	Case taking and examination of cholecystitis on the patients.	**Steps:** Group Discussion 1. Topic Introduction: Start with a brief overview of cholecystitis, its causes, and clinical presentation. 2. Case Presentation: Present a typical case scenario of a patient with cholecystitis. Include details such as patient demographics, symptoms, and medical history. 3. Discussion Questions: • What are the common symptoms of cholecystitis? • What differential diagnoses should be considered? • What are the key elements in the patient's history that suggest cholecystitis?

4. Interactive Discussion: Encourage participants to share their thoughts and experiences. Facilitate a guided discussion to explore various aspects of diagnosis and management.

Role Play

1. Scenario Setup: Create role play scenarios where participants take turns playing the roles of the patient, doctor, and observer.
2. Patient Role: The "patient" presents with symptoms suggestive of cholecystitis (e.g., right upper quadrant pain, nausea, fever).
3. Doctor Role: The "doctor" conducts a thorough history taking and physical examination, focusing on signs and symptoms of cholecystitis.
4. Observer Role: The "observer" provides feedback on the interaction, focusing on communication skills, examination techniques, and clinical reasoning.
5. Debriefing: Conduct a debriefing session to discuss the role play experience, highlighting strengths and areas for improvement.

Case Taking and Examination

1. Patient History:
    - Gather a detailed history of the present illness, including the onset, duration, and nature of pain.
    - Ask about associated symptoms such as nausea, vomiting, fever, and changes in bowel habits.
    - Document past medical history, including any previous episodes of similar pain, surgeries, and family history of gallbladder disease.
2. Physical Examination:
    - Inspection: Observe the abdomen for any visible signs such as distension or jaundice.
    - Palpation: Perform gentle and then deeper palpation of the abdomen, focusing on the right upper quadrant. Check for Murphy's sign (pain upon palpation of the

		gallbladder). • Percussion: Percuss the abdomen to identify areas of tenderness or fullness. • Auscultation: Listen for bowel sounds and any abnormalities.
NLHP 43.4	Case presentation of Carcinoma of Gall Bladder	**Steps:** Group Discussion 1. Topic Introduction: Start with an overview of gallbladder cancer, its epidemiology, risk factors, and clinical presentation. 2. Case Scenario: Present a typical case of a patient with suspected gallbladder cancer, including history, symptoms, and initial findings. 3. Discussion Questions: • What are the common symptoms and risk factors for gallbladder cancer? • What diagnostic tests are essential for confirming the diagnosis? • What are the treatment options and their indications? 4. Interactive Discussion: Encourage participants to share their experiences, insights, and questions. Facilitate a guided discussion on the diagnosis and management of gallbladder cancer. Case Presentation 1. Case Preparation: Select a real or simulated case of gallbladder cancer with comprehensive details. 2. Presentation Components: Include patient history, clinical findings, diagnostic workup, treatment plan, and follow-up. 3. Analysis and Discussion: After presenting the case, engage the participants in analyzing the case, discussing differential diagnoses, and evaluating the management plan. Video Demonstration

		1. Video Commentary: Provide a detailed commentary on each video, explaining the procedure, its indications, and potential complications. 2. Interactive Viewing: Encourage participants to ask questions and discuss the videos in real time. Role Play 1. Scenario Setup: Create role-play scenarios where participants take turns playing the roles of the patient, doctor, and family member. 2. Patient Role: The "patient" presents with symptoms suggestive of gallbladder cancer. 3. Doctor Role: The "doctor" conducts a thorough history-taking and physical examination, explains the diagnosis and treatment options, and addresses the patient's and family's concerns. 4. Observer Role: The "observer" provides feedback on the interaction, focusing on communication skills, empathy, and clinical reasoning. 5. Debriefing: Conduct a debriefing session to discuss the role-play experience, highlighting strengths and areas for improvement.

Topic 44 Agnyashaya Vikara (Diseases of Pancreas) (LH :3 NLHT: 1 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO4	Explain the classification and types of congenital anomalies of the Pancreas with their clinical presentation, diagnosis, management options and surgical interventions, complications, and Post-operative care	CC	MK	K	TUT,CD,PT,L&PPT,CBL	PRN,PP-Practical,P-PRF,P-CASE,T-CS	F&S	III	V-RS,V-KS,V-RS	NLHT44.1
CO1, CO5, CO6	Enumerate Aetiopathogenesis, Classification, Clinical Features, Investigations, Diagnosis & Management of Acute Pancreatitis, Chronic & Chronic relapsing pancreatitis & its Management.	CK	MK	K	L,L&PPT	Log book,CL-PR, C-VC,T-CS,P-VIVA	F&S	III	-	LH
CO1,	Describe Cysts of Pancreas & Pseudocyst of Pancreas & its	CC	NK	K	L,L_VC	T-CS,P-EX	F&S	III	-	LH

CO2, CO4	Management.				,L&PPT	AM,PP-Practical,P-VIVA,PRN				
CO1, CO3, CO5	Explain Cancer of the Pancreas & its Management, Insulinoma & Zollinger Ellison Syndrome.	CC	NK	K	L_VC,L ,L&PPT	VV-Viva,P-EXAM,PP-Practical,T-CS,P-VIVA	F&S	III	-	LH
CO1, CO2, CO4	Demonstrate skills in diagnosing and managing Pancreatitis, along with the clinical presentation, diagnostic techniques, and tre atment options.	PSY-GUD	DK	K	L&PPT ,PBL,PER,L,RP	PM,INT,VV-Viva,OSCE,PP-Practical	F&S	III	-	NLHP44.1
CO1, CO2, CO4	Demonstrate skills to identify, diagnose, and manage Pseudo-Pancreatic Cysts.	PSY-GUD	NK	K	DIS,PBL,L&PPT ,D,PT	P-VIVA,P-EXAM,INT ,PRN,DEB	F&S	III	-	NLHP44.2
CO1, CO2, CO4, CO5	Demonstrate skills in diagnosing and managing Pancreatic Neoplasms with its surgical techniques and treatment options.	CK	NK	K	D-BED, L&GD, PT,L&PPT ,TBL	T-CS,P-EXAM,PP-Practical,VV-Viva	F&S	III	-	NLHP44.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 44.1	Surgical Anatomy & physiology, Congenital Anomalies of Pancreas	**Activities:** 1. Lecture: gross anatomy and microscopic anatomy. 2. Dissection demonstration: pancreatic dissection. 3. Histology lab: examination of pancreatic tissue. 4. Case study presentation: students present pancreatic surgery cases. 5. Interactive session: 3D visualization of pancreatic anatomy.

		6. Lecture: classification and types of congenital anomalies. 7. Case study presentation: students present congenital anomaly cases. 8. Radiology session: interpretation of imaging studies (e.g., CT, MRI). 9. Surgical demonstration: observation of surgical correction. 10. Group discussion: management and post-operative care.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 44.1	Case taking of Pancreatitis with effective communication skills	**Steps:** Group Discussion 1. Topic Introduction: Start with an overview of pancreatitis, its types (acute and chronic), causes, and clinical presentation. 2. Case Scenario: Present a typical case of a patient with pancreatitis, including history, symptoms, and initial findings. 3. Discussion Questions: • What are the common symptoms and risk factors for pancreatitis? • What diagnostic tests are essential for confirming the diagnosis? • What are the treatment options and their indications? 4. Interactive Discussion: Encourage participants to share their experiences, insights, and questions. Facilitate a guided discussion on the diagnosis and management of pancreatitis. Case Presentation 1. Case Preparation: Select a real or simulated case of pancreatitis with comprehensive details. 2. Presentation Components: Include patient history, clinical findings, diagnostic workup,

		treatment plan, and follow-up. 3. Analysis and Discussion: After presenting the case, engage the participants in analyzing the case, discussing differential diagnoses, and evaluating the management plan. Video Demonstration 1. Video Commentary: Provide a detailed commentary on each video, explaining the procedure, its indications, and potential complications. 2. Interactive Viewing: Encourage participants to ask questions and discuss the videos in real time. Role Play 1. Scenario Setup: Create role-play scenarios where participants take turns playing the roles of the patient, doctor, and family member. 2. Debriefing: Conduct a debriefing session to discuss the role-play experience, highlighting strengths and areas for improvement.
NLHP 44.2	Demonstration of Pseudo Pancreatic cyst on patient or simulator.	**Steps:** Patient History and Assessment 1. Gather History: Ask about symptoms such as abdominal pain, nausea, vomiting, and a history of pancreatitis. Document the duration and progression of symptoms. 2. Physical Examination: Observe for signs of abdominal distension, tenderness, and palpable masses. Perform a thorough examination to assess for complications. Diagnostic Tests

		1. Imaging Studies: Perform ultrasound, CT scan, or MRI to visualize the pseudo-pancreatic cyst and assess its size, location, and relation to surrounding structures. 2. Laboratory Tests: Order relevant tests such as Serum Amylase, S.lipase, and liver function tests to assess the underlying condition. Video Demonstration Educational Content: Provide a detailed commentary on each video, explaining the indications, steps, and potential complications. Role Play 1. Scenario Setup: Create role-play scenarios where participants take turns playing the roles of the patient, doctor, and family member. 2. Debriefing: Conduct a debriefing session to discuss the role-play experience, highlighting strengths and areas for improvement.
NLHP 44.3	Case presentation of Neoplasm of Pancreas and its management.	**Steps:** Group Discussion 1. Topic Introduction: Begin with an overview of pancreatic neoplasms, including types (e.g., adenocarcinoma, neuroendocrine tumors), risk factors, and clinical presentation. 2. Case Scenario: Present a typical case of a patient with a pancreatic neoplasm, including history, symptoms, and initial findings. 3. Discussion Questions: • What are the common symptoms and risk factors for pancreatic neoplasms? • What diagnostic tests are essential for confirming the diagnosis? • What are the treatment options and their indications? 4. Interactive Discussion: Encourage participants to share their experiences, insights, and questions. Facilitate a guided discussion on the diagnosis and management of pancreatic neoplasms.

		Case Presentation 1. Case Preparation: Select a real or simulated case of a pancreatic neoplasm with comprehensive details. 2. Presentation Components: Include patient history, clinical findings, diagnostic workup, treatment plan, and follow-up. 3. Analysis and Discussion: After presenting the case, engage the participants in analyzing the case, discussing differential diagnoses, and evaluating the management plan. Video Demonstration 1. Video Commentary: Provide a detailed commentary on each video, explaining the procedure, its indications, and potential complications. 2. Interactive Viewing: Encourage participants to ask questions and discuss the videos in real time. Role Play 1. Scenario Setup: Create role- play scenarios where participants take turns playing the roles of the patient, doctor, and family member. 2. Debriefing: Conduct a debriefing session to discuss the role-play experience, highlighting strengths and areas for improvement.

Topic 45 Pleeha Vikara (Diseases of Spleen) (LH :3 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2,	Define Aetiopathogenesis, Classification, Investigations, Clinical Features and Management of Spleen Rupture.	CK	NK	K	L,L&PPT	DEB,PP-Practical,P-	F&S	III	-	LH

CO3, CO6						VIVA, C-VC,T-CS				
CO1, CO2, CO6	Enumerate the Indications, Complications of Hypersplenism & Benefits of Spleenectomy.	CK	NK	K	L&PPT ,L	P-VIVA,P-EXAM,PP-Practical,PRN,Log book	F&S	III	-	LH
CO1, CO2, CO5	Describe Congenital Anomalies, Clinical Features, and Management of Splenomegaly (Pleeha Vridhi).	CK	DK	K	L&PPT ,L	VV-Viva,P-EXAM,PP-Practical,INT,Log book	F&S	III	-	LH
CO1, CO2, CO4, CO6	Discuss the clinical presentation, and implications of Splenic rupture and Splenomegaly, with their diagnostic approach, and Management strategies.	CC	NK	K	PT,PER ,DIS,L &GD,CD	C-VC,QZ , P-EXAM,VV-Viva,PRN	F&S	III	-	NLHP45.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 45.1	Case presentation of the Splenic Rupture & Splenomegaly on the patients or simulator.	**Steps** Class Discussion/Case Presentation Introduction: Briefly introduce splenic rupture and splenomegaly. State the objectives of the discussion/presentation.

		Case Descriptions: Splenic Rupture: Present a case of a patient with acute abdominal pain, history of trauma, and signs of shock. Splenomegaly: Describe a patient with gradual onset of abdominal discomfort, early satiety, and a palpable mass in the left upper quadrant. Diagnostic Approach: Discuss the diagnostic steps for each condition, including history, physical examination, lab tests, and imaging studies. Highlight the differences in diagnostic approaches for splenic rupture and splenomegaly. Management Strategies: Splenic Rupture: Emphasize the importance of immediate stabilization, fluid resuscitation, and possible surgical intervention (e.g., splenectomy). Splenomegaly: Focus on identifying and treating the underlying cause (e.g., infection, hematologic disorder) and managing symptoms. Q&A Session: Encourage questions and discussions from the audience. Clarify any doubts and provide additional insights. Video Demonstration/Role Play Preparation: Prepare scripts or scenarios for each condition. Assign roles to participants (e.g., patient, doctor, nurse). Demonstration: Splenic Rupture: Show an emergency room scenario with diagnosis and initial treatment of a patient with acute abdominal pain and shock. Splenomegaly: Demonstrate a patient consultation, discussing symptoms, examination findings, and management plans with the doctor. Debriefing: Discuss the key points from each demonstration. Highlight the learning objectives and take-home messages.

Topic 46 Vrikka Evam Mutravahini Vikara (Diseases of Kidney and Ureters) (LH :5 NLHT: 4 NLHP: 2)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2	Describe the Surgical Anatomy and physiology of the Urogenital System and enumerate Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications, and Management of Congenital anomalies of Kidney & Ureter, Horse Shoe kidney & Polycystic kidney.	CK	DK	K	SIM,D-M	P-VIVA,SP,P-MOD	F&S	III	V-RS,V-RS	NLHT46.1
CO1, CO3, CO5	Illustrate the Aetiopathogenesis, Causes, Characteristics, Clinical signs and symptoms, and Development of Congenital Kidney and Ureter anomalies and Polycystic Kidney Disease with their management and Complications.	CAN	MK	K	BL,CBL,TUT,DIS,SDL	M-CHT,VV-Viva,T-CS, C-VC,CL-PR	F&S	III	-	NLHT46.2
CO1, CO3, CO5	Elaborate on the Causes and Mechanisms of Kidney and Ureter injuries with their Clinical Features, Diagnostic Techniques, Management Plans, and Complications.	CC	MK	K	PER,TUT,D,PSM,RP	CL-PR,P-VIVA,P-PS,SP, C-VC	F&S	III	-	NLHT46.3
CO1, CO3, CO5	Define the Aetiopathogenesis, Classification, Clinical Features & Management of Hydronephrosis.	CK	MK	K	PL,LRI,L,L&PPT	P-VIVA,PRN,CL-PR,P-EXAM,QZ	F&S	III	-	LH
CO1, CO3, CO5	Define the Aetiopathogenesis, Classification, Clinical Features & Management of Non-Specific Infection of the Kidneys- Acute & Chronic Pyelonephritis.	CK	MK	K	L,L&GD,L_VC,L&PPT	PRN,DEB,VV-Viva, C-VC,M-CHT	F&S	III	-	LH
CO1, CO3, CO5	Describe the Perinephric Abscess & Renal Abscess.	CC	MK	K	L_VC,L&PPT , L,L&GD,CD	PRN,VV-Viva,P-VIVA,T-CS,PP-Practical	F&S	III	-	LH

CO1, CO3, CO5	Define Aetiopathogenesis, Types, Clinical Features, Investigations, Complications & Management of Vrikkashmari (Renal Calculus).	CK	MK	K	L&PPT,L,L_VC,L&GD	P-VIVA,SA,PRN,PP-Practical,VV-Viva	F&S	III	-	LH
CO1, CO3, CO5	Elaborate Pathophysiology, Causes, and Development of Ureteral Calculus and its Clinical Features, Diagnostic tools and Imaging studies, Management Plans, and Complications.	CC	MK	K	SIM,CBL,PER,TUT,BL	PRN,CL-PR,P-VIVA,P-CASE,P-EXAM	F&S	III	-	NLHT46.4
CO1, CO3, CO5	Define Aetiopathogenesis, Classification, Clinical Features & Management of Tumours of the Kidney.	CC	MK	K	L,L_VC,PER,L&PPT,L&GD	PRN,P-VIVA,P-EXAM,T-CS	F&S	III	-	LH
CO1, CO3, CO5	Discuss the Pathophysiology and Clinical Presentation, Diagnostic approach and Management Strategies of CKD, Perinephric Abscess, and Renal Calculus.	PSY-GUD	MK	K	PSM,PL,TUT,RLE,CBL	VV-Viva,PRN,C-VC,P-VIVA,P-EXAM	F&S	III	-	NLHP46.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 46.1		
NLHT 46.2	Congenital anomalies of Kidney, Ureter & Polycystic Kidney discussion.	**Case Study Analysis**: Review and discuss case studies of patients with congenital kidney and ureter anomalies and polycystic kidney disease. **Diagnostic Techniques Workshop**: Practice using diagnostic tools like ultrasonography, CT, and MRI to identify these anomalies.

		Symptom Simulation: Use simulations to understand and identify the clinical presentations of these conditions.. **Classification Exercises**: Engage in exercises to classify different congenital anomalies of the kidney and ureter. **Complication Scenario Management**: Work through scenarios where students must manage complications arising from these conditions. **Treatment Plan Development**: Create comprehensive management and treatment plans for hypothetical patients. **Group Discussions**: Facilitate discussions on the aetiopathogenesis and clinical features of these conditions.
NLHT 46.3	Demonstration of Injuries to the Kidneys And Ureters.	**Case Study Review**: Analyze and discuss case studies involving kidney and ureter injuries. **Imaging Analysis**: Review and interpret imaging studies of kidney and ureter injuries. **Role-Playing**: Simulate patient interviews and history taking to practice identifying possible causes and symptoms of injuries. **Management Scenarios**: Engage in scenarios to develop and implement management plans for patients with kidney and ureter injuries. **Complication Management**: Discuss and simulate the management of complications arising from these injuries. **Group Discussions**: Facilitate discussions on the mechanisms, diagnosis, and management of kidney and ureter injuries.
NLHT 46.4	Ureteral Stone examination.	**Case Study Analysis**: Review and discuss case studies of patients diagnosed with ureteral stones. **Imaging Interpretation**: Analyze and interpret imaging studies to locate and assess ureteral stones. **Symptom Simulation**: Use simulations to understand and identify the clinical presentation and symptoms of ureteral stones. **Treatment Plan Exercises**: Develop and present comprehensive management and treatment plans for patients with ureteral stones. **Surgical Simulation**: Participate in surgical simulations of procedures such as ureteroscopy and

		lithotripsy. **Complication Management**: Engage in scenarios to identify and manage complications arising from ureteral stones and their treatment. **Group Discussions**: Facilitate discussions on best practices and guidelines for the management of ureteral stones.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 46.1	Case presentation on CKD, Perinephric Abscess & **R**enal Calculus on patients, or simulator.	**Steps** Class Discussion/Case Presentation Introduction: Briefly introduce CKD, perinephric abscess, and renal calculus. State the objectives of the discussion/presentation. Case Descriptions: CKD: Present a case of a patient with gradual decline in kidney function, discussing symptoms such as fatigue, edema, and changes in urine output. Perinephric Abscess: Describe a patient with fever, flank pain, and a history of urinary tract infection. Renal Calculus: Explain a case of a patient with severe flank pain, hematuria, and a history of kidney stones. Diagnostic Approach: Discuss the diagnostic steps for each condition, including history, physical examination, lab tests, and imaging studies. Highlight the differences in diagnostic approaches for each condition. Management Strategies: CKD: Focus on managing underlying causes, controlling blood pressure, and dietary modifications. Perinephric Abscess: Emphasize the importance of antibiotics, drainage, and monitoring for complications. Renal Calculus: Discuss pain management, hydration, and the use of medications or procedures like ESWL or PCNL.

		Q&A Session: Encourage questions and discussions from the audience. Clarify any doubts and provide additional insights. Video Demonstration/Role Play Preparation: Prepare scripts or scenarios for each condition. Assign roles to participants (e.g., patient, doctor, nurse). Demonstration: CKD: Show a patient consultation, discussing symptoms and management plans with the doctor. Perinephric Abscess: Act out an emergency room scenario with diagnosis and initial treatment. Renal Calculus: Demonstrate a patient's experience with acute pain and the steps taken for diagnosis and treatment. Debriefing: Discuss the key points from each demonstration. Highlight the learning objectives and take-home messages.

Topic 47 Mutrashaya Vikara (Diseases of Urinary bladder) (LH :3 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO5	Analyze the anatomy, physiology, and histology of the urinary bladder while evaluating congenital anomalies, diagnostic methods, and management strategies.	CAN	MK	K	L&GD, LRI,TUT,PER, CBL	VV-Viva,M-POS,QZ ,M-CHT, C-VC	F&S	III	V-RS,V-KS,V-RS	NLHT47.1
CO1, CO3, CO5	Define the Aetiopathogenesis, Classification, Clinical Features & Management of Cystitis.	CK	MK	K	L&PPT ,L	C-VC,PP-Practical,PM, QZ ,P-VIVA	F&S	III	-	LH
CO1,	Define the Aetiopathogenesis, Classification, Clinical Features &	CK	MK	K	L&PPT	T-CS,P-VI	F&S	III	-	LH

CO3, CO5	Management of Vesicular Calculus.				,L	VA,P-POS, VV-Viva				
CO1, CO3, CO5	Define Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Urinary Bladder Dysfunction (Neurogenic bladder) and Carcinoma of Urinary Bladder.	CK	MK	K	L&PPT ,PL,PrB L,FC,P ER	T-CS,CL-P R,INT,PRN ,O-QZ	F&S	III	-	LH
CO1, CO2, CO3, CO4, CO5, CO6	Demonstrate the Indications and Contraindications, step-by-step process for Suprapubic catheterization, Cystoscopy, PCNL,& ESWL.	PSY-GUD	MK	KH	TUT,PL ,BL,CD, D-BED	DEB,INT,P -EXAM,C HK,Mini-CEX	F&S	III	-	NLHP47.1
CO1, CO3, CO5	Elaborate on the underlying Pathophysiology, Clinical Features, Physical Examination, Management, and Complications of Haematuria and Anuria.	CC	MK	K	DIS,BL, L&GD, TUT,PE R	CL-PR,P-E XAM,P-VI VA,PRN, C-VC	F&S	III	-	NLHT47.2
CO1, CO3, CO5	Identify Aetiopathology, signs and symptoms, and Examination of Urinary System Disorders.	CK	MK	K	PER,TU T,CD,D -BED,SI M	P-VIVA,P-EXAM,CH K,VV-Viva ,Mini-CEX	F&S	III	-	NLHP47.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 47.1	Surgical Anatomy of Bladder & Congenital Anomalies of Blader.	**Anatomy Dissection**: Conduct detailed dissections to study the bladder's anatomical structure. **Histology Lab**: Analyze histological slides of bladder tissue. **Surgical Simulation**: Engage in simulations of common bladder surgeries, focusing on anatomical landmarks and variations. **Clinical Case Discussions**: Discuss clinical cases involving congenital anomalies of the bladder and

		their surgical management. **Group Discussions**: Facilitate group discussions on the anatomical and physiological implications of congenital anomalies.
NLHT 47.2	Demonstration of Haematuria, Anuria -An evaluation.	**Case Study Review**: Analyze and discuss case studies of patients presenting with haematuria and anuria. **Symptom Simulation**: Use simulations to understand and identify the clinical presentation of haematuria and anuria. **Management Plan Development**: Develop management and treatment plans for hypothetical patients. **Complication Scenario Exercises**: Engage in scenarios where students must identify and manage complications arising from haematuria and anuria. **Group Discussions**: Facilitate discussions on differential diagnosis and appropriate diagnostic pathways.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 47.1	Suprapubic catheterization, Cystoscopy, PCNL,& ESWL on patients or simulators.	**Steps** Suprapubic Catheterization **Preparation:** Wash hands and wear sterile gloves. Explain the procedure and obtain consent. Position the patient in the supine position. **Procedure:** Clean and drape the suprapubic area. Administer local anesthesia. Insert the needle above the pubic symphysis into the bladder. Advance the catheter through the needle into the bladder. Secure the catheter and connect to a drainage bag.

Completion:
Ensure proper drainage and monitor for complications.
Cystoscopy
Preparation:
Wash hands and wear sterile gloves.
Explain the procedure and obtain consent.
Position the patient in the lithotomy position.
Procedure:
Clean and drape the perineal area.
Administer local anesthesia.
Insert the cystoscope through the urethra into the bladder.
Visualize the bladder and urethra, checking for any abnormalities.
Perform any necessary interventions (e.g., biopsy).
Completion:
Remove the cystoscope and monitor the patient.
Percutaneous Nephrolithotomy (PCNL)
Preparation:
Wash hands and wear sterile gloves.
Explain the procedure and obtain consent.
Position the patient in the prone position.
Procedure:
Clean and drape the back and flank area.
Administer local or general anesthesia.
Insert the needle into the kidney through the skin.
Dilate the tract and insert a nephroscope.
Fragment and remove kidney stones using appropriate instruments.
Completion:
Ensure all stones are removed and check for complications.
Place a nephrostomy tube for drainage if necessary.
Extracorporeal Shock Wave Lithotripsy (ESWL)

		Preparation: Wash hands and wear sterile gloves. Explain the procedure and obtain consent. Position the patient on the lithotripter table. Procedure: Apply ultrasound gel to the treatment area. Use imaging (X-ray or ultrasound) to locate the kidney stones. Deliver shock waves to break the stones into smaller fragments. Completion: Monitor the patient for complications. Advise the patient on hydration and follow-up imaging.
NLHP 47.2	Examination of Urinary System Disorders.	**Steps** Preparation: Wash hands and wear appropriate PPE. Introduce yourself to the patient and explain the procedure. Obtain consent from the patient. History Taking: Ask about urinary symptoms such as frequency, urgency, dysuria, hematuria, and nocturia. Inquire about past medical history, including urinary tract infections, kidney stones, and any surgeries. Discuss any medications the patient is taking that may affect the urinary system. General Inspection: Observe the patient for signs of discomfort or distress. Check for any visible abdominal swelling or asymmetry. Palpation: Palpate the abdomen for tenderness, masses, or bladder distension. Perform a focused examination of the kidney area (costovertebral angle tenderness). Check for any lower abdominal tenderness or masses that may indicate bladder issues. Percussion: Percuss the bladder area to assess for distension.

		Check for any dullness over the bladder region. Auscultation: Listen to the abdominal area for bowel sounds to rule out any gastrointestinal involvement. Special Tests: Urine Dipstick Test: Test for the presence of blood, protein, glucose, and other abnormalities in the urine. Post-Void Residual (PVR): Measure the amount of urine left in the bladder after urination to assess for incomplete emptying. Documentation: Record the patient's history, symptoms, and examination findings. Note any abnormalities detected during the examination. **Recapitulation:** Thorough Examination: A comprehensive examination of the urinary system is crucial for diagnosing and managing urinary disorders. Patient Communication: Clearly explain the findings and next steps to the patient.

Topic 48 Mutraghata and Mutrakrichra (LH :2 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO4	Explain the Causes, Diagnosis, Clinical Features & Management of Mutrakrichra.	CC	MK	K	L,L&PPT	PP-Practical,VV-Viva, P-VIVA,T-CS	F&S	III	-	LH
CO1, CO3, CO4	Explain the Causes, Diagnosis, Clinical Features & Management of Mutraghata.	CC	MK	K	L&PPT,L	VV-Viva,P-EXAM,P-VIVA,PRN,PP-Practical	F&S	III	-	LH
CO1, CO2,	Demonstrate the Uttarabasti procedure step-by-step and its therapeutic benefits, indications and contraindications, and post-	PSY-GUD	MK	K	D,CBL, BL,DIS,	QZ ,VV-Viva,PP-Pract	F&S	III	-	NLHP48.1

CO4, CO5	procedure care..				PER	ical,P-CAS E,P-EXAM					

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 48.1	Demonstration of Uttarabasti procedure for Urethral Stricture / BPH with Indication, contraindication, and precautions.	**Steps** Preparation: Wash hands and wear appropriate PPE. Explain the procedure to the patient or simulation model and obtain consent. Patient Positioning: Position the patient in the lithotomy position (lying on the back with knees flexed and feet in stirrups). Ensure proper draping to maintain a sterile field. Catheter Insertion: Lubricate the catheter and gently insert it into the urethra (for males) or vaginal canal (for females). Advance the catheter carefully to the bladder or uterus, depending on the patient's gender. Medication Administration: Administer the prescribed liquid medicine (herbal decoction or medicated oil) through the catheter. Ensure the correct dosage is delivered and monitor the patient for any immediate reactions. Completion: Remove the catheter gently and ensure the patient is comfortable. Dispose of the catheter and other used materials properly. Post-Procedure Care: Monitor the patient for any signs of discomfort, infection, or adverse reactions. Provide post-procedure care instructions, including hydration and rest. Indications Urinary Problems: Such as urinary tract infections, cystitis, and urethral stricture.

		Prostate Enlargement: To reduce symptoms of benign prostatic hyperplasia (BPH). Infertility: In females, for conditions like blocked fallopian tubes and endometriosis. Menstrual Disorders: Such as dysmenorrhea and amenorrhea. Contraindications Infections: Active infections in the urinary or genital tract. Recent Surgery: Recent surgical procedures in the area. Allergies: Known allergies to the medications used in the procedure. Precautions Hygiene: Maintain strict hygiene to prevent infections. Patient Comfort: Ensure the patient is comfortable and informed throughout the procedure. Monitoring: Regularly monitor the patient for any adverse reactions or complications.

Topic 49 Paurusha Granthi Vikara (Diseases of Prostate) (LH :3 NLHT: 1 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO4, CO5	Illustrate the Anatomical, Physiological Structure, and Histological Features of the prostate. Explain Master Imaging Techniques with common surgical procedures involving the prostate.	CAP	MK	K	LRI,RP, D-BED, TUT,DIS	T-CS,PRN, VV-Viva, C-VC,CL-PR	F&S	III	-	NLHT49.1
CO1, CO3, CO5	Explain the Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications, and Management of Prostatitis and Prostatic Abscess.	CC	MK	K	L,L&PPT	T-CS,INT, C-VC,VV-Viva,PRN	F&S	III	-	LH
CO1, CO3, CO5	Define Aetiopathogenesis, Clinical Features & Management of Benign Prostate Hypertrophy.	CK	MK	K	LRI,L,L &PPT	PP-Practical,CL-PR,PRN,T-CS,VV-Viva	F&S	III	-	LH
CO1, CO3,	Demonstrate the skills to identify the clinical features, to perform a systematic examination of BPH, Prostatitis, and Prostatic	PSY-GUD	MK	KH	CD,D-M,CBL,	PP-Practical,CHK,Mini	F&S	III	-	NLHP49.1

CO5	Abscess. Differentiate between BPH, prostatitis, and prostatic abscess.				PBL,PER	-CEX,P-EXAM,OSCE				
CO1, CO3, CO4, CO5	Define the Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications, and Management of Carcinoma of Prostate.	CK	DK	K	L,L&PPT	P-VIVA,P-EXAM,CL-PR,PP-Practical,PRN	F&S	III	-	LH
CO1, CO2, CO3, CO5	Demonstrate the procedural steps of TURP, the use of surgical instruments and techniques for TURP, and the importance of precision and care during the procedure.	PSY-GUD	DK	KH	PBL,CD,PER,CBL,TUT	P-EXAM,P-MOD,P-VIVA,PRN,CL-PR	F&S	III	-	NLHP49.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 49.1	Surgical anatomy and physiology of Prostate gland.	**Anatomy Dissection**: Hands-on dissection and examination of the prostate to understand its structure. **Histology Slides**: Review and analyze histological slides of prostate tissue. **Imaging Techniques**: Practice using imaging tools like ultrasound, MRI, and CT scans to visualize the prostate. **Surgical Simulation**: Engage in simulations of common prostate surgeries, such as prostatectomy. **Clinical Case Discussions**: Discuss clinical cases involving prostate disorders and their management. **Group Discussions**: Facilitate group discussions on the anatomical variations and physiological functions of the prostate

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 49.1	Demonstration of BPH, Prostatitis, and Prostatic Abscess on patients or simulators.	**Steps** Preparation: Wash hands and wear appropriate PPE.

		Introduce yourself to the patient or simulation model and explain the procedure. Obtain consent from the patient or explain the purpose of the demonstration. General Inspection: Ask the patient to stand and then lie down. Observe the abdomen and perineal area for any visible swelling, asymmetry, or discoloration. Palpation: BPH: Palpate the prostate through the rectum (digital rectal examination) to assess size, consistency, and tenderness. BPH typically presents as an enlarged, firm, and non-tender prostate. Prostatitis: Palpate the prostate to check for tenderness, warmth, and swelling. Prostatitis often presents with a tender, boggy, and warm prostate. Prostatic Abscess: Palpate the prostate to identify a fluctuating mass or abscess. Prostatic abscesses are usually tender, and warm, and may have fluctuance. Special Tests: Transillumination: Shine a light through the scrotum to differentiate between solid and fluid-filled masses (if applicable). Prehn's Sign: Elevate the scrotum to see if the pain is relieved (positive in epididymitis, negative in testicular torsion). Auscultation (Optional): Listen for bowel sounds if a hernia is suspected. Documentation: Record your findings, including the size, location, and characteristics of any abnormalities. Note any associated symptoms such as pain, fever, or urinary symptoms.
NLHP 49.2	Procedure of TURP on the patients or simulators.	**Steps** Preparation: Set up the simulation environment or patient setup. Ensure all necessary equipment, including the resectoscope, irrigation system, and electrocautery unit, is ready and functioning. Introduce the procedure to the audience, explaining the purpose and steps.

		Patient Positioning: Position the patient or simulation model appropriately, typically in the lithotomy position. Ensure proper draping to maintain a sterile field. Insertion of the Resectoscope: Lubricate the resectoscope and gently insert it into the urethra. Advance the resectoscope to the prostate, ensuring clear visualization of the prostate and urethra. Visualization and Resection: Use the resectoscope to visualize the prostate and identify the verumontanum and ureteral orifices. Carefully resect the prostate tissue using the wire loop, ensuring to avoid perforation of the prostate capsule. Use electrocautery to control bleeding during the resection. Irrigation and Removal: Continuously irrigate the surgical field with sterile fluid to clear away resected tissue and maintain visibility. Remove the resected tissue from the bladder through the urethra. Completion: Once the resection is complete, remove the resectoscope. Inspect the surgical field for any remaining tissue or complications. Place a catheter to ensure proper drainage and irrigation post-procedure. Post-Procedure Care: Monitor the patient for any immediate complications such as bleeding or infection. Explain post-operative care instructions to the patient or simulation audience. **Recapitulation:** Precision and Care: Emphasize the importance of precision and careful technique to avoid complications such as perforation and excessive bleeding. Continuous Learning: Encourage ongoing practice and learning to improve surgical skills and outcomes. Patient Safety: Highlight the critical role of patient safety and proper post-operative care in ensuring successful recovery.

Topic 50 Mutramarga Vikara (Diseases of Urethra) (LH :2 NLHT: 1 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO3, CO5	Illustrate the Aetiopathology, Clinical Features, Diagnostic tools, Management and Complications of Urethritis.	CAN	MK	K	BL,DIS, CBL,PT ,ML	C-VC,P-VIVA,PRN,P-EXAM,PP-Practical	F&S	III	-	NLHT50.1
CO1, CO3, CO5	Define Congenital Anomalies of the Urethra and its Aetiopathogenesis & Management.	CK	MK	K	L&PPT ,L	QZ ,SA,VV-Viva,P-VIVA	F&S	III	-	LH
CO1, CO3, CO5	Define Clinical Features & Management of Injuries to Urethra and Urethral Stricture.	CK	MK	K	L,X-Ray,L&PPT	P-VIVA,M-CHT,PRN, M-POS,VV-Viva	F&S	III	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 50.1	Case Presentation of Urethritis.	**Case Study Analysis**: Review and discuss case studies of patients with urethritis. **Complication Management Simulation**: Engage in scenarios where students must manage complications arising from urethritis. **Treatment Plan Development**: Create comprehensive treatment plans for hypothetical patients. **Group Discussions**: Facilitate group discussions on the etiology and clinical features of urethritis.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 51 Medhra Vikara (Diseases of Penis) (LH :3 NLHT: 2 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3	Define Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications, and Management of Congenital anomalies of Penis, Niruddhaprakasha (Phimosis).	CK	MK	K	L,L&PPT	P-EXAM,P-VIVA,T-CS,PRN,VV-Viva	F&S	III	-	LH
CO1, CO2, CO4	Define Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications, and Management of Parivartika (Paraphimosis), Avapatika (Abnormal retraction / Tear of the prepuce).	CK	MK	K	L,L&PPT	PRN,PP-Practical,P-EXAM,T-CS,QZ	F&S	III	-	LH
CO1, CO2, CO4	Define Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications and Management of Hypospadias & Epispadias.	CK	MK	K	L&PPT,BL,PER,L,CD	P-VIVA,P-EXAM,CL-PR, C-VC, VV-Viva	F&S	III	-	LH
CO1, CO3, CO5	Explain Aetiopathogenesis and development of Ectopia Vesicae and Balanoposthitis and identify their Clinical Features, Diagnostic Techniques, Treatment Plans, and Complications.	CAN	MK	K	SIM,CBL,DIS,CD,BL	PRN,P-VIVA,P-CASE,P-EXAM,VV-Viva	F&S	III	-	NLHT51.1
CO1, CO3, CO4, CO5	Enumerate the Causes and Progression of Carcinoma of the Penis, Peyronie's Disease, and Granuloma Inguinale with its Management.	CK	DK	K	LRI,CBL,BL,PER,TUT	P-VIVA,PRN,COM,VV-Viva	F&S	III	-	NLHT51.2
CO1, CO3, CO4, CO5	Demonstrate the skills to identify normal and abnormal findings in the Male External Genitalia and differentiate between various conditions affecting the genitalia.	PSY-GUD	MK	K	RP,DIS,CBL,CD,TUT	P-EXAM, Mini-CEX, P-VIVA,DEB,CL-PR	F&S	III	-	NLHP51.1
Non Lecture Hour Theory										

S.No	Name of Activity	Description of Theory Activity
NLHT 51.1	Examination of Ectopia Vesicae & Balanoposthitis.	**Case Study Analysis**: Review and discuss case studies of patients with Ectopia Vesicae and Balanoprosthitis. **Diagnostic Tools Workshop**: Hands-on practice with diagnostic tools and techniques used in identifying these conditions. **Role-Play**: Simulate patient-doctor interactions to practice diagnosing and explaining conditions to patients. **Group Discussions**: Facilitate group discussions on the aetiopathogenesis and clinical features of these conditions.
NLHT 51.2	Examination of Carcinoma of the Penis, Peyronie's Disease & Granuloma Inguinale.	**Case Study Analysis**: Examine and discuss case studies involving each of these conditions. **Role-Playing**: Simulate patient consultations to practice explaining diagnoses and treatment options. **Complication Scenarios**: Engage in scenarios where students must address complications arising from these conditions. **Treatment Plan Exercises**: Develop and present treatment plans for hypothetical patients. **Group Discussions**: Facilitate discussions on the etiopathogenesis and clinical features of these conditions.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 51.1	Examination of Male External Genitalia.	**Steps** Preparation: Wash hands with an antiseptic solution and wear Gloves. Introduce yourself to the patient explain the procedure and Obtain consent. Inspection: Ask the patient to undress and stand and then lie down. Inspect the pubic region, penis, scrotum, and perineum for any visible abnormalities such as swelling,

		discoloration, lesions, or discharge. Palpation: Penis: Gently palpate the shaft of the penis, noting any nodules, plaques, or tenderness. Foreskin: Retract the foreskin (if present) to inspect the glans and urethral meatus. Note any lesions, discharge, or phimosis. Testicles: Palpate each testicle between the thumb and fingers, checking for size, consistency, and tenderness. Normal testicles should be smooth and firm. Epididymis: Palpate the epididymis located at the back of each testicle. It should feel soft and non-tender. Spermatic Cord: Palpate the spermatic cord for any thickening or masses. Special Tests: Transillumination: If there is scrotal swelling and fluid-filled masses. Auscultation (Optional): If a hernia is suspected, listen for bowel sounds in the scrotal region. Documentation: Record your findings, including the size, location, and characteristics of any abnormalities. Note any associated symptoms such as pain or discharge.

Topic 52 Mushka Evum Vrishan Vikara (Diseases of Scrotum and Testis) (LH :2 NLHT: 0 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO5	Define Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications, and Management of Epididymo-orchitis, Epididymal cyst, Varicocele, and Spermatocele.	CK	MK	K	L,L&PPT ,BL,L &GD	DEB,PP-Practical,P-EXAM,PRN, P-VIVA	F&S	III	-	LH
CO1, CO3, CO5	Define the Development of Testis & Aetiopathogenesis, Clinical Features, Investigations, Complications & Management of Undescended Testis, Ectopic Testes, and Torsion of the Testis.	CK	MK	K	L&PPT ,L,BL,SDL	P-VIVA,QZ , C-VC,PRN, P-EXAM	F&S	III	-	LH

CO1, CO2, CO4	Demonstrate the skills to identify various types of Scrotal Swellings with their physical examination and Differentiation.	PSY-GUD	MK	KH	DIS,TUT,D,D-BED	OSCE,PRN,VV-Viva, OSPE,P-EXAM	F&S	III	-	NLHP52.1
CO1, CO2, CO4	Demonstrate the skills to identify different types of swellings in the Inguinoscrotal region with their thorough examination to distinguish between various conditions. Differentiate between Hydrocele, Epididymal Cyst, Testicular Tumour, and other swellings.	PSY-GUD	MK	K	BL,DIS,PER,D,TUT	CHK,OSPE,P-EXAM,DEB,OSCE	F&S	III	-	NLHP52.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 52.1	Examination of Scrotal Swelling.	**Steps** Preparation: Wash hands with an antiseptic solution and wear Gloves. Introduce yourself to the patient and explain the procedure. Obtain consent from the patient. General Inspection: Ask the patient to undress and stand and then lie down. Observe the scrotum for any visible swelling, asymmetry, or discoloration. Palpation: Hydrocele: Feel for a smooth, firm, fluid-filled swelling. It will transilluminate with a penlight. Epididymal Cyst: Palpate for a small, painless, fluid-filled cyst located above or behind the testicle. Varicocele: Feel for a “bag of worms” texture, especially prominent when the patient stands or performs the Valsalva maneuver. Testicular Tumor: Palpate for a firm, irregular mass within the testicle that does not transilluminate.

		Orchitis/Epididymitis: Feel for a swollen, tender testicle or epididymis, often accompanied by redness and warmth. Inguinal Hernia: Palpate the inguinal region for any lumps or protrusions that extend into the scrotum. Transillumination: Darken the room. Shine a penlight or small flashlight through the scrotal swelling. Fluid-filled swellings like hydroceles will transilluminate, creating a red glow. Auscultation (Optional): Listen for bowel sounds if a hernia is suspected. Special Tests: Prehn's Sign: Elevate the scrotum to see if the pain is relieved (positive in epididymitis, negative in testicular torsion). Documentation: Record your findings, including the size, location, and characteristics of the swelling. Note any associated symptoms such as pain or discomfort.
NLHP 52.2	Examination of Swelling in the Inguino scrotal region (Except Inguinal and Femoral Hernia).	**Steps** Preparation: Wash hands with antiseptic solution and wear Gloves. Introduce yourself to the patient and explain the procedure and Obtain consent. General Inspection: Ask the patient to stand and then lie down. Observe the inguino-scrotal region for any visible swelling, asymmetry, or discoloration. Palpation: Hydrocele: Feel for a smooth, firm, fluid-filled swelling confined to the scrotum. It will transilluminate with a penlight. Epididymal Cyst: Palpate for a small, painless, fluid-filled cyst located above or behind the testicle. Varicocele: Feel for a “bag of worms” texture, especially prominent when the patient stands or performs the Valsalva maneuver. Testicular Tumor: Palpate for a firm, irregular mass within the testicle that does not transilluminate. Orchitis/Epididymitis: Feel for a swollen, tender testicle or epididymis, often accompanied by redness

		and warmth. Auscultation (Optional): Listen for bowel sounds if a hernia is suspected. Special Tests: Transillumination: Shine a light through the scrotal swelling to differentiate between solid and fluid-filled masses. Prehn's Sign: Elevate the scrotum to see if pain is relieved (positive in epididymitis, negative in testicular torsion). Documentation: Record your findings, including the size, location, and characteristics of the swelling with associated symptoms such as pain or discomfort. **Recapitulation:** Accurate Diagnosis: Early and accurate diagnosis of scrotal swellings is essential for appropriate management and treatment. Patient Education: Inform patients about the importance of seeking medical advice for worsening symptoms. Follow-Up: Regular follow-up is crucial to monitor changes or complications.

Topic 53 Vriddhi Roga (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO5	Define Aetiopathogenesis, Classification, Clinical Features, Diagnosis, Complications, and Management of Mutravriddhi (Hydrocele).	CK	MK	K	L,L&GD,L&PPT	PP-Practical,PRN,SP,P-EXAM,VV-Viva	F&S	III	-	LH
CO1, CO2, CO4, CO5	Demonstrate the skills to identify the characteristics and symptoms of Hydrocele with a thorough physical examination to detect Hydrocele. Differentiate between Hydrocele and other Scrotal Swellings.	PSY-GUD	DK	KH	DIS,CBL,BL,TUT,PT	CHK,P-VIVA,PRN,Mini-CEX,OSPE	F&S	III	-	NLHP53.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 53.1	Examination of Hydrocele.	**Steps** Preparation: Wash hands with an antiseptic solution and wear Gloves. Introduce yourself to the patient explain the procedure and obtain consent from the patient. General Inspection: Undress the patient and ask to stand up. Observe the scrotum for asymmetry or discoloration. Palpation: Ask the patient to lie down. Gently palpate the scrotum to identify the presence of fluid-filled. Check if the swelling is confined to the scrotum or extends upward into the inguinal canal. Darken the room and test for Transillumination. Shine a penlight or small flashlight through the scrotal swelling. A hydrocele will transilluminate, meaning the light will pass through the fluid-filled swelling, creating a red glow. Auscultation (Optional): Listen for bowel sounds over the scrotum if you suspect an inguinal hernia or bowel involvement. Documentation: Record your findings- the size, location, and characteristics of the Hydrocele and associated symptoms such as pain or discomfort.
Topic 54 Antravriddhi (Hernia) (LH :4 NLHT: 2 NLHP: 4)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO4, CO5	Enumerate Surgical Anatomy of Inguinal Canal and Aetiopathology and Classification of Hernia.	CK	MK	K	L&PPT ,BL,L	PRN,VV-Viva,CL-PR, P-EXAM,PP-Practical	F&S	III	-	LH
CO1, CO4, CO5	Explain Aetiopathogenesis, Classification, Clinical Features, Diagnosis of Hernia (AntraVriddhi) (Inguinal Hernia -Direct & Indirect, Enterocele, Omentocele).	CAN	MK	K	PER,L& PPT ,L	P-VIVA,P-EXAM,T-CS,PRN,CL-PR	F&S	III	-	LH
CO1, CO4, CO5	Describe Complications and Management of Inguinal Hernia (Antravriddhi).	CC	MK	K	PER,L& PPT ,L &GD,L, D-BED	P-EXAM,P-VIVA, C-VC,T-CS,PRN	F&S	III	-	LH
CO1, CO2, CO3, CO5	Explain the Surgical Anatomy of the Femoral Canal & Aetiopathogenesis, Clinical Features, Investigations, Complications & Management of Femoral Hernia.	CAN	MK	K	PER,L_ VC,SIM ,L&GD, PT	P-VIVA,DEB,PRN,P-EXAM,T-CS	F&S	III	-	NLHT54.1
CO1, CO2, CO4, CO5	Enumerate Aetiopathogenesis, Classification, Clinical Features, Examinations, Investigations & Diagnosis, Complications, and Management of Epigastric Hernia, Umbilical Hernia, and Paraumbilical hernia.	CK	MK	K	CBL,SIM,PT,TUT,D	OSCE,P-VIVA, C-VC,INT,PRN	F&S	III	-	NLHT54.2
CO1, CO4, CO5	Define Aetiopathogenesis, Classification, Clinical Features, Examinations, Investigations & Diagnosis, Complications, and Management of Incisional Hernia.	CK	MK	K	L,L&PPT	CL-PR,PRN,P-EXAM ,P-VIVA	F&S	III	-	LH
CO1, CO2, CO4,	Identify the Anatomical Landmarks associated with Inguinal Hernias. Perform a detailed physical examination to detect Inguinal Hernias and Differentiate between Direct and Indirect	PSY-GUD	MK	KH	DIS,TUT,SIM,PT,D-	PRN,P-VIVA,CHK,Mini-CEX,P-	F&S	III	-	NLHP54.1

CO5	Inguinal Hernias.				BED	EXAM				
CO1, CO2, CO4, CO5	Identify the characteristics of Umbilical Hernia and Incisional Hernia and perform a systematic examination to detect Hernias. Differentiate between Umbilical Hernia and Incisional Hernia and Communicate findings effectively to the patients.	PSY-GUD	MK	KH	CBL,TUT,D-BED,DIS,CD	Mini-CEX,P-EXAM,CHK,PRN,SP	F&S	III	-	NLHP54.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 54.1	Examination of Femoral Hernia.	1. **Anatomy Lab**: Organize a hands-on lab session using cadaver dissections or high-quality anatomical models to explore the surgical anatomy of the femoral canal. Ensure students can identify all relevant structures and understand their spatial relationships. 2. **Role-Playing**: Conduct role-playing sessions where students act as surgeons and patients. The "surgeons" can explain the condition, diagnostic procedures, and treatment options to their "patients," enhancing communication skills and empathy. 3. **Investigation Workshops**: Use diagnostic tools, such as ultrasound, CT scans, and MRIs, to identify and understand femoral hernias. Teach students how to interpret these images and understand their clinical implications. 4. **Surgical Simulation**: If available, use surgical simulation tools to let students practice the procedures involved in diagnosing and managing femoral hernias. This could include virtual surgeries or hands-on practice with mannequins. 5. **Guest Lectures**: Invite experienced surgeons to share their insights and experiences with femoral hernias. They can discuss the latest techniques and challenges in diagnosis and management. 6. **Group Discussions**: Facilitate group discussions on the complications and management strategies of femoral hernias. Encourage students to share their thoughts, ask questions, and

		debate different approaches.
NLHT 54.2	Examination of Epigastric Hernia, Umbilical Hernia, and Paraumbilical Hernia.	1. **Anatomy Lab**: Organize a hands-on lab session using cadaver dissections or high-quality anatomical models to explore the surgical anatomy of the femoral canal. Ensure students can identify all relevant structures and understand their spatial relationships. 2. **Role-Playing**: Conduct role-playing sessions where students act as surgeons and patients. The "surgeons" can explain the condition, diagnostic procedures, and treatment options to their "patients," enhancing communication skills and empathy. 3. **Investigation Workshops**: Use diagnostic tools, such as ultrasound, CT scans, and MRIs, to identify and understand femoral hernias. Teach students how to interpret these images and understand their clinical implications. 4. **Surgical Simulation**: If available, use surgical simulation tools to let students practice the procedures involved in diagnosing and managing femoral hernias. This could include virtual surgeries or hands-on practice with mannequins. 5. **Guest Lectures**: Invite experienced surgeons to share their insights and experiences with femoral hernias. They can discuss the latest techniques and challenges in diagnosis and management. 6. **Group Discussions**: Facilitate group discussions on the complications and management strategies of femoral hernias. Encourage students to share their thoughts, ask questions, and debate different approaches.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 54.1	Examination of Inguinal Hernia.	**Steps of Preparation:**

		Wash hands and wear Gloves. Introduce yourself to the patient and explain the procedure. Obtain consent from the patient. General Inspection: Undress the patient and Ask him to stand up. Observe the inguinal region for any visible bulges or asymmetry. Palpation: Ask the patient to lie down. Palpate the inguinal region, feeling for any lumps or protrusions. Using your index finger, gently invaginate the scrotal skin into the inguinal canal. Ask the patient to cough or perform a Valsalva maneuver and feel for any impulse against your finger. Differentiation: Indirect Inguinal Hernia: Often extends into the scrotum and is felt as a bulge along the inguinal canal. Direct Inguinal Hernia: Typically does not extend into the scrotum and is felt as a bulge medial to the inferior epigastric vessels. Auscultation (Optional): Listen for bowel sounds over the hernia site to rule out bowel obstruction. Documentation: Record your findings, including the size, location, and characteristics of the hernia and associated symptoms such as pain or discomfort.
NLHP 54.2	Examination of Umbilical Hernia and Incisional Hernia.	**Steps** Preparation: Wash hands with an antiseptic solution. Introduce yourself to the patient and explain the procedure. Obtain consent from the patient. General Inspection: Observe the patient's general appearance. Look for any visible bulges or asymmetry in the abdominal area. Palpation:

		Ask the patient to lie down and relax. Gently palpate the abdomen, starting from the umbilicus and moving outward. For umbilical hernia, palpate around the umbilicus to feel for a protrusion. For incisional hernia, palpate along the previous surgical scar to check for any bulging. Auscultation: Use a stethoscope to listen for bowel sounds over the hernia site to rule out bowel obstruction. Special Tests: Ask the patient to cough or perform a Valsalva maneuver (bearing down) to see if the hernia becomes more prominent. For incisional hernia, check for tenderness or signs of infection around the scar. Documentation: Record your findings, including the size, location, and characteristics of the hernia and associated symptoms such as pain or discomfort.

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
1.1	CO1	History of surgery
3.1	CO1,CO7	Vranitagara
4.1	CO1,CO2,CO3,CO5	Preoperative assessment
4.2	CO1,CO2,CO4,CO5, CO7	Safe General Surgery
5.1	CO1,CO7	Informed consent in a simulated environment
9.1	CO1,CO2,CO7	Demonstration of Kshar & Kshara Sutra – Preparation, and Method of Application
9.2	CO1,CO2,CO4,CO7	Ksharsutra changing
12.1	CO1,CO2,CO4,CO5	Training of Bandaging on Simulators with relevant modern techniques
14.1	CO1,CO2,CO3,CO4	Electrolyte loss
15.1	CO1,CO2,CO4	Describe Rakta stambhana and methodsof Haemostasis.
15.2	CO1,CO2,CO4,CO6	Describe Blood Transfusion –Blood groups, Compatibility, Indications, Contraindications, Complications, Management. along with Component therapy
19.1	CO1,CO2,CO4	Vranashotha-Nirukti, Nidana, Samprapti, Prakara, Lakshana, Sadhya-asadhyata, Upadrava and Chikitsa
19.2	CO1,CO2,CO5,CO6	Explain etiopathogenesis, types, Clinical Features, Investigations, Differential Diagnosis, complications and management of Kotha (Gangrene)
19.3	CO1,CO2,CO4	Definition, Classification, Clinical features, Complications of Tumour
20.1	CO1,CO2,CO4	Sadhyovrana -(Traumatic wounds) – Nidana, Prakara, Lakshana, Upadrava and Chikitsa.

20.2	CO1,CO2,CO4	Surgical site infection.
22.1	CO1,CO2,CO4	Thyroid gland - anatomy & physiology
22.2	CO1,CO2,CO4	Toxic goiter, Thyroiditis
22.3	CO1,CO2,CO4	Neoplasm of Galaganda (thyroid) -Nidana, Samprapti, Lakshana and Chikitsa
23.1	CO1,CO2,CO4	Surgical Anatomy & Surgical Pathology
27.1	CO1,CO2,CO4	Fracture of scapula & clavicle
27.2	CO1,CO2,CO4	Clinical features, Diagnosis, Complications, and Management of Femur & Patella
27.3	CO1,CO2,CO4	Clinical features, Diagnosis, Complications, and Management of Tibia and Pelvic bones
27.4	CO1,CO2,CO4	Dislocation of joints
27.5	CO1,CO2,CO4	Management of Shoulder & Elbow Dislocation
28.1	CO1,CO2,CO4	Diagnosis, Treatment & Complications of Cysts, Tumours of bones
28.2	CO1,CO2,CO5	Osteoporosis and Paget's disease
29.1	CO1,CO3,CO5	Brain tumours and their management
30.1	CO1,CO3,CO5	Ankylosing Spondylitis
31.1	CO1,CO3,CO5	Sthana Vidradhi - Breast abscess
31.2	CO1,CO3,CO5	Fibroadenoma and Fibroadenosis
32.1	CO1,CO3,CO5,CO6	Examination of Pleurisy, Pleural Abscess, Pleural Effusion, Tumours of the Lung
33.1	CO1,CO3,CO5,CO6	Examination of Oesophageal Varices

36.1	CO1,CO3,CO4	Examination of Ascites
36.2	CO1,CO3,CO4,CO5	Examination of Peritonitis
37.1	CO1,CO3,CO6	Examination of Pyloric Stenosis
38.1	CO1,CO3,CO4,CO7	Demonstration of Blind loop syndrome, Short Bowel Syndrome & Typhoid Enteritis
38.2	CO1,CO3,CO6	Examination of Intussusception
39.1	CO1,CO3	Diagnosis of Carcinoma of Colon
40.1	CO1,CO3,CO5	Surgical Anatomy & physiology of Ano Rectal Conditions
40.2	CO1,CO4	Examination of Anorectal Abscesses (Guda Vidradhi) and Bhagandara (Fistula-in-ano)
40.3	CO1,CO2,CO3,CO7	Examination of Fissure in Ano (Parikartika)
40.4	CO1,CO2,CO4	Examination of Pilonidal Sinus, Proctitis, Pruritis Ani & Injuries of Anorectal region
42.1	CO1,CO3,CO6	Examination of the case of Acute Liver Injury
43.1	CO1,CO4,CO5	Surgical anatomy of Gall Bladder, congenital anomalies of Gall Bladder & Basic Investigations
44.1	CO1,CO4	Surgical Anatomy & physiology, Congenital Anomalies of Pancreas
46.1	CO1,CO2	
46.2	CO1,CO3,CO5	Congenital anomalies of Kidney, Ureter & Polycystic Kidney discussion.
46.3	CO1,CO3,CO5	Demonstration of Injuries to the Kidneys And Ureters.
46.4	CO1,CO3,CO5	Ureteral Stone examination.
47.1	CO1,CO3,CO5	Surgical Anatomy of Bladder & Congenital Anomalies of Blader.

47.2	CO1,CO3,CO5	Demonstration of Haematuria, Anuria -An evaluation.
49.1	CO1,CO4,CO5	Surgical anatomy and physiology of Prostate gland.
50.1	CO1,CO3,CO5	Case Presentation of Urethritis.
51.1	CO1,CO3,CO5	Examination of Ectopia Vesicae & Balanoposthitis.
51.2	CO1,CO3,CO4,CO5	Examination of Carcinoma of the Penis, Peyronie’s Disease & Granuloma Inguinale.
54.1	CO1,CO2,CO3,CO5	Examination of Femoral Hernia.
54.2	CO1,CO2,CO4,CO5	Examination of Epigastric Hernia, Umbilical Hernia, and Paraumbilical Hernia.

Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Practical No*	CO No	Practical Activity details
1.1	CO1,CO3	Surgical case taking
1.2	CO1,CO3,CO4	Special signs and symptoms pertaining to surgery
2.1	CO1,CO2	Demonstration, Comparison & classification of instruments
3.1	CO1,CO2,CO3	Aseptic techniques, sterilization and disinfection of Surgical instruments, OT sterilization
3.2	CO1,CO2,CO4	Hand washing techniques, Donning of Gloves & Gown
4.1	CO1,CO2,CO4,CO6	Demonstration of BLS (Basic life support)
4.2	CO1,CO2,CO4,CO6	Maintenance of an airway / Endotracheal intubation in a mannequin
5.1	CO1,CO2,CO5,CO6	Common minor surgical procedures (Excision of Corn, Cysts, Lipoma, etc)
6.1	CO1,CO2,CO5,CO6	First aid
6.2	CO1,CO2,CO4	Demonstartion of Chhedan(Excision), Bhedan(Incision), Lekhan(scraping) on simulator
6.3	CO1,CO2,CO4	Demonstration of Vedhan & Visravan (Tapping Of abdomen, Hydrocele, ICD) on simulator
6.4	CO1,CO2,CO4	Demonstration of Aharana and Eshana (extraction and probing)on simulator
6.5	CO1,CO2,CO4	Demonstration of Seevan(Suturing & Knots) and minor surgical procedures in patient / simulated environment
7.1	CO1,CO2,CO4,CO6	Hands-on training -Drains
7.2	CO1,CO2,CO4,CO5, CO6	Catheterization -Hands-on training on Simulators
7.3	CO1,CO2,CO6	IV canulation, IM / IV / Subcutaneous / Intradermal Injection

7.4	CO1,CO2,CO4,CO6	Hands On Training- Ryle's tube Insertion
8.1	CO1,CO3,CO7	Marma identification and manipulation techniques in musculoskeletal disorders and Sports injuries
9.1	CO1,CO2,CO4,CO7	Application of Ksharodaka, Kshartaila, Ksharvarti, Ksharpichu in Dushtavrana
9.2	CO1,CO2,CO4,CO7	Demonstration and Hands-on training of Kshar karma in Anorectal disorders (Arsha, Bhagandara, Nadivrana)
10.1	CO1,CO2,CO4,CO7	Hands-on experience with Agnikarma in the pain management of any one disease (Gridhrasi, Avabahuka, etc)
10.2	CO1,CO2,CO4,CO7	Demonstration of Agnikarma in the management of any one surgical disease (Arsha, Charmakeel, etc)
11.1	CO1,CO2,CO4,CO7	Siravedha in the management of any one surgical disease (Grudhrasi, Uttan Vatarakta, etc)
11.2	CO1,CO2,CO4,CO7	Alabu (cupping) procedure in the management of any one surgical disease (Kati Graham, Manya Graha, etc)
11.3	CO1,CO2,CO4,CO7	Jaloukavcharana (Leech Therapy) in the management of any one surgical disease (Vidradhi, Dushtavrana, Koth, etc)
12.1	CO1,CO2,CO4	Perform training of Bandaging on Simulators with relevant modern techniques
12.2	CO1,CO3,CO5	Demonstration of the Transportation of injured patients (Double Human Crutch, Fireman’s Lift, Two-handed Seat, etc) & Recovery Position
13.1	CO1,CO3,CO5	Heimlich maneuver- Hands-on training (Choking)
14.1	CO1,CO3,CO6	Calculations & selections of fluids in various conditions like Dehydration, Shock& Burns
14.2	CO1,CO3,CO6	Acid Base Balance in various conditions like perforation, vomiting, etc
17.1	CO1,CO3,CO6	Demonstration of Chhaya vikiran (X-ray) of Chest, Abdomen, Urology. and Musculoskeletal organs
17.2	CO1,CO5,CO6	Hands on training of different types of Biopsy

17.3	CO1,CO3,CO5,CO6	Avayava pariksha (CT,MRI) of Chest, abdomen, Urology bones & joints
18.1	CO1,CO4,CO7	Surgical intervention according to Shatkriyakala - Special focus on Arsha, Bhagandara, and infective pathology ex.Appendicitis, Cholecystitis, etc.
19.1	CO1,CO2,CO4	Examination of Granthi (lump or Swelling)
19.2	CO1,CO2,CO4,CO6	Emergency management in different types of shock
19.3	CO1,CO3,CO6	Assessment, examination, and documentation of Pramada Dagda (Burn) case
20.1	CO1,CO2,CO4	Examination of an Ulcer
20.2	CO1,CO2,CO4,CO5	Examination of the peripheral nerve lesions
20.3	CO1,CO2,CO4	Demonstration of wound dressings
21.1	CO1,CO2,CO4	Examination of the Hand
22.1	CO1,CO2,CO4	Examination of Galaganda (thyroid gland)
22.2	CO1,CO2,CO4	Examination of the Gala (Neck)
22.3	CO1,CO2,CO4	Examination of a Lymphatic system
23.1	CO1,CO2,CO4	Examination of Varicose Vein
23.2	CO1,CO2,CO4	Examination and differential diagnosis of unilateral and bilateral lower limb edema
24.1	CO1,CO2,CO4	Examination of the Dhamani Vikara (peripheral vascular diseases)
25.1	CO1,CO2,CO3,CO4, CO5	Techniques of Amputation & Complications with examples of individual amputation
25.2	CO1,CO2,CO4	Examinations of Diseases of Snayu Vikara (Muscle, Ligaments, Tendon and Fascia)
26.1	CO1,CO3,CO4	Safety Precautions in the patient of HIV and hepatitis infected Hepatitis B and C Patients

27.1	CO1,CO2,CO4	Examination of the Bone and Joint injuries
27.2	CO1,CO2,CO4	Examination of Injuries about Individual Joints
27.3	CO1,CO2,CO4	Hands on training on traction (skin and skeletal)
27.4	CO1,CO2,CO4	First aid management of fracture cases
28.1	CO1,CO2,CO4	Demonstrate Examination of the diseases of bone
28.2	CO1,CO3,CO5	Examination of pathological joints
28.3	CO1,CO3,CO5	Examination of foot
29.1	CO1,CO3,CO5,CO6	Examination of Head Injuries (Shirobhighaata)
30.1	CO1,CO3,CO4	Hands-on training on 3 stages of neck fracture stabilization with logroll
30.2	CO1,CO2,CO4,CO6	Examination of Spinal Injuries and Abnormalities
31.1	CO1,CO3,CO4,CO5	Examination of the breast and patient education for ‘self-examination of breast.
32.1	CO1,CO3,CO5,CO6	Examination of injuries of the chest (Urah abhigatha)
32.2	CO1,CO3,CO5,CO6	Examination of Diseases of the Chest
33.1	CO1,CO3,CO5	Examination of Dysphagia
35.1	CO1,CO3,CO5,CO6	Examination of Acute Abdomen
37.1	CO1,CO2,CO4	Examination of Abdominal lump
38.1	CO1,CO2,CO4	Per abdominal Clinical Examination.
39.1	CO1,CO2,CO4	Examination of Chronic Abdomen
40.1	CO1,CO2,CO4,CO5	Examination of a Sinus or Fistula and Hands-on training on Simulators
40.2	CO1,CO2,CO3	Examination of Rectal case and Hands-on training on Simulators

41.1	CO1,CO3,CO4,CO6	Examination of Abdominal Injuries
42.1	CO1,CO2,CO4	Demonstration of Surgical anatomy of the liver, Acute Liver Injury in patients, or simulator.
42.2	CO1,CO2,CO4	Demonstration of Diagnosis & Management of Surgical Jaundice with ERCP on patients /simulator.
42.3	CO1,CO2,CO4	Examination of Hepatomegaly & PAIR in Liver Abscess and Hands-on Practice.
42.4	CO1,CO2,CO4,CO6	Demonstration of Paracentesis inpatient or simulator.
42.5	CO1,CO2,CO4	Surgical management of Portal Hypertension
43.1	CO1,CO2,CO4	MRCP & ERCP Demonstration
43.2	CO1,CO2,CO4,CO6	Cholecystitis and Choledocholithiasis Examination
43.3	CO1,CO2,CO4	Case taking and examination of cholecystitis on the patients.
43.4	CO1,CO2,CO4	Case presentation of Carcinoma of Gall Bladder
44.1	CO1,CO2,CO4	Demonstration of Pseudo Pancreatic cyst on patient or simulator.
44.2	CO1,CO2,CO4	Case taking of Pancreatitis with effective communication skills
44.3	CO1,CO2,CO4,CO5	Case presentation of Neoplasm of Pancreas and its management.
45.1	CO1,CO2,CO4,CO6	Case presentation of the Splenic Rupture & Splenomegaly on the patients or simulator.
46.1	CO1,CO3,CO5	Case presentation on CKD, Perinephric Abscess & **R**enal Calculus on patients, or simulator.
47.1	CO1,CO3,CO5	Examination of Urinary System Disorders.
47.2	CO1,CO2,CO3,CO4, CO5,CO6	Suprapubic catheterization, Cystoscopy, PCNL,& ESWL on patients or simulators.
48.1	CO1,CO2,CO4,CO5	Demonstration of Uttarabasti procedure for Urethral Stricture / BPH with Indication, contraindication, and precautions.

49.1	CO1,CO3,CO5	Demonstration of BPH, Prostatitis, and Prostatic Abscess on patients or simulators.
49.2	CO1,CO2,CO3,CO5	Procedure of TURP on the patients or simulators.
51.1	CO1,CO3,CO4,CO5	Examination of Male External Genitalia.
52.1	CO1,CO2,CO4	Examination of Scrotal Swelling.
52.2	CO1,CO2,CO4	Examination of Swelling in the Inguino scrotal region (Except Inguinal and Femoral Hernia).
53.1	CO1,CO2,CO4,CO5	Examination of Hydrocele.
54.1	CO1,CO2,CO4,CO5	Examination of Inguinal Hernia.
54.2	CO1,CO2,CO4,CO5	Examination of Umbilical Hernia and Incisional Hernia.

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (200)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AYUG-ST	2	200	100	70	-	30	200	400

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	3 PA & First TT	3 PA & Second TT	3 PA	**UE****

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
******University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 3	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

Topics for Periodic Assessments

PA	Paper 1	Paper 2
PA 1	Topic **1 To 3**	-
PA 2	Topic **4 To 7**	-
PA 3	Topic **8 To 12**	-
Term Test 1	Entire Syllabus of Term 1 of 2 papers	
PA 4	Topic **16 To 20**	-
PA 5	Topic **21 To 26**	-
PA 6	-	Topic **27 To 32**
Term Test 2	Entire Syllabus of Term 2 of 2 papers	
PA 7	-	Topic **36 To 42**
PA 8	-	Topic **43 To 48**
PA 9	-	Topic **49 To 54**

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-ST
PAPER-I
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II.

6 F : Distribution of theory examination

Paper 1 (Fundamentals of Shalya Tantra)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
1	**Introduction to Shalya Tantra (Introduction to development of surgery)**	15	Yes	Yes	Yes
2	**Yantra and Shastra (Blunt and sharp instruments)**		Yes	Yes	Yes
3	**Nirjantukarana (Sterilization)**		Yes	Yes	No
4	**Sangyaharana (Anaesthesia)**		Yes	Yes	No
5	**Trividha Karma (Pre, Operative and Post Operative care)**		Yes	Yes	Yes
6	**Shastra Karma (Operative procedure)**		Yes	Yes	Yes
7	**Yogya (Experimental Surgical Training)**		Yes	Yes	Yes
8	**Marma (Vital points)**	5	Yes	Yes	No
9	**Kshara Karma**	15	Yes	Yes	Yes
10	**Agnikarma**		Yes	Yes	Yes
11	**Raktamokshana**		Yes	Yes	Yes
12	**Bandha Vidhi**	6	Yes	Yes	No
13	**Pranashta Shalya**		Yes	Yes	No
14	**Fluid, Electrolyte, Acid Base Balance and Nutrition in surgical practice**	5	Yes	No	No
15	**Rakta**		Yes	No	No
16	**Life Saving and Emergency Medicines in surgical practice (Prana Rakshaka and Atyayika Dravya)**	4	Yes	No	No
17	**Naidanik Vidhi (Diagnostic techniques)**		Yes	No	No
18	**Shat Kriyakala in surgical practice**	5	Yes	Yes	No
19	**Samanya Vyadhi Parichaya**	10	Yes	Yes	Yes
20	**Vrana**	10	Yes	Yes	Yes
21	**Kshudra Roga**	3	Yes	No	No
22	**Manya Vikara**	5	Yes	Yes	No
23	**Sira Vikara (Venous Disorders)**	10	Yes	Yes	Yes
24	**Dhamani Vikara (Arterial disorders)**		Yes	Yes	Yes
25	**Snayu Vikara (Diseases of tendons and ligaments)**	5	Yes	No	No
26	**AIDS - HIV and Hepatitis (B and C)**	2	Yes	No	No

Total Marks	**100**		

Paper 2 (Shalya Tantra Chikitsa Siddhanta)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
27	**Bhagna (Skeletal Injuries)**	10	Yes	Yes	Yes
28	**Asthi Sandhi Vikara (Diseases of Bone and Joints)**	5	Yes	Yes	No
29	**Shirobhighata (Cranio-cerebral Injurie/ Disorders)**	6	Yes	Yes	No
30	**Kasheruka Vikara (Diseases of Spine)**		Yes	No	No
31	**Stana Roga (Diseases of Breast)**	5	Yes	No	No
32	**Urah Vikara (Diseases of Chest)**	3	Yes	No	No
33	**Anna Nalika Vikara (Diseases of Oesophagus)**	2	Yes	No	No
34	**Gulma Roga**	2	Yes	No	No
35	**Shoola Vyadhi**		Yes	No	No
36	**Udara Roga**	5	Yes	Yes	No
37	**Aamashaya Evam Adho-Aamashaya Vikara (Diseases of Stomach and Duodenum)**	12	Yes	Yes	Yes
38	**Kshudrantra Vikara (Diseases of Small Intestine)**		Yes	Yes	Yes
39	**Brihadantra Vikara (Diseases of Large Intestine)**		Yes	Yes	Yes
40	**Guda Vikara (Diseases of Rectum and Anal Canal)**		Yes	Yes	Yes
41	**Udarabhighata (Abdominal Injuries)**		Yes	No	No
42	**Yakrit Vikara (Diseases of Liver)**	15	Yes	Yes	Yes
43	**Pittashaya Vikara (Diseases of Gall Bladder)**		Yes	Yes	Yes
44	**Agnyashaya Vikara (Diseases of Pancreas)**	5	Yes	Yes	No
45	**Pleeha Vikara (Diseases of Spleen)**		Yes	Yes	No
46	**Vrikka Evam Mutravahini Vikara (Diseases of Kidney and Ureters)**	15	Yes	Yes	Yes
47	**Mutrashaya Vikara (Diseases of Urinary bladder)**		Yes	Yes	Yes
48	**Mutraghata and Mutrakrichra**		Yes	Yes	Yes
49	**Paurusha Granthi Vikara (Diseases of Prostate)**		Yes	Yes	Yes
50	**Mutramarga Vikara (Diseases of Urethra)**		Yes	Yes	Yes

51	**Medhra Vikara (Diseases of Penis)**	15	Yes	Yes	Yes
52	**Mushka Evum Vrishan Vikara (Diseases of Scrotum and Testis)**		Yes	Yes	Yes
53	**Vriddhi Roga**		Yes	Yes	Yes
54	**Antravriddhi (Hernia)**		Yes	Yes	Yes
Total Marks		**100**			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 100-mark question paper shall contain:
   - 20 MCQs
   - 8 SAQs
   - 4 LAQs

7. MCQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 3.
   - Questions from the Nice to Know part of syllabus shall not exceed 2.

8. SAQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 1.
   - No questions shall be drawn from the Nice to Know part of syllabus.
   - SAQs shall assess understanding, application, and analysis, rather than simple recall.

9. LAQs:
   - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
   - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
   - Number of LAQs should not exceed one per topic unless maximum marks exceed 20 for the topic.

10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

S.No	Heads	Marks
1	Spotting (Instruments, X-ray and Drugs etc) - 5 spots 4 marks each.	20
2	Clinical case taking (One case)	30
3	Demonstration of procedures: Demonstration of surgical and parasurgical procedures	40
4	Records : 1. 10 Instruments with diagrams 2. 10 Records of surgical and parasurgical procedures (CPR,CATHERIZATION,ENDOTRECHIAL INTUBATION) 3. 10 IPD case sheets of Shalyatantra 4. 10 OPD case sheets of Shalyatantra	10
5	Viva Voce • Structured Viva • Questions (assessing clinical skills) on paper 1 - 30 Marks • Questions (assessing clinical skills) on paper 2 - 30 Marks • Communication Skill - 10 Marks	70
6	Marks of Internal assessment	30
Total Marks		**200**

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Syllabus Committee

SHALYA TANTRA	
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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)

Shalakya Tantra
(Ophthalmology, Oto-Rhino- Laryngology & Oro-Dentistry)

(SUBJECT CODE : AyUG-SL)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

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NCISM

III Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-SL

Shalakya Tantra

(Ophthalmology, Oto-Rhino- Laryngology & Oro-Dentistry)

Summary

Total number of Teaching hours: 300			
Lecture (LH) - Theory		**100**	**100(LH)**
Paper I	50		
Paper II	50		
Non-Lecture (NLHT)		**60**	**200(NLH)**
Paper I	30		
Paper II	30		
Non-Lecture (NLHP)		**140**	
Paper I	70		
Paper II	70		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	70	-	30
Paper II	100				
Sub-Total	200	200			
Total marks	400				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

A dynamic and evolving curriculum is crucial in Ayurveda education to prepare future medical professionals who are adaptable, informed, and empathetic. The third professional year plays a pivotal role in bridging foundational knowledge with clinical application, shaping students into competent Vaidyas (physicians). This phase of education must be a living entity, constantly adapting to advancements in healthcare, technology, and patient needs. Shalya Tantra, the Ayurvedic science of surgery, is a critical discipline that blends traditional surgical wisdom with modern innovations, ensuring a comprehensive and holistic approach to surgical education.

This curriculum serves as more than just a framework for knowledge dissemination—it is a structured roadmap designed to foster critical thinking, ethical integrity, and a commitment to lifelong learning. By integrating traditional pedagogical methods with innovative teaching-learning strategies, including case-based learning, hands-on training on simulators, and research-oriented clinical exposure, we aim to redefine surgical education in Ayurveda. It is designed to strengthen diagnostic abilities, enhance surgical skills, and introduce students to evidence-based practice through practical demonstrations, case discussions, and group interactions.

To ensure the global relevance and applicability of Shalya Tantra, the Expert Committee on Competency-Based Dynamic Curriculum has introduced enhancements such as the integration of modern surgical techniques, clinical research updates, and evidence-based practice. This curriculum not only delves into the strengths of Ayurveda in managing lifestyle disorders and non-communicable diseases but also equips students with the necessary skills to navigate an evolving healthcare system. We hope that this curriculum serves as a strong foundation for students, enabling them to achieve clinical excellence and uphold the highest ethical standards in their surgical practice.

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Course Code and Name of Course

Course code	Name of Course
AyUG-SL	Shalakya Tantra

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-SL At the end of the course AyUG-SL, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Demonstrate clincical application of anatomy and physiology of the Netra, Karna, Nasa, Mukha, Shiras.	PO1
CO2	Identify and understand Nidana-panchaka of diseases in Shalakyatantra according to Ayurveda and contemporary medical science. (Rogapareeksha)	PO1,PO2,PO3
CO3	Conduct appropriate clinical examinations using various diagnostic and imaging techniques, along with appropriate instrument usage and interpretation, as per Ayurveda and contemporary medical sciences.	PO2,PO3
CO4	Present the cases related to Shalakyatantra with clinical reasoning (Naidanika Tarka) along with prognosis (Sadhya-asadhyata) in clinical practice.	PO2,PO5
CO5	Acquire a knowledge of principles of treatment and various therapeutic measures related to Shalakyatantra, according to Samhitas and contemporary medical science.	PO2,PO3,PO4,PO7
CO6	Perform appropriate therapeutic measures related to Shalakyatantra and seek or refer for expert opinion whenever needed.	PO4,PO7
CO7	Communicate effectively with the patient, relatives and other stakeholders.	PO7,PO8
CO8	Demonstrate ethics (Sadvritta), compassion (Karuna) and possess qualities of a clinician (Vaidyaguna).	PO6,PO7,PO9

Table 2 : Contents of Course

Paper 1 (Netraroga (Ophthalmology))						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Shareera, Nidaana Panchaka of Netraroga.** A) Paribhasha of Shalakya Tantra. B) Netra Rachanashareera (Anatomy of Eye). C) Netra Kriyashareera (Physiology of Eye). D) Samanya Hetu (Nija and Agantuja) of Netraroga. E) Purvarupa of Netraroga. F) Samprapti of Netraroga. G) Saama and Niraama Lakshanas of Netraroga. H) Classification of Netraroga.	1	30	2	2	6
2	**Samanya Chikitsa and Kriyakalpa.** A) Samanya Chikitsa of Netraroga. B) Enumeration of Kriyakalpa. C) Seka. D) Pindi. E) Vidalaka. F) Aschyotana. G) Tarpana H) Putapaka. I) Anjana.	1		3	3	8
3	**Panchakarma and Netraroga.**	1		0	1	0

	Arhata and Importance of Panchakarma in Netraroga Chikitsa.					
4	**Sanjnaharana in Netraroga.** Types and drugs used in Sanjnaharana in Netraroga (Anesthesia in Ophthalmology).	1		0	1	0
5	**Sandhigata Roga -1** A) Applied anatomy of Lacrimal apparatus. B) Pooyalasa, Upanaha (Acute and Chronic Dacryocystitis).	1		3	0	2
6	**Sandhigata Roga -2** A) Netrasrava (Epiphora). B) Hyperlacrimation.	1		1	1	0
7	**Sandhigata Roga -3** A) Krimigranthi (Blepharitis). B) Parvani, Alaji.	1		2	0	0
8	**Vartmagata Roga-1** A) Anjananamika (Hordeolum). B) Utsangini, Lagana (Chalazion). C) Pakshmakopa (Trichiasis, Entropion). D) Pakshmashata. E) Ectropion.	1	34	4	1	6
9	**Vartmagata Roga-2** A) Pothaki (Trachoma). B) Sikatavartma.	2		1	0	0
10	**Vartmagata Roga -3** A) Vatahatavartma (Ptosis). B) Nimesha. C) Klinnavartma.	2		2	0	4

	D) Utklishtavartma.				
11	**Bhedana Karma** Arhata, Purvakarma, Pradhanakarma, Pashchatkarma of Bhedana in Netraroga.	2	0	1	2
12	**Lekhana Karma.** Arhata, Purvakarma, Pradhanakarma, Pashchatkarma of Lekhana in Netraroga.	2	0	1	2
13	**Shuklagata Roga -1** A) Arma (Pterygium). B) Arjuna (Sub-Conjunctival Haemorrhage). C) Shuktika. D) Pishtaka.	2	3	0	6
14	**Shuklagata Roga -2** A) Applied Anatomy of Sclera. B) Sirajala, Sirajapidika (Episcleritis, Scleritis).	2	2	0	2
15	**Chhedana Karma.** Arhata, Purvakarma, Pradhanakarma, Pashchatkarma of Chhedana in Netraroga.	2	0	1	2
16	**Agnikarma and Ksharakarma.** Arhata, Purvakarma, Pradhanakarma, Pashchatkarma of Agnikarma and Ksharakarma in Netraroga.	2	0	1	0
17	**Krishnagata Roga -1** A) Savrana Shukra/Shukla (Corneal Ulcer). B) Avrana Shukra/Shukla (Corneal Opacity). C) Ajakajata (Staphyloma). D) Sirashukla. E) Akshipakatyaya.	2	5	0	4
18	**Krishnagata Roga -2**	2	2	0	4

	A) Uveitis. B) Acute Iridocyclitis.(Tarakamandala-shotha.)					
19	**Dravyas Used In Netrachikitsa-1** Dravyas used in Netrachikitsa [Anti-inflammatory drugs, Immunosuppressive drugs, Anti-infective drugs (Topical- Antibiotics/ Antiviral/ Antifungal agents), Lubricating agents and Artificial tears, Dyes used in Ophthalmology].	2		0	4	0
20	**Eye Donation** A) Basic knowledge of Eye bank. B) Eye Donation. C) Corneal Transplantation.	2		0	4	0
21	**Sarvagata Roga -1** A) Abhishyanda (Conjunctivitis). B) Adhimantha. C) Hatadhimantha.	2	18	4	1	2
22	**Sarvagata Roga -2** A) Shushkakshipaka (Dry Eye Syndrome, Computer Vision Syndrome). B) Sashophapaka. C) Ashophapaka. D) Amloshita. E) Sirotpaata. F) Siraharshha. G) Vaataparyaya. H) Pillaroga.	3		3	1	2
23	**Glaucoma** Dynamics of Aqueous Humour; Classification of Glaucoma and Description of Primary Open Angle	3		1	1	2

	Glaucoma and Primary Angle Closure Glaucoma.					
24	**Drishtigata Roga-1** A) Timira (Errors of Refraction, Presbyopia). B) Amblyopia. C) Kacha. D) Linganasha. E) Kaphaja Linganasha Shastrakarma. F) Pitta-vidagdha Drishti. G) Kapha-vidagdha Drishti. H) Dhumadarshi. I) Ushna-vidagdha Drishti. J) Abhighataja Linganasha. K) Sanimittaja Linganasha. L) Animittaja Linganasha. M) Gambhirika . N) Hraswajadya. O) Nakulandhya.	3	18	7	1	4
25	**Nayanabhighata** A) Nayanabhighata (Ocular trauma and management). B) Agantuja Shalya (Foreign body in eye).	3		1	0	2
26	**Drishtigata Roga-2** Classification of Cataract and description of Senle Cataract (Kaphaja Linganasha).	3		1	1	2
27	**Drishtigata Roga- 3** A) Madhumehajanya Drishtiroga (Diabetic Retinopathy).	3		2	0	0

	B) Jarajanya Pitabindu Upaghata (Age related macular degeneration). C) Drishti-nadi Shosha (Optic atrophy).					
28	**Dravyas used in Netra Chikitsa-2** Mydriatics, Cycloplegic agents.	3		0	1	0
29	**Dravyas used in Netra Chikitsa-3, Swasthavritta, Kuposhanajanya Netravikara (Malnutritional Eye Disorders), Community Ophthalmology.** • A) Dravyas in Netrachikitsa. - Prayoga of Samanya Chakshushya Dravyas. - Prayoga of Samanya Chakshushya Yogas • B) Swasthavritta in Netraroga. - Netra and Chakshu Swasthyahitakara Dinacharya. - Netra and Chakshu Swasthyahitakara Aahara evam Vihara. • C) Kuposhanajanya Netravikara (Malnutritional Eye Disorders) - Naktandhya (Night Blindness). -Jeevanasatwa-kshayajanya Netra roga(Vitamin deficiency Eye disorders). - Xerophthalmia. - Xerosis. • D) Community and Preventive Ophthalmology.	3		1	3	8
Total Marks			**100**	**50**	**30**	**70**

Paper 2 (Shiro-Karna-Nasa-Mukharoga (Oto-rhino-laryngology and Oro-dentistry))						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture**	**E2 Non-Lecture**

					hours Theory	hours Practical
30	**Enumeration, Nidana Panchaka and Sadhya-asadhyata of Shiroroga** A) Enumeration, Samanya Nidana, Samprapti, Samanya Lakshanas, Sadhya-asadhyata of Shiroroga. B) Vataja, Pittaja, Kaphaja, Sannipataja Shirahshoola. C) Classification of Headache as per ICHD 3.	1	10	2	1	4
31	**Samanya Chikitsa of Shiroroga** A) Suryavarta, Anantavata, Ardhavabhedaka (Detailed study and differential diagnosis of Migraine headache). B) Shiraso Uttamangatwam, Pathyapathya and Samanya Chikitsa of Shiroroga.	1		0	2	4
32	**Karna Rachana Shareera, Nidana Panchaka and Samanya Chikitsa of Karnaroga** A) Rachana of Karna (Anatomy of Ear) B) Enumeration, Nidana Panchaka, Classification, Sadhya-asadhyata, Pathyapathya, Samanya Chikitsa of Karnaroga.	1	25	2	2	4
33	**Karnaroga 1** A) Karnashoola (Otalgia). B) Karna Shopha.	1		2	0	2
34	**Nasa Shareera, Ghranendriya and Nidana Panchaka of Nasaroga** A) Nasa and Ghranendriya Shareera(Anatomy of Nose & Paranasal sinuses and physiology of Olfaction). B) Enumeration, Samanya Hetu, Samanya Chikitsa, Pathya-apathya, Prognosis of Nasaroga.	1		2	1	2
35	**Pratishyaya**	1		3	1	0

	Pratishyaya, Dushtapratishyaya ,Puyarakta, Nasapaka, Nasashopha.					
36	**Mukha Shareera and Nidana Panchaka of Mukharoga** A) Paribhasha of Mukha. B) Mukha-Shareera. C) Nidana Panchaka,(Common etiological, pathological factors of diseases of Oral cavity as per Contemporary Medical Science); Enumeration, Classification, Sadhya-asadhyata, Pathya-apathya and Samanya Chikitsa of Mukharoga.	1		1	1	4
37	**Oshtharoga** A) Oshtharoga - Vataja, Pittaja, Kaphaja Oshtha Prakopa (Cheilitis, Herpes labialis). B) Khandoushtha (Cleft lip). C) Jalarbuda (Lip Mucocele).	1	10	1	0	0
38	**Sarvasara Mukharoga** Sarvasara Mukharoga (Stomatitis, Oral Submucous Fibrosis, Oral Candidiasis, Tumours of Oral cavity).	1		2	0	0
39	**National Oral Health Programme** National Oral Health Programme including prevention of malignancy of Oral cavity, Dantaraksha Vidhi.	1		0	1	0
40	**Kapalagata Roga** Enumeration, Samanya Nidana, Samprapti, Lakshana and Chikitsa of Kapalagata Roga - Arumshika, Darunaka, Indralupta, Khalitya, Palitya.	2	10	1	0	4
41	**Karna Kriya Shareera and Shravanendriya** Kriya Shareera of Karna and Shravanendriya (Physiology of Hearing and Equilibrium)	2		0	1	0
42	**Karna Badhirya, Karna Naada and Kshweda** A) Karna Badhirya (Hearing loss, Otosclerosis). B) National Programme for Prevention & Control	2		3	1	12

	of Deafness. C) Noise pollution. D) Karna Naada and Kshweda (Tinnitus).					
43	**Karna Srava and Putikarna** Karna Srava (Otorrhea). Putikarna (Otitis Media,Mastoiditis).	2	05	4	2	4
44	**Karnakandu, Karnaguthaka, Karnapratinaha, Krumikarna, Karnavidradhi, Karnapaka.** A) Karnakandu, Karnaguthaka (Ear wax), Karnapratinaha. B) Krumikarna (Maggots in Ear), Karnavidradhi, Karnapaka (Otitis Externa), Otomycosis.	2		2	0	4
45	**Rhinitis** Rhinitis.	2		1	2	0
46	**Deeptadi Nasaroga.** Deepta,Putaka, Nasaparishosha, Bhramshathu, Nasanaha, Kshavathu, Peenasa, Apeenasa, Putinasa (Sinusitis).	2		3	1	2
47	**Nasavamsha-kutilatwa (Deviated Nasal Septum).** Nasavamsha-kutilatwa (Deviated Nasal Septum).	2	10	1	1	0
48	**Dantamulagata roga** A) Sheetada, Dantaveshtaka, Paridara, Upakusha (Gingivitis, Periodontitis). B) Adhimaamsa (Impacted wisdom tooth). C) Dantanaadi. D) Dantavidradhi (Apical abscess).	2		2	1	0
49	**Jihvagata Roga** A) Jihvakantaka (Glossitis).	2		1	1	0

	B) Alaasa. C) Ankyloglossia (Tongue tie).					
50	**Krimidantaka and Dantaharsha** A) Krimidantaka (Dental Caries). B) Dantaharsha (Dentin Hypersensitivity).	2		1	1	0
51	**Dravyas used in Karna Nasa Mukha Roga Chikitsa-1** A) Common Pharmacological agents in Oto-Rhino-Laryngology (Antibiotics, Anti-histamines, PPIs, Steroids, Nasal Decongestants). B) Sammohan Dravyas in Karna Nasa Mukha Roga (Anaesthesia in Oto-Rhino-Laryngology).	2		1	0	2
52	**Karnarsha and Karnarbuda** Karnarsha (Aural Polyps). Karnarbuda.	3	10	1	0	0
53	**Karnasandhana** Karnasandhana (Auroplasty)	3		1	1	0
54	**Bhraamara (Vertigo)** Bhraamara (Vertigo- Benign Paroxysmal Positional Vertigo, Meniere's disease, Labyrinthitis).	3		1	1	2
55	**Agantuja Shalya in Karna** Agantuja Shalya in Karna (Foreign Body in Ear).	3	10	0	1	2
56	**Nasarsha** Nidan Panchaka and Chikitsa of Nasarsha (Nasal polyps).	3		1	1	2
57	**Nasagata Raktasrava** Nidana Panchaka and Chikitsa of Nasagata Raktasrava (Epistaxis).	3		1	1	2
58	**Nasarbuda** Nasarbuda (Tumors of nose and paranasal sinuses).	3		1	1	2

59	**Agantuja Shalya in Nasa** Agantuja Shalya in Nasa (Foreign Body In nose).	3	10	1	0	2
60	**Nasa-abhighata, Nasasandhana** Nasa-abhighata (Nasal trauma). Nasasandhana.	3		1	0	2
61	**Talugata Roga** A) Galashundika (Uvulitis) B) Tundikeri C) Kacchapa (Tumours of hard palate) D) Gilayushotha (Tonsillitis) E) Arbuda F)Talushosha G) Talupaaka	3		2	1	0
62	**Kantharoga** A) Rohini B) Kanthashaluka C) Ekavrunda,Vrunda (Pharyngitis) D) Svaraghna (Laryngitis, Ca Larynx) E) Maamsatana F) Vidaari G) Gilayu, Galavidradhi, (Peritonsillar abscess, Para & Retro-pharyngeal abscess) H) Parotitis I) Agantuja Shalya in Kantha (Foreign Body in throat)	3		4	2	6
63	**Dravyas used in Karna Nasa Mukha Roga Chikitsa-2** Samanya Yogas used in Shiro, Karna, Nasa and Mukha Roga.	3		1	1	2

Total Marks	**100**	**50**	**30**	**70**

Table 3 : Learning objectives of Course

Paper 1 (Netraroga (Ophthalmology))										
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Shareera, Nidaana Panchaka of Netraroga. (LH :2 NLHT: 2 NLHP: 6)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Define Paribhasha of Shalakya Tantra.Explain Netra Rachana Shareera (Anatomy of Eye).	CC	MK	KH	L	QZ ,VV-Viva,PUZ,M-POS	F&S	I	V-RS,V-RS	LH
CO1	Explain Kriya Shareera of Netra (Physiology of vision).	CC	MK	KH	D-M,PER,L&PPT ,TPW	CL-PR,COM	F&S	I	V-KS	NLHT1.1
CO1, CO2	Explain Classification of Netraroga according to treatment principles, prognosis, and Doshadhikya and Explain Saama-Nirama Lakshana.	CC	MK	KH	L&GD, DIS	P-POS,QZ , T-OBT,COM	F&S	I	V-RN	NLHT1.2
CO2	Describe Samanya Hetus (Nija and Agantuja), Purvarupa, and Samprapti of Netraroga.	CC	MK	KH	BS,L&PPT	M-CHT,VV-Viva,P-EXAM	F&S	I	-	LH
CO3, CO7	Perform History taking in cases of Netraroga.	CAN	MK	SH	PBL,EDU,PT,TUT,D-BED	Mini-CEX, P-PRF,P-EXAM,P-VIVA	F&S	I	-	NLHP1.1
CO3, CO7	Follow the steps in performing the structural examination of Netra.	PSY-GUD	MK	SH	TUT,PT ,D-BED ,D,CBL	Mini-CEX	F&S	I	-	NLHP1.2

CO3, CO7	Follow the steps in performing the visual acuity assessment for Distant vision, near vision, colour vision, field of vision, and ocular motility.	PSY-GUD	MK	SH	D,RP,PT,PBL	Mini-CEX, PP-Practical,P-PRF	F&S	I	-	NLHP1.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 1.1	Discussion on Netra Kriya Shareera in its Applied aspect.	A) The teacher will provide the link of the material needed or the physical material. Ask the Students to study, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness. Ask the student to connect the knowledge gained in previous classes into applicable clinical framework. B)Make small groups, subdivides subject into smaller topics and asks student to make power point presentations in the class. PowerPoint presentations should be assessed on following criteria- content , focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, effective use of visual aids. OR C) Learning on eye models can be done for better understanding. Ask the students to compile information and conclusion of discussions. Compilations can be assessed on criteria like Content Accuracy, Completeness, Organization, Clarity of language and explanation of technical terms,Consistency, Uniform presentation of citations and references. D) Guidance from faculty of Kriya Shareera can be taken if needed.
NLHT 1.2	Classification and Saama Nirama Lakshana of Netraroga.	A)Make three groups for classification of Netraroga. The presentation on the topic should be prepared and uploaded on a website created for the students or free cross-platform messaging services like Whatsapp or Telegram or Learning platforms like google classroom. They should be also instructed to go through the textbooks and read this topic. They should make posters and present in classroom, try to find Mnemonics to remember

		classifications. B) Make two groups to understand Saama Niraama Lakshanas. Ask the students to go to library and ask for Librarian's help. They should be asked to subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading and taking notes. Ask the Students to have a group discussion on the topic and prepare a compilation. Encourage open sharing by stating that all ideas are welcome without judgment. Encourage participants to expand on each other's suggestions. Emphasize the importance of listening attentively to all contributions. C) Help from Faculty of Roga Nidana can be taken for better understanding of concepts. D) An open book test or quiz can be conducted to assess the students learning.Evaluation of compilation can be done on criteria like Content Accuracy, Completeness, Organization, Clarity of language and explanation of technical terms, Consistency, Uniform presentation of citations and references.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 1.1	History taking in cases of Netraroga.	A) Encourage students to teach each other history taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions Make Student introduce himself to patients. Ask Student to make patients comfortable. Ask Student to take general history and history related to eye diseases. Make student Understand Ocular diseases with diminution of vision and normal vision. OR B) Utilize advanced simulation technology to create realistic patient scenarios. Engage students with virtual patient software that simulates real-life scenarios, helping them practice history taking and clinical reasoning skills.

		OR C) Recommend apps like geekymedics, wikimeds that offer virtual practice and conduct quizzes on history-taking skills. D) Conduct OSCEs where students rotate through stations to practice history taking and communication skills.The assessor should use checklists to evaluate students' performance in a reliable and consistent way. E) Communication skills can be assessed by Kalamazoo essential elements communication checklist. OR F) Use MINI-CEX As an evaluation method. The format can be downloaded from https://www.ranzcr.com/images/20211015_RO_Mini-CEX_Assessment_Form.pdf. A similar format can be developed.
NLHP 1.2	Structural Examination of Netra.	A) Prepare the students for examination of all Mandalas, Patalas and Sandhis. Explain parts of Mandalas, Patalas and Sandhis. Explain why examination is crucial for diagnosis. B) Conduct live demonstrations with real or simulated patients to model effective case taking. OR Use videos of experienced clinicians. OR C) Use standardised patients (actors trained to simulate real patient cases) to perform a step-by-step demonstration in a controlled environment. Emphasize key points like technique, safety and anatomical landmarks. D) Teach students the importance of building rapport and demonstrating empathy during patient interactions. Use Mini-CEX. for assessment o Observe a Student’s interaction with a patient in a real-world clinical setting o Rate the performance of student using a 9-point scale: 1 through 3 is unsatisfactory, 4 through 6 is satisfactory, 7 through 9 is superior. o The student receives immediate feedback from the expert E) Provide constructive feedback on their performance, highlighting areas of improvement and

		excellence.
NLHP 1.3	Functional examination of Netra.	A) Present a clinical case of diminution of Vision and have students work in groups to gather history, discuss differential diagnosis, and plan management. Encourage the students for Assessment of visual acuity with the help of Snellen's chart, Assessment of colour vision with Ishihara's chart, Pin hole examination and Assessment of near vision, The finger tip method to assess intraocular pressure and Testing of Ocular motility. OR B)Assign roles to students, such as the patient, the primary care provider, and an observer. Rotate roles to ensure each student gets to practice different aspects of management. Give clear instructions and guidelines for the role-play scenarios. C) Break students into small groups for more focused practice and individualised feedback. Highlight the role of active listening. D) Use Mini-CEX for assessment of students o Observe a Student’s interaction with a patient in a real-world clinical setting o Rate the performance in areas like history taking, physical examination, and counselling skills o The student receives immediate feedback regarding performance and suggestions for improvement

Topic 2 Samanya Chikitsa and Kriyakalpa. (LH :3 NLHT: 3 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO6	Enumerate Kriyakalpa, Define and Describe types and dose, Indications and contraindications, Poorva, Pradhana and Pashchat Karma, Kala, Ayoga, Samyak yoga and Atiyoga lakshanas of Seka.Define and Detail Indications and contraindications, Poorva, Pradhana and Pashchat Karma of Pindi and Vidalaka.	CC	MK	KH	L&PPT ,L	QZ ,T-OBT	F&S	I	-	LH
CO5	Define, Describe types and dose, Indications and contra indications, Poorva, Pradhana and Pashchat Karma, Kala, Ayoga,	CK	NK	KH	PER,FC ,L&GD	PA,CR-RE D,T-CS,PR	F	I	-	NLHT2.1

	Samyak and Atiyoga lakshanas of Aschyotana.List the key findings of current research on Aschyotana, Seka, Pindi and Vidalaka.					N,O-QZ				
CO6	Demonstrate Seka and Pindi.Take informed consent and counsel patients for Kriyakalpas in a simulated environment.	PSY-MEC	MK	SH	D,D-M,TUT,RP,TBL	P-PRF,DOPS,DOPS,P-EXAM,DOAP	F&S	I	-	NLHP2.1
CO5	Define and Discuss Types and dose, indications and contra indications, Poorva, Pradhana and Pashchat karma, Kala, Ayoga, Samyakyoga and Atiyoga Lakshanas, complications and management of Tarpana and Putapaka.	CC	MK	KH	L&PPT,L	PRN,M-CHT,COM,QZ,VV-Viva	F&S	I	-	LH
CO5	List the key findings of current research on Tarpana and Putapaka.	CK	NK	K	DIS,TBL,LS	CR-RED,M-POS	F	I	-	NLHT2.2
CO6, CO7	Demonstrate Vidalaka and Aschyotana.	PSY-MEC	MK	SH	D-M,TUT,SIM,D,PT	DOPS,P-PRF,DOPS,PP-Practical, Log book	F&S	I	-	NLHP2.2
CO5	Summarise the steps involved in Tarpana and Putapaka.	CC	MK	KH	D-M,SIM,TUT,PT,D	VV-Viva,P-VIVA,O-QZ	F&S	I	-	NLHP2.3
CO5	Define and Explain Types and Dosage, Indications and contraindications, Poorva- Pradhana and Paschat karma, Kala, Heena, Samyaka and Atiyoga lakshanas, Complications of Anjana.Describe Anjana Shalaka.	CC	MK	KH	L&PPT,L	T-CS,M-POS,PRN,VV-Viva,QZ	F&S	I	-	LH
CO5	List the key findings of current research on Anjana.	CK	NK	K	DIS,L&GD,LS	SA,CR-RED	F	I	-	NLHT2.3
CO5,	Summarise the steps involved in Anjana.	CC	MK	KH	ML,SI	VV-Viva,P	F&S	I	-	NLHP2.4

CO6, CO7					M,PT,D	P-Practical, Log book,P -VIVA,O-QZ					

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 2.1	Details of Aschyotana and Researches studies on Aschyotana, Seka, Pindi and Vidalaka.	A) Aschyotana (25 minutes) Teacher will form study groups to discuss and share information regarding Aschyotana. Ask the students to study themselves, discuss with peers, review each other's notes and finally make short notes and record what they have learnt. At the end of session, make students to have group discussions in the class, which will be summed up by the teacher. Utilize pre-class online quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; During class discussions, assessment of engagement can be done by criteria like student participation, level of curiosity, and willingness to ask questions. B) Researches on Aschyotana, Seka, Pindi and Vidalaka.(25 minutes) Ask the students to form four groups and collect relevant research papers and articles, on the topic. Ask them to go to library and ask for Librarian's help.(Pre-class) Make them subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading and taking notes. Ask them to familiarise themselves with tools like EndNote, Zotero, or Mendeley to collect information about primary and secondary sources, such as journal articles,and books. At the end of session, have group discussions in the class, each group 04 minutes; which will be summed up by the teacher. To evaluate the performance, Peer assessment can be done.
NLHT 2.2	Review of Research studies on Tarpana and Putapaka.	A)Teacher will form four study groups to discuss and share information- Two each for Tarpana and Putapaka. Teacher can subdivide subtopics amongst the students and split time between different activities like searching for articles, reading and taking notes. Students will study themselves, discuss with peers, review each other's notes.(Pre-class) OR B)Teacher will ask the students to go to library and ask for Librarian's help, Students can be asked to

		familiarise themselves with tools like EndNote, Zotero, or Mendeley and collect information from primary and secondary sources, such as journal articles, books etc.(Pre-class) C) At the end of session students must be asked to summarize and record what they have learned.They should make posters and present in the class. A time of 10 minutes should be alloted to each group. Evaluation of posters- To evaluate Consider criteria like Overall impression, Blank Spaces, Balance, Relation between text and graphs, Text size, Structure and reading fluency, Contents.
NLHT 2.3	Discussion on Research studies on Anjana.	A) Teacher will form study groups to discuss and share information, Students will study themselves, discuss with peers, review each other's notes.(Pre-class) Students will be asked to go to library and ask Librarian's help, Teacher can subdivide subtopics amongst them and split time between different activities like searching for articles, reading and taking notes. Students will be asked to familiarise themselves with tools like Zotero, to collect information about primary and secondary sources, such as journal articles, books. (30 min. of the class time.) At the end of session, they should summarize what they have learned. Choose randomly two students from each group to present (05- 10 min. each) B) Students should be encouraged to reflect on their own performance and identify areas for improvement. Self-assessment can be done on parameters like:- Team work and collegiality, empathy and openness, ethical awareness, work planning, scientific method of working, structuring, coping with mistakes, and priorities.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 2.1	A) Procedures of Seka and Pindi. B) Method of taking Informed consent from patients.	A) Ask the Students to observe and perform the procedures under supervision. OR B)Teacher may show recorded procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. OR

		C) Use anatomical models, diagrams, and 3D animations to illustrate. D) Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. E) Promote teamwork and collaboration among students, encouraging them to learn from each other's experiences.Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients. Evaluation can be done by Direct Observation of Procedural Skills (DOPS) • The trainee receives constructive feedback that focuses on essential skills. • An assessor observes a trainee performing a procedure. • The assessor records their observations on a structured form. • The assessor provides immediate feedback to the trainee. • Proforma for DOPS can be found at https://www.iscp.ac.uk/static/public/DOPSJul2015.pdf. F) Ask the Students to learn to take informed consent for Kriyakalpas by role play. G)Assign roles to students, such as the patient, the primary care provider, a nurse, and an observer. Rotate roles to ensure each student gets to practice different aspects of management.
NLHP 2.2	Demonstration on Vidalaka and Aschyotana.	A) Ask the students to observe and perform the procedures under supervision. B) Teacher may show recorded procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. OR C) Use anatomical models, diagrams, and 3D animations to illustrate. D)Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. E) Promote teamwork and collaboration among students, Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients. Ask the students to maintain log book.

		G)Evaluation can be done by Direct Observation of Procedural Skills (DOPS) • The trainee receives constructive feedback that focuses on essential skills. • An assessor observes a trainee performing a procedure. • The assessor records their observations on a structured form. • The assessor provides immediate feedback to the trainee.
NLHP 2.3	Discussion on Tarpana and Putapaka.	A) Divide students into groups of 04-06 students. Ask the students to observe the technique of preparation of Mashapali, administration of Tarpana, preparation of Putapaka Rasa and administration of Putapaka and outcomes. Teacher may show recorded procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. OR Use anatomical models, diagrams, and 3D animations to illustrate. B)Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. C) Promote teamwork and collaboration among students, encouraging them to learn from each other's experiences. Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients. D) Conduct online quiz to evaluate students.
NLHP 2.4	Procedure of Anjana.	A) Divide the students into groups of 04-06. Ask the Students to observe the procedures while being conducted in hospital, under supervision. OR

		B)Teacher may show recorded procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. OR C)Use anatomical models, diagrams, and 3D animations to illustrate. D) Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. E) Promote teamwork and collaboration among students, encouraging them to learn from each other's experiences.Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients. F) To assess, use online quiz or evaluate the log book.

Topic 3 Panchakarma and Netraroga. (LH :0 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Enlist the diseases in which Poorvakarmas of Panchakarma (Snehana / Swedana) and Panchakarmas are indicated and contra-indicated in Netraroga.	CK	NK	K	L&GD, DIS,LS	M-POS	F&S	I	-	NLHT3.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 3.1	Indications and contraindications of Poorvakarma and Vamana, Virechana, Basti, Nasya,Raktamokshana In Netraroga.	A) Teacher will divide the students into 06 groups. Ask the Students to visit the library and collect related references from Samhita and prepare posters on the indications and contraindications of Panchakarma related to Netraroga.(Pre-class) Make students present their work in the classroom (05 minutes to each group). Conduct a brief discussion, (15- 20 min.)encouraging students to come out with their views regarding the logic behind it. Evaluate them on criteria like Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills.

		B) A constructive feedback with guidelines for improvements can be given. C) Assess the posters on following points- Choosing the right type; Design for clarity and simplicity; and Use of proper and reliable Data-source.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 4 Sanjnaharana in Netraroga. (LH :0 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Define Sanjnaharana (Anesthesia).Enlist types and drugs used for Anesthesia in Ophthalmology.Describe dosage, indications, contraindications and untoward effects. (Topical/Surface anaesthesia - Lidocaine, Amethocaine, Proparacaine).	CC	DK	KH	FC	T-OBT,QZ	F&S	I	-	NLHT4.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 4.1	Sanjnaharana in Netra (Anesthesia in Ophthalmology) -	A)The topic is assigned to students using the flipped method. The students will be given a link to a PowerPoint presentation on Sanjnaharana. The presentation on the topic should be prepared and uploaded on a website created for the students or free cross -platform messaging services like Whatsapp or Telegram or blended learning platforms like google Classroom. They should be also instructed to go through the textbooks and read this topic.(Pre-class) They should be given 1 week time before the scheduled Flipped Class Room for this topic.The class can be divided into 3 groups .one group can be given a job of enlisting the types of anaesthesia used in eye and names of the drugs.Second group can be given a topic- dosage and indications of anaesthetic drugs. Third group can be asked to prepare Indications and contraindications of anesthetic drugs. They would present in the class. (10 min. to each group.)

		B)The students will be asked completion type, reason assertion type, and problem-based questions in the form of Quizzes or open book test for assessment.Students will be also encouraged to ask questions to clarify concepts. (20 min.)

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 5 Sandhigata Roga -1 (LH :3 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe clinical features and management of Pooyalasa.Define and describe types of Dacryocystitis.	CC	MK	KH	PBL,L, L&PPT	P-VIVA,QZ ,T-OBT	F&S	I	-	LH
CO2, CO5	Describe etiology, clinical features, complications and medical management of acute and chronic Dacryocystitis.	CC	DK	KH	L&PPT	T-OBT	F&S	I	-	LH
CO2, CO5	Describe surgical management of Chronic Dacryocystitis - Dacryocystorhinostomy (DCR), Dacryocystectomy (DCT):- (Their indications, contra indications, type of anaesthesia, major surgical steps, post-operative care, complications and their management in brief).	CC	DK	KH	L&PPT ,L	INT, C-VC,QZ ,P-POS,T-OBT	F&S	I	-	LH
CO3	Examine Netra-sandhi.Follow the steps in performing regurgitation test of the lacrimal sac and observe sac syringing.	PSY-GUD	DK	SH	D-BED, D-M,RP ,L_VC, CBL	OSCE,DOPS,P-EXAM, DOPS,CHK	F&S	I	-	NLHP5.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 5.1	Evaluation of Netra-sandhi and Dacryocystitis.	A) Examine Netra-sandhi.(60 min.) Make students examine all Sandhis in eye. They will check for any Redness, Growth, Deformity or Scarring. Explain why examination is crucial for diagnosis. Conduct live demonstrations with real or simulated patients to model effective case taking. OR Use standardised patients (actors trained to simulate real patient cases) to perform a step-by-step demonstration in a controlled environment. Emphasize key points like technique, safety, anatomical landmarks Teach students the importance of building rapport and demonstrating empathy during patient interactions. B) OSCE stations -Each student should be given the same model or simulated patient for assessment. The assessor should use checklists to evaluate students' performance in a reliable and consistent way. C) Regurgitation test of the lacrimal sac (30 minutes) Make students demonstrate the technique for the regurgitation test of the Lacrimal sac. Emphasize key points like technique, safety, anatomical landmarks. Teach students the importance of building rapport and demonstrating empathy during patient interactions. C)Observation of Lacrimal sac syringing (30 minutes) Make Students observe the technique of Lacrimal sac syringing.They will be provided with a proper step wise checklist so they do not miss any step while observing the procedure. For assessment checklist can be used each step having specific marks.

Topic 6 Sandhigata Roga -2 (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Describe samprapti of Netrasrava and Clinical features of Pooyasrava, Kaphaja Srava, Raktaja Srava and Pittaja Srava.Give an account of Clinical features and Chikitsasutra of Upanaha.	CC	MK	KH	L,L&PPT ,DIS	INT,O-QZ, T-OBT,VV-Viva	F&S	I	-	LH

CO2	Differentiate between Epiphora and Hyperlacrimation.	CC	MK	KH	LS,L&GD,DIS	T-OBT,INT,CL-PR,DEB,VV-Viva	S	I	-	NLHT6.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 6.1	Differential Diagnosis and causes of Epiphora and Hyperlacrimation.	A) Make atleast four study groups to discuss and share information, each for Differential Diagnosis and causes of Epiphora and Hyperlacrimation. Ask Students to study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness. OR B) Make students to visit library for library session (20 minutes). Divide subtopics amongst the students by making atlest 4 groups and ask them to read relevant literature about the differences between Epiphora and Hyperlacrimation, and have a group discussion, which will be followed by a presentation (30 minutes - 5 min for each presentation and 10 minutes for teacher for briefing.). During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions to assess their engagement. Presentations should be assessed on following criteria- content , focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves and effective use of visual aids. Last 10 minutes will be devoted for assessment. Ask the students to record all the discussion.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 7 Sandhigata Roga -3 (LH :2 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe clinical features and management of Krimigranthi.Define and Enumerate types of Blepharitis.	CC	MK	KH	L&PPT	VV-Viva,T-OBT	F&S	I	-	LH
CO2, CO5	Explain etiology, clinical features, complications, and treatment of Ulcerative and Seborrhoeic blepharitis.Describe clinical features and Chikitsasutra of Parvani; and clinical features of Alaji.	CC	DK	KH	L&PPT ,L	T-OBT,QZ	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 8 Vartmagata Roga-1 (LH :4 NLHT: 1 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Describe clinical features and management of Anjananamika. Describe types of Hordeolum.Describe etiology, clinical features and management of External and Internal Hordeolum.	CC	MK	KH	L&PPT	VV-Viva,T-CS	F&S	I	-	LH
CO2, CO5	Describe clinical features and management of Utsangini and Lagana.Describe the etiology, clinical features, and medical and surgical management of Chalazion.	CC	MK	KH	L&PPT	VV-Viva,T-CS	F&S	I	-	LH
CO2, CO5	Describe clinical features and management of Pakshmakopa.Describe etiology, clinical features, complications and principle of treatment in Trichiasis and Entropion.	CC	DK	KH	L&PPT	T-CS,VV-Viva	F&S	I	-	LH
CO2, CO5	Describe etiology, clinical features, complications and principle of treatment in Ectropion.Describe clinical features and	CC	NK	KH	L&PPT	T-CS,VV-Viva	F&S	I	-	LH

	management of Pakshmashata.									
CO3, CO5	Discuss and Diagnose, Ectropion and Entropion.	CAN	DK	KH	DIS,PBL,TBL	CL-PR,QZ	F	I	-	NLHT8.1
CO3	Examine of Bhru (eyebrow), Pakshma (eye lashes), Pakshmavartmasandhi (lid margin) and Vartma (eye lid).	PSY-MEC	MK	SH	TUT,PBL,L_VC,D-BED	P-EXAM,P-VIVA,OSCE	F&S	I	-	NLHP8.1
CO5	Summarise the steps involved in the incision and curettage (I&C) for treating a Chalazion.	CC	DK	KH	D,CBL,L_VC	CHK,Log book,OSCE	F	I	-	NLHP8.2
CO3, CO4, CO7	Demonstrate assessment of Pakshmakopa (Trichiasis / Entropion) and Ectropion.Demonstrate misdirected eyelash removal by Epilation.	PSY-GUD	DK	SH	D-BED,L_VC,PBL,ML	SP,Mini-CEX,OSCE	F&S	I	-	NLHP8.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 8.1	Diagnostic Approaches to Eyelid Malposition: Entropion and Ectropion.	A) Share a link about explanation of subject by free messaging services or Google classroom.(Pre-class). Make four groups to discuus the subject. Encourage students to actively participate in interactive activities and apply their understanding of Entropion and Ectropion. OR B) Present cases of entropion and ectropion. Have students work in pairs or small groups to discuss symptoms and propose treatments, then share insights, focusing on key clinical signs and diagnostic approaches. C) Give 10 minutes to each group to present in the classroom. D) Assess students individually or in small groups using a quiz format, including multiple-choice and short-answer questions on the etiology, signs, symptoms, and management of entropion and ectropion. OR Assess presentation on its clarity of information, logical organization, visual appeal, scientific soundness, and whether key elements are presented clearly and concisely, E) Briefly discuss the answers to reinforce understanding and address misconceptions.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 8.1	Examination of Periocular Structures - Bhru (Eyebrow), Pakshma (Eyelash), Pakshmavartmasandhi (Lid Margin), and Vartma (Eyelid).	A) Ask students to carefully inspect these areas/structures for any anomalies that may compromise ocular health, comfort, and vision. B)Integrate clinical scenarios at the patient's bedside/OPD, allowing students to apply learned skills in a real-world context. C) Encourage students to formulate diagnostic hypotheses based on patient history, guiding their physical examination to focus on relevant findings. Emphasize key points like technique, safety, anatomical landmarks. Teach students to carefully observe patient appearance, skin color, swellings, and any other visible abnormalities. Emphasize appropriate hand placement, pressure application, and how to differentiate textures, masses, and tenderness. D) Teach students the importance of building rapport and demonstrating empathy during patient interactions. E) Provide constructive feedback on their performance, highlighting areas of improvement and excellence. F) Students can be assessed with the help of OSCE stations: They should be assessed on competency in communication, history taking, physical examination, clinical reasoning, and knowledge. OSCE stations may include: • Clinical interactions (in-person or virtual) with standardized patients: counseling, examination, history taking • Examination of mannequins and interpretation of findings • Computerized cases • Test Interpretation.
NLHP 8.2	Incision and curettage (I&C) in Chalazion	A) Instruct students to observe and learn the incision and curettage (I&C) procedure for chalazion .

	surgery.	B) Demonstrate surgical instruments and each phase of the procedure, instructing students to note the surgeon's techniques. C)Teach students about post-operative care, including monitoring for complications and managing patient recovery. OR D) Record surgeries (with patient consent) for educational purposes. Reviewing these videos can help students learn and improve. OR E) Provide access to online surgical tutorials, webinars, and interactive platforms for additional learning. F) Students should be asked to make check lists and assess them. Alternatively, they can be asked to complete log books and they can be assesed. OR To assess, use OSCE covering steps of procedures, focusing on evaluating student's understanding of anatomy, surgical techniques, decision-making, patient management, and appropriate response to complications.
NLHP 8.3	Cases of Eyelid Malposition: Pakshmakopa (Trichiasis, Entropion)and Ectropion; Trichiatic cilia removal by Epilation.	A) Guide students to learn lid examination technique accurately and thoroughly, explaining rationale and key anatomical landmarks. Use a structured approach, breaking down complex examinations into smaller, manageable steps while making them aware of the Assessment of Pakshmakopa (Trichiasis/Entropion), and Ectropion. B) Emphasize proper patient positioning, communication skills, and ethical considerations. C) Students should Observe procedures under supervision. D) Select appropriate patients with relevant clinical presentations. OR E) Teacher can share a video clip of these condition and Epilation process and during practical hours may explain step by step through mobile or big screen. F) Demonstrate the procedure of removing misdirected eyelashes. Emphasize the importance of ethical conduct, patient-centered communication, and empathy throughout clinical teaching. G) Use Standardized assessments like Simulated Patients OR MINI-CEX to assess assessment skills objectively. Create realistic patient scenario with properly trained simulated patients. Assess teh

		students on Communication skills, Physical examination skills, History taking, Developing treatment plans.

Topic 9 Vartmagata Roga-2 (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe clinical features and treatment of Pothaki and Sikatavartma.Describe etiology, clinical features and treatment of Trachoma.	CC	NK	KH	L&PPT ,L	VV-Viva,T-CS	F&S	II	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 10 Vartmagata Roga -3 (LH :2 NLHT: 0 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe clinical features of Vatahatavartma and Nimesha.Describe etiology, clinical features and principle of treatment of Ptosis.	CC	NK	KH	L,L&PPT	VV-Viva,T-CS	F&S	II	-	LH
CO3, CO4, CO6, CO7	Present an appropriate history in a patient with complaints of Abnormal Eyelid Mobility.	CAP	DK	KH	PBL	Mini-CEX	F&S	II	-	NLHP10.1
CO2, CO5	Describe clinical features and management of Klinnavartma and Utklishtavartma.	CC	NK	KH	L&PPT	VV-Viva,T-CS	F&S	II	-	LH

CO3, CO4, CO6, CO7	Present an appropriate history in a patient with complaints of Vartma-shopha(lid edema).	CAP	DK	KH	CBL,PBL	Mini-CEX	F&S	II	-	NLHP10.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 10.1	History Taking and Case Presentation: Assessment of Patients with Abnormal Eyelid Mobility.	A) To maximize exposure within the scheduled time, it is desirable to organize students into small groups to explore various cases of abnormal eyelid mobility through real patient interactions or problem-based (PBL) methods, rather than focusing on a single case. When evaluating and demonstrating the assessment of a patient with abnormal lid mobility, the teacher should ask students to focus on a thorough history, a comprehensive examination, accurate documentation, and precise diagnosis and treatment tailored to the identified cause. Elicit: Gather focused information on eyelid mobility issues, including onset, duration, severity, associated symptoms (drooping, twitching, or difficulty closing/opening), medical history, surgeries, trauma, and contributing medications or conditions. Document: Record the gathered information accurately in the patient’s medical record for diagnostic assessment, continuity of care, and future reference. Present: Clearly explain the patient's history, highlighting key points for diagnosis and management. B)While assessing with the help of MINI-CEX:- • Select a suitable patient. • Actively observe the student's interaction with the patient, noting their performance on the different criteria like history taking, physical examination, and counselling skills. • Discuss the observations with the trainee, highlighting both positive aspects and areas for improvement,

		• Give a constructive feedback giving guidelines for various software and apps to improve skills.
NLHP 10.2	History Taking and Case Presentation: Assessment of Patients with Vartma-shopha(lid edema).	A) To maximize exposure within the scheduled time, it is desirable to organize students into small groups to explore various types of lid edema through real patient interactions or problem-based (PBL) method, rather than focusing on a single case. The teacher should guide students to focus on obtaining a detailed history, performing a comprehensive examination, ensuring accurate documentation, and providing a precise diagnosis and treatment based on the identified cause. Elicit: Gather relevant information through focused questioning, including onset, duration, severity, associated symptoms (pain, redness, itching), medical history, medications, and potential triggers. Document: Record the gathered information accurately in the patient's medical record for diagnostic assessment, continuity of care, and future reference. Present: Clearly present the patient's history, highlighting key points for diagnosis and management. B) Use MINI-CEX as an assessment tool. Identify stregths and weaknesses in students and discuss with them the ways to improve their clinical skills.

Topic 11 Bhedana Karma (LH :0 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Discuss Bhedana in Netraroga (Indications, Contraindications, Incision Techniques and Procedures; and to recognize and manage complications).	CC	MK	KH	BS,RP, TBL,L_ VC	QZ ,VV-Viva	F&S	II	-	NLHT11.1
CO5, CO7	Participate in the team for Bhedana Karma in Netraroga.	PSY-PER	MK	SH	L_VC,C BL,D,T UT	Log book,T R,CHK	F	II	-	NLHP11.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 11.1	Discussion on Bhedana in Netraroga.	A) Present a short case of a condition requiring Bhedana (incision) in Netraroga. Ask students to

		brainstorm and discuss indications and contraindications in pairs or groups. (10 minutes) B) Discuss preoperative steps like consent, anaesthesia. Use checklist or flowchart. Have students role-play as surgeons preparing a patient. (10 minutes) C) Demonstrate proper Bhedana technique using simulated skin pads, gel models, or fruits. (10 minutes) D) Cover key postoperative care steps, including wound dressing, pain management, and infection monitoring. (5 minutes) E) Students should be divided into small groups, and let them identify and discuss managing complications of Bhedana. (5 minutes) F) Summarize key points on indications, contraindications, procedure steps, postoperative care, and complications. (5 minutes) G) Review and re-solve the problems they get wrong. It is preferable to provide self-evaluation in a simple form, such as a quiz.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 11.1	Collaborative Observation of Bhedana Karma in Netraroga (Incision and Drainage/ Curettage).	A) Students gain insight into the surgical techniques of Bhedana, aseptic practices, review relevant anatomy, basic steps of the Bhedana procedure (Incision and drainage / curettage), operating room etiquette, and understand a flow from preoperative counseling to discharge. OR B) A teacher may use recorded procedures, pausing to explain key steps and their rationale, or opt for live demonstrations. C) Focus on each step of the Bhedana karma (incision process), noting the surgeon’s techniques for incision, tissue handling, and any instrument use. D) Encourage students to ask questions about the rationale for certain steps, techniques, or instruments, focusing on gaining insight into procedural reasoning. E) Observe and discuss post surgical procedures with peers. F) Assessment can be done by observing 360 degree behaviour of the student. The format can be based upon Feedback form like - https://abpn.org/wp-content/uploads/2024/04/ABPN-360-Degree-

		Evaluation-Feedback-Form.pdf

Topic 12 Lekhana Karma. (LH :0 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Discuss Lekhana in Netraroga (Indications, Contraindications, Techniques and Procedures; and recognize and manage complications).	AFT-VAL	MK	KH	L_VC,D ,RP,TB L	QZ ,VV-Viva	F&S	II	-	NLHT12.1
CO5, CO7	Participate in the team for Lekhana Karma in Netraroga.	PSY-PER	MK	SH	D,TUT, L_VC,P BL	CHK,TR,L og book	F	II	-	NLHP12.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 12.1	Procedure of Lekhana in Netraroga.	A) Integrate practical skill-building with theoretical knowledge, ensuring students develop expertise in both the technical and clinical aspects of Lekhana procedures in Netraroga, from preparation to postoperative care and complication management. (10 minutes) B) Begin with a brief case presentation of a condition requiring Lekhana in Netraroga. Have students work in pairs or groups to brainstorm and share insights. Summarize key indications and contraindications for Lekhana. (10 minutes) Discuss Preoperative Preparations like patient consent, site cleaning, and anaesthesia. Use models or peers to simulate aseptic preparation, marking, and positioning. Reinforce steps with a checklist. (10 minutes) C) Demonstrate how to create precise, uniform strokes or cuts for controlled Lekhana, using models like canvas ball (tennis ball). (5 minutes) Discuss Postoperative Care and Enlist complications and encourage groups of 4-6 students to analyze and discuss recognizing and managing potential complications of Lekhana among themselves. (5 minutes). D) Summarize and encourage questions and clarifications. (5 minutes)

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 12.1	Collaborative Observation of Lekhana Karma in Netraroga.	A teacher may use recorded procedures, pausing to explain key steps and their rationale, or opt for live demonstrations. A)Review the purpose, indications, and expected outcomes of Lekhana Karma. B) Students should observe surgeon’s techniques for making precise incisions, controlled handling of instruments (Yantra or Patra) and note strategies for patient comfort, like anesthesia/pain management, management of complications. C) They should make Focused Observations and take notes and prepare questions for discussion. D) Summarize and share Key Learnings connecting theory with practice, emphasizing precision and care in outcomes. E) Use log book or trainer's report to evaluate the students. OR Ask them to prepare the checklist and assess it on the thoroughness, completeness and comprehension.

Topic 13 Shuklagata Roga -1 (LH :3 NLHT: 0 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe Etiology, Types, Clinical features, Differentials of Arma(Pterygium).	CC	MK	KH	L,L&PPT	QZ ,T-CS, VV-Viva	F&S	II	-	LH
CO2, CO5	Describe Medical management and Surgical excision of Arma (Pterygium).[Arma Chhedana, Conjunctival limbal autograft or amniotic membrane graft with Its indications, contra-indications, type of anaesthesia, major surgical steps and post-operative care.]	CC	MK	KH	L&PPT	VV-Viva,T-CS	F&S	II	-	LH
CO3, CO4	Examine Shuklamandala (Conjunctiva and Sclera), and learn the techniques, document findings, and understand Clinical relevance.	CAP	MK	KH	D,D-BED	OSCE,P-EXAM,P-VIVA	F&S	II	-	NLHP13.1
CO3,	Present an appropriate history in patients presenting with growth	AFT-	MK	SH	PBL,D-	Mini-CEX	F&S	II	-	NLHP13.2

CO4, CO6, CO7	(Arma/Pterygium or Pinguecula) or lesions (Bitot's spots) in Shuklamandala.	RES			BED,CBL					
CO2, CO5	Describe clinical features and management of Arjuna.Describe etiology, clinical features and management of Sub-Conjunctival Haemorrhage.Describe clinical features and management of Shuktika and Pishtaka.	CC	MK	KH	L&PPT	T-CS,VV-Viva	F&S	II	-	LH
CO3, CO4, CO6, CO7	Present an appropriate history in a patient presenting with a Raktaakshi (Red Eye) - Arjuna (Sub-Conjunctival Haemorrhage).	AFT-RES	MK	SH	CBL,PBL,D-BED	Mini-CEX	F&S	II	-	NLHP13.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 13.1	Examination of the Shuklamandala (Conjunctiva and Sclera).	A) Instruct students to examine the Shuklamandala (Conjunctiva and Sclera) through inspection, eyelid eversion, and observation of vascular patterns. B) Use live or simulated patient demonstrations or video clips to emphasize technique, safety, and anatomical landmarks, aiding in the diagnosis of ocular conditions ranging from minor irritations to serious systemic diseases. C) Teach mnemonics like 'SHOR ya SHASTRA' (Shotha, Raktima, Shalya, Srava) to observe redness, edema, discharge, and foreign bodies. D) Introduce learning platforms like Picmonic for better understanding. E) Let them document and present. F) Assess them, provide them insights on importance of precision in clinical diagnosis.

NLHP 13.2	Cases of Arma, Pishtaka, and growths or discolourations on Shuklamandala.	A) To maximize exposure within the scheduled time, it is desirable to organize students into small groups to explore various cases with growth or lesion in Shuklamandala through real patient interactions or problem-based (PBL)method, rather than focusing on a single case. B) Encourage students to ask patients relevant questions to gather a detailed history of growths or lesions in the Shuklamandala (Conjunctiva). C) They should document the patient's medical history and findings, differentiate growth or lesion to support diagnostic evaluation, care continuity, and future consultations. D) They should summarize and present the patient's history and conjunctiva examination findings in a structured and clear manner. E) Students should be assessed on parameters like Interview Skills, Examination, Interpersonal Skills / Professionalism and Case Presentation using Mini-CEX - (Ophthalmic Clinical Evaluation Exercise (OCEX))
NLHP 13.3	Assessment of patients with Raktaakshi (Red Eye), focusing on Arjuna (Sub-Conjunctival Hemorrhage).	A) Using real patient interactions or problem-based/case-based learning (PBL/CBL) methods, outline an approach for examining and evaluating a patient with Raktaakshi (Red Eye) due to Arjuna (Sub-Conjunctival Hemorrhage), focusing on history-taking, examination, documentation, and an effective diagnosis and management plan. B) Allow students to gather appropriate history to come to diagnosis, record the patient's responses which could assist in the evaluation. C) They should summarize the patient's history and conjunctiva findings in a clear, structured manner, focusing on key points for diagnosis and management and present. D) Identify clinical features that may need referral to a neurosurgeon, if necessary. E) Teach students the importance of building rapport and demonstrating empathy during patient interactions. F) Students should be assessed on parameters like Interview Skills, Examination, Interpersonal Skills / Professionalism and Case Presentation using Mini-CEX - (Ophthalmic Clinical Evaluation Exercise (OCEX))
Topic 14 Shuklagata Roga -2 (LH :2 NLHT: 0 NLHP: 2)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe clinical features and management of Sirajala and Sirajapidika.	CC	MK	KH	L&PPT	VV-Viva,T-CS	F&S	II	-	LH
CO2, CO5	Describe etiology, clinical features and treatment of Episcleritis and Scleritis.	CC	MK	KH	L&PPT	T-CS,VV-Viva	F&S	II	-	LH
CO3, CO4, CO6, CO7	Present an appropriate history in a patient presenting with Raktaakshi (Red Eye) - Sirajala / Sirajapidaka (Episcleritis and Scleritis - Diffuse / Nodular); differentiate nodule at limbus.	AFT-RES	MK	SH	CBL,D-BED	Mini-CEX	F&S	II	-	NLHP14.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 14.1	Assessment of Patients with Raktaakshi (Red Eye) - Episcleritis / Scleritis: Differentiating Diffuse / Nodular Forms.	A) To maximize exposure within the scheduled time, students can be organized into small groups to explore multiple cases of Raktaakshi (Red Eye) caused by Sirajala/Sirajapidaka (Episcleritis and Scleritis - Diffuse/Nodular) in the Shukla mandala through real patient interactions or problem-based/case-based learning (PBL/CBL) methods, rather than focusing on a single case. B) Students should gather detailed information from the patient's medical history, including symptoms, onset and duration, past ocular or medical history, family history, and potential triggers or systemic associations (e.g., autoimmune conditions). Identify and differentiate nodules at the limbus. C) They should record the patient's history and findings in a structured and clear manner, noting the presence of diffuse or nodular forms of episcleritis or scleritis. D) Encourage them to summarize and share key findings with peers or supervisors. E) Provide constructive feedback on their performance, highlighting areas of improvement and excellence. F) Students should be assessed on parameters like Interview Skills, Examination, Interpersonal Skills /

		Professionalism and Case Presentation using Mini-CEX - (Ophthalmic Clinical Evaluation Exercise (OCEX))

Topic 15 Chhedana Karma. (LH :0 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Discuss Chhedana in Netraroga (Indications and Contraindications for Excision Techniques and Procedures; and to recognize and manage complications).	CC	MK	KH	D,L_VC ,TBL,SIM,BS	QZ ,VV-Viva	F&S	II	-	NLHT15.1
CO5	Participate in the team for Chhedana in Netraroga.	PSY-PER	MK	SH	CBL,L_VC,D	TR,Log book,CHK	F	II	-	NLHP15.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 15.1	Comprehnsive discussion on Chhedana in Netraroga.	A) Begin with a brief case presentation of a condition requiring Chhedana (excision) in Netraroga. Encourage students to brainstorm and collaborate in pairs or groups to discuss the indications and contraindications for performing the procedure. (10 minutes) B) Discuss the steps for preoperative preparation, can use role-play as surgeons preparing a "patient," using another student or a mannequin. (10 minutes) C) Use simulated skin pads, gel models, fruits (like oranges), or a video of an actual or simulated procedure for demonstration of the procedure. (10 minutes) D) Divide students into small groups and encourage students to think critically about postoperative care, and managing complications of Chhedana. (10 minutes) E) Summarize the session’s key points, covering the indications, contraindications, steps of the procedure, postoperative care, and complications. (5 minutes)

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

NLHP 15.1	Observation of Chhedana(Excision) in Netraroga.	A) By following a teacher-led patient journey from preoperative counseling to discharge, students gain valuable insights into the surgical techniques of Chhedana (excision), aseptic practices, and procedural reasoning. Teachers can enhance learning through recorded procedures, pausing to explain critical steps and their rationale, or by conducting live demonstrations. B) Prepare students with Background Knowledge and goals of the Chhedana (Excision). Familiarize them with its basic steps. C) They should observe key surgical steps noting techniques for incision, tissue handling, excision, hemostasis, and closure. D) Encourage them to make Mental or Written Notes E) Allow them to ask questions and strengthen comprehension of surgical concepts. F) Assess them through OSCE, Checklists.

Topic 16 Agnikarma and Ksharakarma. (LH :0 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Narrate Agnikarma and Ksharakarma in Netraroga (Indications, Contraindications, Techniques and Procedures; and recognize and manage complications).	CC	DK	KH	L_VC,D ,CBL	VV-Viva,QZ ,COM	F&S	II	-	NLHT16.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 16.1	Discussion on Agnikarma and Ksharakarma in Netraroga.	A) Compile, discuss, brainstorm relevance of Agnikarma and Ksharakarma in Netraroga with its Indications and Contra-indications, Poorvakarma, Pradhanakarma, Pashchatkarma, Upadrava and management of Upadrava in brief. (10 minutes) B) The teacher may Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures. OR Show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each

		action. (20 minutes) Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. C) Provide access to reputable online resources and journals for further reading and research. (10 minutes) D) Use quizzes, written exams, and practical assessments to evaluate students' understanding and skills. (5 minutes)

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 17 Krishnagata Roga -1 (LH :5 NLHT: 0 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Enumerate Krishnagata Rogas. Describe clinical features, management & Sadhya-asadhyata of Savrana Shukra (Corneal Ulcer).	CC	MK	KH	L&PPT ,L	T-CS,P-VIVA,QZ	F&S	II	-	LH
CO2, CO5	Classify Corneal Ulcers.Describe etiology, clinical features, management and complications of Bacterial,Viral and Fungal Corneal Ulcers.	CC	MK	KH	L,L&PPT	T-OBT,QZ ,VV-Viva	F&S	II	-	LH
CO2, CO5	Describe etiology, clinical features, types, prognosis and management of Avrana Shukra (Corneal Opacity)..	CC	MK	KH	L,L&PPT	T-OBT,VV-Viva	F&S	II	-	LH
CO2, CO5	Describe Etiology, Clinical features and Treatment of Ajakajata.(Anterior Staphyloma)	CAN	MK	KH	L&PPT	VV-Viva,T-OBT	F&S	II	-	LH
CO2, CO5	Explain clinical features and treatment of Sirashukla and clinical features of Akshipakatyaya.	CC	DK	KH	L&PPT ,L	T-OBT,VV-Viva,QZ	F&S	II	-	LH
CO3,	Present the method of examination of a Sashula	AFT-	MK	SH	SIM,D-	P-EXAM,O	F&S	II	-	NLHP17.1

CO4, CO7	Raktaakshi.(Painful red eye)(Savrana Shukla/Corneal ulcer).	RES			BED,PBL	SCE,Mini-CEX				
CO3, CO7	Summarise the steps involved in the technique of Slit lamp examination.	CC	MK	KH	ML,TUT,D,PBL,SIM	PP-Practical,SP	F&S	II	-	NLHP17.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 17.1	Evaluation of Savrana Shukra (Corneal Ulcer).	A)Present a clinical case of Sashula Raktakshi and have students work in groups to gather history, discuss differential diagnoses, and plan management. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. OR B) Utilise advanced simulation technology to create realistic patient scenarios. Engage students with virtual patient software that simulates real-life scenarios, helping them practice history taking and clinical reasoning skills. OR Use standardized patients(actors or fellow students)to role-play patients with Savrana Shukla. C) Break students into small groups for more focused practice and individualised feedback. D) Recommend apps like Geekymedics, wikimeds that offer virtual practice and quizzes on history-taking skills. E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. F) Assess the students with the help of MINI-CEX or OSCE. Mini-CEX.

		◦ Observe Student’s interaction with a patient in a real-world clinical setting. ◦ Rate the performance in areas like history taking, physical examination, and counselling skills.performance is recorded on a 4 point scale where 1 is unacceptable, 2 is below expectation, 3 is met expectations, and 4 is exceeded expectations. ◦ The student receives immediate feedback from the teacher. F) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. Encourage students to assess their own performance and identify areas for improvement.
NLHP 17.2	Slit lamp examination.	A) Explain why this examination is crucial for diagnosis. Conduct live demonstrations with real or simulated patients to model effective case taking. OR Use videos of experienced clinicians. OR Use standardized patients (actors trained to simulate real patient cases) to perform a step-by-step demonstration in a controlled environment. B) Introduce different parts of slit lamp, instructions, indications, contra-indications. C) Stress importance of Ensuring patient's comfort, his position, and proper alignment; setting up of Slitlamp ensuring hygiene. D)Ask them to record any findings, such as abnormalities in the cornea, lens, iris, or anterior chamber; any lesions, pigmentation, or signs of disease. E) A simulated patient (SP) can be used as an examination tool by acting as a standardized "patient" with a specific medical scenario, allowing students to demonstrate their clinical skills like history taking, physical examination, communication, and decision-making in a controlled environment, where they can be assessed on their ability to interact with the patient and manage the presented case, providing a consistent and reliable evaluation across different students.

Topic 18 Krishnagata Roga -2 (LH :2 NLHT: 0 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO3, CO4, CO7	Present the case of Uveitis.	AFT-RES	MK	SH	D-BED, PBL,CD	P-CASE,OSCE,SA	F&S	II	-	NLHP18.1
CO2, CO5	Expound Tarakamandala-shotha (Acute Iridocyclitis.)- investigations, differential diagnosis,clinical features,treatment and complications.	CC	MK	KH	L,L&PPT	VV-Viva,QZ ,T-CS	F&S	II	-	LH
CO1, CO2	Recap Applied anatomy of Uvea.Define and narrate (Anatomical and Etiological) classification of Uveitis.	CAP	MK	KH	L&PPT ,L	VV-Viva,T-OBT,M-POS	F&S	II	-	LH
CO3, CO6, CO7	Examine the Taraka (Iris), Drishtimandala (Pupil), and Anterior chamber.	PSY-GUD	MK	KH	PBL,RP ,TUT,D-BED,ML	360D,P-EXAM	F&S	II	-	NLHP18.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 18.1	Evaluation of Uveitis.	A)Present different cases of uveitis, discussing the clinical features, differential diagnosis, and treatment options. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices

		and techniques and facilitate post-shadowing discussions. OR B) Use standardized patients(actors or fellow students)to role-play patients with uveitis. C) Recommend apps like Geekymedics, Wikimeds that offer virtual practice and quizzes on history-taking skills. D) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. F) Discuss indications for referral to a Kayachikitsaka (rheumatologist or infectious disease specialist if systemic causes are suspected). G) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback.Rate the performance in areas like history taking, physical examination, and counselling skills. Performance is recorded on a 4 point scale where 1 is unacceptable, 2 is below expectation, 3 is met expectations, and 4 is exceeded expectations. OR Encourage students to assess their own performance and identify areas for improvement. Self-assessment can be done on following parameters:- Empathy and openness, Ethical awareness, Workplanning, Scientific method of working, Coping with mistakes, and Priorities.
NLHP 18.2	Assessment of Anterior chamber.	A) Divide the students into small groups and direct them to do role play. One student may act as examiner, the other as the patient and ask them to : Assess Drishtimandala (Pupil). Note Findings Record pupil size, shape, and any abnormal reactivity. Assess Taraka (Iris) and note Pathologies. Evaluate Depth Of Anterior Chamber. Evaluate contents of the Anterior chamber. Encourage students to rotate through each station, practicing with the slit lamp and torchlight. OR Provide a link for examination of anterior chamber through Google classroom or free messaging platforms and describe each and every step with necessary pause for detailed explanations while

		students are accessing the link through smart gadgets. B) Demonstrate the use of instruments and explain what to look for at each step. C) Supervisors should verify techniques and provide feedback. D) Teach students how to record findings systematically, including pupil size, iris abnormalities, and anterior chamber status. E) Clarify doubts and review the steps. F) Maintain standards of Safety and Ethics. G) Use 360 degree assessment where the peers, paramedical staff and the assessor assess the students with the help of pre-provided standard checklist.

Topic 19 Dravyas Used In Netrachikitsa-1 (LH :0 NLHT: 4 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO3	Explain the indications, contraindications, dosage and untoward effects of Dyes used in Ophthalmology (Flourescien and Rose bengal stain).	CC	NK	KH	BL,FC	QZ ,VV-Viva,CL-PR	F&S	II	-	NLHT19.1
CO5	Explain the indications, contraindications, dosage and untoward effects of Anti-inflammatory agents (Ketorolac,Flurbiprofen), and Steroids (Dexamethasone and Prednisolone) used in Ophthalmology.	CC	NK	KH	RP,ML,PBL,BL,FC	VV-Viva,QZ	F&S	II	-	NLHT19.2
CO5	Explain the indications, contraindications, dosage and untoward effects of Antibiotics (Bacitracin, Moxifloxacin, Tobramycin, Gentamycin), antifungal agents (Amphoterecin,Natamycin,Fluconazole), and antiviral agents (Trifluridine, Acyclovir).	CC	NK	KH	RP,DIS,LS,ML,PER	PA,VV-Viva,QZ	F&S	II	-	NLHT19.3
CO2, CO5	Explain the indications, contra indications, dosage and untoward effects of lubricating agents and artificial tears (CMC,HPMC, Carbomers, Poly-vinyl Alcohol and Acetylcysteine).	CC	DK	KH	FC	P-EXAM,CL-PR,QZ	F&S	II	-	NLHT19.4

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 19.1	Comprehension on uses of Dyes in Ophthalmology.	A) The topic may be assigned using the flipped method. The presentation on the topic should be prepared and uploaded on a website created for the students or free cross -platform messaging services like Whatsapp or Telegram. The students will be given a link to a PowerPoint presentation. They should be also instructed to go through the textbooks and read this topic. Sub-divide them into four groups:- one each for indications and contraindications for Fluorescein, dosage and untoward effects of Fluorescein ; and Indications and contraindications for Bengal stain, dosage and untoward effects of Bengal stain. They should be given 1 week time before the scheduled Flipped Class room for this topic. After 1 week of self-learning, problem-based questions related to the topics may be asked and discussed with the students. Students will be also encouraged to ask questions to clarify concepts. Each group will be given 12 min. to present. PowerPoint presentations (Each group 10 minutes)should be assessed on following criteria- content , focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, effective use of visual aids.
NLHT 19.2	Discussion on Anti inflammatory agents and steroids used in ophthalmology.	The students will be explained role of anti-inflammatory agents and steroids essential in Netra Chikitsa ,and the risks involved by a link provided or a physical literature provided a week before. A) Problem-Based Learning Present real-life clinical scenarios and discuss them in groups: Example 1: A patient with anterior uveitis—which drug to prescribe; dosage, and precautions? (10 min) Example 2: A glaucoma patient with conjunctivitis—should steroids be used? Why or why not?(10 min) Groups present findings, followed by class discussion and instructor feedback.(10 min.) OR B) Role-Play Activity- (20 min.) Students act as doctors explaining drug use to a patient:

		Indication for the prescribed drug. Dosage schedule (e.g., tapering for steroids). Possible side effects and their prevention. Rotate roles to ensure participation. Recap and Reflection. C) Use a quiz or rapid-fire questions to recap key points:(10 min.) Dosage and tapering for steroids. Contraindications for NSAIDs (e.g., corneal ulcers). Side effects like increased IOP or delayed healing. Facilitate a reflective discussion on the importance of proper drug use in Netra Chikitsa.
NLHT 19.3	Comprehension on Antibiotics ,antifungal agents, and antiviral agents used in ophthalmology.	A) Divide the class into groups to encourage teamwork during activities. Share information on topic through link a week before the class by Google classroom or free messaging services like Telegram. B) Group Discussion and Role Play- Assign each group a specific category (antibiotic, antifungal, or antiviral) and a corresponding ocular condition. Groups prepare on: Appropriate drug choices. Dosage forms specific to ophthalmology (e.g., eye drops, ointments, injections). Contraindications in ocular and systemic contexts. Common adverse effects and how to manage them. C) Role Play: Groups present their findings as if explaining to a patient or conducting a team discussion in a hospital setting. D) Each group shares its solution and reasoning, leading to peer feedback and a guided discussion by the instructor. Each group will be given 10-12 min. for disccussion and role play.
NLHT 19.4	Presentation on Lubricating agents and Artificial tears.	A) The topic may be assigned using the flipped method. The presentation on the topic 'Lubricants and artificial tears in Ophthalmology' should be prepared and uploaded on a website created for the students or free cross -platform messaging services like Whatsapp or Telegram or blended learning platforms like Google classroom.

		The students are divided into five groups- one each for each drug and will be given a link to a PowerPoint presentation. They should be also instructed to go through the textbooks and read this topic. They should be given 1 week time before the scheduled Flipped Class Room for this topic. B)After 1 week of self-learning, problem-based questions related to the topics may be asked and discussed with the students. Students will present in class and duration of 10-12 min. is allotted to each group. Students will be also encouraged to ask questions to clarify concepts. PowerPoint presentations should be assessed on following criteria- content , focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, effective use of visual aids. C) Constructive feedback should be given in the form of summary and take home message.(05-10 min.)
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 20 Eye Donation (LH :0 NLHT: 4 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Describe organizational structure, purpose and need of growth of Eye Banks.	CC	DK	KH	RLE,FV ,ML,L& GD	VV-Viva,C L-PR,QZ ,INT,M-POS	F&S	II	-	NLHT20.1
CO5	Explain the Objectives, Awareness & Significance of Eye donation.	CC	NK	KH	L&GD, BS	VV-Viva,M-POS,CL-PR	F&S	II	-	NLHT20.2
CO5	Enlist types; describe indications, techniques, risks and complications of corneal transplantation.	CC	NK	KH	DIS,L& PPT ,L_VC	QZ ,M-POS ,VV-Viva	F&S	II	-	NLHT20.3

CO2, CO5	Explain National Programme for Control of Blindness.	CC	DK	KH	FC,PER	QZ ,CL-PR ,PRN,M-POS	F&S	II	-	NLHT20.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 20.1	Eye banking- its organization, relevance and purpose.	A) Give a brief introduction of Eye banking ,explaining its relevance and purpose. B) Divide the students into six groups. Each group could focus on a specific aspect of eye banking, such as its services, benefits, technology, legal considerations, ethical implications, or case studies. C) Allow each group to either visit an actual eye Bank or view videos that demonstrate the setup, operation, and impact of an Eye Bank. After the visit or video session, each group should gather detailed information based on their focus area. They can conduct research, discuss among themselves, and prepare to present their findings. D) Host a group discussion in the classroom where each team presents findings. Encourage students to compare and contrast different aspects of eye banking and address any questions or insights that arise. Each group will be given 06-08 minutes each to present. E) Conclude the session (15 min.) by summarizing the key takeaways, and if applicable, encourage students to reflect on how eye banking might evolve in the future. You could also have a Q&A session or brief evaluations of the visit or video experience. F) Group Discussion should be assessed on - Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills.
NLHT 20.2	Discussion on Eye donation.	A) Clearly present the scenario of Eye donation that the group will brainstorm around. OR Host a group discussion in the classroom where each team presents their aspects of eye donation, and address any questions or insights that arise. B) Encourage open sharing by stating that all ideas are welcome without judgment. Encourage participants to expand on each other's suggestions. Emphasize the importance of listening attentively to all contributions.

		C) Divide students into groups of 5-8 for optimal interaction and participation. Consider assigning roles like facilitator (to guide discussion), timekeeper (to manage time), and notetaker (to record key points). Clearly introduce the topic, providing necessary background information and key questions to guide the discussion. Encourage all students to contribute their thoughts, opinions, and evidence-based reasoning, ensuring everyone has a chance to speak. Ask probing questions to challenge assumptions, evaluate different perspectives, and encourage students to justify their reasoning. Emphasize the importance of listening attentively to others' viewpoints and building on ideas respectfully. C) Give 08-10 minutes for each group to discuss about Objectives, Awareness and Significance of Eye donation. Evaluate them on Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills. D) Ask students to make posters. Judge the posters on clarity of information, logical organization, visual appeal, scientific soundness, and whether key elements like Objectives, Awareness and Significance of Eye donation are presented clearly and concisely, while also considering the visual design and readability from a distance.
NLHT 20.3	Discussion on Keratoplasty.	A) Begin with a brief case presentation of a condition requiring corneal transplantation. Encourage students to brainstorm and collaborate in pairs or groups to discuss:- (10 min.) Clinical indications for corneal transplantation. Types of corneal transplantation. Correlation of indications with the appropriate transplantation techniques. Risks and complications involved. B) Show recorded surgical procedures (40 min.)to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action; emphasizing the importance of patient selection, proper surgical technique, and managing potential complications like rejection and infection. C) Use quizzes, Making of Posters to evaluate students’ understanding and skills. Assess its clarity of information, logical organization, visual appeal, scientific soundness, and whether key elements are presented clearly and concisely, while also considering the visual design and readability from a distance.

NLHT 20.4	Objectives, Organizational structure and New initiatives under National programme for Control of Blindness and Visual Impairment.	Use Flipped Classroom method: A) Pre-Class Preparation- Share a concise video (10 minutes) covering the NPCB, its objectives, strategies, and key statistics. Include a short article or infographic for reference through Google Classroom or Whatsapp or telegram. (Pre-class). Ask students to watch the video and read the materials. Provide a quick online quiz (5 minutes) to ensure they understand the basics. B) In-Class Activities (45 minutes) 1. Interactive Discussion (15 minutes)-Start with a quick discussion based on the pre-class materials. Ask students to share key points they found interesting or any questions they have. 2. Case Studies (15 minutes)- Present a brief case study of a community affected by blindness. Have students work in pairs to discuss and propose strategies based on NPCB initiatives. 3. Role-Playing (10 minutes)- Organize a role-playing activity where students act out scenarios involving healthcare providers and patients. Focus on communication and community engagement strategies. C) Post-Class Follow-Up (15 minutes) 1. Reflection (5 minutes)- Ask students to write a short reflection on what they learned and how they can apply it in their future practice. 2. Group Presentation (10 minutes)- Have students present their case study strategies to the class. Assess their understanding and provide feedback. D) Assessment Methods- 1. Pre-Class Quiz- Evaluate students' understanding of the basic concepts before the class. 2. In-Class Participation- Assess students based on their engagement and contributions during discussions and activities. 3. Group Presentation: Evaluate the quality and depth of their proposed strategies.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
Topic 21 Sarvagata Roga -1 (LH :4 NLHT: 1 NLHP: 2)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Enumerate Sarvagata Rogas; Describe Lakshana, Chikitsa and Complications of different types of Abhishyanda.	CC	MK	KH	L,L&PPT	QZ ,VV-Viva,T-OBT, T-CS,M-POS	F&S	II	-	LH
CO2	Give Etiological and Clinical Classification, Clinical features (Bacterial, Viral &Allergic) and differential Diagnosis of Conjunctivitis.	CC	MK	KH	L,L&PPT	T-CS,T-OBT,VV-Viva	F&S	II	-	LH
CO2, CO5	Describe Management and complications of Conjunctivitis.	CC	MK	KH	PBL,LS,FC,BL	CL-PR,T-OBT,QZ	F&S	II	-	NLHT21.1
CO2, CO5	Explain Hetu, Lakshana, Chikitsa and Upadrava of different types of Adhimantha and Hatadhimantha.	CC	MK	KH	L&PPT	T-OBT,VV-Viva,QZ ,T-CS	F&S	II	-	LH
CO3, CO4, CO7, CO8	Present a case of Raktaakshi (red eye) presenting with Srava (discharge).	AFT-RES	MK	SH	D,PBL, TUT,RP	P-PRF,Mini-CEX,P-VIVA,OSCE	F&S	II	-	NLHP21.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 21.1	Management of Conjunctivitis.	A) Divide the students into five groups, each assigned a different aspect of Conjunctivitis. Provide a link/ power point presentation/ document with brief overview of Conjunctivitis, explaining the causes, types (viral, bacterial, allergic), symptoms, general management principles, Hygiene measures, and complications. Encourage them to use textbooks, reputable websites, and journal articles. B) Group Assignment: Group 1: Viral Conjunctivitis

		Group 2: Bacterial Conjunctivitis Group 3: Allergic Conjunctivitis Group 4: General Management and Prevention Group 5: Complications of Conjunctivitis C) Each group should create a PowerPoint presentation (10 min.) summarizing their findings. D) After the presentations, facilitate a classroom discussion. Ask questions to encourage critical thinking. Address the role of healthcare providers in preventing spread, particularly in school and daycare settings. Review patient follow-up protocols and when to refer to a specialist E) Conclude by summarizing the key points from each group's presentation. Provide feedback on the students' understanding of the topic. Assess each group's presentation and ability to discuss and answer questions. OR use pre and post quiz method to assess.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 21.1	Evaluation of Raktaakshi (Red eye) with Srava (Discharge).	A)Present a clinical case of Conjunctivitis and have students work in groups to gather history, discuss differential diagnoses, and plan management. OR Assign roles to students, such as the patient, the primary care provider, a nurse, and an observer. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. OR B) Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. Examine Conjunctiva and Cornea thoroughly. C) Document the detailed history (symptom onset, type of discharge, associated symptoms). Record physical examination findings (conjunctival reaction, corneal status, lymphadenopathy,

		anterior chamber clarity). D) One group will present the patient’s history, examination findings, and differential diagnosis to the class. The instructor and peers will discuss possible diagnoses (bacterial vs viral vs allergic conjunctivitis, for example), and the rationale behind them. Discuss management options and treatment approaches based on the clinical findings. Allow time for students to ask questions or clarify doubts. E) Recap of the key learning points from the session. Encourage students to continue practicing the systematic approach to examining red eye conditions. F) Use MINI-CEX or OSCE to evaluate students. • OSCE stations to have signs of local examination, psychomotor skills, communication skills and history taking of a particular examination. Each student is exposed to the same stations and assessment. The assessor should use checklists to evaluate students' performance in a reliable and consistent way. • Communication skills to be assessed by Kalamazoo essential elements communication checklist.

Topic 22 Sarvagata Roga -2 (LH :3 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Describe Lakshanas and Chikitsa of Shushkaskhipaka.Explain Structure of Tear Film: Etiology, Clinical Features, and Management of Dry Eye Syndrome and Computer vision	CC	MK	KH	L,L&PPT	T-OBT,T-CS,VV-Viva,QZ	F&S	III	-	LH

	syndrome.									
CO2, CO5	Construe Lakshanas and Chikitsa of Sashophapaka, Ashophapaka, Amloshita, Sirotpata, Siraharsha, and Vataparyaya.	CC	DK	KH	L,L&PPT	QZ ,T-OBT ,T-CS,PUZ, VV-Viva	F&S	III	-	LH
CO2, CO5	Enlist the diseases mentioned in Pillaroga, And describe Nidana and Chikitsa of Pillaroga.	CC	NK	KH	PL,DIS, BL,TBL ,TPW	VV-Viva,CL-PR,QZ	F&S	III	-	NLHT22.1
CO3, CO4, CO7, CO8	Present a case presenting with Shushkakshi (dry eyes).	AFT-RES	MK	SH	SIM,TUT,ML,PBL,CD	OSCE,Mini-CEX,P-EXAM,P-VIVA,P-CASE	F&S	III	-	NLHP22.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 22.1	Nidana and Chikitsa of Pillaroga.	A) Split the class into 03 groups, ensuring each group has an equal number of students. Assign a group leader for each group to help coordinate the work. Each group will focus on a specific aspect of Pillaroga. Below are some potential topics each group can research: Group 1: Definition and enumeration of Pillarogas (understanding what makes a disease, a Pillaroga). Group 2: Symptoms and causes of different Pillarogas. Group 3: Treatment methods for Pillarogas. C) Ask each group to visit the library and refer to various texts, including classical medical texts, contemporary studies, and academic journals.(pre class: 30 min.) Each group should take detailed notes on their assigned topic and focus on finding credible sources. D) Let them organize their findings into a presentation format (like PowerPoint slides, a report, or posters). Ensure each member of the group understands the topic thoroughly and can contribute to the group discussion.

		E) Arrange a class-wide group discussion, where each group presents their findings to the rest of the class. Group 1: 05 min. Group 2: 05 min. Group 3: 15 min. F) After each presentation, allow time for questions and feedback from other groups. After all presentations, facilitate an open discussion, encouraging students to explore how the information from different groups overlaps and what new insights they have gained. Emphasize the importance of listening attentively to others' viewpoints and building on ideas respectfully. (25 min.) Teacher may share his real-life experiences. Judge them on Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills. or Take a quiz.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 22.1	Evaluation of Shushkakshi (Dry eye evaluation).	A)Present a clinical case of Shushkakshi and have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. Perform the Schirmer test to measure tear production . Conduct the tear breakup time (TBUT) test. Use ocular surface staining with dyes like fluorescein. OR B) Utilize advanced simulation technology to create realistic patient scenarios. Engage students with virtual patient software that simulates real-life scenarios, helping them practice history taking and clinical reasoning skills. C) Break students into small groups for more focused practice and individualized feedback.

		D) Recommend apps like Geekymedics, wikimeds, etc that offer virtual practice and quizzes on history-taking skills. E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. F) Conduct MINI-CEX or OSCEs where students rotate through stations to practice history taking and receive immediate feedback. ◦ Observe a Student's interaction with a patient in a real-world clinical setting. ◦ Rate the performance in areas like history taking, physical examination, and counselling skills. Performance is recorded on a 4 point scale where 1 is unacceptable, 2 is below expectation, 3 is met expectations, and 4 is exceeded expectations. ◦ The student receives immediate feedback from the teacher. Encourage students to assess their own performance and identify areas for improvement. G) Distribute patient questionnaires to gather more detailed information on symptoms and environmental factors affecting eye moisture.

Topic 23 Glaucoma (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Define Glaucoma.Explain Clinical & etiological Classification, Clinical Features,Investigative procedures and Complications of Glaucoma (Primary Open Angle Glaucoma,Primary Angle Closure Glaucoma); and various Medical Regimes for Management of Glaucoma. [Topical Beta Blockers, Carbonic Anhydrase inhibitors, Prostaglandin analogues, Adrenergic Drugs Miotics (Pilocarpine)].	CC	MK	KH	L&PPT ,L	T-CS,VV-Viva,QZ ,T-OBT	F&S	III	-	LH
CO5	Describe fundamentals of surgical techniques for Management of	CC	NK	KH	BL,L_V	QZ ,M-	F&S	III	-	NLHT23.1

	Glaucoma (Peripheral Iridectomy, Trabeculectomy, and cyclodestructive procedures).				C,ML	POS,CHK				
CO3, CO7	Summarize the steps involved in the technique of Tonometry and Perimetry.	CC	MK	KH	D-BED, PBL,TUT,D-M	QZ ,P-EXAM,SP	F&S	III	-	NLHP23.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 23.1	Surgical Procedures for Glaucoma.	A) Introduce students to the surgical techniques used in the management of Glaucoma, namely, peripheral iridectomy, trabeculectomy, and cyclodestructive procedures, and to understand the complications associated with glaucoma surgery. Introduce the students to various Surgical instruments; Post-operative monitoring tools. B)Show recorded surgical procedures to give students a realistic view of the process. (45 min.)Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. C) Summarize key concepts, and complications.(05 min.) D) Allow students to ask questions and clarify doubts regarding the procedures and their indications.(10 min.) E) Reinforce the importance of sterile techniques during all procedures to minimize infection risk. F) Encourage students to think critically about when each surgical technique is appropriate based on the glaucoma type and severity. G) By the end of the activity, students should have a solid understanding of the different surgical methods used to manage glaucoma, their indications, potential complications, and the post-operative care required to ensure successful outcomes. H) Use quizzes, written exams, and poster making to evaluate students' understanding and skills. Assess poster by its clarity of information, logical organization, visual appeal, scientific soundness, relevance, and whether key elements like the pre-operative, operative and post-operative procedures are presented clearly and concisely, while also considering the visual design and readability from a

		distance.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 23.1	Discussion on Tonometry and Perimetry.	A) Divide Students in small groups of 4 to 6. Tonometry Practical:(45 min.) • Introduction: Explain different types of tonometer, the purpose of measuring IOP ,its importance in diagnosing glaucoma. • Demonstrate the procedure. • Perform the digital tonometry on different patients or among themselves • Discussion: Review normal IOP ranges (10-21 mmHg) and their clinical significance. Perimetry Practical:(45 min.) • Introduction: Explain the concept of visual fields and conditions affecting them (e.g., glaucoma, optic neuropathy). • Result Interpretation: Teach students how to analyze printouts (e.g., blind spots, scotomas). • Key Points to Emphasize- Importance of patient cooperation and fixation; Proper alignment of instruments for accurate readings; Identification of normal vs. abnormal findings in both tests. B) Summarize findings and their clinical implications. Answer student queries and clarify doubts.Encourage students to reflect on challenges faced during the practical.(10 min.) C) Evaluate the students by conducting quiz or demonstrating on model as a simulated patient focusing on student's understanding of anatomy, techniques, decision-making, and appropriate response to complications.

Topic 24 Drishtigata Roga-1 (LH :7 NLHT: 1 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO5	Describe in brief Drishti Vichara as per Susruta Samhita.Expound the clinical features of Patalagata Timira.	CC	MK	KH	L&PPT ,L	VV-Viva,QZ ,PUZ	F&S	III	-	LH
CO2, CO5	Elaborate clinical features and management of Doshaja Timira.	CC	MK	KH	L,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO2, CO5	Explain Clinical features and Treatment of Kacha and Linganasha.	CC	MK	KH	L&PPT ,L	T-OBT,M-POS,CL-PR	F&S	III	-	LH
CO5	Narrate Kaphaja Linganasha Shastrakarma- Poorva , Pradhana, Pashchat karma; Vedhana Shalaka; Upadravas.	CC	MK	KH	L&PPT ,FC,DIS	CL-PR,QZ	F&S	III	-	NLHT24.1
CO2, CO5	Define and expound etiological and clinical classification, clinical features, complications and treatment of errors of refraction - (Myopia, Hypermetropia, Astigmatism).	CC	MK	KH	L&PPT ,L	VV-Viva,T-OBT	F&S	III	-	LH
CO2, CO5	Define, Describe etiology, clinical features and treatment of Presbyopia and Amblyopia.	CC	DK	KH	L,L&PPT	T-OBT,QZ ,VV-Viva	F&S	III	-	LH
CO2, CO5	Detail Clinical features and Treatment of Pitta-vidagdha Drishti, Kapha-vidagdha Drishti, Dhumadarshi and Ushna-vidhagdha Drishti.	CC	DK	KH	L,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO2, CO5	Describe the clinical features of Abhighataja Linganasha, Sanimittaja Linganasha, Animitta Linganasha, Gambhirika and Hraswajadya.Explain the clinical features and treatment of Nakulandhya.	CC	DK	KH	L,L&PPT	QZ ,VV-Viva,T-OBT	F&S	III	-	LH
CO3,	Demonstrate the technique of Fundus examination.	PSY-	MK	SH	ML,D,P	QZ ,SA	F&S	III	-	NLHP24.1

CO7		GUD			T,PBL, D-BED					
CO3, CO4, CO6, CO7	Present an appropriate history in a patient with Timira (Dimness of vision).	AFT-RES	MK	SH	PBL,CD ,RP,D,S IM	P-EXAM,O SCE,P-VIVA	F&S	III	-	NLHP24.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 24.1	Kaphaja Linganasha Shastrakarma.	A)The teacher will form five study groups to discuss and share information, each for Purva, Pradhana, Pashchat karma; Vedhana Shalaka and Upadravas of Kaphaja Linganasha. Teacher will instruct students to study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness. The topics should be presented by power point presentations. Each group should be given a time of 05-08 minutes. OR A)Teachers may use Flipped Classroom technique.The importance as world's first cataract removal technique should be stressed. B) Analyse the students on following criteria- Student participation, Level of curiosity, and Willingness to ask questions; Judge the presentation on following criteria- Content Accuracy, Completeness, Organization, Clarity of language and explanation of technical terms.Provide constructive feedback on their performance, highlighting areas of improvement and excellence. OR B) Utilize pre-class quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; Encourage students to reflect on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 24.1	Fundus evaluation (ophthalmoscopy).	A)Students will be demonstrated the parts of the ophthalmoscope and the correct technique for using the ophthalmoscope. Describe and distinguish the fundoscopic features in a normal condition and in abnormal retinal conditions. OR A)They will be shown pictures and videos of normal fundus and abnormal retinal conditions. B) Teach students the importance of building rapport and demonstrating empathy during patient interactions. Provide constructive feedback on their performance, highlighting areas of improvement and excellence. OR C)Recommend apps and online resources that offer virtual practice scenarios. D) It is preferable to provide self-evaluation in a simple form, such as a quiz. OR Self-assessment can be done on following parameters:- Ethical awareness, workplanning, scientific method of working, coping with mistakes.
NLHP 24.2	History taking in a patient with Timira (Dimness of vision).	A) Present a clinical case of Timira (Dimness of vision) and have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions OR A)Utilise advanced simulation technology to create realistic patient scenarios. Engage students with virtual patient software that simulates real-life scenarios, helping them practice history taking and clinical reasoning skills. OR A)Use standardized patients(actors or fellow students)to role-play patients with Timira (Dimness of

		vision). OR A) Recommend apps like Geekymedics, wikimeds that offer virtual practice and quizzes on history-taking skills. B)Break students into small groups for more focused practice and individualised feedback. C) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. OR C)Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. Encourage students to assess their own performance and identify areas for improvement. OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination . The assessor should use checklists to evaluate students' performance in a reliable and consistent way. Communication skills to be assessed by Kalamazoo essential elements communication checklist.

Topic 25 Nayanabhighata (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5, CO6	Describe causes, prognosis, clinical features and treatment of Nayanabhighata.Explain types, clinical features and management of Ocular trauma.Narrate clinical features, methods of removal, and treatment of Agantuja Akshi Shalya (Foreign body in eyes) and when to seek an expert opinion form Netra Shalaki/ Ophthalmologist.	CC	MK	KH	L,L&PPT	C-VC,T-OBT,DEB,QZ ,VV-Viva	F&S	III	-	LH
CO5, CO6, CO7, CO8	Summarize the steps involved in the technique of removal of Agantuja Shalya from the eye.	CC	MK	KH	BS,ML, SIM,D-M,DIS	P-MOD,DOPS,DOPS	F&S	III	-	NLHP25.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 25.1	Evaluation of Agantuja Shalya (Foreign body in eyes).	A) Start with a short case presentation of a condition of Agantuja Shalya (Foreign body in eyes). Ask students to brainstorm and to work in pairs or groups to discuss various types of foreign body in eyes. OR A) Demonstrate the correct technique of removal of foreign body from conjunctiva using suitable instruments; or a video of a real or simulated foreign body removal, along with topical anesthetic use. B) Discuss the key steps in Pashchatkarma, such as pain management, and infection monitoring. C) Teacher should educate the students when and how to refer a patient with a foreign body in the eye other than the conjunctiva, to a Netra Shalaki (ophthalmologist). D) Summarize the session's key points. E) Determine the level of understanding by Direct Observation of Procedure Skills or Demonstration on Models: • An assessor observes a trainee performing a procedure. • The assessor records their observations on a structured form. • The assessor provides immediate feedback to the trainee. • The trainee receives constructive feedback that focuses on essential skills.

Topic 26 Drishtigata Roga-2 (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2,	Define and enlist classification of Cataract.Discuss the etiology,	CC	MK	KH	L&PPT	T-OBT,QZ	F&S	III	-	LH

CO5	clinical features, investigations, and medical management of Senile Cataract.					,VV-Viva				
CO2, CO5	Enlist procedures for surgical management of Senile Cataract.Expound Small Incision Cataract Surgery (SICS) and Phacoemulsification (Their indications, contraindications, type of anesthesia, major surgical steps, post-operative care, complications, and their management in brief).Summarise current research studies on Kaphaja Linganasha/Timira (Cataract).	CC	NK	K	L_VC,DIS,L&GD,ML	OSCE,QZ , VV-Viva,COM	F&S	III	-	NLHT26.1
CO3, CO7	Demonstrate the technique of ocular examination in a patient with Cataract.	AFT-RES	MK	SH	D,D-BED,ML,PBL,CD	P-VIVA,OSCE,360D, PP-Practical	F&S	III	-	NLHP26.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 26.1	Surgical management of Senile Cataract and current research studies on Kaphaja Linganasha/Timira (Cataract).	Surgical Management of Senile Cataract (40 min.) The teacher may- A)Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures. OR A)Show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. OR A) The teacher may use Video Recordings or surgical simulators to provide hands-on practice in a controlled, risk-free environment. B) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative

		learning environment. The teacher should Include scenarios where complications arise and teach students how to manage these situations. C) Stress the importance of patient safety, aseptic techniques, and surgical hygiene. Discuss ethical issues related to surgery, including informed consent, patient confidentiality, and decision-making. OR A) Provide access to reputable online resources and journals for further reading and research. B) To evaluate, use quizzes, written exams, and practical assessments through OSCE to evaluate students' understanding and skills. Provide constructive feedback on their performance, highlighting areas of improvement and excellence. C) Instruct students to go through various research works published in peer-reviewed journals, compile and present the data followed by a discussion. Assess them on Content , Focus, Clarity and coherence, In-depth analysis, Grammar and spelling,Effective use of visual aids.(15 min.)

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 26.1	Examination of Cataract.	A) Break students into small groups for more focused practice and individualized feedback.Present a clinical case of cataract, including examination of visual acuity and iris shadow. And have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices

		and techniques and facilitate post-shadowing discussions. OR Use standardized patients(actors or fellow students)to role-play patients with cataract. The student will take informed consent, counsel, examine, and explain surgical steps to a patient /volunteer in a simulated environment.Break students into small groups for more focused practice and individualized feedback. OR Recommend apps like Geekymedics and wikimeds that offer virtual practice and quizzes on history-taking skills. OR Make them a part of surgical team for Cataract. B) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. OR Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. Encourage students to assess their own performance and identify areas for improvement. OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination. OR The students can be assessed through 360 degree assessment wherein the student himself, the peers, the nursing staff and the assessor do the evaluation with a pre-given standard format.

Topic 27 Drishtigata Roga- 3 (LH :2 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Define and describe etiopathology, classification, clinical features, complications, and treatment of Madhumehajanya Drishtiroga (Diabetic Retinopathy).	CC	DK	KH	L&PPT ,L	T-OBT,COM,VV-Viva	F&S	III	-	LH
CO2,	Define, describe etiopathology, clinical features, complications	CC	DK	KH	L&PPT	VV-Viva,T-	F&S	III	-	LH

CO5	and treatment of -Jarajanya Pitabindu Upaghata (Age-related macular degeneration) and Drishti-nadi Shosha (Optic Atrophy).				,L	OBT				
CO2, CO5, CO7	Present a case of Madhumehajanya Drishtiroga (Diabetic Retinopathy).	AFT-RES	MK	KH	ML,PBL,D-BED	VV-Viva,OSCE	F&S	III	-	NLHP27.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 27.1	Case discussion on Madhumehajanya Drishtiroga (Diabetic Retinopathy).	A) Introduction (10 min.) - Briefly introduce the topic and outline the objectives of the practical session. - Explain the importance of understanding diabetic retinopathy for future healthcare professionals. - Provide a concise overview of Madhumehajanya Drishtiroga (Diabetic Retinopathy), including its definition, prevalence, and significance. B) Interactive Lecture (20 minutes) - Explain the pathophysiology of diabetic retinopathy using diagrams and images. - Discuss the stages of diabetic retinopathy and its progression. - Describe common symptoms and diagnostic methods, including fundoscopy and imaging techniques like OCT (Optical Coherence Tomography). C) Hands on activity-(70 min.) - Provide students with access to retinal images. - Guide them through the process of examining retinal images and identifying key features of diabetic retinopathy. - Present real or simulated case studies of patients with diabetic retinopathy. - Encourage students to analyze the cases, identify the stage of retinopathy, and suggest possible treatment options. - Divide students into small groups to discuss the case studies and share their findings.

		- Facilitate a discussion on the challenges and management strategies for diabetic retinopathy. - Encourage them to discuss the relative Arhata-anarhata of Kriyakalpa. D) Assessment and Wrap-Up (10 minutes) - Administer a short quiz to assess students' understanding of the topic. - Review the answers and provide feedback. - Summarize the key takeaways from the session. - Encourage students to continue their learning and stay updated on advancements in diabetic retinopathy.

Topic 28 Dravyas used in Netra Chikitsa-2 (LH :0 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Define Mydriatics, Describe Phenylephrine 5% and Tropicamide 0.5%.Define Cycloplegic agents, Explain Atropine 1%, Homatropine 2%, and Cyclopentolate 1%.	CAP	DK	KH	L&GD	CL-PR,VV-Viva	F&S	III	-	NLHT28.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 28.1	Mydriatics and Cycloplegic agents.	A)Teacher will form five study groups to discuss and share information, through link circulated through messaging platforms or google classroom; each for phenylephrine 5% Tropicamide 0.5%, Atropine 1%, Homatropine 2%, Cyclopentolate 1%. Teacher will instruct students to study their dosage, indications, contraindications, untoward effects; discuss with peers, review each other’s notes and findings to ensure accuracy and comprehensiveness. B) Each group will be given a duration of 10 minutes to present in Classroom. During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions assess their engagement. assess the presentations on content , focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, effective use of visual aids. At the end of session, summarize what they have learned.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 29 Dravyas used in Netra Chikitsa-3, Swasthavritta, Kuposhanajanya Netravikara (Malnutritional Eye Disorders), Community Ophthalmology. (LH :1 NLHT: 3 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5, CO6	Identify and describe Guna,Karma and Matra of Samanya Chakshushya Dravyas.	CC	MK	KH	D,DG	P-EXAM,P-ID	F&S	III	-	NLHP29.1
CO5	Observe the communication between physician and patient regarding prescription (Matra, Anupana, Route of administration, Untoward effects) of Samanya Chakshushya Yoga.	CC	DK	KH		Log book	F	III	-	NLHP29.2
CO5	Describe Netra Swasthyahitakara Dinacharya.	CC	MK	KH	DIS,LS, BL	VV-Viva,COM,CL-PR	F&S	III	-	NLHT29.1
CO5	Describe Netra Swasthyahitakara Aahara Evam Vihara.	CC	DK	KH	LS,DIS, PER	CL-PR,VV-Viva,QZ	F&S	III	-	NLHT29.2
CO5	Describe causes, clinical features, prevention and treatment of Naktandhya (Night Blindness); and Jeevanasatwa-Kshayajanya Netraroga (Vitamin deficiency disorders)(Malnutritional Eye disorders)- (Deficiency of Vitamin-A, Vitamin-B1, Vitamin- B2, Vitamin C, Vitamin-D).	CC	DK	KH	FC,DIS	QZ ,VV-Viva,PRN	F&S	III	-	NLHT29.3
CO4, CO7	Present an appropriate history in a patient presenting with Naktandhya (night blindness).	AFT-RES	MK	KH	SIM,RP ,PBL	OSCE,Log book,QZ	F&S	III	-	NLHP29.3
CO2, CO5	Describe the etiology, clinical features, WHO Classification, management and prophylaxis of Xerophthalmia. Describe clinical	CC	NK	KH	L&PPT ,L	VV-Viva,T-OBT	F&S	III	-	LH

	features and management of Xerosis.										

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 29.1	Netra Swasthyahitakara Dinacharya.	A) Teacher forms groups to compile information from classics. These groups can form subgroups to divide chapters from classics. (30 min.) Librarians can collaborate with teacher to incorporate medical informatics into medical education. Librarians can help students evaluate and synthesize information. OR Digital libraries can create a medical informatics program that complements this activity. After this Library session, they should come back to classroom and present information from the library and classroom lecture. (25 min.) Debriefing can help maximize learning by summarizing and clarifying what was learned. B) Provide feedback to help students identify areas for improvement. (05 min.) Impress upon them that presentation and contents are equally important in this topic and evaluate them accordingly. After class, ask these groups to compile the information. Each group will submit separate compilation. C)Evaluation of compilation can be done on criteria like Content Accuracy, Completeness, Organization, Clarity of language and explanation of technical terms, Consistency, Uniform presentation of citations and references.
NLHT 29.2	Netra Swasthyahitakara Aahara Evam Vihara.	A) The teacher will form two study groups to discuss and share information, each for Netra Swasthyahitakara Aahara Evam Vihara. (pre class) Teacher will form sub groups to discuss and share information, each for Various eye exercises like Sunning, Palming, Ball exercise, Bar exercise, candle light reading, pencil push-ups, and figure of eight. (Pre-class)

		Teacher will Instruct the students to study themselves, discuss with peers, review each other’s notes and findings to ensure accuracy and comprehensiveness. Teacher will ask the groups to present information about Aahara in the classroom. (20 min.) Sub groups can be made according to Aahara-varga. And 30 minutes will be given to present Eye exercises. B) Utilize pre-class quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; During class discussions, pay attention to Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills to assess their engagement; Encourage students to reflect on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong. C) At the end of session, summarize what they have learned.
NLHT 29.3	Jeevanasatwa-kshayajanya Netraroga (Vitamin deficiency disorders)(Malnutritional Eye disorders).	A) Teacher will form six study groups to discuss and share information, each for Naktandhya (Night Blindness), Jeevanasatwa-kshayajanya Netraroga (Vitamin deficiency disorders)(Malnutritional Eye disorders)- (Deficiency of Vitamin-A, Vitamin-B1, Vitamin- B2, Vitamin C, Vitamin-D) (causes, clinical features, prevention and treatment) Teacher will instruct students to study themselves, discuss with peers, review each other’s notes and findings to ensure accuracy and comprehensiveness.(pre-class) The groups will present in the classroom. (06-08 min. for each group) B)Utilize pre-class quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions assess their engagement; Encourage students to reflect on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong. It is preferable to provide self-evaluation in flipped classroom in a simple form, such as a quiz. At the end of session, summarize what they have learned and plan what to do next.(10-15 min.)
Non Lecture Hour Practical		

S.No	Name of Practical	Description of Practical Activity
NLHP 29.1	Use of Samanya Chakshushya Dravyas in Eye diseases..	The drugs to be studied are :- Amalaki, Vibheetaki, Hareetaki, Draksha, Yashtimadhu, Punarnava, Saindhava, Shigru, Lodhra, Nimba, Manjistha, Daruharidra, Gairika. A) Prepare handouts of the pictures of the drugs and handover to students. Teacher will instruct students to learn to identify common chakshushya dravyas by specimens and pictures. OR Use knowledge of Dravyaguna (pharmacology) to provoke pharmacotherapeutic thinking and reasoning. Explain students the indications of these drugs in Netraroga.. OR Ask them to go through various databases like https://bsi.gov.in/page/en/medicinal-plant-database. B) Questionnaires can be used to assess a student's knowledge of drugs. The questionnaire can include questions about the drug's name, dosage, analyzing the drug's active ingredients, side effects, precautions, and more.
NLHP 29.2	Prescription of Samanya Chakshushya Yoga.	A) Students will observe the communication between physician and patient regarding prescription (Dose, anupana, route of administration, anticipation of effects) of Samanya Chakshushya Yogas like - Triphala Ghrita, Jeevantyadi Ghrita, Patoladi Ghrita, Saptamruta Louha, Triphala Guggulu, Chandrodaya Varti, Ilaneer Kuzhampu and Triphala Churna. They will journal these points. B)They are encouraged to ask questions. C) They should be able to identify these drugs. D) Action of these Yogas in diseases described in Shalakyatantra is explained by the teacher. E) Evaluate their log books on clarity, completeness, comprehensive information. OR Students can review each other's logbooks to provide additional feedback and perspective.

NLHP 29.3	Evaluation of Naktandhya (night blindness).	A) Present a clinical case of night blindness and have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. OR Engage students with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills. OR Use standardized patients(actors or fellow students) to role-play patients with night blindness Break students into small groups for more focused practice and individualized feedback. OR Recommend apps like Geekymedics, Wikimeds that offer virtual practice and quizzes on history-taking skills. B) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. OR Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. Encourage students to assess their own performance and identify areas for improvement. OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination . The assessor should use checklists to evaluate students' performance in a reliable and consistent way. Communication skills to be assessed by Kalamazoo essential elements communication checklist.

Paper 2 (Shiro-Karna-Nasa-Mukharoga (Oto-rhino-laryngology and Oro-dentistry))										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**

Course outcome	Learning Objective (At the end of the session, the students should be able to)	Domain/sub	MK / DK / NK	Level	T-L method	Assessment	Assessment Type	Term	Integration	Type
Topic 30 Enumeration, Nidana Panchaka and Sadhya-asadhyata of Shiroroga (LH :2 NLHT: 1 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2, CO5	Classify Shiroroga according to Sushrutha and Vagbhata.Enlist Sadhya-asadhyatwa of Shiroroga.Explain the Samanya Nidana and Samprapti of Shiroroga.Explain Hetus, Lakshana, Chikitsa of Vataja Shiroroga, Pittaja Shiroroga, Kaphaja Shiroroga and Sannipataja Shiroroga.	CC	MK	KH	L&PPT ,L	QZ ,P-VIVA,T-OBT, M-POS,S-LAQ	F&S	I	-	LH
CO2, CO5, CO7	Present an appropriate history in a patient presenting with Shirahshoola. Learn Differential diagnosis of Shirorogas -Vataja, Pittaja, Kaphaja, Sannipataja, Suryavartha, Anantavata, Ardhavabhedhaka.	AFT-RES	MK	SH	CD,D,TUT,PBL ,RP	P-EXAM,P-VIVA,SA, OSCE	F&S	I	-	NLHP30.1
CO2, CO5	Understand the International Classification of Headache ICHD-3 and discuss Samanya Yogas used in Shiroroga.	CC	DK	KH	LS,L&PPT ,DIS,SY	M-POS,CL-PR	F&S	I	-	NLHT30.1
CO2, CO7	Perform History taking and give outline of case sheet (Shira Karna Nasa Mukha roga).	CAP	MK	SH	BL,RP, D,TUT, PBL	SP	F&S	I	-	NLHP30.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 30.1	Poster presentation on ICHD-3 Classification. Compiled presentation on Common Yogas used in Shiroroga.	A) The teacher will form five different study groups to discuss and share information. One group for Classification of ICHD-3 and 04 for Samanya Yogas. Students will study themselves, discuss with peers, and review each other’s notes and findings to ensure accuracy and comprehensiveness.

		They would make a Poster as per ICHD-3. The presentation time will be 10 minutes. Assess on criteria like clarity of information, visual appeal, scientific soundness, and readability from a distance. B) To study Yogas, the students are divided into 04 groups; they can go to the library (Pre-class), ask Librarian's help, they can subdivide subtopics -usage, dosage, and outcomes. Compile the Yogas. • Varunadi Kashaya • Mahalakshmi Vilasa Rasa • Laghusutashekhara Rasa • Varanadi ksheera Ghrita. They can split time between different activities like searching for articles, reading, and taking notes. They should familiarise themselves with tools like Zotero, to collect information about primary and secondary sources, such as journal articles, and books. C) At the end of the session, the teacher should ask them to summarize what they have learned and present in class. Each group is given 05 minutes to present. Judge the compiled presentation on- • Content Accuracy. • Completeness. • Presentation in a logical and coherent structure. • Clarity of language and explanation of technical terms. • Uniform presentation of citations and references.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 30.1	Evaluation of Shirahshoola.	A) Present a clinical case of Shirorogas (Headaches) -Any Type of Headache (such as Suryavarta,

		Ardhavabhedhaka, Anathavata) and have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. Encourage students to present a case in a scientific format. OR Use standardized patients(actors or fellow students)to role-play patients with Shirahshoola. C) Break students into small groups for more focused practice and individualized feedback. D) Recommend apps like Geekymedics, Wikimeds that offer virtual practice and quizzes on history-taking skills. E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. F) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. G) Encourage students to assess their own performance and identify areas for improvement.
NLHP 30.2	Introduction of case sheet for Shiro Karna Nasa Mukha roga.	A)Get familiar with the Case sheet. Form groups of 5-7 students each. Facilitate discussion amongst themselves regarding the topic and observe. The student tries to connect the knowledge gained in previous classes to applicable clinical framework. The teacher shows the student how to see the case sheet, the way he sees it. The teacher helps to bring things together in the context of Shiro-karna nasa mukha roga. Teacher and student come to a point of new understanding after discussion. B) Explain why case-taking is crucial for diagnosis and treatment planning. Conduct live demonstrations with real or simulated patients to model effective case-taking. C)Use videos of experienced clinicians. D)Provide a structured framework for students to follow during case taking. E) Teach Mnemonics like OLD CARTS (Onset, Location, duration, Character, Aggravating/relieving

		factors, timing, severity) F)Engage students with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills. G)Use standardized patients (actors or fellow students)to role-play patients. H)Teach students the importance of building rapport and demonstrating empathy during patient interactions. Highlight the role of active listening. Integrate case-taking with physical examination skills, teaching students correlations between them. I)Use Simulated patients as an evaluation method. • Create realistic patient scenarios with detailed medical histories, presenting complaints, and desired outcomes. • Thoroughly train Simulated Patients to accurately portray patient behaviors, emotions, and physical presentations. • Assess on criteria like Communication skills, Physical examination skills, History taking, and developing treatment plans. • Provide constructive feedback on their performance, highlighting areas of improvement and excellence.

Topic 31 Samanya Chikitsa of Shiroroga (LH :0 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Explain Shiraso Uttamangatwam.	CC	DK	KH	BL,DIS, BS	DEB,CL-PR	F&S	I	-	NLHT31.1
CO5, CO6, CO7	Demonstrate under supervision Moordhni Taila.	PSY-GUD	MK	SH	RP,D,D-M	DOPS,DOPS	F&S	I	-	NLHP31.1
CO2, CO3,	Present an appropriate history in a patient presenting with Ardhavabhedaka.	AFT-RES	MK	SH	CD,RP, PBL,D-	SA,PP-Practical,OSCE	F&S	I	-	NLHP31.2

CO7					BED					
CO3, CO5	Discuss Ardhabhedaka, Anantavata and Suryavarta.	CC	MK	KH	DIS,PER	PP-Practical,INT,CL-PR	F&S	I	-	NLHT31.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 31.1	Discussion on Shiraso Uttamangatwam.	A)Teacher will share information through cross-platform messaging services like Signal, WhatsApp etc., or google classroom, a week before. Teacher will form different study groups to discuss and share this information, each for Rachana, Kriya related to Shiras; Nidanatmaka involvement of Shiras in Indriya-vikaras; and Shiras as Chikitsa-marga. B)Students will study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness. They can Brainstorm their sub-topic Pre-class and come to inferences. They can go to library, ask Librarian's help, they can subdivide subtopics such as Rachana Shareera of Shiras,Marma,Nervous System,etc amongst themselves and split time between different activities like searching for articles, reading and taking notes. C) Each group would be given 10 minute to present in the classroom in the form of Powerpoint presentation and then they can have a debate on the scientific nature, objectivity and applicability of the topic for 10 minutes. At the end of session, summarize and give feedback based on their participation levels, clarity of kowledge, visual appeal and organisation of thoughts.
NLHT 31.2	Etiology, Clinical Features,and Management of Ardhabhedaka, Anantavata and Suryavarta.	A) The teacher will form three study groups to discuss and share information, each for Ardhavabhedaka, Anantavata, and Suryavarta. Students will study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness. Encourage all students to contribute their thoughts, opinions, and evidence-based reasoning, ensuring

		everyone has a chance to speak. Ask probing questions to challenge assumptions, evaluate different perspectives, and encourage students to justify their reasoning. Emphasize the importance of listening attentively to others' viewpoints and building on ideas respectfully. B) Provide feedback: Assessment of -Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills. At the end of the session, summarize what they have learned. C) Discuss the similarities and usefulness in current practice.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 31.1	Application of Shirolepa, Shiro-abhyanga, Shiroseka, and Shirobasti.	A)Discuss the patient’s history, diagnosis, and therapy plan in detail before entering the Therapy Hall. Emphasize the importance of hygienic techniques and the steps to maintain a hygienic environment. Ensure students understand the correct use of PPE whenever necessary. Walk students through the Murdhni Taila procedure step-by-step, explaining the purpose and technique of each step. OR Demonstrate on model. Foster an environment where students feel comfortable asking questions and seeking clarification. Teach students about care for Pashchat-Karma, including monitoring for complications and managing patient recovery. B)Record Methodologies (with patient's consent) for educational purposes. Reviewing these videos can help students learn and improve. C) Promote teamwork and collaboration among students, encouraging them to learn from each other’s experiences. Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients. D) Emphasis role of Informed consent. Use role play as an instruction method. E) Use Direct Observation of Procedural Skills (DOPS) as an assessment method.

		• The trainee receives constructive feedback that focuses on essential skills. • An assessor observes a trainee performing a procedure. • The assessor records their observations in a structured form. • The assessor provides immediate feedback to the trainee. • The format for DOPS can be found at https://www.iscp.ac.uk/static/public/DOPSJul2015.pdf.
NLHP 31.2	Evaluation of Ardhavabhedaka.	A) Present a clinical case of Ardhavabhedhaka, and have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. OR B) Use standardized patients(actors or fellow students)to role-play patients with Ardhavabhedaka. C) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. D) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. Encourage students to assess their own performance and identify areas for improvement. Self-assessment can be done on following parameters:- Team work , empathy and openness, ethical awareness, work planning, scientific method of working, structuring, and coping with mistakes.

Topic 32 Karna Rachana Shareera, Nidana Panchaka and Samanya Chikitsa of Karnaroga (LH :2 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2	Define Karna Nirukti, Karna Shareera (Asthi, Sandhi, Peshi, Sira, Marma) and Shravanendriya, Enlist Karna Rogas,Explain	CK	MK	K	L,L&PPT	M-POS,DEB,PRN,T-O	F&S	I	-	LH

	Samanya Nidana, Samanya Samprapti and Describe Samanya Chikitsa of Karna Roga.					BT,S-LAQ				
CO1	Describe the anatomy of different structures of Karna - Ear (External, Middle, and Internal) and clinical application.	CC	MK	KH	L&PPT,PER,ML,L_VC,DIS	P-VIVA,PUZ,PRN,S-LAQ,VV-Viva	F&S	I	V-RS,V-RS	NLHT32.1
CO1, CO2, CO4, CO5	Elaborate Karna Roga- Samanya Nidana, Samanya Samprapti and Sadhya-asadhyata.	CC	MK	K	L&PPT,LS,L&GD,DIS,SDL	P-REC,VV-Viva,M-POS,T-OBT,CL-PR	F&S	I	V-RN	NLHT32.2
CO3, CO7	Examination of Karna.Demonstrate the use of a headlamp and otoscopy in the examination of Karna, Nasa and Mukha (Ear, Nose and Throat).	PSY-GUD	MK	SH	PT,TUT,TBL,RP,ML	P-ID,Log book,P-PRF	F&S	I	-	NLHP32.1
CO5, CO6, CO7	Present cases of Karnarogas.	AFT-RES	MK	SH	D-BED,PBL,TUT,SIM,RP	DOAP,OSCE	F&S	I	-	NLHP32.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 32.1	Presentation on Anatomy of Ear.	A) The teacher should provide the link for audio-visual/animation presentations a week before the actual class through various messaging services or Google Classroom. The students can then be divided into three groups, each for External, middle, and internal ear; and they will go through those videos and present in front of the entire class. The time duration for each group will be 15 minutes. B) PowerPoint presentations should be assessed on the following criteria- content, grammar and spelling, delivery of the material, audience engagement, handling nerves, and effective use of visual aids. OR

		Models can be used to assess the ability to show important landmarks of the external, middle, and internal ear on. C)The teacher should use puzzles to identify the point/s, and knowledge they have learnt during the session.
NLHT 32.2	Samanya Nidana,Samanya Samprapti,Sadhya-asadhyata of Karna Rogas.	A) The teacher provides link of powerpoint presentation about the common Samanya Nidana, Samprapti and Sadhya-asadhyata of Karna Rogas. Teacher will then form three study groups to discuss and share information, each for Samanya Nidana, Samprapti and Sadhya-asadhyata. Students will be directed to compile Nidana, Samprapti, and Sadhya-asadhyata from various Ayurveda Classics. Teacher should encourage them to study by themselves, discuss with peers, review each other’s notes and findings to ensure accuracy and comprehensiveness. They can be advised by the teacher to go to the library and ask Librarian's help. B) At the end of session, the students should summarize what they have learned and present it in front of the teacher. Each group will be given 10 minutes. C) A discussion will take place about mechanism of each nidana to karnaroga and logic behind their prognosis. (15 min.) D) Evaluation to be done on the basis of : • Content Accuracy, any factual errors or inconsistencies. • Completeness. • Organization- presented in logical and coherent structure. • Clarity of language and explanation of technical terms. • Consistency, uniform presentation of citations and references. OR Open book test can be used for assessment. OR Posters made by students are assessed. OR Recitation competition of Shlokas can be arranged.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 32.1	Identification and use of basic Ear OPD Instruments.	A)The teacher should explain to students why examination is crucial for diagnosis. B) The teacher should conduct live demonstrations with real or simulated patients to model effective case-taking. OR The Teacher can make use of videos of experienced clinicians to make students understand the correct use of OPD Instruments. The teacher should then explain parts of instruments, instructions, indications, and contraindications. The teacher can use standardized patients (actors trained to simulate real patient cases) to perform a step-by-step demonstration in a controlled environment. Emphasize key points like technique, safety, and anatomical landmarks should be done. OR C) The Teacher should teach students the importance of building rapport and demonstrating empathy during patient interactions. D) Students should be provided constructive feedback on their performance, highlighting areas of improvement and excellence. E) The teacher should see to it that the student is able to identify instruments used in Karna, Nasa, Mukha OPD. The teacher should observe if the student is able to use a headlamp and do otoscopy with the help of otoscope/endoscope. The teacher should ensure that the student is able to use other OPD-based Ear instruments effectively on patients under the guidance of the Consultant and examine Karna.
NLHP 32.2	Case taking in Karnaroga.	A) The teacher should elaborate on the key points needed to keep in mind while taking a clinical case of Karnaroga. The teacher should then have students work in groups to gather history, discuss differential diagnoses, and plan management. After analyzing the information that the students have gathered while working in groups, the teacher should then teach students other history-taking techniques, which reinforce their learning and builds

		confidence. OR B) The teacher should utilize advanced simulation technology to create realistic patient scenarios. The students should then be engaged with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills. OR The Teacher can use standardized patients(actors or fellow students)to role-play patients with Karnaroga. B) The teacher should teach students the importance of making patients comfortable and should later help the student to understand the importance of informing the patient what he/she is going to do for case-taking purposes. The teacher should then observe the student while he/she takes generalized history, and see to it if the student understands the relation between systemic and neighboring diseases and karnarogas. C) The teacher should evaluate on the basis of OSCE. The teacher at the end should provide constructive feedback on their performance, highlighting areas of improvement and excellence.

Topic 33 Karnaroga 1 (LH :2 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO4, CO5, CO6	Describe Samprapti and Lakshanas of Karnashoola as per Acharya Sushruta.Enlist types and lakshanas of Karnashoola as per Acharya Vagbhata.Describe Chikitsa of Karnashoola.Describe Samprapti,Lakshanas and Chikitsa of Karna Shopha.	CC	MK	KH	L,L&GD	CL-PR,QZ,T-OBT	F&S	I	-	LH
CO2, CO3, CO4, CO5, CO7	Present an appropriate history in a patient presenting with Karnashoola (Otalgia).	AFT-RES	MK	SH	X-Ray,PBL,CD,RP,PT	PP-Practical, C-VC,OSCE,P-RP,P-EXAM	F&S	I	-	NLHP33.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 33.1	Evaluation of Karnashoola (Otalgia).	A)The teacher should explain to the students why case-taking is crucial for diagnosis and treatment planning. The teacher can later conduct live demonstrations with real or simulated patients to model effective case-taking. Videos of experienced clinicians can also be shown to the students to understand Karnashoola (Otalgia). The teacher should provide a structured framework for students to follow during case-taking. B)The teacher should teach Mnemonics like OLD CARTS (Onset, Location, duration, Character, Aggravating/relieving factors, timing, severity) The students can also be engaged with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills. The teacher can use standardized patients (actors or fellow students)to role-play patients with Karnashoola (Otalgia). The teacher should teach students the importance of building rapport and demonstrating empathy during patient interactions. Students should also know the role and importance of active listening. The teacher can Integrate case-taking with physical examination skills, teaching students correlations between them. C) MINI-CEX or OSCE can be used to assess. Students should be provided constructive feedback on their performance, highlighting areas of improvement and excellence. The format can be downloaded from https://www.ranzcr.com/images/20211015_RO_Mini-CEX_Assessment_Form.pdf. A similar format can be developed.
Topic 34 Nasa Shareera, Ghranendriya and Nidana Panchaka of Nasaroga (LH :2 NLHT: 1 NLHP: 2)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Explain Nasashareera (Applied Rachana and Kriyashareera of Nasa and Nasagandakutalalatasthi-kuhara).Explain Kriya of Ghranendriya and physiology of olfaction.	CC	MK	KH	L&PPT ,L	T-OBT,VV -Viva,COM ,QZ	F&S	I	V-RS,V -KS,V-RS	LH
CO2, CO5	Enumerate Nasarogas.Describe etiological factors of Nasarogas.Enlist Pathya-apathya and Sadhya-asadhyatwa of Nasarogas; indications and contra-indications for Dhumapana specific to Shalakyatantra.Discuss Poorva-Pradhana-Pashchat Karma and complications of Dhumapana and its management.	CC	MK	KH	L&PPT ,L	T-OBT,VV-Viva,QZ ,PUZ,M-POS	F&S	I	-	LH
CO3, CO5	Describe Nasya in Diseases described in Shalakyatantra.Summarise current research studies on Nasya and Dhumapana in the diseases of Shira, Karna, Nasa, and Mukha.	CC	DK	KH	DIS,FC, TBL,LS	M-CHT,CL -PR,M-POS,QZ ,VV-Viva	F&S	I	H-PK	NLHT34.1
CO2, CO5, CO7	Present cases of Nasaroga.	AFT-RES	MK	SH	CD,PBL ,D-BED	OSCE,P-CASE,VV-Viva,SP	F&S	I	-	NLHP34.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 34.1	Discussion on Nasya. Current research studies on Nasya and Dhumapana in diseases in Shalakyatantra.	A) The teacher makes four groups of students. Each group is given a subtopic as - a) Enlist indications and contra-indications for Nasya, in conditions in Shalakyatantra. b) Describe complications of Nasya and its management. c) Summarise current research on Nasya in diseases described in Shalakyatantra. d) Summarise current research on Dhumapana related to Shalakyatantra. Students may compile the information about the topics (Pre-class) and one, two or three students from each group present in class. Other groups may critically discuss the topics, by asking questions, in the classroom. Each group will be given 10-15 minutes to present.

		Encourage all students to contribute their thoughts, opinions, and evidence-based reasoning, ensuring everyone has a chance to speak. Ask probing questions to challenge assumptions, evaluate different perspectives, and encourage students to justify their reasoning. Emphasize the importance of listening attentively to others' viewpoints and building on ideas respectfully. Provide feedback: Assessment can be done on the following criteria:- Communication skills, Teamwork, Critical thinking, Body language, and Interpersonal skills. OR The teacher asks students to prepare Posters. Each group is given 10-12 minutes to present in the classroom. Assessment is made on the basis of clarity of information, visual appeal, scientific soundness, and whether key elements are presented clearly and concisely, while also considering the visual design and readability from a distance.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 34.1	General histroy taking, Specific history taking in the cases of Nasaroga.	A) The teacher makes groups of 03 students and asks them to check patients in Nasa opd. After initial introduction and demographic history taking they learn to gather comprehensive and relative information from the patients specific to Nasaroga. Students may practice taking histories with each other or with simulated patients. OR B) The teacher may choose four students to volunteer as patients, they are given a standard set of symptomatology, preferably written, about a nasal disease, which they would answer to their enquiring peers. Introduce mnemonics like OPQRST: Onset, Provocation / Palliation, Quality, Region/Radiation, Severity, Timing; to guide. Learn to understand the relation of diseases' neighboring structures and systemic diseases with nasarogas.

		Learn to Document in proper format. Encourage interactive sessions where students can discuss their experiences, challenges, and strategies. C)Use Observed Structured Clinical Examination OR Simulated Patients to assess. • OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a case of Nasaroga. The assessor should use checklists to evaluate students' performance in a reliable and consistent way. Performance can recorded on a 4-point scale where 1 is unacceptable, 2 is below expectation, 3 is met expectations, and 4 is exceeded expectations. • Communication skills to be assessed by Kalamazoo essential elements communication checklist. • Each student is exposed to the same stations and assessment Give constructive feedback on their skills. • Simulated patients can be as a part of OSCE or a separate assessment. Students or actors are provided with written, specific, clear-cut instructions and clinical features of a nasaroga and the students are rotated through this setup. They are assessed in the areas like history taking, physical examination, and counseling skills.

Topic 35 Pratishyaya (LH :3 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Define Paribhashha of Pratishyaya.Describe the Hetus, Samprapti, Purvarupa, Lakshana, and the Importance (Significance in relation to overall health)of Pratishyaya.(Vataja, Pittaja, Kaphaja, Saanipataja, Raktaja, Ama, Pakva).	CC	MK	KH	L&PPT ,L	QZ ,T-OBT	F&S	I	-	LH
CO2, CO5	Explain Upadrava, Sadhyasadhyata and Chikitsa of Pratishyaya. Elaborate Nidana, Samprapti, Lakshanas and Chikitsa of Dushtapratishyaya.	CC	MK	KH	L,L&PPT	VV-Viva,T-OBT,QZ	F&S	I	-	LH
CO2,	Discuss Nidana, Samprapti, Lakshanas and Chikitsa of Puyarakta,	CC	MK	KH	DIS,PL,	T-OBT,P-P	F&S	I	-	NLHT35.1

CO5	Nasapaka, and Nasashopha.				L&PPT	OS,VV-Viva,CL-PR				

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 35.1	Discussion on Puyarakta, Nasapaka, Nasashopha.	A) The teacher will form three study groups to discuss and share information, each for Puyarakta, Nasapaka, and Nasashopha. (Pre-class) They can go to the library, ask the Librarian's help, they can subdivide subtopics amongst themselves, and split time between different activities like searching for articles, reading, and taking notes. Students will study themselves, discuss with peers, and review each other's notes and findings to ensure accuracy and comprehensiveness. They will present the information with a PowerPoint presentation in the classroom. (15 min. each)OR they can present posters in the classroom. PowerPoint presentations should be assessed on the following criteria- content, focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, and effective use of visual aids. OR They can be subjected to an Open-book test. B) At the end of the session, the teacher should summarize what they have learned and plan what to do next. (05 min.)

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 36 Mukha Shareera and Nidana Panchaka of Mukharoga (LH :1 NLHT: 1 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Define Paribhasha of Mukha, Describe the anatomy of Ostha (lips), Mukha-kuhara (oral cavity), Jivha(tongue), Danta (teeth), Gala- Talu (Pharynx), Lalagranthi -Salivary glands (parotid, submandibular) and Swarayantra (larynx).	CC	MK	KH	LS,DIS, FC,ML	CL-PR,QZ	F	I	V-RS,V-RS	NLHT36.1

CO3, CO7, CO8	Present an appropriate history in a patient presenting with an Oro – dental complaint.	AFT-RES	MK	SH	PBL,D-BED,RP,TUT	P-EXAM,P-CASE,OSCE,SP,C-INT	F	I	-	NLHP36.1
CO3, CO7, CO8	Demonstrate Kavala , Gandusha, Pratisarana.	PSY-MEC	MK	D	RP,D-BED,TUT,PBL	DOAP	F	I	-	NLHP36.2
CO2, CO5	Describe Classification (based on Adhishthana and Sadhya-asadhyata), Samanya Chikitsa (Kavala, Gandusha and Pratisarana – Their indications, contraindications, types and procedure) and Pathya-apathya of Mukha Roga along with Nidana Panchaka.	CC	MK	KH	L	PRN,P-VIVA,SP,T-CS,T-OBT	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 36.1	Elaboration on Mukha- Shareera.	A) Make 08 teams and give them subtopics as Paribhasha of Mukha, Anatomy of Oshtha (lips), Mukha-kuhara (oral cavity), Jivha(tongue), Danta (teeth), Gala- Talu (Pharynx), Lalagranthi -Salivary glands (parotid, submandibular) and Swarayantra (larynx). The students will be given a link to a PowerPoint presentation on these topics. The presentation on the topic should be prepared and uploaded on a website created for the students or free cross-platform messaging services like WhatsApp, Telegram or learning platforms like Google Classroom. They should be also instructed to go through the textbooks and read this topic. They should be given 01 week time before the scheduled Flipped ClassRoom for this topic. After 01 week of self-learning, problem-based questions related to the topics may be asked and discussed with the students. Students will be also encouraged to ask questions to clarify concepts. Present in the classroom. B) Utilize pre-class quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions and assess their engagement; Encourage students to reflect

		on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong. It is preferable to provide self-evaluation in the flipped classroom in a simple form, such as a quiz. Give constructive feedback.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 36.1	Oro - Dental case taking and examination.	A) Conduct live demonstrations with real or simulated patients to model effective case-taking. Use videos of experienced clinicians. Provide a structured framework for students to follow during case taking. Preparation and Review of Available Records B) Self-Introduction and Rapport Building Recording the Chief Complaint Collecting Past Medical History, Medications, Allergies, and Family History Gathering Social History Review of Systems (ROS) C) Patient Positioning and Instructions Inspection of the Lips and Perioral Area Examination of the Buccal Mucosa and Gingiva Examination of the Hard and Soft Palate Inspection of the Tongue Examination of the Floor of the Mouth and Sublingual Area Examination of the Oropharynx Pay special attention to changes in color, ulcers, bleeding, growths and other variations in concerned areas. Differentiate Lecoplakia, and Erythroplakia. Palpation of the Oral Cavity. D) Closing (Thanking the patient). E) Use the Simulated Patient technique or OSCE to evaluate the students.

NLHP 36.2	Poorva, Pradhana and Pashchat Karma of Kavala, Gandusha and Mukhapratisarana.	A)Discuss the patient's history, diagnosis, and therapy plan, its preparation, Sambhara-samgraha, preparation of the patient, Pradhanakarma, and Pashchat karma, in detail before entering the therapy room. B)Emphasize the importance of a hygeinic environment. Ensure students understand the correct use of PPE if needed. C) Walk students through the procedure step-by-step, explaining the purpose and technique of each step. D) Foster an environment where students feel comfortable asking questions and seeking clarification. E)Teach students about post-operative care, including monitoring for complications and managing patient recovery. F)Record procedures (with patient consent) for educational purposes. Reviewing these videos can help students learn and improve. G)Promote teamwork and collaboration among students, encouraging them to learn from each other's experiences. Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients. H) Assess the students on the basis of DOAP.

Topic 37 Oshtharoga (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Elaborate clinical features and treatment of Vataja, Pittaja, Kaphaja Oshthakopa (Chelitis) Khandoushtha (Cleft lip), Jalarbuda, Herpes labialis and Lip Mucocele.	CC	MK	KH	L,L&PPT	T-OBT,QZ,T-CS	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 38 Sarvasara Mukharoga (LH :2 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO5	Describe the clinical features and treatment of Vatika, Pittaja, Kaphaja, Raktaja, Sannipatika Sarvasara along with Stomatitis, and Oral candidiasis.	CC	MK	KH	L&PPT	T-CS,VV-Viva,P-VIVA,T-OBT,QZ	F&S	I	-	LH
CO2, CO5	Explain the etiology, clinical features and treatment of Oral submucous fibrosis, and Tumours of the oral cavity, (Pleomorphic adenoma, Malignancies of tongue, palate and oral mucosa).	CC	NK	KH	L&PPT	T-OBT,QZ ,T-CS,INT, M-CHT	F&S	I	-	LH

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 39 National Oral Health Programme (LH :0 NLHT: 1 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO5	Describe National Oral Health Programme.Explain methods for the prevention of oral malignancy.Present methods of prevention of oral diseases mentioned in Ayurvedic classics.	CC	DK	KH	ML,PSM,BL,BS,DIS	P-RP,DEB, QZ ,PRN, M-POS	F	I	-	NLHT39.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 39.1	Brainstorming session on National Oral Health Programme and Dantarakshavidhi.	1. Introduction & Group Allocation (5 minutes)

- Briefly explain the session’s structure and learning outcomes.
- Divide students into three groups:
    - Group 1: National Oral Health Programme (NOHP)
    - Group 2: Prevention of Oral Malignancy
    - Group 3: Prevention According to Ayurveda Classics

2. Group Discussions & Brainstorming (15 minutes)

- Group 1 (NOHP):
    - Presentation on key components of the National Oral Health Programme (prepared in advance).
    - Stress the scientific nature of Dantaraksha Vidhi and its role in modern dentistry.
    - Identify gaps in implementation and suggest improvements.
- Groups 2 & 3:
    - Prevention of Oral Malignancy:
        - Brainstorm common etiologies (tobacco, betel nut, alcohol, infections).
        - Discuss public awareness strategies for prevention.
    - Ayurveda-Based Prevention:
        - Discuss Ayurveda’s perspective on oral health maintenance (Dantaraksha Vidhi, Dinacharya, Rasayana therapy, dietary habits, and herbal formulations).
- Encourage open sharing with no judgment.

- Utilize whiteboards/digital tools to map ideas visually.

3. Group Presentations (15 minutes)

		• Each group gets 5 minutes to present key takeaways. • Others can ask questions and add inputs. 4. Idea Refinement & Action Plan (10 minutes) • Evaluate the strengths and weaknesses of each group's ideas. • Develop an action plan: ◦ Steps for public awareness campaigns. ◦ Community-based interventions. ◦ Ayurveda-based preventive strategies in clinical practice. 5. Conclusion & Takeaways (5 minutes) • Reinforce the importance of public awareness in preventing oral malignancies. • Summarize key learnings. • Encourage students to implement their ideas in clinical practice and community health initiatives.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 40 Kapalagata Roga (LH :1 NLHT: 0 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Explain Samprapti, Lakshana, Chikitsa of Darunaka, Indraluptha, Khalitya and Palitya.	CC	DK	KH	L&PPT ,L	CL-PR,PR N,T-CS,P-ID	F&S	II	-	LH
CO3, CO7	Decipher the steps involved in Prachchhana, and Jalaukavacharana.	CC	DK	KH	D,PT	CHK,VV-V iva,M-POS	F&S	II	-	NLHP40.1

CO3, CO7	Summarise the steps involved in performing Agnikarma in Shiroroga/Kapalagata Roga.	CC	DK	KH	PT,D,PER	DOPS,P-VIVA,DOPS, CL-PR	F&S	II	-	NLHP40.2

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 40.1	Purva- Pradhana and Pashchat Karma related to the procedures of Prachchhanna and Jalaukavacharana.	A) The teacher may- Use anatomical models, diagrams, and 3D animations to illustrate the procedures. OR Show recorded these procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. B) The student may be a part of a team that does these procedures. C)Stress the importance of patient safety, aseptic techniques, and surgical hygiene. D) Discuss ethical issues related to surgical or Para surgical aspects, including informed consent, patient confidentiality, and decision-making E) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative learning environment. F) The teacher should Include scenarios where complications arise and teach students how to manage these situations. G) Use Poster making and checklists to evaluate students' understanding and skills. H) Provide constructive feedback on their performance, highlighting areas of improvement and excellence.
NLHP 40.2	Discussion on Agnikarma in Shiroroga.	A) The teacher may-

		Use anatomical models, diagrams, and 3D animations to illustrate the procedures. OR Show recorded these procedure to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. OR B) The student may be a part of a team that does these procedures. C)Stress the importance of patient safety, aseptic techniques, and surgical hygiene. D) Discuss ethical issues including informed consent, patient confidentiality, and decision-making E) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative learning environment. F) The teacher should Include scenarios where complications arise and teach students how to manage these situations. G) Use quizzes, written exams, and practical assessments to evaluate students' understanding and skills. J) Provide constructive feedback on their performance, highlighting areas of improvement and excellence.

Topic 41 Karna Kriya Shareera and Shravanendriya (LH :0 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Describe Kriya Shareera of Karna and Shravanendriya.Explain the Physiology of Equilibrium.	CC	MK	KH	L&GD, FC,RP, DIS,D-M	QZ ,S-LAQ ,PA,T-OBT ,CL-PR	F&S	II	-	NLHT41.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 41.1	Discussion on Shareer Kriya of Karna and Shravanendriya, and Physiology of Equilibrium.	A) The teacher can divide students into groups and conduct a group discussion on Jnana of Srotra-Pratyaksha, Conductive Apparatus, Perceiving Apparatus and Auditory Pathway; balance mechanism and importance of the inner ear in maintaining balance of human body. Divide students into groups of 5-8 for optimal interaction and participation. Consider assigning roles like facilitator (to guide discussion), timekeeper (to manage time), and notetaker (to record key points). Clearly introduce the topic, providing necessary background information and key questions to guide the discussion. Encourage all students to contribute their thoughts, opinions, and evidence-based reasoning, ensuring everyone has a chance to speak. Ask probing questions to challenge assumptions, evaluate different perspectives, and encourage students to justify their reasoning. Emphasize the importance of listening attentively to others' viewpoints and building on ideas respectfully. B) Provide feedback: evaluate on the criteria like Communication skills, Teamwork, Critical thinking, Body language, and Interpersonal skills and give constructive feedback. OR Use poster presentations or theory open-book test as assessment methods.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 42 Karna Badhirya, Karna Naada and Kshweda (LH :3 NLHT: 1 NLHP: 12)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO5	Describe Hetu, Samprapti, Lakshanas and Chikitsa of Karna Badhirya.Explain types of Hearing Loss (Conductive, Sensorineural and Mixed) and its investigations (Tunning Fork Test, Audiometry, Impedance Audiometry).Summarise Etiology, Pathology, Differential Diagnosis of Otosclerosis, Medical and	CC	MK	KH	BL,L&P PT ,L,PER	T-OBT,CL-PR,DEB,P-EXAM,PP-Practical	F&S	II	-	LH

	Surgical Management of Otosclerosis.									
CO2, CO3, CO5	Explain Hetus, Lakshanas, Samprapti and Chikitsa of Karna Naada, Karna Kshweda.Describe types and Causes, Investigation and Treatment of Tinnitus.	CC	MK	KH	L,L&PPT	QZ ,S-LAQ ,PP-Practical,CL-PR,P-VIVA	F&S	II	-	LH
CO7	Describe the National Program for Prevention and Control of Deafness.Elaborate Causes and ill effects of Noise Pollution.	CC	DK	K	RP,BL	P-RP,M-POS,VV-Viva	F&S	II	-	NLHT42.1
CO2, CO3, CO4	Present an appropriate history in a patient presenting with Badhirya (Deafness).	AFT-RES	MK	SH	L_VC,RP,PBL, D-BED, TUT	P-CASE,VV-Viva,OSCE,Mini-CEX	F&S	II	-	NLHP42.1
CO3, CO4, CO5	Demonstrate the technique of Tuning fork Tests.	PSY-MEC	MK	SH	TUT,CD,RP,D, PBL	DOPS,VV-Viva,CL-PR,PP-Practical,DOPS	F&S	II	-	NLHP42.2
CO3, CO5	Summarise the technique of Audiometry and interpret reports of Audiogram.	CC	DK	SH	D-M,PT ,D,RP, ML	Log book,P-RP,OSPE, P-EXAM,P-PRF	F&S	II	-	NLHP42.3
CO2, CO3, CO4	Present an appropriate history in a patient presenting with Karna Kshweda- Naada (Tinnitus)-	AFT-RES	MK	SH	PT,D-BED,CD, PBL,TUT	QZ ,P-CASE,P-PRF,P-VIVA,S-LAQ	F&S	II	-	NLHP42.4
CO5, CO6, CO7	Perform a procedure of Karnapoorana.	PSY-GUD	MK	SH	PT,PBL ,D-BED ,SDL	VV-Viva,P-PRF,SA,DOPS,P-EXAM	F&S	II	-	NLHP42.5

CO5, CO6	Summarise the steps involved in performing Karna Pramarjana, Karna Prakshalana and Karna Dhoopana.	CC	MK	KH	L_VC,D-BED,PBL	P-EXAM,P-MOD,CHK,Log book	F&S	II	-	NLHP42.6

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 42.1	Group discussion on National Programme for Prevention and Control of Deafness and Noise Pollution.	A) Divide the class into small groups and provide each group with printed brochures and posters about NPPCD. Ask each group to discuss the key messages and strategies presented in the materials. (Pre-class) Show a short video or presentation highlighting key points about hearing health and the National Program for Prevention and Control of Deafness(NPPCD).(05-08 minutes). B)Role-Playing (30 minutes): - Assign roles to students (e.g., healthcare providers, community members, patients) and provide them with role-play scripts. - Have students act out scenarios where they educate community members about hearing health and the NPPCD initiatives. Role Play Scenarios: Scenario 1: A festival Scenario 2: Emergency room with case of sudden hearing loss Scenario 3: Care and Follow-Up education to society. Encourage students to act out their roles as realistically as possible, using appropriate terminology and interactions. - Encourage students to use the brochures and posters to support their role-play. - Encourage students to share their thoughts on how they can contribute to hearing health awareness in their communities. Rotate roles to ensure each student gets to practice different aspects of management. Give clear instructions and guidelines for the role-play scenarios, including the causes and control of noise pollution; hierarchical arrangements of National Program for Prevention and Control of Deafness - Allow students to ask questions and discuss their actions during the role play. - Ask students to write a short reflection on what they learned from the activity and how they can

		apply this knowledge in real-life situations. B) Provide feedback on their participation and understanding of the NPPCD.(10 min.) - Assess students based on their engagement and contributions during the group discussion and role-play. - Evaluate the quality and clarity of their role-play presentations. - Review their written reflections to gauge their understanding and personal takeaways from the activity. - Group Discussion- After each scenario, conduct a debriefing session where students can discuss their experiences, challenges, and what they learned.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 42.1	Case Taking and Differential Diagnosis of Badhirya.	A)Teacher should teach students the basic way of case taking which starts with the student introducing himself/herself to patient. Student should then make patients comfortable and then inform patient what he/she is going to do for case-taking purpose. Student should take proper history of the patient and present differential diagnosis of Karna Badhirya (Deafness) in front of the class. Student should then be encouraged to come to proper diagnosis by performing various tuning fork tests. B) Teacher should see that students conduct live demonstrations with real or simulated patients to model effective case-taking. OR Use videos of experienced clinicians can be done by the teacher to demonstrate ways of diagnosing Karna Badhirya. C) Students should be provided a structured framework to follow during case taking. Integrate case-taking with physical examination skills, teaching students correlations between them. E) Observed Structured Clinical Examination:

		• OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination. The assessor should use checklists to evaluate students' performance in a reliable and consistent way. • Communication skills to be assessed by Kalamazoo essential elements communication checklist. Each student is exposed to the same stations and assessment. Teacher should discuss the areas for improvement with students.
NLHP 42.2	Tuning Fork Test (Rinne's, Weber) and their interpretation.	Teacher should teach students various frequencies of Tuning forks used in OPD. Students should be taught basics of tuning fork tests. A) Students will be divided in various groups and demonstrate on patients basic tunning fork tests under the Guidance of the Consultant. OR A)Teacher should assign roles to students, such as the patient, the primary care provider, a nurse, and an observer. Rotate roles to ensure each student gets to practice. Teacher should give clear instructions and guidelines for the role-play scenarios, including the symptoms and history of the patient. C) Students should be encouraged to reflect on their own performance and identify areas for improvement. Self-assessment can be done on the following parameters:- Teamwork and collegiality, empathy and openness, ethical awareness, scientific method of working, coping with mistakes, and priorities.
NLHP 42.3	Audiometry and its interpretation.	A) The teacher should teach students the basic concepts of Audiometry. The student will observe the correct way of positioning the patient while doing Audiometry in a soundproof room. Students will learn how to use an Audiometry machine and the basics of how to switch between Air and Bone conduction in the Audiometry Machine. Student should be taught basics of masking and how it is shown on Audiogram.

		Student should also be taught the technique of reading audiogram. B)The teacher should conduct live demonstrations with real or simulated patients to model effective performance. OR C)The teacher can show videos of experienced clinicians demonstrating the correct technique of doing Audiometry. Student should be able to explain parts of instruments, instructions, indications, and contraindications. OR D)Teacher can use standardized patients (actors trained to simulate real patient cases) to perform a step-by-step demonstration in a controlled environment. E)Teacher should teach students the importance of building rapport and demonstrating empathy during patient interactions. F)Evaluate students by Objective Structured Practical Examination. Analyse student's performance on criteria like knowledge of parts of instruments, indications, contra-indications, reading and analysing audiometry reports, building rapport and demonstrating empathy during patient interactions. Provide constructive feedback on their performance.
NLHP 42.4	Assessment of Karna Kshweda-Naada (Tinnitus).	A) The teacher should teach students about Tinnitus, its types and various etiological factors and causes associated with it. 1. Introduction (15 minutes) - Welcome and Introduction (5 minutes): Briefly introduce yourself and the topic. - Objective of the Session (5 minutes): Explain the importance of case-taking in diagnosing and managing tinnitus. - Overview of Tinnitus (5 minutes): Provide a brief overview of what tinnitus is, its prevalence, and its impact on patients. 2. Case History Taking (45 minutes) - Introduction to Case History (10 minutes): Explain the components of a comprehensive case history for tinnitus patients. - Interactive Case Study (30 minutes): Present a sample case study and guide students through the process of taking a detailed case history. Encourage students to ask questions and participate in the

		discussion. - Review and Discussion (5 minutes): Review the case study and discuss the key points that were covered. 3. Diagnostic Tools and Assessments (30 minutes) - Introduction to Diagnostic Tools (10 minutes): Explain the various diagnostic tools and assessments used in evaluating tinnitus (e.g., audiometry, tinnitus matching, questionnaires). - Hands-On Demonstration (15 minutes): Demonstrate how to use these tools and assessments on a volunteer or simulated patient. - Q&A Session (5 minutes): Allow students to ask questions and clarify any doubts. 4. Management and Treatment Options (30 minutes) - Overview of Management Options (10 minutes): Discuss the different management and treatment options available for tinnitus (e.g., hearing aids, sound therapy, cognitive-behavioral therapy). - Case-Based Discussion (15 minutes): Present another case study and discuss the appropriate management and treatment options for the patient. - Q&A Session (5 minutes): Allow students to ask questions and share their thoughts. 5. Conclusion and Wrap-Up (10 minutes)** - Summary of Key Points (5 minutes): Summarize the key points covered in the session. - Feedback and Evaluation (5 minutes): Collect feedback from students and evaluate the effectiveness of the session.
NLHP 42.5	Procedure of Karnapoorana.	A)Students should be taught about Karnapoorana. Students should also be taught about the Indications, Contraindications, Vyapadas and their Management. Student will observe the correct positioning of the patient, materials used and technique of Karnapoorana. B)The student will observe the process of Karnapoorana. After observing everything, students should be divided in groups and should be able to demonstrate Poorvakarma, Pradhanakarma and Pashchatkarma of Karnapoorana under the Guidance of the physician. Teacher should teach students about post-operative care, including monitoring for complications.

		C)- Direct Observation of Procedural Skills- The assessor actively watches the student perform the procedure, noting their technique, decision-making, communication with the patient, and adherence to safety protocols. Students should be provided constructive feedback on their performance. Teacher should encourage students to reflect on their own performance and identify areas for improvement.
NLHP 42.6	Procedures of Karna Pramarjana, Karna Prakshalana, and Karna Dhoopana.	A)The students should be taught Karna Pramarjana, Karna Prakshalana and Karna Dhoopana procedures. The teacher should teach students Indications, Contraindications and Vyapadas along with its management related to these procedures. The teacher should observe students do pre-procedural examinations and take care of post-therapy management. B) The student should observe the main process of Karna Pramajana, Karna prakshalana and Karna Dhoopana under the supervision of the Consultant. OR C) The teacher should show recorded procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. D) Students should be provided with procedural checklists to help them remember the steps and ensure nothing is missed. E)Teacher should emphasize on patient safety, aseptic techniques, and hygiene to students. F) The teacher should assess students' log books OR the students can be assessed by the checklist method.

Topic 43 Karna Srava and Putikarna (LH :4 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2,	Describe Hetu, Lakshana, Samprapti and Chikitsa of Karna Srava.	CC	MK	KH	L,L&PP	P-VIVA,PP	F&S	II	-	LH

CO3, CO4, CO5					T	-Practical,T-CS,P-CASE,P-EXAM				
CO2, CO3, CO4, CO5	Present appropriate history in a patient presenting with Karna Srava (Otorrrhoea)	AFT-RES	MK	SH	RP,D-BED,ML,LS,CD	Log book,P-RP,P-VIVA,P-EXAM,VV-Viva	F&S	II	-	NLHP43.1
CO2, CO3, CO5	Explain Samprapti, Lakshanas and Chikitsa of Putikarna.	CC	MK	KH	LS,PBL,ML,L&GD	T-OBT,P-EXAM,CL-PR,P-VIVA,VV-Viva	F&S	II	-	NLHT43.1
CO1, CO2, CO3, CO4, CO5, CO6	Elucidate Etiology, Pathology, Clinical Features and Management of Acute Suppurative Otitis Media (ASOM)Expound Etiology, Pathology, Clinical Features and Medical Management of Safe Chronic Suppurative Otitis Media (Safe CSOM), Unsafe Chronic Suppurative Otitis Media (Unsafe CSOM) and Serous Otitis Media (SOM).Enumerate Complications of Otitis Media.Summarise the Etiology, Pathology, Clinical Features, and Medical Management of Mastoiditis.	CC	MK	KH	L,L&PPT	COM,P-EXAM,CL-PR,S-LAQ,T-CS	F&S	II	-	LH
CO2, CO3, CO4, CO5	Summarise types and Surgical Steps in Mastoidectomy.Explain Indication, Contra-Indication and Surgical Steps in Myringotomy.	CC	DK	SH	D-BED,PBL,L_VC,ML,X-Ray	P-EXAM,OSCE,P-VIVA	F&S	II	-	NLHP43.2
CO1, CO2, CO3, CO4, CO5	Explain Indications, Contra-Indications, Types and Basic Surgical Steps in Tympanoplasty.	CC	MK	KH	L_VC,D-M,BL,RP,PBL	P-EXAM,QZ,VV-Viva,OSCE	F&S	II	-	NLHT43.2

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 43.1	Presentation on Putikarna.	Putikarna (60 mins) A) Students should be encouraged to compile Samprapti, Lakshsanas and Chikitsa of Putikarna from Ayurveda Classics and Present. Students should then be directed to study themselves, discuss with peers, review each other’s notes and findings to ensure accuracy and comprehensiveness. Students can be guided to go to the library (pre-class), and ask Librarian's help. They can subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading, and taking notes. The students will then be divided into groups and will present their findings in front of the class (7-8 mins per group). The teacher at the end of the session will summarise everything and explain to the class. The students will be assessed by the teacher based on the detailed contents of the topic, presentation skills and answering to questions asked in the class. B)At the end of the session, the teacher should see to it that students should summarize what they have learned and plan what to do next.
NLHT 43.2	Surgical steps in Tympanoplasty.	Tympanoplasty (60 mins) A) The teacher may- Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures (5mins). OR Show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. (20 mins) Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. (5 mins) OR B) The teacher may use Virtual Reality or surgical simulators to provide hands-on practice in a controlled, risk-free environment. C) Have students role-play as surgeons, assistants, or scrub nurses to practice different aspects of the

		procedure. (10 mins) D) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative learning environment. E) The teacher should Include scenarios where complications arise and teach students how to manage these situations. F) Provide access to reputable online resources and journals for further reading and research. G) Use quizzes, written exams, OSCE,and practical assessments to evaluate students' understanding and skills. (10 mins) H) Provide constructive feedback on their performance, highlighting areas of improvement and excellence. I) Stress the importance of patient safety, aseptic techniques, and surgical hygiene.(5mins) J) Discuss ethical issues related to surgery, including informed consent, patient confidentiality, and decision-making. (5mins)
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 43.1	Etiology, Clinical Features and Medical Management of Karna Srava (Otorrhea).	A)Student should be taught to find out the etiology, clinical features of Karna Srava (Otorrhea) B) For Case taking, the teacher should teach students the basics of case taking which starts with the student introducing himself/herself to patients. Students should then make patients comfortable and inform patient what he/she is going to do for case-taking purposes. The student should then be able to take generalized history of Karna Srava (Otorrhea). Students should also be able to do differential diagnosis, document the case in proper format, present the case and describe the Medical management of Karna Srava (Otorrhea). OR C) Teacher should engage students with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills. OR D) The teacher can use standardized patients (actors or fellow students)to role-play patients with

		Karna Srava. Teachers should teach students the importance of building rapport and demonstrating empathy during patient interactions. Students should highlight the role of active listening. E) The teacher should assess students and provide constructive feedback.
NLHP 43.2	Surgical procedures of Mastoidectomy and Myringotomy.	A)Teacher should teach students indications and contra-indications of Mastoidectomy and Myringotomy. Students, with the help of various audio-visual aids and observation under the guidance of consultants, must be able to explain pre-operative and post-operative management and basic surgical steps involved in the surgery. OR B)Student can be encouraged by the teacher to be a part of the surgical team. C)Teacher should teach students about post-operative care, including monitoring for complications and managing patient recovery. D)Teachers/consultants can record surgeries (with patient consent) for educational purposes. Reviewing these videos can help students learn and improve. E)Teachers should provide access to online surgical tutorials, webinars, and interactive platforms for additional learning. F) Teacher should explain the roles and responsibilities of each member of the surgical team. Teacher should promote teamwork and collaboration among students, encouraging them to learn from each other’s experiences. Teacher should stress the importance of maintaining professionalism, confidentiality, and empathy towards patients to students. G) To Assess students' progress OSCE can be adopted which will cover: a. Understanding Surgical Anatomy b. Surgical Steps and its technique c. Patient Management d. Complications of Surgery and its Management.

Topic 44 Karnakandu, Karnaguthaka, Karnapratinaha, Krumikarna, Karnavidradhi, Karnapaka. (LH :2 NLHT: 0 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO5	Describe Samprapti Lakshanas and Chikitsa of Karna Kandu.Describe the Etiology, Pathology, Clinical Features and Management of Otomycosis.	CC	MK	KH	L&PPT ,L	DEB,T-OBT,QZ	F&S	II	-	LH
CO2, CO3, CO4, CO5	Present an appropriate history in a patient presenting with Karna Kandu.	AFT-RES	MK	KH	PBL,TUT,ML,D-BED	P-CASE,P-EXAM,P-PRF,Mini-CEX	F&S	II	-	NLHP44.1
CO1, CO2, CO3, CO4, CO5, CO6	Describe Samprapti, Lakshanas, Upadravas and Chikitsa of Karna Guthaka (Ear Wax).Explain Samprapti, Lakshanas and Chikitsa of Karna Pratinaha and Krimikarna (Maggots in Ear).Decipher Hetu, Lakshanas, Samprapti and Chikitsa of Karna Vidradhi, Karnapaaka (Otitis Externa).	CC	MK	KH	L&PPT ,L	PP-Practical,T-OBT,VV-Viva,CL-PR,QZ	F&S	II	-	LH
CO1, CO3, CO5, CO6	Summarise the technique for removal of Karnaguthaka (ear wax) from the ear.	CC	MK	KH	TUT,PBL,D-BED	Log book,P-CASE,P-VIVA	F&S	II	-	NLHP44.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 44.1	Assessment of Karna Kandu.	A)Teacher should teach students the proper way of case taking which starts with students introducing himself/herself to patient.

		Student should then make patients comfortable and inform patient what he/she is going to do for case-taking purpose. Student should then take proper history of patient and present differential diagnosis of Karna Kandu in front of the class. Student should finally come to proper diagnosis and should be able to describe its Management and prognosis. B) Teacher should teach students the importance of building rapport and demonstrating empathy during patient interactions. Students should be highlighted the role of active listening. C) Students should Integrate case-taking with physical examination skills, teaching students correlations between them. D)Evaluate their performance with Mini-CEX. ◦ Observe a Student's interaction with a patient in a real-world clinical setting ◦ Rate the performance in areas like history taking, physical examination, and counseling skills ◦ Teacher should provide constructive feedback on their performance, highlighting areas of improvement and excellence. ◦ performance is recorded on a 4-point scale where 1 is unacceptable, 2 is below expectation, 3 is met expectations, and 4 is exceeded expectations.
NLHP 44.2	Removal of Ear Wax.	A) Teacher should teach student the signs and symptoms of Karnaguthaka (Ear Wax). B)Teacher should emphasize students the importance of aseptic techniques and the steps to maintain a sterile environment. C) Teacher should walk students through the procedure step-by-step, explaining the purpose and technique of each step.

		D)Teacher should teach students about post-operative care, including monitoring for complications and managing patient recovery. E) Students should be provided access to online surgical tutorials, webinars, and interactive platforms for additional learning.

Topic 45 Rhinitis (LH :1 NLHT: 2 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Define and Enlist types of Rhinitis.Describe Etiology, Pathology and Clinical Features of Acute Non-specific Rhinitis (The common cold), Allergic Rhinitis, Chronic Hypertrophic Rhinitis and Atrophic Rhinitis.	CC	MK	KH	L,L&PPT	T-OBT,VV-Viva,QZ	F&S	II	-	LH
CO2, CO5	Describe Differential Diagnosis, Investigations, Complications, and Treatment of Acute Non-specific Rhinitis (The common cold).Explain Differential Diagnosis and Treatment of Chronic Hypertrophic Rhinitis.	CC	MK	KH	LS,L&GD,DIS,FC	QZ ,INT,VV-Viva,PRN	F&S	II	-	NLHT45.1
CO2, CO5	Describe Differential Diagnosis, investigations, complications, and medical treatment of Atrophic rhinitis and Allergic rhinitis.Summarize current research studies on Allergic rhinitis.	CC	MK	KH	L&PPT,FC,DIS	CL-PR,PRN,Mini-CEX	F&S	II	-	NLHT45.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 45.1	Diagnosis and Treatment of Rhinitis.	A) Teacher will form six study groups to discuss and share information, each for Differential Diagnosis, Investigations, Complications, and Treatment of Acute Non-specific rhinitis (The common cold).; and Differential Diagnosis and Treatment of Chronic Hypertrophic Rhinitis. They should be given 1 week time before the scheduled presentation for this topic. Students will study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness.

		OR They can go to library, ask Librarian's help, they can subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading and taking notes. Let them summarize what they have learned and present in the classroom. Each group will be given a time of 06-08 minutes. OR B) They can use Flipped Classroom to illustrate different types of rhinitis and their management. Each group will be given a time of 06-08 minutes. Utilize pre-class quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions to assess their engagement; Encourage students to reflect on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong. It is preferable to provide self-evaluation in flipped classroom in a simple form, such as a quiz. C) Assessing presentations involves evaluating a speaker's performance, clarity of voice, communication skills, content, time management, use of visual aids, and spelling and grammar.
NLHT 45.2	Diagnosis and treatment of Atrophic and Allergic Rhinitis; Summary of Research studies on Allergic Rhinitis.	Teacher will form Ten study groups to discuss and share information, each for A) Differential Diagnosis, B)Investigations, C) Complications, and D) Medical Treatment of Atrophic Rhinitis; E) Differential Diagnosis, F) Investigations, G)Complications, H) Prevention and I) Medical Treatment of Allergic Rhinitis; J) Current Research studies on Allergic Rhinitis. Teacher sends them to the Library, they can subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading and taking notes. Students will study themselves, discuss with peers, review each others notes and findings to ensure accuracy and comprehensiveness. Librarian can familiarise them with tools like Zotero, to organise and present the research works. Powerpoint presentation or Flipped classroom method will be used to discuss in class.

		Each group will be given 05 minutes to present their topic. At the end of the session, the teacher will summarize what they have learned. Assessment should be done on the following points- content, focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, and effective use of visual aids.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 46 Deeptadi Nasaroga. (LH :3 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO5, CO6	Describe Samprapti, Lakshana and Chikitsa of Peenasa, Apeenasa, Putinasa (Sinusitis).Define Sinusitis and its types.Describe etiology, pathology, clinical features, differential diagnosis, radiological and laboratory investigations, complications and medical treatment of Sinusitis (Frontal and Maxillary).Describe Surgical Treatment of Sinusitis- Functional endoscopic sinus surgery. (Its indications, contraindications, type of anesthesia, major surgical steps, post-operative care, complications and their management in brief).Describe when to seek an expert opinion, and when to refer for surgery.	CC	MK	KH	L&PPT ,L	QZ ,VV-Viva,CL-PR,S-LAQ	F&S	II	-	LH
CO3, CO4, CO7	Present an appropriate history in a patient presenting with Nasasrava (Rhinorrhoea), Sinusitis.	AFT-RES	MK	SH	D-BED, CD,PBL	OSCE,Mini-CEX,P-VIVA,CBA	F&S	II	-	NLHP46.1
CO2, CO5	Describe Samprapti, Lakshana and Chikitsa of Deepta, Putaka, Nasaparishosha, Bhramshathu, Nasanaha, Kshavathu.	CC	MK	KH	L&PPT ,RP,FC, ML,DIS	COM,PRN, SA,P-VIVA,VV-Viva	F&S	II	-	NLHT46.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 46.1	Diagnosis and treatment of Deepta, Putaka, Nasaparishosha, Bhramshathu, Nasanaha, Kshavathu.	A) Teacher will form six study groups to discuss and share information, each for Deepta, Putaka, Nasaparishosha, Bhramshathu, Nasanaha, and Kshavathu (Samprapti, Lakshana and Chikitsa). Use platforms like Google Classroom or messaging services like WhatsApp and telegram to share information on these topics. Students will study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness. They will do PowerPoint presentation in class. OR The teacher will assign roles to the students such as the patient, the primary care provider, a nurse, and an observer. Rotate roles to ensure each student gets to practice different aspects of management. Give clear instructions and guidelines for the role-play scenarios, including the symptoms and history of the patient. B) At the end of the session, summarize what they have learned and plan what to do next. C) Encourage students to reflect on their own performance and identify areas for improvement. Self-assessment can be done on the following parameters:- Teamwork and collegiality, empathy and openness, ethical awareness, work planning, scientific method of working, structuring, coping with mistakes, and priorities. Presentations can be assessed with the following parameters:- content, focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, effective use of visual aids.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 46.1	Examination of Nasa and Nasagandakutalalatasthi-kuhara (Nose and Paranasal sinuses). Evaluation of Nasa srava (Rhinorrhoea).	A)Sub-divide students in groups of 4-6. Use problem based learning method. (PBL). Use one patient each for teaching Nasasrava and Sinusitis and as the case unfolds, the teacher should

	Evaluation of Sinusitis.	show how to examine Nasavamsha (Septum), Nasasrotas (Nasal Cavity), Nasagandakutalalatasthi-kuhara.(Paranasal sinuses). Show how to perform Anterior and Posterior rhinoscopy. Discuss Differential Diagnosis of Nasasrava. Later , The student will take a history, examine with proper instruments, document and present the case of patients presenting with Nasa Srava and Sinusitis. Assess the performance of students by MINI-CEX method:- ◦ Observe a Student’s interaction with a patient. ◦ Rate the performance in areas like history taking, physical examination, and counselling skills. ◦ The student receives immediate feedback from the teacher. OR It can be assessed by Observed Structural Clinical Examination (OSCE). • OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination . The assessor should use checklists to evaluate students' performance in a reliable and consistent way. • Communication skills to be assessed by Kalamazoo essential elements communication checklist.

Topic 47 Nasavamsha-kutilatwa (Deviated Nasal Septum). (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO5	Define and Enlist types of Nasavamsha-kutilatwa (Deviated Nasal Septum).Explain Etio-pathology, Clinical Features, Differential Diagnosis, investigations, complications, and medical mananagement of Nasavamsha-kutilatwa (Deviated Nasal	CC	MK	KH	L,L&PPT	QZ ,CL-PR ,T-OBT,VV-Viva	F&S	II	-	LH

	Septum).									
CO5, CO6	Describe surgical Management of Nasavamsha-kutilatwa (Deviated Nasal Septum).-- Sub mucous resection (SMR), Septoplasty. (Their indications, contraindications, type of anesthesia, major surgical steps, post-operative care, complications and their management in brief).Describe when to seek an expert opinion, and when to refer for surgery.	CC	DK	K	PER,ML,L_VC,DIS	T-OBT,CHK,VV-Viva,P-EXAM,QZ	F&S	II	-	NLHT47.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 47.1	Surgical management of Nasavamsha-kutilatwa (Deviated Nasal Septum).	A) The teacher may- Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures. OR B)He may show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. OR C) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative learning environment. D) Time Duration- SMR- 40 min. Septoplasty- 15 min. E) The teacher should Include scenarios where complications arise and teach students how to manage these situations. F) Provide access to reputable online resources and journals for further reading and research. G) Use Quizzes, Open book theory tests, Checklists and Class presentations to evaluate students' understanding and skills. Use platforms like Kahoot!, Mentimeter to generate quizzes. H) Stress the importance of patient safety, aseptic techniques, and surgical hygiene. J) Discuss ethical issues related to surgery, including informed consent, patient confidentiality, and

		decision-making. H) Describe when to seek an expert opinion, and when to refer for surgery.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 48 Dantamulagata roga (LH :2 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe the aetiopathogenesis, clinical features, prevention and treatment of Gingivitis and Periodontitis.Explain the indications for referral in Dantamoolagata Roga	CC	MK	KH	L,L&PPT	T-OBT,QZ,PUZ	F&S	II	-	LH
CO2, CO5	Describe the clinical features and treatment of Paridara, Adhimamsa (Impacted wisdom tooth), and Describe the Nidana, Samprapti, clinical features, classification and treatment of DantaNaadi.	CC	MK	KH	L&PPT	T-OBT,PUZ,M-POS,QZ	F&S	II	-	LH
CO2, CO5	Describe the clinical features and treatment of Sheetada, Upakusha, Dantaveshtaka and Dantavidradhi(Apical abscess).	CC	MK	KH	ML,FC,PBL,L&GD,PL	P-VIVA,M-POS,CL-PR,QZ	F&S	II	-	NLHT48.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 48.1	Laxanas and Chikitsa of Sheetada, Upakusha, Dantaveshtaka and Dantavidradhi.	Pre-Class (Online Learning) – Before the Session • Students access digital resources (videos, articles, or PDFs) shared by the teacher on: ◦ Etiology, Clinical Features, Differential Diagnosis, Complications, and Treatment of: 1. Sheetada

2. Upakusha
3. Dantaveshtaka
4. Dantavidradhi (Apical Abscess)

- They study at their own pace, take notes, and prepare for classroom discussions.

In-Class (Face-to-Face Learning) – 55 Minutes

1. Introduction & Group Formation (5 minutes)

- Teacher gives a brief overview and clarifies learning objectives.
- Students are divided into four groups, each assigned one disease.

2. Group Discussions & Peer Learning (15 minutes)

- Each group collaborates, discussing key aspects from their pre-class study.
- They refine their understanding, compare notes, and identify key points for presentation.
- The teacher acts as a facilitator, clarifying doubts and ensuring accuracy.

3. Group Presentations (20 minutes) – 5 minutes per group

- Each group presents their findings in 5 minutes using:
  - Whiteboards
  - Digital slides
  - Charts or models
- Other students ask questions, ensuring peer engagement.

4. Interactive Q&A & Teacher’s Summary (10 minutes)

		• The teacher provides feedback on presentations, corrects misconceptions, and highlights key learning points. • Class discussion on Ayurvedic relevance and modern perspectives. 5. Assessment & Reflection (5 minutes) • Students are evaluated on presentation skills based on: ◦ Content accuracy and depth ◦ Clarity and coherence ◦ Audience engagement ◦ Delivery and confidence ◦ Use of visual aids • The session concludes with a brief reflection and discussion on next steps for learning.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 49 Jihvagata Roga (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe the clinical features and treatment of Vatika, Paittika and Kaphaja Jihvakantaka and Alasa.	CC	MK	KH	L,L&PPT	QZ ,PUZ,SP,T-CS,VV-Viva	F&S	II	-	LH
CO2, CO5	Describe the clinical features and management of ankyloglossia and glossitis (Hairy tongue, Geographic tongue, Migratory Glossitis).	CC	MK	KH	FC,PL,ML,DIS,LS	VV-Viva,P-VIVA,QZ ,M-POS,CL-PR	F&S	II	-	NLHT49.1

Non Lecture Hour Theory			
S.No	**Name of Activity**	**Description of Theory Activity**	
NLHT 49.1	Clinical features and management of ankyloglossia and glossitis (Hairy tongue, Geographic tongue, Migratory Glossitis).	Symposium Structure & Time Distribution: 1. Introduction & Overview by the Moderator (5 minutes) • The teacher (or a designated student) introduces the theme of the symposium. • Brief explanation of importance, etiology, and general approach to tongue disorders. • Groups are introduced, and the session format is explained. 2. Group Presentations (30 minutes) – 10 minutes per group Each group presents a specific topic, covering: • Definition & Etiology • Clinical Features • Complications • Management & Treatment (Modern & Ayurvedic Approaches) Group 1: Ankyloglossia (Tongue-Tie) Group 2: Hairy Tongue (Lingua Villosa) Group 3: Geographic Tongue (Benign Migratory Glossitis) and Migratory Glossitis 3. Open Discussion & Q&A (10 minutes) • Each group asks questions to other groups, fostering peer learning. • The teacher clarifies doubts and emphasizes key differentiating features. 4. Summary & Takeaways (5 minutes)	

		• The teacher or moderator summarizes the main points. • Discuss the clinical relevance and importance in Ayurveda and modern medicine. • Assign follow-up tasks like writing a short reflective report on what they learned.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 50 Krimidantaka and Dantaharsha (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe the Samprapti, clinical features and treatment of Krimidantaka (Dental carries), and Dantaharsha (Dentin hypersensitivity).	CC	MK	KH	L&PPT	QZ ,VV-Viva,M-POS, SP,T-OBT	F&S	II	-	LH
CO2, CO5	Explain root canal treatment.	CC	DK	KH	L_VC, ML,FC, BL	QZ ,CL-PR,M-POS	F	II	-	NLHT50.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 50.1	Explanation of Root Canal Treatment.	1. Introduction & Visual Learning (10 min) Method: Flipped Classroom • Share pre-session materials (videos, diagrams, articles) on RCT before class. • In-class: Use 3D animations, models, or a video demonstration of the RCT procedure. • Discuss the importance of RCT, indications, and contraindications. 2. Case-Based Discussion (15 min)

Method: Problem-Based Learning (PBL)

- Present a realistic clinical case:
  "A patient complains of severe pain in a molar with deep caries. The tooth is tender on percussion, and X-ray shows periapical pathology."
- Divide students into three groups to discuss:
  - Group 1: Diagnosis (Symptoms, Pulp Testing, X-ray interpretation).
  - Group 2: Step-by-Step RCT Procedure (Access, Cleaning, Shaping, Obturation).
  - Group 3: Post-Treatment Care & Ayurveda-Based Healing Approaches.
- Each group presents findings, followed by discussion.

3. Simulation & Demonstration (15 min)
Method: DIY Simulation

- Use readily available models to simulate RCT steps:
  - Soap Carving Method: Students carve access cavities on soap bars or wax blocks to understand instrument handling.
  - Clay Model Demonstration: Representing root canal anatomy.
  - Use tooth models with X-ray images for visualization.
- If possible, invite a guest dentist or use a virtual demonstration.

4. Interactive Q&A & Quiz (10 min)
Method: Peer Teaching & Gamification

- Conduct a quiz (MCQs or case-based questions).
- Encourage students to explain concepts to peers.
- Address common doubts.

		5. Conclusion & Reflection (5 min) Method: Summary Discussion • Teacher reinforces key concepts. • Ask students: “How will you explain RCT to a patient?”

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 51 Dravyas used in Karna Nasa Mukha Roga Chikitsa-1 (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Elucidate Common Dravyas used in Karna Nasa Mukha Roga- Antibiotics, PPIs, Steroids, Antihistamines, Nasal Decongestants, and Anesthetic drugs.	CC	DK	KH	L	INT,O-QZ, P-EXAM,V V-Viva,PUZ	F&S	II	-	LH
CO5, CO7	Describe Samanya Yoga (Drugs) used in Karna Nasa Mukha Roga.	CC	DK	KH	D,DA,L &GD,DIS,CBL	COM,CBA, Log book,INT,P-ID	F&S	II	V-DG	NLHP51.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 51.1	Contemporary Pharmaceutical Agents Used in Karna Nasa Mukha Roga.	1. Introduction (10 min) • Brief overview of pharmacological agents used in Karna Nasa Mukha Roga (ENT disorders). • Explain classification & mode of action of: ◦ Antibiotics (Amoxicillin, Cephalosporins, Macrolides, Fluoroquinolones, Aminoglycosides). ◦ PPIs (Rabeprazole, Esomeprazole, Omeprazole). ◦ Steroids (Fluticasone, Glucocorticoids). ◦ Antihistamines (Cetrizine, Bilastine, Fexofenadine). ◦ Nasal Decongestants (Ephedrine, Oxymetazoline). 2. Group Activity - Case-Based Discussion (20 min) Method: Problem-Based Learning (PBL) • Divide students into 5 groups, each assigned a case involving drug use in ENT disorders. • Cases provided: ◦ Group 1: Bacterial sinusitis – Choice of antibiotics, dosage, resistance issues. ◦ Group 2: GERD-associated chronic cough – Role of PPIs, adverse effects. ◦ Group 3: Allergic rhinitis – Use of steroids & antihistamines, comparison of nasal sprays. ◦ Group 4: Acute otitis media – Indications for antibiotics vs. observation. ◦ Group 5: Nasal congestion – Benefits & risks of decongestants. • Each group discusses their case and presents findings. 3. Practical Demonstration (15 min) Method: Hands-on Drug Identification & Prescription Writing • Display different drug formulations (tablets, syrups, nasal sprays).

		• Teach students how to read labels, identify active ingredients, and understand dosing instructions. • Practice prescription writing for each drug category based on case discussions. 4. Q&A and Conclusion (10 min) • Interactive Q&A session to clarify doubts. • Recap of key learning points. • Discuss Ayurvedic alternatives for symptom relief 5. Recording the Activity in the Journal or Clinical Record • Each student must document the session in their journal or clinical record, including: ◦ Summary of case discussions and key takeaways. ◦ Drugs discussed, their indications, dosages, and possible side effects. ◦ Observations from practical demonstrations (drug identification, prescription writing, etc.). ◦ Personal reflections on learning outcomes and areas for improvement. • The journal entry should be reviewed and signed by the faculty as part of assessment.

Topic 52 Karnarsha and Karnarbuda (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5, CO6	Describe Samprapti, Lakshanas, and Chikitsa of Karnarsha and Karnarbuda.Discuss the Etiology, Pathology, Clinical features, and Medical and Surgical management of Aural Polyp.Enlist indications for referral in these conditions.	CC	MK	KH	L&PPT ,L	DEB,T-OBT,QZ	F&S	III	H-SH	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 53 Karnasandhana (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO3, CO5	Describe Karnasandhana; its Indications, Contraindications, Types, Purva-Pradhana-Pashchat Karma and Complications.	CC	MK	KH	L&PPT	T-CS,M-CHT,T-OBT	F&S	III	-	LH
CO3, CO4, CO5	Elaborate on Indications, Contraindications, and Surgical procedures of Auroplasty.	CC	DK	KH	SIM,FC,D-M,PBL,L_VC	C-VC,OSCE,CL-PR,QZ ,M-POS	F&S	III	-	NLHT53.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 53.1	Purva-Pradhana-Pashchat Karma for Karnasandhana (Auroplasty).	Karnasandhana (60 mins) A) The teacher may- Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures. (10 mins) Show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. (15 mins) Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. (10 mins) OR B) The teacher may use Virtual Reality or surgical simulators to provide hands-on practice in a controlled, risk-free environment. OR

		C) Have students role-play as surgeons, assistants, or scrub nurses to practice different aspects of the procedure.(10mins) D) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative learning environment. (5mins) E) The teacher should Include scenarios where complications arise and teach students how to manage these situations. F) Provide access to reputable online resources and journals for further reading and research. G) Use quizzes, written exams, and OSCEs to evaluate students' understanding and skills. (5 mins) H) Provide constructive feedback on their performance, highlighting areas of improvement and excellence. I) Stress the importance of patient safety, aseptic techniques, and surgical hygiene. J) Discuss ethical issues related to surgery, including informed consent, patient confidentiality, and decision-making. (5 mins)

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 54 Bhraamara (Vertigo) (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe Etiology, Pathology, Clinical Features and Management of Labyrinthitis.Describe the Etiology, Pathology, Clinical Features, and Medical and Surgical Management of Meniere's Disease.	CC	DK	KH	L&PPT ,L	CL-PR,QZ ,T-OBT	F&S	III	-	LH
CO1, CO2, CO3, CO4, CO5,	Describe Etiology, Pathology, Clinical Features and Management of Benign Paroxysmal Positional Vertigo (BPPV)	CC	DK	KH	L&GD, ML,FC, L&PPT ,PER	M-POS,DO AP,CL-PR,QZ ,T-OBT	F&S	III	-	NLHT54.1

CO6										
CO2, CO3, CO4, CO5, CO7	Present an appropriate history in a patient presenting with Bhraamara (Vertigo).	AFT-RES	DK	SH	PER,PBL,PT,TUT,D-BED	P-EXAM,DEB,PP-Practical,M-CHT,VV-Viva	F&S	III	-	NLHP54.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 54.1	Etiology, Pathology, Clinical Features and Management of Benign Paroxysmal Positional Vertigo (BPPV)	Benign Paroxysmal Positional Vertigo (BPPV) (60 mins) A) Teacher will form four study groups to discuss and share information, each for Etiology, Pathology, Clinical Features and Management of Benign Paroxysmal Positional Vertigo (BPPV). Students will be encouraged to go to the library (pre-class) and ask Librarian's help. Each group will then present in front of the entire classroom (10 mins each group) Teacher should discuss the relation between Bhraamara and BPPV. (5mins) Teacher should Brainstorm the reasons and treatment modalities. (5mins) B) Student should be able to diagnose and perform various clinical maneuvers like Epliey maneuver under the guidance of the Clinician using Roleplay. (10mins) C) Evaluate the student's performance on the basis of their presentations, quizzes, and practical demonstration, observation, assistance and performance.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 54.1	Case discussion on Bhraamara (Vertigo).	A) Teacher should teach students the proper way of case taking which starts with students introducing himself/herself to the patient. Student should then make patients comfortable and inform patient what he/she is going to do for case-taking purpose. Student should then take proper history of the patient and present a differential diagnosis of Vertigo in

		front of the class. Student should finally come to proper diagnosis and should be able to describe its Management and prognosis. OR B)Teacher should have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. OR C) Students should utilize advanced simulation technology to create realistic patient scenarios. Teacher should engage students with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills. OR Teacher can use standardized patients(actors or fellow students)to role-play patients D) Students can be recommended apps like Geekymedics that offer virtual practice and quizzes on history-taking skills. E) Students should be able to demonstrate different Tests for Equilibrium. F) The students must be assessed based on their anatomical knowledge, clinical findings, and understanding of the underlying pathology and its management.

Topic 55 Agantuja Shalya in Karna (LH :0 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5, CO7	Present a case with Agantuja Shalya in Karna (Foreign Body in Ear) and its management.	AFT-RES	DK	SH	PBL,DIS,CD,D-M,TBL	DOPS,P-EXAM,P-CASE,DOPS,P-PRF	F&S	III	-	NLHP55.1
CO2, CO5	Describe Types, Clinical features and method of removal of Agantuja Shalya (Foreign Body) in Ear.	CC	DK	KH	TUT,L&PPT , PT,L_VC,TBL	P-CASE,CL-PR	F&S	III	-	NLHT55.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 55.1	Techniques for removal of Agantuja Shalya (Foreign Body) from Ear..	Foreign Body in Ear (60 mins) Teacher should teach students different types of Foreign Bodies in ear. (10 mins) Teacher can show various Videos related to various techniques related to the removal of Foreign Bodies (10 mins) Teacher should demonstrate proper technique of removal of Foreign Body to students. (15 mins) Students will be divided into four groups and different foreign bodies like hygroscopic, non-hygroscopic, living and non-living will be allotted to them. Students will be given 5 minutes to prepare and will be directed to present their findings in front of the entire class (5 minutes for each group) Assessment of students will be done on presentation.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 55.1	Case discussion on Agantuja Shalya in Karna (Foreign Body in Ear).	A)Teacher should present a clinical case of Agantuja Shalya in Karna (Foreign Body in Ear). and have students work in groups to gather history, discuss differential diagnoses, and plan management.. Teacher should have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. Student should be able to elicit differences between living/non-living, Hygroscopic/ Non Hygroscopic foreign bodies and ways to deal with them. OR B) Teacher can utilize advanced simulation technology to create realistic patient scenarios. Helping them practice history-taking and clinical reasoning skills. C) Teacher can break students into small groups for more focused practice and individualized feedback. D) Teacher should walk students through the removal procedure step-by-step, explaining the purpose and technique of each step.

		E)Teacher should teach students about post-operative care, including monitoring for complications and managing patient recovery. F) Students can be assessed by DOPS.

Topic 56 Nasarsha (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO5	Describe types, etiology, clinical features, differential diagnosis, investigations, and medical treatment of Nasarsha (Nasal Polyps).	CC	MK	KH	TUT,BL ,L&PPT	T-OBT,VV -Viva,CL-PR,QZ	F&S	III	-	LH
CO5	Expound surgical treatment of Nasal Polyps. (FESS surgery-indications, contraindications, type of anesthesia, major surgical steps, post-operative care, complications and their management in brief)	CC	DK	KH	L_VC, ML	CHK,VV-Viva,QZ	F&S	III	-	NLHT56.1
CO3, CO4, CO7	Present an appropriate history in a patient presenting with Nasa-avarodha.	AFT-RES	MK	KH	CD,PBL ,RP	Mini-CEX, P-VIVA,P-EXAM,OS PE,OSCE	F&S	III	-	NLHP56.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 56.1	Surgical treatment of Nasarsha (Nasal Polyps).	The teacher may- A) Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures. (35 min.) OR A) Show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. (35 min.) Provide students with procedural checklists to help them remember the steps and ensure nothing is

		missed. (05 min.) B) Encourage students to ask questions and discuss the procedure as it unfolds. (05 min.) C) The teacher should Include scenarios where complications arise and teach students how to manage these situations. D) Stress the importance of patient safety, aseptic techniques, and surgical hygiene. E) Discuss ethical issues related to surgery, including informed consent, patient confidentiality, and decision-making. F) Describe when to seek an expert opinion, and when to refer for surgery. G) Provide access to reputable online resources and journals for further reading and research. H) Use quizzes, and open-book texts to evaluate students' understanding and skills. (10 min.) I) Provide constructive feedback on their performance, highlighting areas of improvement and excellence. (03-05 min.)
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 56.1	Evaluation of Nasa-avarodha. Evaluation of Nasarsha (Nasal polyp).	Evaluation of Nasa-avarodha-(50 min.) A)Present a clinical case of nasal obstruction and have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. OR B) Use standardized patients(actors or fellow students)to role-play patients with nasal obstruction. C) Break students into small groups for more focused practice and individualized feedback. D) Recommend apps like Geekymedics that offer virtual practice and quizzes on history-taking skills. E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. F) To assess the performance, use Mini-CEX (Mini Clinical Evaluation Excercise).

- Observe a Student’s interaction with a patient in a real-world clinical setting.
- Rate the performance in areas like history taking, physical examination, and counseling skills.

- The student receives immediate feedback from the teacher.

OR
Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. (10 min.)
OR
G)Encourage students to assess their own performance and identify areas for improvement.
Surgical and/or para surgical procedures for Nasarsha (50 min.):-
1. Introduction (5 minutes)- Explain the importance of understanding nasal polyp surgery and its impact on patient care.
2. Overview of Nasal Polyps (10 minutes) - Definition and Symptoms, Diagnosis -the diagnostic tools and methods used to identify nasal polyps.
3. Surgical Procedure (20 minutes)
- Preoperative Preparation (5 minutes): Describe the steps taken before surgery, including patient preparation and anesthesia.
- Surgical Technique (10 minutes): Explain the surgical technique, including the use of endoscopes, micro-debriders, and other instruments.
- Postoperative Care (5 minutes): Discuss the immediate postoperative care, including monitoring and managing potential complications.
4. Interactive Demonstration (10 minutes)
- Live Demonstration or Video (5 minutes): Show a live demonstration or a video of the surgical procedure.
- Hands-On Practice (5 minutes): Allow students to practice on models or simulators, if available.
5. Q&A and Discussion (5 minutes)
- Q&A Session (3 minutes): Allow students to ask questions and clarify any doubts.

		- Discussion (2 minutes): Summarize key points and encourage students to share their thoughts and experiences. 6. To assess, use OSCE covering steps of procedures, focusing on evaluating student's understanding of anatomy, surgical techniques, decision-making, patient management, and appropriate response to complications.

Topic 57 Nasagata Raktasrava (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Enlist the causes of Nasagata Raraktasrava.Describe Hetus, Samprapti, Lakshanas and Chikitsa of Urdhwaga (Nasagata) Raktapitta.Describe Etiology, Types, Clinical Features, Differential Diagnosis, and Investigations of Epistaxis.	CC	MK	KH	L&PPT	T-OBT,S-LAQ,VV-Viva	F&S	III	-	LH
CO5	Describe Management of Nasagata Raktasrava (Epistaxis).	CC	MK	KH	L_VC,D-M,RP	P-MOD,VV-Viva,T-OBT	F&S	III	-	NLHT57.1
CO3, CO5, CO6	Present cases with Nasagata Raktasrava.Summarise the steps involved in the Atyayika Chikitsa in Nasagata Raktasrava (Anterior epistaxis).	AFT-RES	MK	SH	D-M,D-BED,PBL	360D,P-VIVA,OSCE	F&S	III	-	NLHP57.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 57.1	Management of Nasagata Raktasrava (Epistaxis).	The student will learn management, including basic first aid, through interaction and role play. (30 min.) (A)The students will be divided into four groups. Each group will be given a topic as - a) Ayurvediya management,b) Basic first aid. c) Anterior nasal packing. d) Posterior nasal packing. Assign roles to students, such as the patient, the primary care provider, a nurse, and an observer. Rotate roles to ensure each student gets to practice different aspects of management.

		Give clear instructions and guidelines for the role-play scenarios, including the symptoms and history of the patient with epistaxis. Role Play Scenarios: Scenario 1: Initial Assessment and First Aid Scenario 2: Persistent Bleeding and Nasal Packing Scenario 3: Post-Procedure Care and Follow-Up Encourage students to act out their roles as realistically as possible, using appropriate medical terminology and patient interactions. Allow students to ask questions and discuss their actions during the role play. Group Discussion- (20 min.)After each scenario, conduct a debriefing session where students can discuss their experiences, challenges, and what they learned. Provide constructive feedback on their performance. Encourage students to reflect on their own performance and identify areas for improvement. (B) Use video demonstrations of epistaxis management to complement role-playing and provide visual aids for students. (C) Use open book test to assess. OR ask students to demonstrate on model to evaluate the understanding of students in the following manner:- ◦ Observe a Student’s interaction with a virtual patient in the form of model. ◦ Rate the performance in areas like physical examination, counseling skills, and procedural skills. ◦ The student receives immediate feedback from the teacher.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 57.1	Evaluation of Nasagata raktasrava (Anterior epistaxis).	A)Present a clinical case of Nasagata Raktasrava and have students work in groups to gather history, discuss differential diagnoses, and plan management. Have students shadow experienced clinicians during patient history taking to observe best practices

		and techniques and facilitate post-shadowing discussions. Allow them to observe the correct technique of emergency management of anterior epistaxis including anterior nasal packing. Allow students to practice the procedure on simulation models or cadavers under supervision. Provide access to instructional videos for further learning. Understand the referral indications and procedure. OR B) Utilise advanced simulation technology to create realistic patient scenarios. Engage students with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills. C) Break students into small groups for more focused practice and individualized feedback. D) Recommend apps like Geekymedics and Wikimeds that offer virtual practice and quizzes on history-taking skills. E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. F) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. • OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking. The assessor should use checklists to evaluate students' performance in a reliable and consistent way. OR G) 360-degree assessment can be used for evaluating, it includes responses from assessor and peers, obtained through standard checklists, throughout the process of case taking. The format can be modified from:- https://abpn.org/wp-content/uploads/2024/04/ABPN-360-Degree-Evaluation-Feedback-Form.pdf

Topic 58 Nasarbuda (LH :1 NLHT: 1 NLHP: 2)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO5	Describe Lakshanas and Chikitsa of Nasarbuda.Describe Etilogical classification and Clinical Features of Tumors of the nose and paranasal sinuses. (Rhinophyma and Squamous cell Ca)	CC	DK	KH	L,L&PPT	VV-Viva,QZ ,CL-PR,T-OBT	F&S	III	-	LH
CO2, CO5	Describe investigations and treatment for Nasarbuda- Tumors of nose and paranasal sinuses. (Rhinophyma and Squamous cell Ca).	CC	DK	KH	FC,DIS, PER	M-POS,CL-PR	F&S	III	-	NLHT58.1
CO3, CO4, CO7	Present an appropriate history in a patient presenting with Gandhajnana Vikruthi (Anosmia, Hyposmia, Parosmia).	AFT-RES	MK	KH	RP,D-BED,PBL	OSCE,VV-Viva,Mini-CEX	F&S	III	-	NLHP58.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 58.1	Nasarbuda- Tumors of nose and paranasal sinuses.	(A) Teacher will form four study groups to discuss and share information, each for investigations and treatment of Rhinophyma and investigations and treatment of Squamous cell Ca. Encourage students to discuss with peers, subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading and taking notes, review each other's notes and findings to ensure accuracy and comprehensiveness. Let them present in classrrom. (10- 12 min.for each group) Make them specify indications and procedure for referrral. OR (A)Use the method of Flipped Classroom.The students will be given a link to a PowerPoint presentation on Nasarbuda.The presentation on the topic should be prepared and uploaded on a website created for the students or free cross -platform messaging services like Whatsapp or Telegram or google clasroom.They should be given 1 week time before the scheduled FCR for this topic. Let them present in classrrom. (10- 12 min.for each group).

		At the end of session, summarize what they have learned and plan what to do next. (10 min.) (B) Evaluate the student's performance during class presentation or asking them to make posters. During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions; Encourage students to reflect on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong. It is preferable to provide a self-evaluation quiz.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 58.1	Evaluation of Gandhajnana Vikruthi (Anosmia, Hyposmia, Parosmia).	A)Present a clinical case of Gandhajnana Vikruthi and have students work in groups (4 to 6 students in each group) to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. OR B) Use standardized patients(actors or fellow students)to role-play patients with Gandhajnana Vikruthi. C) Break students into small groups for more focused practice and individualized feedback. D) Recommend apps like Geekymedics and Wikimeds that offer virtual practice and quizzes on history-taking skills. E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. F) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. • OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination. The assessor should use

checklists to evaluate students' performance in a reliable and consistent way.

- Communication skills to be assessed by Kalamazoo essential elements communication checklist.

OR
F) Use Mini-CEX.

- Observe a Student's interaction with a patient in a real-world clinical setting.
- Rate the performance in areas like history taking, physical examination, and counseling skills.

- The student receives immediate feedback from the teacher.

G) Encourage students to assess their own performance and identify areas for improvement.

Topic 59 Agantuja Shalya in Nasa (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe aetiology and types ,Clinical Features, Common locations ,Complications, Radiological investigations and Treatment for Foreign Body in nose.	CC	MK	KH	L,L&PPT	P-POS,QZ ,T-OBT	F&S	III	-	LH
CO3, CO5, CO7	Describe the etiology and types of Agantuja Shalya (Foreign Body) in Nasa (nose), and their Clinical Features, Common locations and complications, investigations, and treatment.	CC	MK	KH	TUT,X-Ray,CD ,SIM	P-EXAM,PP-Practical, P-VIVA	F&S	III	-	NLHP59.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 59.1	Case discussion on Agantuja Shalya in Nasa(nose).	To examine the foreign bodies in the nose and their removal, in Yogya Lab or in the OPD under supervision. (A)Present a real-life clinical scenario of the nasal foreign body to the students; or use a model in Yogya lab. Students discuss the problem in small groups, identifying what they know and what they need to learn. Encourage students to identify Foreign bodies in X-rays. Walk students through the removal procedure step-by-step, explaining the purpose and technique. Foster an environment where students feel comfortable asking questions and seeking clarification. Teach students about post-procedure care, including monitoring for complications and managing patient recovery. Record procedure(with patient consent) for educational purposes. Reviewing these videos can help students learn and improve. Provide continuous feedback to students on their performance, encouraging reflection and improvement. OR B) Use a low-tech simulator model like a cardboard box or SOSO-NOSO simulator. Conduct a debriefing session to discuss challenges and areas for improvement. C)Use quizzers or 360 d direct observations to assess.

Topic 60 Nasa-abhighata, Nasasandhana (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO5	Narrate Etiology, Types, Clinical Features, Complications, Investigations, and Treatment of Nasal Trauma including Fracture Nasal Bone.	CAP	MK	KH	L,L&PPT	P-VIVA,T-CS	F&S	III	H-SH	LH

CO5, CO6	Summarise the steps involved in Nasasandhana Vidhi as explained by Sushruta.	CC	MK	KH	SIM,TUT,D-M	CHK,P-EXAM,M-CHT,DOPS,DOPS	F&S	III	-	NLHP60.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 60.1	Details in Nasasandhana Vidhi.	A) Observe the Nasasandhana Vidhi on models or patients. To do the Nasasandhana Vidhi on models use simple materials like Foam, Rubber or silicon models. Define clear objectives of the procedure. Break down the surgical procedure into manageable smaller steps. B) Record videos and play it to revise. C) Emphasize ethical and professional considerations. D) To assess, use OSCE covering steps of procedures, focusing on evaluating student's understanding of anatomy, surgical techniques, decision-making, patient management, and appropriate response to complications.

Topic 61 Talugata Roga (LH :2 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe the Aetiology, Clinical features, and treatment of Galashundika, Tundikeri, Kacchapa (Tumours of the palate), Uvulitis, and Gilayushotha (Tonsillitis).	CC	DK	KH	L&PPT,L	CL-PR,QZ,COM,M-POS	F&S	III	-	LH
CO2, CO5	Describe the Clinical features of Talu-Arbuda.Describe the Clinical Features and Treatment of Talushosha and Talupaaka.	CC	DK	KH	DIS,L&PPT,PL	QZ ,M-POS,PRN	F&S	III	-	NLHT61.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 61.1	Discussion on Talu-Arbuda, Talushosha, Talupaka.	1. Pre-Class Activity (Preparation) – (Before the Session) • Students are provided with reading materials or video links on: ◦ Arbuda (Tumors) – Types, characteristics, clinical features. ◦ Talushosha & Talupaaka – Definitions, pathophysiology, symptoms, Ayurvedic and contemporary management. • Students review the materials at home and prepare notes. 2. In-Class Activity – 55 Minutes A) Group-Based Learning (20 min) • Divide students into 3 groups to discuss: 1. Arbuda – Clinical features, types (Vataja, Pittaja, Kaphaja, Mamsaja, etc.), differential diagnosis. 2. Talushosha – Symptoms, causes, risk factors, correlation with modern conditions (Palatal atrophy, Sjögren's syndrome). 3. Talupaaka – Clinical features, inflammation process, management strategies. • Each group presents their findings (5 min per group). • Teacher moderates, corrects misconceptions, and highlights key points. B) Case-Based Discussion (15 min)

		• Teacher presents clinical case scenarios: ◦ A patient with a hard, immobile swelling (Arbuda) – Students analyze possible diagnosis & discuss management. ◦ A patient with palatal dryness & ulceration (Talushosha & Talupaaka) – Students suggest Ayurvedic and contemporary treatment approaches. C) Concept Reinforcement (10 min) • Comparative discussion of Ayurveda and modern medical perspectives. • Quick Quiz – Rapid-fire Q&A to assess understanding. 3. Post-Class Activity (Journal Entry & Reflection) – (After the Session) • Students document key takeaways in their journal/clinical record, including: ◦ Clinical features & treatment approaches discussed. ◦ Case discussions & differential diagnoses. ◦ Personal reflections on how Ayurveda can address these conditions. • Faculty reviews and provides feedback.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 62 Kantharoga (LH :4 NLHT: 2 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO4	Define Kantharoga and explain the Etiology, Clinical features and treatment of Vataja Rohini, Pittaja Rohini, Kaphaja Rohini, Sannipataja Rohini, and Raktaja Rohini.	CC	DK	KH	L&PPT ,L	OSCE,VV-Viva,S-LAQ	F&S	III	-	LH
CO2,	Describe Etiology, Clinical Features and Treatments of	CC	DK	KH	L&PPT	OSCE,PRN	F&S	III	-	LH

CO5	Ekavrunda, Vrunda, Gilayu, Galavidradhi (peritonsillar abscess), Mamsatana and Vidari.				,L					
CO2, CO3, CO5, CO7	Present the case of a patient presenting with Geelana-Shoola (Odynophagia), Geelana-kashta (Dysphagia), and Mukha Dourgandhya (Halitosis).	AFT-RES	DK	SH	D,L&GD,CBL	P-EXAM,P-VIVA,CBA,OSCE	F&S	III	-	NLHP62.1
CO2, CO3, CO5, CO7	Present cases of Ekavrunda, Vrunda (Pharyngitis), Gilayu, Galavidradhi, Rohini and Kanthashalooka.	AFT-RES	DK	SH	TUT,PBL,D-BED	OSCE,P-ID,CL-PR,C-VC,P-CASE	F&S	III	-	NLHP62.2
CO2, CO3, CO5, CO7	Present an appropriate history in patients presenting with Swarabheda (Hoarseness of voice) and Kantha Koojana (Stridor).	AFT-RES	DK	SH	D-BED,TBL,CBL,TUT,CD	P-RP,P-EXAM,Mini-CEX,OSCE	F&S	III	-	NLHP62.3
CO2, CO3, CO5	Explain Parotitis.	CC	NK	KH	PBL,L&GD	CL-PR,QZ,VV-Viva	F&S	III	-	NLHT62.1
CO2, CO5	Explain the etiology, clinical features, and treatment of Galavidradhi. (Peritonsillar abscess, Paratonsillar abscess, Para and Retropharyngeal abscess)	CC	DK	KH	L&GD,FC	P-EXAM,QZ,PRN	F	III	-	NLHT62.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 62.1	Etiology, clinical features and treatment of Parotitis.	1. Introduction (5 min) • Briefly introduce Parotitis as inflammation of the parotid gland and its classification

		2. Case-Based Group Discussion (25 min) Divide students into 3 groups, each discussing a different clinical presentation of parotitis: Each group presents their discussion (3-5 min each), while faculty guides clinical reasoning. 3. Concept Mapping Activity (15 min) • Students create a visual concept map linking causes, symptoms, diagnosis, and management of parotitis. • Faculty adds Ayurvedic correlations, 4. Summary & Documentation (10 min) • Summarize key learning points and integrate Ayurvedic vs. modern approaches. Students document findings in a clinical journal, including: • Differential diagnosis • Modern & Ayurvedic treatment plans • Preventive aspects (oral hygiene, hydration, immunity-boosting drugs like Guduchi, Yashtimadhu, etc.)
NLHT 62.2	Group Discussion on Galavidradhi.	A) Pre-Class Activities (Self-Learning Phase) – 1 Week Before • Provide Learning Materials: ◦ Share a PowerPoint presentation on Galavidradhi (Google Classroom/WhatsApp/Telegram). ◦ Recommend textbook readings for deeper understanding.

- Encourage self-study before the session.
- Preparation for Discussion:
  - Students form small groups and discuss the topic among themselves.
  - Clarification of doubts via messaging platforms before the class.

B) In-Class Activities (55 Minutes Flipped Classroom Session)
1. Introduction & Quiz (10 min)

- Quick recap of Galavidradhi (Peritonsillar, Paratonsillar, Para- & Retropharyngeal Abscess).
- Conduct a short quiz (MCQs or case-based) to assess prior learning.

2. Student Presentations (45 min)
Each group presents for 15 minutes:

- Group 1: Peritonsillar abscess (15 min)
- Group 2: Paratonsillar abscess (15 min)
- Group 3: Para- & Retropharyngeal abscess (15 min)

During each presentation:

- Encourage peer discussion and critical thinking.
- Facilitate Q&A to clarify concepts.

C) Assessment & Feedback

- Evaluate students’ performance based on:

		◦ Presentation skills (clarity, organization, engagement). ◦ Depth of knowledge (clinical features, diagnosis, treatment). ◦ Response to Q&A and quiz results. • Provide constructive feedback for improvement. •
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 62.1	Cases of Geelana-Shoola (Odynophagia), Geelana-Kashta (Dysphagia), and Mukha Dourgandhya (Hallitosis).	1. Introduction (5 min) • Brief explanation of the conditions: ◦ Geelana-Shoola (Odynophagia) – Pain while swallowing. ◦ Geelana-Kashta (Dysphagia) – Difficulty in swallowing. ◦ Mukha Dourgandhya (Halitosis) – Bad breath, its causes & impact. • Clinical relevance – Correlation with modern conditions (Tonsillitis, GERD, Oral infections, etc.). 2. Case-Based Group Activity (30 min) • Divide students into 3 groups, each assigned one condition. • Each group is given a case scenario to discuss and analyze: ◦ Case 1 (Odynophagia): A patient with throat pain while swallowing, fever, and inflamed tonsils. ◦ Case 2 (Dysphagia): A patient with difficulty swallowing, weight loss, and long-term acid reflux history. ◦ Case 3 (Halitosis): A patient with persistent bad breath despite regular oral hygiene. • Tasks for each group: 1. Identify probable causes (Ayurvedic & modern perspectives).

		2. Discuss pathophysiology and Samprapti. 3. Suggest diagnostic approaches and treatment options (Ayurvedic & contemporary). 3. Practical Demonstration (15 min) • Examination techniques: ◦ Inspection of oral cavity & throat using a torch and tongue depressor. ◦ Palpation of lymph nodes for signs of infection. ◦ Assessment of swallowing difficulty using simple bedside tests. • Discussion on treatment strategies: ◦ Ayurvedic Kavala, Gandusha, and Pratisarana. ◦ Importance of dietary & lifestyle modifications. ◦ Herbal formulations & modern pharmacology. 4. Recording in Clinical Journal (5 min) • Each student documents key learnings in their clinical record, including: ◦ Summary of cases discussed. ◦ Examination findings & differential diagnosis. ◦ Ayurvedic & modern treatment approaches. ◦ Reflections on clinical relevance and learning experience. • Faculty reviews & provides feedback.
NLHP 62.2	Case-based discussion on Kantharoga.	1. Introduction (5 min) • Brief overview of the conditions: ◦ Ekavrunda & Vrunda (Pharyngitis) – Inflammation of the pharynx, causes, and symptoms. ◦ Gilayu – Swelling of the tonsils, correlation with tonsillitis.

			◦ Galavidradhi – Deep-seated abscess in the throat region, correlation with retropharyngeal abscess. ◦ Rohini – Ulcerative lesions in the throat, possible correlation with diphtheria or severe aphthous ulcers. ◦ Kanthashalooka – Foreign body sensation in the throat, possible correlations with GERD or globus pharyngeus. 2. Case-Based Group Activity (30 min) • Divide students into 3 groups, each assigned two conditions. • Provide clinical case scenarios for discussion: ◦ Case 1 (Pharyngitis & Gilayu): A patient presents with sore throat, fever, and difficulty swallowing. ◦ Case 2 (Galavidradhi & Rohini): A patient with throat swelling, pus discharge, and severe difficulty in speaking/swallowing. ◦ Case 3 (Kanthashalooka & Differential Diagnoses): A patient complains of a persistent foreign body sensation in the throat. • Tasks for each group: 1. Discuss possible etiologies (Ayurvedic & modern). 2. Identify pathophysiology & Samprapti. 3. Suggest examination methods and treatment approaches (Ayurvedic & contemporary). 3. Clinical Examination & Demonstration (15 min) • Practical demonstration of examination techniques: ◦ Inspection of the throat, tonsils, and oral cavity using a torch and tongue depressor. ◦ Palpation of cervical lymph nodes for signs of infection. ◦ Demonstration of simple bedside swallowing tests. • Discussion on treatment approaches:

		◦ Ayurvedic Kavala, Gandusha, Pratisarana, and Lepa. ◦ Importance of diet & lifestyle modifications. ◦ Use of Ayurvedic and modern medications for infection and inflammation. 4. Recording in Clinical Journal (5 min) • Students document the session in their clinical record, including: ◦ Summary of cases discussed. ◦ Clinical features & differential diagnosis. ◦ Examination findings & practical learnings. ◦ Ayurvedic & modern treatment approaches. ◦ Reflections on clinical relevance and observations. • Faculty reviews and provides feedback.
NLHP 62.3	Case Discussion on Swarabheda and Kantha Koojana.	1. Introduction (5 min) • Brief overview of Swarabheda (Hoarseness) and Kantha Koojana (Stridor): ◦ Swarabheda: Altered voice quality due to laryngeal pathology (e.g., laryngitis, vocal cord nodules, neurological causes). ◦ Kantha Koojana (Stridor): High-pitched breathing sound due to airway obstruction (e.g., laryngeal edema, foreign body, tumors). • Importance of history-taking in differentiating benign vs. serious conditions. 2. Case-Based Role-Play Activity (20 min) Students are divided into pairs (Doctor & Patient) and given case scenarios: • Case 1: Hoarseness due to Chronic Laryngitis ◦ Patient: A teacher with a history of voice strain, dry cough, and mild throat pain for 2

weeks.
    - Doctor: Ask relevant questions about duration, voice usage, and associated symptoms.
- Case 2: Hoarseness due to Vocal Cord Nodules
    - Patient: A singer with progressive hoarseness over months.
    - Doctor: Ask about professional voice use, lifestyle factors, and past medical history.
- Case 3: Acute Stridor Due to Laryngeal Edema
    - Patient: A child with sudden breathing difficulty and noisy breathing.
    - Doctor: Ask about recent infections, allergies, or possible foreign body aspiration.
- Case 4: Chronic Stridor Due to Laryngeal Tumor
    - Patient: A middle-aged smoker with progressive stridor and weight loss.
    - Doctor: Focus on risk factors, duration, and associated symptoms.

Each pair performs history-taking in front of the class while others observe and provide feedback.
3. Group Discussion & Analysis (20 min)
Faculty guides students to identify key aspects of history-taking:

- Onset & duration (Acute vs. chronic)
- Voice changes (Hoarseness, breathy, strained)
- Associated symptoms (Cough, pain, dysphagia, fever, weight loss)
- Risk factors (Smoking, allergies, vocal strain)
- History of infections, trauma, or systemic diseases
- Comparison of Ayurvedic and modern perspectives on causation and diagnosis.

4. Clinical Journal Documentation (10 min)

- Students record their findings from the role-play cases, including:

		◦ Chief complaints and history format. ◦ Differential diagnosis based on history clues. ◦ Ayurvedic Samprapti of Swarabheda and Kantha Koojana. ◦ Treatment approach – Ayurvedic & contemporary. • Faculty reviews entries and gives constructive feedback.

Topic 63 Dravyas used in Karna Nasa Mukha Roga Chikitsa-2 (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Describe the Use of the following drugs in Shiro Karna Nasa Mukha Roga:- • Laxmivilasa Rasa • Shirashuladi Vajra Rasa. • Tribhuvanakirti Rasa. • Guda Shunthi Nasyayoga. • Rasa Manikya. • Kshaara Taila • Discuss Research publications on recently proven drugs used in Shiro Karna Nasa Mukha Roga.	CC	DK	KH	L&PPT ,L,REC	P-EXAM, M-POS,VV -Viva,S-LAQ,COM	F&S	III	-	LH
CO5	Discuss Samanya Yogas used in Shiro Karna Nasa Mukha Roga.	CC	DK	KH	REC,L &GD,B L,PL	QZ ,P-VIV A,COM	F&S	III	-	NLHT63.1
CO5, CO7	Discuss prescription of Samanya Yogas used in Shiro Karna Nasa Mukha Roga.	CC	DK	KH	DIS	P-EXAM,P -CASE,SP, VV-Viva	F&S	III	V-RS,V-RS	NLHP63.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 63.1	Discussion on Samanya Yogas used in Shiro Karna Nasa Mukha Roga.	A) Pre-Class Activities (Self-Learning & Group Collaboration) • Sloka-Based Study: ◦ Students will be provided with relevant slokas from classical texts covering: ▪ Ingredients ▪ Pharmacological actions ▪ Indications and contraindications ◦ Each group will analyze one or more slokas related to their assigned yoga. • Familiarization with Easily Available Ingredients: ◦ Students will identify and collect samples of commonly available ingredients (e.g., Haritaki, Bibhitaki, Amalaki, Bilwa, Khadira, Vyosha, Tila Taila, etc.). ◦ They will observe, smell, and describe the characteristics of these ingredients. • Group Discussion & Compilation: ◦ Students work in groups (5–8 members) to: ▪ Translate and interpret the slokas. ▪ Extract therapeutic relevance in Shalakyatantra. ▪ Compare with contemporary formulations if applicable. ◦ Findings are compiled in notebooks or digital documents for in-class discussion. B) In-Class Activities (55 Minutes - Active Learning Session) 1. Group Presentation of Yogas (15 min) • Each group presents the sloka meaning, ingredient actions, and clinical relevance. • Faculty moderates and provides additional insights.

2. Ingredient Demonstration & Discussion (10 min)

- Groups will display and describe the ingredients they collected.
- Faculty will highlight key identification features and therapeutic properties.

3. Clinical Case Discussion (15 min)

- Present hypothetical or real cases where these yogas are applicable.
- Groups discuss dosage, administration method, and expected outcomes.

4. Critical Analysis & Debate (10 min)

- Debate on choosing specific yogas for similar conditions.
- Comparison with other Ayurvedic or modern interventions.

5. Summary & Takeaways (5 min)

- Teacher consolidates key points and assigns follow-up reading.

C) Evaluation of Student Compilation
Assessment Criteria

1. Interpretation Accuracy:
    - Correct translation and explanation of slokas.
2. Clinical Correlation:
    - Application of the yoga in Shalakyatantra.

		3. Ingredient Familiarization: ◦ Proper identification and description of easily available ingredients. 4. Completeness & Organization: ◦ Well-structured and comprehensive presentation. 5. Presentation & Engagement: ◦ Clarity in explaining concepts and interacting with peers.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 63.1	Common Yogas used in Shiro Karna Nasa Mukha Roga- their usage, indications, outcomes.	1. Ingredient Familiarization & Pharmacological Understanding (20 min) • Discuss the key ingredients of each Yoga. • Explain their mechanism of action in diseases of Shalakyatantra. • Compare their formulations with contemporary pharmacology where relevant. • Highlight any known pharmacological studies supporting their efficacy. 2. Prescription Analysis & Clinical Application (15 min) • Provide sample prescriptions containing these Yogas. • Students analyze the prescriptions, identify the ingredients, and justify their therapeutic use. • Discuss variations in dosage, anupana, administration route, and contraindications. 3. Group Discussion & Case-Based Learning (15 min) • Present real or hypothetical cases where these Yogas are used. • Students discuss and justify their choice of Yoga for each case. • Consider patient-specific factors (age, Dosha, severity, comorbidities) while selecting

		formulations. 4. Summary & Q&A Session (5 min) • Recap the key learnings of the session. • Allow students to clarify doubts and ask relevant questions.

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
1.1	CO1	Discussion on Netra Kriya Shareera in its Applied aspect.
1.2	CO1,CO2	Classification and Saama Nirama Lakshana of Netraroga.
2.1	CO5	Details of Aschyotana and Researches studies on Aschyotana, Seka, Pindi and Vidalaka.
2.2	CO5	Review of Research studies on Tarpana and Putapaka.
2.3	CO5	Discussion on Research studies on Anjana.
3.1	CO2,CO5	Indications and contraindications of Poorvakarma and Vamana, Virechana, Basti, Nasya,Raktamokshana In Netraroga.
4.1	CO5	Sanjnaharana in Netra (Anesthesia in Ophthalmology) -
6.1	CO2	Differential Diagnosis and causes of Epiphora and Hyperlacrimation.
8.1	CO3,CO5	Diagnostic Approaches to Eyelid Malposition: Entropion and Ectropion.
11.1	CO2,CO5	Discussion on Bhedana in Netraroga.
12.1	CO2,CO5	Procedure of Lekhana in Netraroga.
15.1	CO2,CO5	Comprehnsive discussion on Chhedana in Netraroga.
16.1	CO5	Discussion on Agnikarma and Ksharakarma in Netraroga.
19.1	CO3	Comprehension on uses of Dyes in Ophthalmology.
19.2	CO5	Discussion on Anti inflammatory agents and steroids used in ophthalmology.
19.3	CO5	Comprehension on Antibiotics ,antifungal agents, and antiviral agents used in ophthalmology.

19.4	CO2,CO5	Presentation on Lubricating agents and Artificial tears.
20.1	CO5	Eye banking- its organization, relevance and purpose.
20.2	CO5	Discussion on Eye donation.
20.3	CO5	Discussion on Keratoplasty.
20.4	CO2,CO5	Objectives, Organizational structure and New initiatives under National programme for Control of Blindness and Visual Impairment.
21.1	CO2,CO5	Management of Conjunctivitis.
22.1	CO2,CO5	Nidana and Chikitsa of Pillaroga.
23.1	CO5	Surgical Procedures for Glaucoma.
24.1	CO5	Kaphaja Linganasha Shastrakarma.
26.1	CO2,CO5	Surgical management of Senile Cataract and current research studies on Kaphaja Linganasha/Timira (Cataract).
28.1	CO5	Mydriatics and Cycloplegic agents.
29.1	CO5	Netra Swasthyahitakara Dinacharya.
29.2	CO5	Netra Swasthyahitakara Aahara Evam Vihara.
29.3	CO5	Jeevanasatwa-kshayajanya Netraroga (Vitamin deficiency disorders)(Malnutritional Eye disorders).
30.1	CO2,CO5	Poster presentation on ICHD-3 Classification. Compiled presentation on Common Yogas used in Shiroroga.
31.1	CO1	Discussion on Shiraso Uttamangatwam.
31.2	CO3,CO5	Etiology, Clinical Features,and Management of Ardhabhedaka, Anantavata and

		Suryavarta.
32.1	CO1	Presentation on Anatomy of Ear.
32.2	CO1,CO2,CO4,CO5	Samanya Nidana,Samanya Samprapti,Sadhya-asadhyata of Karna Rogas.
34.1	CO3,CO5	Discussion on Nasya. Current research studies on Nasya and Dhumapana in diseases in Shalakyatantra.
35.1	CO2,CO5	Discussion on Puyarakta, Nasapaka, Nasashopha.
36.1	CO1	Elaboration on Mukha- Shareera.
39.1	CO2,CO5	Brainstorming session on National Oral Health Programme and Dantarakshavidhi.
41.1	CO1	Discussion on Shareer Kriya of Karna and Shravanendriya, and Physiology of Equilibrium.
42.1	CO7	Group discussion on National Programme for Prevention and Control of Deafness and Noise Pollution.
43.1	CO2,CO3,CO5	Presentation on Putikarna.
43.2	CO1,CO2,CO3,CO4, CO5	Surgical steps in Tympanoplasty.
45.1	CO2,CO5	Diagnosis and Treatment of Rhinitis.
45.2	CO2,CO5	Diagnosis and treatment of Atrophic and Allergic Rhinitis; Summary of Research studies on Allergic Rhinitis.
46.1	CO2,CO5	Diagnosis and treatment of Deepta, Putaka, Nasaparishosha, Bhramshathu, Nasanaha, Kshavathu.
47.1	CO5,CO6	Surgical management of Nasavamsha-kutilatwa (Deviated Nasal Septum).
48.1	CO2,CO5	Laxanas and Chikitsa of Sheetada, Upakusha, Dantaveshtaka and Dantavidradhi.

49.1	CO2,CO5	Clinical features and management of ankyloglossia and glossitis (Hairy tongue, Geographic tongue, Migratory Glossitis).
50.1	CO2,CO5	Explanation of Root Canal Treatment.
53.1	CO3,CO4,CO5	Purva-Pradhana-Pashchat Karma for Karnasandhana (Auroplasty).
54.1	CO1,CO2,CO3,CO4, CO5,CO6	Etiology, Pathology, Clinical Features and Management of Benign Paroxysmal Positional Vertigo (BPPV)
55.1	CO2,CO5	Techniques for removal of Agantuja Shalya (Foreign Body) from Ear..
56.1	CO5	Surgical treatment of Nasarsha (Nasal Polyps).
57.1	CO5	Management of Nasagata Raktasrava (Epistaxis).
58.1	CO2,CO5	Nasarbuda- Tumors of nose and paranasal sinuses.
61.1	CO2,CO5	Discussion on Talu-Arbuda, Talushosha, Talupaka.
62.1	CO2,CO3,CO5	Etiology, clinical features and treatment of Parotitis.
62.2	CO2,CO5	Group Discussion on Galavidradhi.
63.1	CO5	Discussion on Samanya Yogas used in Shiro Karna Nasa Mukha Roga.

Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Practical No*	CO No	Practical Activity details
1.1	CO3,CO7	History taking in cases of Netraroga.
1.2	CO3,CO7	Structural Examination of Netra.
1.3	CO3,CO7	Functional examination of Netra.
2.1	CO6	A) Procedures of Seka and Pindi. B) Method of taking Informed consent from patients.
2.2	CO6,CO7	Demonstration on Vidalaka and Aschyotana.
2.3	CO5	Discussion on Tarpana and Putapaka.
2.4	CO5,CO6,CO7	Procedure of Anjana.
5.1	CO3	Evaluation of Netra-sandhi and Dacryocystitis.
8.1	CO3	Examination of Periocular Structures - Bhru (Eyebrow), Pakshma (Eyelash), Pakshmavartmasandhi (Lid Margin), and Vartma (Eyelid).
8.2	CO5	Incision and curettage (I&C) in Chalazion surgery.
8.3	CO3,CO4,CO7	Cases of Eyelid Malposition: Pakshmakopa (Trichiasis, Entropion)and Ectropion; Trichiatic cilia removal by Epilation.
10.1	CO3,CO4,CO6,CO7	History Taking and Case Presentation: Assessment of Patients with Abnormal Eyelid Mobility.
10.2	CO3,CO4,CO6,CO7	History Taking and Case Presentation: Assessment of Patients with Vartma-shopha(lid edema).
11.1	CO5,CO7	Collaborative Observation of Bhedana Karma in Netraroga (Incision and Drainage/ Curettage).
12.1	CO5,CO7	Collaborative Observation of Lekhana Karma in Netraroga.

13.1	CO3,CO4	Examination of the Shuklamandala (Conjunctiva and Sclera).
13.2	CO3,CO4,CO6,CO7	Cases of Arma, Pishtaka, and growths or discolourations on Shuklamandala.
13.3	CO3,CO4,CO6,CO7	Assessment of patients with Raktaakshi (Red Eye), focusing on Arjuna (Sub-Conjunctival Hemorrhage).
14.1	CO3,CO4,CO6,CO7	Assessment of Patients with Raktaakshi (Red Eye) - Episcleritis / Scleritis: Differentiating Diffuse / Nodular Forms.
15.1	CO5	Observation of Chhedana(Excision) in Netraroga.
17.1	CO3,CO4,CO7	Evaluation of Savrana Shukra (Corneal Ulcer).
17.2	CO3,CO7	Slit lamp examination.
18.1	CO2,CO3,CO4,CO7	Evaluation of Uveitis.
18.2	CO3,CO6,CO7	Assessment of Anterior chamber.
21.1	CO3,CO4,CO7,CO8	Evaluation of Raktaakshi (Red eye) with Srava (Discharge).
22.1	CO3,CO4,CO7,CO8	Evaluation of Shushkakshi (Dry eye evaluation).
23.1	CO3,CO7	Discussion on Tonometry and Perimetry.
24.1	CO3,CO7	Fundus evaluation (ophthalmoscopy).
24.2	CO3,CO4,CO6,CO7	History taking in a patient with Timira (Dimness of vision).
25.1	CO5,CO6,CO7,CO8	Evaluation of Agantuja Shalya (Foreign body in eyes).
26.1	CO3,CO7	Examination of Cataract.
27.1	CO2,CO5,CO7	Case discussion on Madhumehajanya Drishtiroga (Diabetic Retinopathy).
29.1	CO5,CO6	Use of Samanya Chakshushya Dravyas in Eye diseases..
29.2	CO5	Prescription of Samanya Chakshushya Yoga.

29.3	CO4,CO7	Evaluation of Naktandhya (night blindness).
30.1	CO2,CO5,CO7	Evaluation of Shirahshoola.
30.2	CO2,CO7	Introduction of case sheet for Shiro Karna Nasa Mukha roga.
31.1	CO5,CO6,CO7	Application of Shirolepa, Shiro-abhyanga, Shiroseka, and Shirobasti.
31.2	CO2,CO3,CO7	Evaluation of Ardhavabhedaka.
32.1	CO3,CO7	Identification and use of basic Ear OPD Instruments.
32.2	CO5,CO6,CO7	Case taking in Karnaroga.
33.1	CO2,CO3,CO4,CO5, CO7	Evaluation of Karnashoola (Otalgia).
34.1	CO2,CO5,CO7	General histroy taking, Specific history taking in the cases of Nasaroga.
36.1	CO3,CO7,CO8	Oro - Dental case taking and examination.
36.2	CO3,CO7,CO8	Poorva, Pradhana and Pashchat Karma of Kavala, Gandusha and Mukhapratisarana.
40.1	CO3,CO7	Purva- Pradhana and Pashchat Karma related to the procedures of Prachchhanna and Jalaukavacharana.
40.2	CO3,CO7	Discussion on Agnikarma in Shiroroga.
42.1	CO2,CO3,CO4	Case Taking and Differential Diagnosis of Badhirya.
42.2	CO3,CO4,CO5	Tuning Fork Test (Rinne's, Weber) and their interpretation.
42.3	CO3,CO5	Audiometry and its interpretation.
42.4	CO2,CO3,CO4	Assessment of Karna Kshweda-Naada (Tinnitus).

42.5	CO5,CO6,CO7	Procedure of Karnapoorana.
42.6	CO5,CO6	Procedures of Karna Pramarjana, Karna Prakshalana, and Karna Dhoopana.
43.1	CO2,CO3,CO4,CO5	Etiology, Clinical Features and Medical Management of Karna Srava (Otorrhea).
43.2	CO2,CO3,CO4,CO5	Surgical procedures of Mastoidectomy and Myringotomy.
44.1	CO2,CO3,CO4,CO5	Assessment of Karna Kandu.
44.2	CO1,CO3,CO5,CO6	Removal of Ear Wax.
46.1	CO3,CO4,CO7	Examination of Nasa and Nasagandakutalalatasthi-kuhara (Nose and Paranasal sinuses). Evaluation of Nasa srava (Rhinorrhoea). Evaluation of Sinusitis.
51.1	CO5,CO7	Contemporary Pharmaceutical Agents Used in Karna Nasa Mukha Roga.
54.1	CO2,CO3,CO4,CO5, CO7	Case discussion on Bhraamara (Vertigo).
55.1	CO5,CO7	Case discussion on Agantuja Shalya in Karna (Foreign Body in Ear).
56.1	CO3,CO4,CO7	Evaluation of Nasa-avarodha. Evaluation of Nasarsha (Nasal polyp).
57.1	CO3,CO5,CO6	Evaluation of Nasagata raktasrava (Anterior epistaxis).
58.1	CO3,CO4,CO7	Evaluation of Gandhajnana Vikruthi (Anosmia, Hyposmia, Parosmia).
59.1	CO3,CO5,CO7	Case discussion on Agantuja Shalya in Nasa(nose).
60.1	CO5,CO6	Details in Nasasandhana Vidhi.
62.1	CO2,CO3,CO5,CO7	Cases of Geelana-Shoola (Odynophagia), Geelana-Kashta (Dysphagia), and Mukha Dourgandhya (Hallitosis).
62.2	CO2,CO3,CO5,CO7	Case-based discussion on Kantharoga.
62.3	CO2,CO3,CO5,CO7	Case Discussion on Swarabheda and Kantha Koojana.

63.1	CO5,CO7	Common Yogas used in Shiro Karna Nasa Mukha Roga- their usage, indications, outcomes.

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (200)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-SL	2	200	100	70	-	30	200	400

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	3 PA & First TT	3 PA & Second TT	3 PA	**UE****

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
******University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 4	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

Topics for Periodic Assessments

PA	PAPER ONE(topic no.)	PAPER TWO (topic no.)
PA-1	Topic 01	Topic 30,31.
PA-2	Topic 02,03,04,05.	Topic 32,33,34,35.
PA-3	Topic 06,07	Topic 36,37,38.
Term Test – 1	Entire Syllabus of Term 1 of 2 papers	
PA-4	Topic 09,10,11,12.	Topic 40,41,42.
PA-5	Topic 13,14,15,16.	Topic 43,44,45.
PA-6	Topic 17,18,19,20.	Topic 46,47,48,49,50.
Term Test 2	Entire Syllabus of Term 2 of 2 papers	
PA-7	Topic 22,23.	Topic 52,53,54,55.
PA-8	Topic 24,25,26.	Topic 56,57,58,59.
PA-9	Topic 27,28,29.	Topic 60,61,62,63.

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-SL
PAPER-I
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II.

6 F : Distribution of theory examination

Paper 1 (Netraroga (Ophthalmology))					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
1	**Shareera, Nidaana Panchaka of Netraroga.**	30	Yes	Yes	No
2	**Samanya Chikitsa and Kriyakalpa.**		Yes	Yes	Yes
3	**Panchakarma and Netraroga.**		No	Yes	No
4	**Sanjnaharana in Netraroga.**		Yes	No	No
5	**Sandhigata Roga -1**		Yes	Yes	Yes
6	**Sandhigata Roga -2**		Yes	Yes	No
7	**Sandhigata Roga -3**		Yes	Yes	No
8	**Vartmagata Roga-1**	34	Yes	Yes	No
9	**Vartmagata Roga-2**		Yes	No	No
10	**Vartmagata Roga -3**		Yes	Yes	No
11	**Bhedana Karma**		Yes	Yes	No
12	**Lekhana Karma.**		Yes	Yes	No
13	**Shuklagata Roga -1**		Yes	Yes	Yes
14	**Shuklagata Roga -2**		Yes	Yes	No
15	**Chhedana Karma.**		Yes	Yes	No
16	**Agnikarma and Ksharakarma.**		Yes	Yes	No
17	**Krishnagata Roga -1**		Yes	Yes	Yes
18	**Krishnagata Roga -2**		Yes	Yes	Yes
19	**Dravyas Used In Netrachikitsa-1**		Yes	Yes	No
20	**Eye Donation**		No	Yes	No
21	**Sarvagata Roga -1**	18	Yes	Yes	Yes
22	**Sarvagata Roga -2**		Yes	Yes	No
23	**Glaucoma**		Yes	Yes	Yes
24	**Drishtigata Roga-1**	18	Yes	Yes	Yes
25	**Nayanabhighata**		Yes	Yes	No
26	**Drishtigata Roga-2**		Yes	Yes	Yes
27	**Drishtigata Roga- 3**		Yes	Yes	No

28	**Dravyas used in Netra Chikitsa-2**		Yes	No	No
29	**Dravyas used in Netra Chikitsa-3, Swasthavritta, Kuposhanajanya Netravikara (Malnutritional Eye Disorders), Community Ophthalmology.**		Yes	Yes	No
Total Marks		**100**			

Paper 2 (Shiro-Karna-Nasa-Mukharoga (Oto-rhino-laryngology and Oro-dentistry))					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
30	**Enumeration, Nidana Panchaka and Sadhya-asadhyata of Shiroroga**	10	Yes	Yes	No
31	**Samanya Chikitsa of Shiroroga**		Yes	Yes	Yes
32	**Karna Rachana Shareera, Nidana Panchaka and Samanya Chikitsa of Karnaroga**	25	Yes	Yes	No
33	**Karnaroga 1**		Yes	Yes	Yes
34	**Nasa Shareera, Ghranendriya and Nidana Panchaka of Nasaroga**		Yes	Yes	No
35	**Pratishyaya**		Yes	Yes	Yes
36	**Mukha Shareera and Nidana Panchaka of Mukharoga**		Yes	Yes	No
37	**Oshtharoga**	10	Yes	Yes	No
38	**Sarvasara Mukharoga**		Yes	Yes	No
39	**National Oral Health Programme**		Yes	Yes	No
40	**Kapalagata Roga**	10	Yes	Yes	No
41	**Karna Kriya Shareera and Shravanendriya**		Yes	Yes	No
42	**Karna Badhirya, Karna Naada and Kshweda**		Yes	Yes	Yes
43	**Karna Srava and Putikarna**	05	Yes	Yes	No
44	**Karnakandu, Karnaguthaka, Karnapratinaha, Krumikarna, Karnavidradhi, Karnapaka.**		Yes	Yes	No
45	**Rhinitis**		Yes	Yes	No
46	**Deeptadi Nasaroga.**		Yes	Yes	No
47	**Nasavamsha-kutilatwa (Deviated Nasal Septum).**	10	Yes	Yes	Yes
48	**Dantamulagata roga**		Yes	Yes	No
49	**Jihvagata Roga**		Yes	Yes	No

50	**Krimidantaka and Dantaharsha**		Yes	Yes	Yes
51	**Dravyas used in Karna Nasa Mukha Roga Chikitsa-1**		Yes	No	No
52	**Karnarsha and Karnarbuda**	10	Yes	Yes	No
53	**Karnasandhana**		Yes	Yes	No
54	**Bhraamara (Vertigo)**		Yes	Yes	No
55	**Agantuja Shalya in Karna**	10	Yes	Yes	No
56	**Nasarsha**		Yes	Yes	Yes
57	**Nasagata Raktasrava**		Yes	Yes	Yes
58	**Nasarbuda**		Yes	Yes	No
59	**Agantuja Shalya in Nasa**	10	Yes	Yes	No
60	**Nasa-abhighata, Nasasandhana**		Yes	Yes	No
61	**Talugata Roga**		Yes	Yes	Yes
62	**Kantharoga**		Yes	Yes	Yes
63	**Dravyas used in Karna Nasa Mukha Roga Chikitsa-2**		Yes	Yes	No
Total Marks		**100**			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 100-mark question paper shall contain:
   - 20 MCQs
   - 8 SAQs
   - 4 LAQs

7. MCQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 3.
   - Questions from the Nice to Know part of syllabus shall not exceed 2.

8. SAQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 1.
   - No questions shall be drawn from the Nice to Know part of syllabus.
   - SAQs shall assess understanding, application, and analysis, rather than simple recall.

9. LAQs:
   - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
   - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
   - Number of LAQs should not exceed one per topic unless maximum marks exceed 20 for the topic.

10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

S.No	Heads	Marks
1	Long case assessment • Assess ability to gather and interpret patient information accurately. • Gauge the ability to organise the data into a coherent case presentation. • Appraise the clarity of thought process showing how student narrowed down the possibilities to formulate a differential diagnosis. • Examine the ability to develop a comprehensive management plan, including immediate treatment for acute issues and ongoing management for chronic conditions. This should cover investigations, treatment options, and any necessary referrals. • Judge communication skills and preparation to answer questions and discuss rationale for the decisions student has made.	30
2	Short case assessment (One case) A Short Case,featuring either a simulated or a real patient is used to assess a student’s ability to quickly approach a case and highlight and interpret different key clinical signs before offering a differential diagnosis. * The candidate is given approximately 8-12 mins to examine a part or anatomical area. * No history is taken. * Verbal communication is only allowed to get the patient to follow a set of instructions or if the patient's speech is being formally tested. * Following the examination the candidate must give a 3-5 minute **summary** of 1. The examination findings 2. The likely differential diagnosis based on the finding 3. The probable causes and severity of the condition 4. General discussion related to the above * A smooth and confident technique and a gentle, kind and friendly manner indicate professionalism.	10

3	**Spotters** 5 spotters of 2 marks each . Spotter 1) Any Ayurvedic drug described in Paper one. Spotter 2) Any Ayurvedic drug described in Pape two. Spotter 3) Any drug from contemporary medical science described in Papers one and two. Spotter 4) Clear picture of any of Anatomical part, pathological condition,and investigations described in paper one. Spotter 5) Clear picture of any of Anatomical part, pathological condition,and investigations described in paper two.	10
4	Skill Based Clinical Assessment	40
5	Journal or Case Record Viva Ask students to provide a concise summary of the case, including chief complaints, diagnosis, and treatment plan. Question the relevance of history, investigation findings, and clinical examination to the diagnosis. Probe the reasoning behind the chosen treatment and its expected outcomes. Present alternative scenarios and ask students how they would adapt their diagnosis or management plan. Assess the accuracy, clarity, and completeness of the journal or case record. Ask students how they would approach a similar case in a practical setting. Inquire about adherence to guidelines or protocols relevant to the case. Marks Distribution- 1. Accuracy, Neatness and completeness of Journal- 03 marks. 2. Adaptation to alternative scenarios and differential diagnosis- 02 marks. 3. Clarity about the investigations,treatment plan, follow ups and outcomes- 05 marks.	10

6	Viva- Instruments in an oral examination: (20 marks) 1.Pose direct questions about different instruments, their uses, and maintenance. 2. Ask students to identify instruments from a set. This can be done visually or through touch if the exam format allows. 3. Have students explain or demonstrate the function of each instrument, detailing their specific uses during procedures. 4.Inquire about the proper sterilization, maintenance, and storage of instruments to ensure they understand these crucial aspects. 5. Present clinical scenarios where students must select the appropriate instruments and explain their choice based on the scenario. 6. Select minimum two instruments each from Ear examination and surgery , Nose Examination and surgery, Throat(pharynx and larynx) examination and surgery. 7. Select minimum four instruments from Eye examination and surgery. Xray examination (10 marks) 1. Test their ability to identify anatomical structures on X-rays relevant to ENT. For example, they should be able to distinguish between different sinuses, the structures of the ear, and the anatomy of the throat and neck. 2. Present clinical scenarios relevant to ENT and ask the student which X-ray views or types would be most appropriate for diagnosis. Assess their ability to justify their choices based on the clinical context. 3. Provide students with sample X-rays to interpret. Evaluate their ability to detect common ENT conditions such as sinusitis, laryngeal masses, mastoiditis, foreign bodies, and fractures of the nasal bones. 4. Provide minimum one Xray each for Ear and Mastoid; Nose; Paranasal Sinuses; Pharynx and Larynx. Oral Examination -(30 marks.) Ask core questions on the anatomy and physiology of Netra, Karna, Nasa,Mukha	70

	and Shiras. Discuss Nidana, Samprapti, and Lakshana of common Shalakya disorders. Inquire about treatment protocols such as Panchakarma and Kriyakalpa Question the use and maintenance of Shalakya instruments. Present clinical scenarios to assess diagnostic and treatment planning skills. Include questions on advancements such as OCT or endoscopic techniques in Shalakyatanthra. Mark Distribution- A) Netraroga- 10 marks. B) Karnaroga- 05 marks. C) Nasaroga- 05 marks. D) Mukharoga- 05 marks. E) Shiroroga- 05 marks. Communication Skill (10 Marks)	
7	Internal assessment.	30
Total Marks		**200**

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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)

Prasuti Tantra evam Stree Roga
(Gynecology and Obstetrics)

(SUBJECT CODE : AyUG-PS)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

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BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026

NCISM

III Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-PS

Prasuti Tantra evam Stree Roga
(Gynecology and Obstetrics)

Summary

Total number of Teaching hours: 275			
Lecture (LH) - Theory		**100**	**100(LH)**
Paper I	50		
Paper II	50		
Non-Lecture (NLHT)		**52**	**175(NLH)**
Paper I	26		
Paper II	26		
Non-Lecture (NLHP)		**123**	
Paper I	62		
Paper II	61		

Examination (Papers & Mark Distribution)

Item	Theory Component Marks	Practical Component Marks			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	60	10 (Set-TA)	30
Paper II	100				
Sub-Total	200	200			
Total marks	400				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

The Indian government introduced the National Education Policy with the aim of transforming India into a knowledge-based society by providing quality education to all.

Prasuti Tantra and Stree Roga is a comprehensive and integral subject that equips students with the knowledge and skills required for the effective care of women throughout their life stages with special emphasis on reproductive health & management of pregnancy, child birth & postpartum care.

The curriculum is designed to develop a strong foundation in Ayurvedic concepts related to women's health, combined with contemporary medical knowledge, making it a dynamic and interdisciplinary subject.

In this competency based curriculum the syllabus has been crafted by blending traditional teachings & guidance with the latest scientific advancements to create a comprehensive & relevant educational experience. There is a conscious effort to incorporate a variety of innovative learning methods to ensure more practical education.

Innovative teaching methodologies, including problem-based learning (PBL), case-based learning (CBL), and simulation-based training, are integrated to encourage clinical reasoning, critical thinking, and application of theoretical knowledge. These methods help in honing the competencies necessary for handling real-life situations in Prasuti Tantra and Stree Roga practice. Vertical and horizontal integration with other subjects ensures a seamless learning process and prepares students for interdisciplinary care delivery.

Incorporating student-centric and activity-based learning, the curriculum also focuses on building competencies in areas such as patient interaction, clinical examination, diagnostic decision-making, and treatment planning. Dedicated time for clinical exposure, self-directed learning, peer learning, community outreach programs, and surveys on women's health helps students understand the diverse range of health issues faced by women across different demographics.

The curriculum is aligned with Competency-Based Dynamic Curriculum (CBDC) aims to produce confident, skilled practitioners who can diagnose and treat women's health issues effectively, keeping in mind the ancient wisdom of Ayurveda and the advances in contemporary medicine. Through traditional and modern assessment methods, students will be regularly evaluated to ensure they achieve the desired learning outcomes, contributing to both their academic success and professional development.

By the end of this course, students will not only be well-versed in Ayurvedic approaches but also adapt in contemporary medical practices, enabling them to provide high-quality, integrated healthcare to women.

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Course Code and Name of Course

Course code	Name of Course
AyUG-PS	Prasuti Tantra evam Stree Roga

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-PS At the end of the course AyUG-PS, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Explain anatomy, physiology, neuro-endocrinology of reproduction and implement *Garbhini Paricharya* (Antenatal care), *Garbha Samskara* to achieve *Shreyasi Praja* (healthy progeny) and minimize maternal morbidity and mortality.	PO1,PO4,PO5
CO2	Explain *Youvanavastha*(Puberty), *Kishoravastha*(Adoloscence) and Rajonivrutti (Menopause). Diagnose *Yonivyapad* (Gynecological disorders), *Artava vyapad* (Menstrual disorders), *Vandhyatva* (Infertility), *StanaRoga* with integration of Ayurveda principles and Scientific advances for holistic management.	PO1,PO3
CO3	Perform *Sthanika upakrama* (in-situ treatment), *Panchakarma* and Surgical procedures and implement drug interventions ethically ensuring patient safety.	PO2,PO4,PO5
CO4	Perform Normal labor, anticipate Obstetric emergencies and ensure timely referral. Manage *Sutika* (normal puerperium) and *Sutika Vyapad* (abnormal puerperium). Postpartum counseling on contraceptives.	PO2,PO3,PO6
CO5	Participate in National maternal health programs and comprehend the medicolegal aspects related to *Prasuti tantra and Stree Roga* including the MTP ACT and PC-PNDT ACT.	PO6,PO7
CO6	Demonstrate professional ethics, communication skills with compassionate attitude, engage in clinical research embracing the principles of lifelong learning and professional development.	PO6,PO8,PO9

Table 2 : Contents of Course

Paper 1 (PRASUTI TANTRA - OBSTETRICS)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Stree Vishishta Shareera Vigyana - Anatomy of Female Reproductive System** a. Introduction to *Prasuti Tantra* and *Stree Roga*. Origin of word "*Stree*" with nomenclature. (*Vayobheden Stree sangya*) b. *Tryavarta Yoni* and anatomical insights of *Garbhashaya* with *marma, peshi*. c. *Artavavaha* and *Stanyavaha Srotas*. d. Anatomy of Female internal and external genital organs with applied aspects. e. *Streeshroni* (Female Pelvis) -Types, Diameters and Obstetric significance.	1	30	3	2	4
2	**Rutuchakra - Menstrual Cycle** a. *Shuddha Artava* & *Shuddha Shukra Lakshana*. b. *Tridosha* & *Panchamahabhoota* in *Rutuchakra*. c. Practices of *Rajaswala Paricharya* and its potential effects on reproductive health. d. *Rutukala, Rutumati Lakshana* and *Rutumati Paricharya* with significance. e. Highlights on *Beeja Nirmana* - Oogenesis, Spermatogenesis. f. *Rutuvyatita Kala.* g. Phases of Menstrual cycle. Importance of HPO axis in menstrual regulation.	1		1	4	1
3	**Garbha Vigyana - Embryology & Fetal Development**	1		4	4	4

	a. *Garbhakara Bhava, Garbhadhana, Garbhavakranti, Garbha Samskara, Pumsavana Samskara* for achieving *Shreyashi-praja*. b. *Apara* (Placenta) and *Garbha Nabhinadi* (umbilical cord), *Garbhodaka* (amniotic fluid) - formation with abnormalities c. *Garbha Poshana* d. Fetal nourishment and Fetal circulation. e. *Masanumasika Garbha Vriddhi* f. *Garbhashayantara Garbha Sthiti* (Fetus-in-utero) - Lie, Attitude, Presentation, Presenting part, Denominator, Position.					
4	**Garbhini Vigyana - Physiology of Pregnancy & Antenatal Care** a. *Garbhini Nidana – Garbhini Lakshana, Garbha-Upaghatkara bhava, Garbha Vikruti.* b. Physiological changes and Diagnosis of Pregnancy. c. *Garbhini Paricharya, Prajasthapana gana.* d. Antenatal care – Objectives, Immunization, Examination, Investigations and Management with contemporary National protocol. e. Demographic statistics related to Obstetrics.	1		3	3	8
5	**Garbha Vyapad - Fetal Pathologies** a. *Garbha Srava, Garbha Pata - Nidana, Samprapti, Lakshana, Chikitsa.* b. Abortion, Medical Termination of Pregnancy Act (MTP Act). c. *Garbha Vyapad – Nidana, Samprapti, Lakshana, Chikitsa.* d. Intrauterine Growth Restriction, Oligohydramnios, Polyhydramnios—Etiological factors, Clinical features, Management.	2	40	4	4	7

	e. Rh incompatibility, ectopic pregnancy, gestational trophoblastic disease. f. *Antarmruta Garbha – Nidana, Samprapti, Lakshana, Chikitsa.* g. Intrauterine Fetal Demise—Etiological factors, Clinical features, Management. h. *Raktagulma—Nidana, Lakshana, Chiktisa.*					
6	**Garbhini Vyapad - Minor Ailments and Major Disorders of Pregnancy** a. *Garbhini Vyapad – Aruchi, Hrillasa, Chardhi, Vibanda, Atisara, Arsha, Parikartika, Udavarta* b. *Vaivarnya, Kandu, Kikkisa, Pandu, Garbhini Jwara, Shotha.* c. Hypertensive Disorders in Pregnancy. d. High risk Pregnancy. e. *Prasava poorva rakta srava* (Ante Partum Hemorrhage) – Causes, Classification, Clinical features, Management.	2		6	0	6
7	**Prasava Vigyana - Labour** a. *Sutikagara* and Labour Room setup, Labour Room Protocol according to contemporary National Health Guidelines. b. Drugs commonly used during Labour (Uterotonics, Tocolytics, Analgesics, Ergot Alkaloids and Anesthetics) - Guidelines for use with Pharmacotherapeutics. c. *Prasava Paribhasha, Prasava Hetu, Prasava Kala*. d. Causes of onset, Physiology and Diagnosis of Labour. e. Anatomy of Fetal Skull and Clinical Pelvimetry. f. *Prajayini, Upasthita Prasava* and *Asanna Prasava*.	2		10	1	17

	g. Stages of Labour and Mechanism of Labour. h. *Avi, Grahishoola, Prasuti maruta* and *Garbha Sthiti Parivartana* during *Prasava Kala*. i. *Prasava Paricharya* - Monitoring with Partograph and management of Labour. j. Episiotomy. k. Intrapartum Fetal Monitoring techniques, Non Stress Test, Fetal Distress. l. *Jatamatra Paricharya* (Immediate care & Resuscitation of Newborn).					
8	**Prasava Vyapad - Labour Complications & Obstetric Emergencies.** a. *Nidana, Samprapti, lakshana* and *Chikitsa* of *Akala Prasava* (Preterm labour) b. Post term pregnancy c. *Garbha Sanga, Vilambita Prasava.* d. Obstructed and Prolonged labour. e. *Apara sanga - Nidana, Lakshana and Chikitsa.* f. Post Partum Haemorrhage - Causes, Clinical features, Complications and Management.	3	30	6	2	4
9	**Moodhagarbha - Obstructed Labour** a. *Nirukti, Samprapti, Bheda, Gati, Chikitsa* of *Moodhagarbha.* b. Abnormal Presentations – Breech, Persistent Occipito Posterior Position. c. Cephalo Pelvic Disproportion (CPD). d. *Moodhagarbha Upadrava – Garbhakosha-parasanga, Makkala, Yonisamvarana.* e. Obstetric Emergencies with timely referral - Cord prolapse, Genital Tract Injuries during labour, f. Uterine -inversion, Amniotic fluid Embolism,	3		8	3	6

	Obstetric Shock, Uterine Rupture. g. Induction and Augmentation of Labour and Assisted Labour Techniques. (Forceps, Vacuum, Caesarean Section).					
10	**Sootika Vigyana - Puerperium** a. *Sootika, Sootika-kala, Sootika Paricharya*. b. Puerperial changes, Postpartum care. c. Contraception d. *Sootika Vyapad – Nidana, Samprapti, Lakshana, Chikitsa.* e. Puerperial Disorders.	3		3	1	3
11	**Stanya Vigyana - Lactation** a. *Stanya, Stanya Sampat.* b. Physiology of Lactation, Breast feeding techniques. c. *Stanya dushti, Stana Shotha, Stana Vidradhi.* d. Mastitis, Breast abscess.	3		2	2	2
Total Marks			**100**	**50**	**26**	**62**

Paper 2 (STREE ROGA - GYNAECOLOGY)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
12	**Stree Prajanananga Nirmana and Vikruti - Development of Female Reproductive System with Anomalies.** a. Development of female reproductive system from Mullerian duct and its anomalies. b. Neuroendocrinology of reproduction.	1	30	3	2	4

	c. Anatomy and Physiological aspects of Puberty and Menopause.					
13	**Yantra evam Shastra - Instruments** Instruments commonly used in *Prasutitantra* (Obstetrics) and *Stree Roga* (Gynaecology) procedures and surgeries - a. Types of *Yantra* (Blunt instruments) and utilization- i) *Sandansha Yantra* (Pincer like or dissecting forceps) – * *Annigraha* – plain non toothed forceps * *Sannigraha* – Toothed forceps ii) *Swastika Yantra* (Cruciform like Forceps) - Allies forceps, Vulsellum, Sponge holding forceps, Cheatle's forceps, Kocher's forceps, Babcock's forceps, Needle holder, Artery forceps, Ovum forceps, Green armytage forceps, Cervical punch biopsy forceps. iii) *Shalaka Yantra* (Rod like instruments) - Uterine sound, Hegar's dilator, Uterine curette, Endometrial biopsy curette, *Agnikarma Shalaka*, Anterior vaginal wall retractor iv) *Dvi Tala Yantra* (Scoops or spoon-shaped instruments) - Sim's speculum, Endometrial curette, Cusco's speculum, Doyen's retractor, Obstetric forceps v) *Nadi Yantra* (Tubular instruments) - *Yonivranekshana yantra*, Leech Wilkinson's HSG cannula, Rubin's cannula, Suction cannula, *Uttarabasti* cannula, Vaginal douching syringe, *Basti yantra* b. Type of *Shastra* (Sharp instruments) and utilization - i) *Kartari Shastra* (Scissors) - *Atimukha Shastra* (Episiotomy Scissors), *Mandalagra Shashtra* (Umbilical cord cutting Scissors), *Shararimukha Shastra* (Mayos scissors / Simple scissors, suture removing scissors)	1		1	1	6

	ii) *Vriddhipatra Shastra* – Scalpel iii) *Suchi Shastra* – different type of needles					
14	**Stree Rugna Parikshana - Gynaecological Examination** a. Gynaecological History taking. b. General and systemic examination. c. Breast examination, Per abdomen, Per speculum, Per vaginal, Per rectal examination.	1		2	1	4
15	**Artava Vyapad - Menstrual Disorders** a. *Ashtartava Dushti*. b. *Anartava* (Amenorrhoea). c. Poly Cystic Ovarian Syndrome (PCOS). d. *Artava Kshaya* (Oligomenorrhoea, Hypomenorrhoea). e. *Artava Vruddhi* (Polymenorrhoea). f. *Asrugdara* (Abnormal Uterine Bleeding).	1		6	2	4
16	**Rajonivritti - Menopause** a. Anatomical & Physiological changes in Genital organs during Menopause. b. *Rajonivrutti Janya Lakshana* (Menopausal Syndrome). c. Management of Menopausal syndrome. d. Role of *Rasayana* in Menopausal syndrome.	1		2	1	2
17	**Yoni Vyapad - Disorders of Female Reproductive system** a. *Yoni vyapad - Bheda, Nidana, Samprapti, Lakshana, Upadrava, Samanya* & *Vishesha Chikitsa*. b. *Udavarta, Vandhya, Vipluta, Paripluta,Vatala, Rudhirakshara, Vamini, Sramsini, Putraghni, Pittala,*	2	40	13	3	10

	c. *Atyananda, Karnini, Acharana, Aticharana, Shleshmala, Shandhi,* d. *Phalini, Mahati, Soochivaktra, Sarvaja, Antarmukhi, Shuska, Arajaska, Lohita kshaya, Upapluta.* e. Dysmenorrhoea, Pruritus Vulvae, Endometriosis, Adenomyosis, Pelvic Inflammatory Diseases, f. Pelvic organ prolapse, Cervical erosion and Ectropion, Dyspareunia, Vaginismus, Presacral neuralgia, Constitutional nymphomania, Effluvium seminis - Causes, Clinical features, Investigations and Management.					
18	**Vandhyatwa - Infertility** a. *Nirukti* and *Bheda* of *Vandhyatwa.* b. Female and Male factors of infertility. c. Infertility Evaluation - Semen Analysis, Hormonal assays, Follicular study, Ultrasonography & Hysterosalpingography d. *Chikitsa* of *Vandhyatwa – Shodhana, Shamana* and *Sthanika upakrama* e. Assisted Reproductive Techniques.	2		4	3	8
19	**Vyadhi Vinischaya Upaya - Diagnostic Tools and Techniques** a. Pap smear b. Colposcopy c. Cervical biopsy d. Endometrial biopsy e. Hysterosalpingography f. Ultrasonography g. Hysteroscopy h. Laparoscopy	2		1	1	2

	i. Magnetic Resonance Imaging j. Computed Tomography scan					
20	**Sthanika Upakrama - In situ Treatment Modalities** *Sthanika Upakrama - Yoni Dhavana, Yoni Prakshalana,Yoni Pichu,Yoni Varti,Yoni Lepana, Yoni Avachurnana, Yoni Purana, Yoni Dhoopana, Dahana, Ksharkarma, Uttarbasti.*	2		1	2	7
21	**Stree Jananganga Granthi Evam Arbuda - Benign & Malignant lesions of Female Reproductive System** a. *Yonikanda,Yoni Arsha.* b. Benign lesions of reproductive system - Fibroid uterus, Bartholin cyst, Endometrial and Cervical polyp, Ovarian cyst, Tubo ovarian mass. c. *Arbuda* d. Premalignant & Malignant lesions of Uterus, Cervix, Endometrium & adnexa - Aetiology, Evaluation, Staging, Management e. Preventive aspects of Malignancies. f. Vaccination for cervical cancer.	3	30	4	2	4
22	**Guhya Roga - Sexually Transmitted Diseases** a. *Upadamsha, Firanga, Puyameha - Nidana, Samprapti, Lakshana, Chikitsa.* b. Sexually Transmitted Infections.- Causative microorganisms, Pathology, Clinical features, Investigations and Treatment.	3		2	1	0
23	**Yoni srava - Vaginal Discharge** a. *Shweta pradar - Nidana, Lakshana* and *Chikitsa.* b. Differential Diagnosis of Abnormal Vaginal Discharge and management.	3		1	1	2
24	**Stana Roga - Breast Disorders** a. Clinical Anatomy of Breast.	3		3	1	3

	b. *Stana Keelaka, Stana Granthi - Nidana, Samprapti Lakshana, Bheda, Upadrava* & *Chikitsa* c. Fibroadenoma Breast. d. *Stanarbuda* - Breast carcinoma. e. Aetiology, Clinical features, Diagnosis, Staging, Prevention & Management.					
25	**Shastra Karma in Stree Roga - Surgical Procedures in Gynaecology** a. Sterilization methods of Instruments, Equipments and Labour - OT complex. b. *Garbhashaya Mukha Vistrutikarana evam Lekhana* (Dilatation & Curettage). c. *Garbhashaya Mukha Dahana* (cauterization). d. *Vandhya karana* (Sterilization) – Tubectomy & Vasectomy. e. *Udaramarga Garbhashaya Nirharana* (Abdominal hysterectomy). f. *Yonimarga Garbhashaya Nirharana* (Vaginal hysterectomy). g. *Arbudanirharana* (Myomectomy). h. *Granthinirharana* (Cystectomy). i. *Arshanirharana* (Polypectomy).	3		4	1	4
26	**Stree Roga Sambandhi Aushadhi- Classical Formulations** a. *Vishista-Phalashruti* (Specific indication) of following formulations - b. *Churna Kalpana - Pushyanuga Churna, Shatpushpa Churna, Shatavari Churna, Nagakeshara Churna.* c. Ghrita Kalpana - Phalaghrita, Kashmaryadi Ghrita, Vidaryadi Ghrita. d. *Taila Kalpana - Dahtakyadi Taila, Shatpushpa*	3		1	1	0

	Taila, Jatyadi Taila, Narayana Taila. e. *Asava and Arishta - Ashokarishta, Kumaryasava.* f. *Rasa aushadhi - Rajahpravartini Vati, Pratapalankeshwar Rasa, Garbhapala Rasa, Pushpadhanva Rasa.* g. *Kwatha - Nyagrodhadi kwatha, Dashmoola Kwatha, Panchavalakala Kwatha.* h. *Paka Kalpana - Sobhagya Shunthi Paka, Puga Khanda/ Puga Paka.* i. *Avaleha - Jeerakavaleha, Kushmandavaleha*					
27	**National Maternal Health Programs** a. Family planning. b. Reproductive and Child Health c. '*Janani Suraksha Yojana'* d. '*Janani Shishu Suraksha Karyakram'* e. '*Pradhan Mantri Surakshit Matritva Abhiyan'* f. 'Mission Indradhanush' g. 'Menstrual Hygiene Scheme' h. 'LaQshya programme'	3		1	2	0
28	**Medical ethics, Record keeping and Audit in Obstetrics and Gynaecology** a. Medical ethics. b. Medical record documentation – Informed Consent, Birth & Death registration, Issuing Medical Certificate c. Audit in Obstetrics and Gynaecology.	3		1	1	1
Total Marks			**100**	**50**	**26**	**61**

Table 3 : Learning objectives of Course

Paper 1 (PRASUTI TANTRA - OBSTETRICS)										
A3 Course out come	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Stree Vishishta Shareera Vigyana - Anatomy of Female Reproductive System (LH :3 NLHT: 2 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Explain the origin of the word "*Stree*" with nomenclature and classification based on age (*Vayobhedena Stree Sangya*).	CK	MK	K	L&PPT	VV-Viva	F&S	I	-	LH
CO1	Demonstrate the anatomy of female reproductive organs - *Tryavarta Yoni, Garbhashaya, Stree vishista Marma* & *Peshi*.	CAP	MK	SH	D,D-M	PP-Practical,P-VIVA,VV-Viva	F&S	I	-	NLHP1.1
CO1	Enumerate and describe *Stree vishista Rachana Shareera -Tryavarta Yoni, Garbhashaya, Stree vishista Marma* and *Peshi*.Describe *Artava vaha srotas* and *Stanya vaha srotas with Viddha Lakshana.*	CC	MK	K	L&PPT	S-LAQ,P-VIVA	F&S	I	-	LH
CO1	Demonstrate the spatial orientation and positioning of the female reproductive organs within pelvic cavity and role of ligaments.Demonstrate Blood supply to the Uterus, Adnexa and Pelvic floor.	CAP	MK	SH	D-M,D	P-EXAM	F	I	-	NLHP1.2
CO1	Describe external genital organs and Internal genital organs with applied clinical aspects.	CC	MK	K	L&PPT,CBL	P-VIVA,INT,P-EXAM,S-LAQ	F&S	I	-	NLHT1.1
CO1, CO4	Demonstrate landmarks of true pelvis, false pelvis, inlet, cavity, outlet with diameters of Obstetric importance and their measurements.	CAP	MK	SH	D-M	P-MOD,VV-Viva,P-VIVA	F&S	I	-	NLHP1.3

CO1	Describe *Stree Shroni - Asthi, Sandhi, Parimana and* highlight difference with *Purusha Shroni.*	CC	MK	K	L&PPT	S-LAQ,VV-Viva,P-VIVA,P-MOD	F&S	I	-	NLHT1.2
CO1, CO4	Classify Female Pelvis. Describe Obstetric measurements with clinical importance.	CC	MK	KH	L&PPT	VV-Viva,P-VIVA,S-LAQ	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 1.1	Anatomy of female genital organs	**(1 hr)** Teacher will demonstrate Normalcy and abnormalities in Female external genital organs - vulva, labia majora, labia minora, clitoris and vestibule with videos or images and explain clinical importance. Normalcy and abnormalities in internal female genital organs - vagina, cervix, uterus, fallopian tubes and ovaries with videos or images and explain clinical importance. Encourage students to relate anatomical positioning to clinical conditions.
NLHT 1.2	*Asthi, Sandhi* and *Parimana* of *Stree Shroni*	**(1 hr)** Teacher will demonstrate *Asthis in Stree Shroni* - Guda, Bhaga, Nitamba, Trika, Shroniphalaka. *Sandhis - Tunnasevani and Samudga* in *Stree Shroni*. Discuss A*ngula Parimana* with comparative study of *Purusha Shroni*.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 1.1	*Tryavarta Yoni*	**(1 hr)**

		Teacher will orient students on anatomy of female reproductive system and demonstrate anatomical co-relations of *Tryavarta yon*i on model - A) 1. vagina with adnexal structures 2. cervix with adnexal structures 3. uterus with adnexal structures B) 1. introitus 2. mid-canal 3. fornices C) 1. Thick connective and fibrous layers separating vaginal canal from urinary bladder and urethra anteriorly & rectum and anus posteriorly. 2. Muscular layer 3. Mucous layer D) 1. External genitalia 2. Vagina 3. Uterus with adnexa E) 1. Submeatal sulcus 2.Transeverse vaginal sulcus 3. Bladder sulcus Locate *Garbhashaya* on model and understand with respect to description given by Acharya Sushrut and Kashyap. Locate *Stree Vishista Peshis* and *marmas* on model and understand their importance. Divide students into small groups and student will immitate the demonstration - Provide each group with anatomical models of the female reproductive system - uterus with adnexa models. Students will identify and demonstrate structures namely *Avarta of Yoni, Garbhashaya, and marma,*

		stree vishista peshi and srotas.
NLHP 1.2	Spatial orientation and Blood supply of uterus and adnexa	**(1 hr)** Teacher will use anatomical models to demonstarte - Blood supply to the uterus, ovaries, and fallopian tubes. Detailed structure of the pelvic floor muscles and their clinical importance. Ligaments and their role in pelvic support. Group Activity - Divide students into small groups, Provide each group a pelvic model and chart showing the vascular and ligamentous connections. Instruct groups to debrief - the arterial and venous supply to the uterus and adnexa. Identify the spatial orientation of pelvic organs in relation to each other. Spatial Orientation Exercise - Use cross-sectional images or models to demonstrate how reproductive organs are positioned within the pelvic cavity. Students will practice positioning models accurately to demonstrate version and flexion of uterus.
NLHP 1.3	Female bony pelvis	**(2 hrs)** Teacher will demonstrate on bony pelvis model - Boundaries of True & false pelvis. Dimensions of the pelvic inlet - Plane, Axis, Antero-posterior diameter, Oblique diameter, Transverse diameter. Dimensions of Mid-Cavity - Axis, Diameter, Boundaries and Plane. Dimensions of Outlet - Antero-posterior diameter, Transverse diameter, Pubic arch angle, Waste space of Morris. Pictorial Demnstration of types of pelvis - Gynecoid, Android, Anthropoid and Platypelloid. The student will imitate demonstration on model, describe the importance of obstetric diameters.
Topic 2 Rutuchakra - Menstrual Cycle (LH :1 NLHT: 4 NLHP: 1)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Define *Raja, Artava, Shukra.* Describe *Shuddha Artava* & *Shuddha Shukra Lakshanas* with clinical significance.	CC	MK	K	L&GD	VV-Viva	F&S	I	-	NLHT2.1
CO1	Explain the role of *Tridosha* and *Panchamahabhoota* in *Rutuchakra* (Menstrual cycle)	CC	MK	K	L&GD	VV-Viva	F&S	I	-	NLHT2.2
CO1	Explain the phases of the menstrual cycle and the role of hypothalamo-pituitary-ovarian axis in its regulation.	CC	MK	K	L&PPT	VV-Viva,S-LAQ,P-VIVA	F&S	I	-	LH
CO1	Explain physiology of Menstruation and phases of Menstrual cycle.	CAP	MK	K	FC	CL-PR,VV-Viva,P-VIVA	F&S	I	-	NLHT2.3
CO1	Demonstrate dietary recommendations and other practices with potential health benefits of *Rajaswala Paricharya.*	CAP	MK	KH	D,RP	VV-Viva	F&S	I	-	NLHP2.1
CO1	Describe *Rutumati Lakshana and Paricharya.*	CAP	MK	K	L&GD,DIS,PER	VV-Viva,CL-PR,PRN	F&S	I	-	NLHT2.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 2.1	Concept of *Raja, Artava and Shukra.*	**(1 hr)** Teacher will facilitate presentation, discussion and clarification of the concept, dividing students into small groups and assign each group with one of topics - '*Raja, Artava and Shukra'.* Teacher will ensure discussion of *Shuddha Artava* & S*huddha Shukra Lakshanas* and their clinical significance. Peer discussion on the concept of *Stree Shukra* followed by interaction with students.

NLHT 2.2	*Tridosha* and *Panchamahabhuta* in *Rutuchakra*.	**(1 hr)** Teacher will give presentation and have discussion with students, on G*unas* of *Tridosha* and *Panchamahabhut* in correlation with different phases - *Rajasrava Kaala, Rutukala* and *Rutu Vyateeta Kala* with focus on physical, mental, and emotional manifestations. Students will have discussion on cases of irregular menstrual cycles and abnormal menstruation with respect to imbalance of *Doshas, Mahabhutas* and *Gunas* involved.
NLHT 2.3	Physiology of Menstruation.	**(1 hr)** Flipped Classroom - Students will review reading material before class and during class-presentation they will create flow chart / present with diagrams of hormonal regulation of different phases of menstrual cycle followed by peer discussion. Teacher will encourage students to analyze different case scenarios of menstrual irregularities and identifying which phase of the menstrual cycle is affected and how the HPO axis dysfunction contributes.
NLHT 2.4	Importance of *Rutukala*	**(1 hr)** Teacher will discuss the significance of *Rutukala* with physiology of Ovulation. Explain *Rutumati Lakshana* and enumerate *Rutumati Paricharya* (practices to be followed) for successful conception & the process of *Beeja Nirmana* (gamete formation-spermatogenesis and oogenesis) in Ayurveda and contemporary science. Class presentation by students on spermatogenesis and oogenesis followed by peer discussion.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 2.1	*Rajaswala paricharya*	**(1 hr)** Teacher will discuss and analyze role of various components - *Ahara, Vihara* and *Sadvrutta* of *Rajaswala Paricharya* through role play & Interaction. Student will demonstrate and explain the benefits of dietary recommendations with analysis of

		techniques that help to balance *Vata dosha* during menstruation aligning with recommendations in *Rajaswala Paricharya* (menstruating women).

Topic 3 Garbha Vigyana - Embryology & Fetal Development (LH :4 NLHT: 4 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Define *Garbha* and explain the process of *Garbhadhana* (conception) and *Garbhavakranti* (chronological evolution of *Garbha*), describe *Garbha-kara shad-bhavas* (factors influencing development and traits of fetus).	CC	MK	KH	L&GD, PER,FC	S-LAQ,T-OBT,CL-PR, P-REC,P-VIVA	F&S	I	-	NLHT3.1
CO1	Explain the importance of pre-conception care and factors promoting conception.	CAP	MK	KH	L&PPT	S-LAQ,VV-Viva	F&S	I	-	LH
CO1	Explain significance of *Garbha Samskara* and *Pumsavana Samskara* for achieving *Shreyasee-Praja* - Fetal optimisation (physical, mental and emotional development of fetus).	CAP	MK	K	CBL,SIM,RP,D,W	P-PRF,VV-Viva,S-LAQ,P-EN	F&S	I	V-SW	NLHP3.1
CO1	Describe the formation and functions of *Apara* (placenta with membranes), *Garbha Nabhinadi* (umbilical cord), and *Garbhodaka* (amniotic fluid)	CC	MK	K	L&PPT	VV-Viva,QZ ,S-LAQ	F&S	I	-	LH
CO1	Describe *Apara, Nabhinadi* and *Garbhodaka Vikaras* (abnormalities of placenta, umbilical cord and amniotic fluid) with clinical significance.	CAN	MK	K	D-M,CD,CBL, PBL,LRI	P-PS,S-LAQ,P-ID,VV-Viva	F&S	I	-	NLHT3.2
CO1	Describe *Garbha Vriddhikara Bhava* (factors affecting fetal growth) and *Garbha Poshana* (mechanisms of fetal nourishment). Illustrate fetal circulation along with utero- placental and feto-placental circulation.	CC	MK	K	L&PPT ,D-M,D,FC	M-CHT,VV-Viva,COM,QZ ,S-LAQ	F&S	I	-	NLHT3.3
CO1	Explain *Masanumasika Garbha Vriddhi* (Month wise fetal growth	CC	MK	K	PER,L_	P-REC,S-L	F&S	I	-	NLHT3.4

	and development)				VC,D-M	AQ,COM,PA				
CO1	Explain *Garbhashayantara Garbha Sthiti*.	CC	MK	K	L&PPT	P-MOD,S-LAQ,P-PRF,VV-Viva	F&S	I	-	LH
CO1, CO4	Demonstrate *Garbhashayantara Garbha Sthiti* (fetus -in utero).	PSY-SET	MK	SH	CBL,D,CD,D-M,D-BED	VV-Viva,P-EXAM,P-VIVA,OSCE,P-PRF	F&S	I	-	NLHP3.2
CO1, CO4	Describe fetus-in-utero - Lie, attitude, presentation, presenting part, denominator and position.	CC	MK	K	L&PPT,D-M	P-MOD,OSCE,VV-Viva,S-LAQ	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 3.1	*Garbha* and *Garbhavakranti*	**(1 hr)** Student will present and discuss *Garbha Kara Shad Bhavas* in conception and guidelines of *Garbhadhana Vidhi* during classroom presentation with flow charts. Teacher will explain components of *Garbhavakranti* with applied clinical aspects - *Anupahata Retus, Apradushta Yoni, Shonita and Garbhashaya.*
NLHT 3.2	*Apara, Nabhinadi* and *Garbhodaka Vikaras* (abnormalities of placenta, umbilical cord and amniotic fluid) with clinical significance.	**(1 hr)** Teacher will demonstrate abnormal conditions related to following, on models / charts / specimen / clinical case / videos - 1. Placenta - formation, location, shape, size and implantation,

		2. Umbilical cord - structure, characteristics, length and attachment, 3. Amniotic fluid – volume and colour Student will be given case scenarios to discuss clinical consequences and strategies to improve pregnancy outcome.
NLHT 3.3	*Garbha Poshana* (fetal nourishment) and *Garbha Vridhhikara Bhava.*	**(1 hr)** Flipped class - Students will be encouraged to review the literatures related to different methods of *Garbhaposhana* (*Upasneha, Upasweda,*through *Nabhinadi*) during different stages of intra uterine development with utero- placental and feto-placental circulation and make compilation. Teacher will summarize concepts of *Garbhaposhana* with theories of *Upasneha, Upasweda, Apara* and *Garbha Nabhinadi* (fetal Circulation) with utero- placental and feto-placental circulation and discuss the importance of *Garbha Vriddhikara bhava* (factors affecting fetal growth).
NLHT 3.4	Month wise fetal development	**(1 hr)** Teacher will explain the stages of *Masanumasika Garbha Vriddhi* - month wise developement of fetus and demonstrate on model/ videos/ charts/ specimen. Student will analyze the mile-stones of fetal developement and recite the shlokas of *Masanumasika Garbha Vriddhi.* Teacher will assign compilation work to students.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 3.1	*Garbha Samskara* and *Pumsavana Samskara*.	**(2 hrs)** Activity 1 (Garbha samskara) - Teacher will discuss the process and practices of *Garbha Samskara* for achieving *Shreyasee-Praja* and

		orient students to Pre-Conception and Pre-natal care. Discuss and provide clinical exposure to *Garbha Samskara* Practices - *Beejasamskara* (Preconceptional *Samsodhana* therapy) and special diet indications viz *Taila, Masha* to female and *madhura ousadha sidhha Ghrita, Ksheera* to male. Equip students with skill to advice couple desiring healthy progeny through garbhasamskara programme viz Dietary recomendations - *Garbhini Masanumasika pathya* (monthly regime). Prenatal *Yoga and Pranayam* : *yoga* postures and breathing techniques designed to promote physical and mental well-being during pregnancy under supervision of yoga instructor. Meditation and Chanting: meditation or chanting practices. Activity 2 (*Pumsavana* samskara for achieving *Shreyasee-praja*) - Teacher will explain the ritual of *Pumsavana Samskara* for achieving *Shreyasee-praja.* Demonstrate process of drug collection, ritual with time, preparation and procedure of administration indicated (nasally or orally), followed by the chanting of specific mantras. Student will observe and discuss the process and benefits.
NLHP 3.2	Fetus-in-utero	**(2 hrs)** Teacher will demonstrate with help of female pelvis and fetal skull/ model and dummy of fetus - Fetal Lie - longitudinal, transverse, oblique Fetal Attitude - flexed, deflexed, extended and hyper-extended Fetal Presentation - cephalic, breech, shoulder Fetal Presenting part - vertex, brow, face, mentum, breech, foot, compound Fetal Position - Occiput Anterior, Occiput Posterior, Left Occiput Anterior, Left Occiput Posterior, Right Occiput Anterior, Right Occiput Posterior, Left Occiput Transverse, Right Occiput Transverse. Denominator - Occiput, Mentum, Sacrum, Acromion. Student will practice the components of fetus in utero and demonstrate denominator and its relation with various quadrants of pelvis in determining fetal position.
Topic 4 Garbhini Vigyana - Physiology of Pregnancy & Antenatal Care (LH :3 NLHT: 3 NLHP: 8)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Explain the physiological changes during pregnancy and discuss maternal adaptations.	CC	MK	K	L&PPT	COM,S-LAQ,VV-Viva,P-VIVA	F&S	I	-	LH
CO1	Explain Garbhini Nidana and analyze Sadyogruhita Garbha, Vyakta Garbha Lakshanas, and the Clinical diagnosis of pregnancy in the first, second, and third trimesters based on signs and symptoms.	CAP	MK	KH	REC,L&PPT,CD	VV-Viva,S-LAQ,P-REC,P-VIVA,P-CASE	F&S	I	-	NLHT4.1
CO1	Identify and demonstrate pregnancy signs - Trimester wise.	CAP	MK	KH	D-M,CD,D-BED,SIM,L_VC	P-VIVA,SP,OSCE	F&S	I	-	NLHP4.1
CO1	Describe *Garbhopaghatakara Bhava* and *Garbha Vikruti*.	CC	MK	K	L&GD,CBL	VV-Viva,CBA,INT	F	I	-	NLHP4.2
CO1	Describe *Masanumasika Garbhini Paricharya* and importance of *Garbha Sthapaka Gana*.	CC	MK	K	L&PPT	P-VIVA,S-LAQ	F&S	I	-	LH
CO1	Describe Antenatal care as per National protocol.	CC	MK	K	L&PPT	P-VIVA,P-CASE,SP,S-LAQ,VV-Viva	F&S	I	-	LH
CO1, CO4	Screen & identify high risk pregnancy.	CAP	MK	KH	D-BED,DIS,L&PPT,CBL,CD	VV-Viva,SBA,P-VIVA,CBA	F	I	-	NLHT4.2
CO1,	Demonstrate Obstetric history taking and perform Antenatal	PSY-	MK	SH	SIM,CB	P-EXAM,S	F&S	I	-	NLHP4.3

CO4	Examination.	GUD			L,D-M, D-BED, CD	P,VV-Viva, P-VIVA,P-MOD				
CO1, CO5	Enlist routine investigations in pregnancy and know the role of Ultra sound in pregnancyBe familiarized with special diagnostic aids in pregnancy viz, double marker, triple marker, quadruple marker and Nonstress test.Analyze the provisions and limitations of PC PNDT act.	CAN	MK	KH	LRI,CD ,D-BED ,L&GD, PBL	VV-Viva,C BA,P-VIVA,SBA	F&S	I	-	NLHP4.4
CO1, CO5	Describe demographic statistics related to obstetrics - Maternal Mortality Rate, Maternal Morbidity, Infant Mortality Rate.	CC	MK	K	L&PPT ,BS	VV-Viva,C L-PR	F	I	-	NLHT4.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 4.1	*Garbhini Nidana*: Diagnosis of pregnancy	**(1 hr)** Teacher will explain *Garbhini Nidana* based on *Sadyogruhita Garbha* and *Vyakta Garbha Lakshanas.* Discuss clinical signs and symptoms related to diagnosis of pregnancy in first, second and third trimester. Student will recite shlokas and analyze the diagnosis of pregnancy based on clinical findings.
NLHT 4.2	High Risk Pregnancy	**(1 hr)** Teacher will discuss the alarming signs and methods of screening and identifying high risk pregnancy like multiple gestation, pregnancy induced hypertension, elderly primigravida, gestational diabetes etc. for timely referral to appropriate higher health care facility. Students will have peer discussion about high risk pregnancy cases.
NLHT 4.3	Demographic Statistics in Obstetrics	**(1 hr)** Teacher will facilitate the students with credible sources on current demographic statistics related to obstetrics - Maternal Mortality rate, Maternal Morbidity and Infant Mortality rate.

		Students will discuss the factors contributing to the statistical data (e.g., socioeconomic factors, healthcare access). Recent trends and initiatives to address issues related to ststatistics.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 4.1	Clinical Diagnosis of pregnancy	**(2 hr)** Teacher will demonstrate physical signs - Jacqemier's or Chadwick's, Osiander's, Goodell's, Hegar's, Piskack's and Palmer's signs, Chloasma, Montgomery's tubercle, Linea nigra, Stria gravidarum, Braxton-hicks contractions during clinical demonstration / demonstration on models and simulators/ Videos. Student will explain trimester wise signs of pregnancy.
NLHP 4.2	*Garbha Vikruti*	**(1 hr)** Teacher will explain *Garbha Upaghatakara Bhava* with effect on fetus. Students will be given case scenarios involving fetal deformities to analyze the possible *Garbha Upaghatakara Bhava* -maternal lifestyle, diet, stress and environmental exposure and discuss preventive measures.
NLHP 4.3	Antenatal History taking and Examination	**(4hrs)** Teacher will orient students to develop communication skill, identify risk factors, plan investigations and give appropriate advice for Antenatal cases. A. History taking in Pregnancy - 1. Patient particulars

2. Chief complaints – Complaints, their onset in chronological order (e.g.- complaints like Pain abdomen / Vaginal bleeding / Urinary problems / other minor complaints)

3. History of present illness: Elaboration of the chief complaints as regard to their onset, duration, severity, use of medications, investigations & progress. Trimester wise complications if any.

4. Past Pregnancy and Obstetric History : Gravida , Parity, Abortion, high risk pregnancy,Ectopic, Twins, mode of previous delivery ,Intrapartum complications, Post partum heamorrhage, Fetal morbidity, Fetal Death,

5. Menstrual History: Menarche (age), Last Menstrual Period (LMP), Regular /Irregular cycles

6. Naegele's formula - calculate Expected Date of Delivery (EDD)

7. History of Medications, Surgeries, Allergies

8. Family history : Parents & First degree relatives with a condition such as Diabetes, Multiple pregnancy, consanguineous marriage, bleeding dyscrasias, birth defects.

9. Personal History : Smoking, sleep, appetite , bowel & bladder habits.

B. Examination (on models / clinically)

1. General appearance and parameters viz, Height, Weight, Pallor, Jaundice, Oral cavity, Hair, Neck, Lymph nodes, edema, Varicosities, BP, Pulse, Temperature

2. Breast examination :Patient reclining, arms to the sides, breasts are inspected and palpated with flat of fingers of both hands

3. Systemic Examination: Respiratory system respiratory rate, Inspection & Auscultation of the

chest

Cardiovascular system : Inspect the chest , Auscultate heart sounds

4. Obstetric Examination

Pre-requisites: Verbal consent, Bladder evacuation, Proper exposure of abdomen from Xiphisternum to symphysis pubis
Woman in dorsal posture with thighs & knees slightly flexed
Stand on right side of the patient
Woman's head should be tilted to the left side

a. Inspection: Uterine shape, Contour of Uterus

Skin condition: Presence of Linea nigra, Striae gravidarum, presence of scar mark, infection

b. Palpation: Height of the uterus in terms of weeks

Symphysis - fundal height in cm to be measured with measuring tape.
Obstetric grips (Leopold's maneuvers) - Hands on practice on the manikin/real cases

i. Fundal grip

		ii. Lateral or Umbilical grip iii. First pelvic grip iv. Second pelvic grip (Pawlik's grip) c. Auscultation of Fetal Heart Sound (FHS) C. Case writing in prescribed journal proforma
NLHP 4.4	Investigations in pregnancy	**(1hr)** Teacher will elaborate planning routine and special investigations in pregnancy with provisions of PC & PNDT act. Narrate & Interpret routine and special investigations viz, double marker, triple marker, quadruple marker and Nonstress test with appropriate time of advice. Ultrasonography - Indications and interpretation of USG parameters during pregnancy. Early pregnancy scan, Nuchal Translucency Scan (NT), Targeted imaging for fetal anomaly (TIFFA) scan and growth scan in third trimester. Student can interpret various normal and abnormal investigation reports.

Topic 5 Garbha Vyapad - Fetal Pathologies (LH :4 NLHT: 4 NLHP: 7)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Define *Garbha Srava* and *Garbha Pata*. Explain *Nidana, Samprapti, Lakshana, and Chikitsa.*	CC	MK	K	L&PPT	P-REC,S-LAQ	F&S	II	-	LH
CO1,	Define Abortion and describe classification with aetiological	CC	MK	K	DIS,LRI	P-VIVA,S-	F&S	II	-	NLHT5.1

CO5	factors, clinical features, and investigations with medical and surgical management.				,L&PPT ,CD,CBL	LAQ,P-CASE,VV-Viva,CBA				
CO1, CO5	Demonstrate Dilatation & Curettage (D & C), Provisions of MTP act.Demonstrate cervical encirclage procedure (McDonald and Shirodkar procedure)	CAP	DK	KH	L_VC,CBL,D	VV-Viva, C-VC,CBA,S-LAQ	F&S	II	-	NLHP5.1
CO1	Elaborate *Nidana, Samprapti, Lakshana and Chikitsa of Garbha Vyapad - Upavishtaka Nagodara, Linagarbha, Makkala, Jarayu dosha.*	CC	MK	K	REC,L&PPT	S-LAQ,P-REC,VV-Viva	F&S	II	-	LH
CO1	Define Intra Uterine Growth Restriction (IUGR). Enumerate aetiological factors, classification, clinical diagnosis, investigations & management.	CC	MK	K	L&PPT ,CBL,CD,LRI	P-VIVA,SP ,S-LAQ	F&S	II	-	NLHT5.2
CO1	Identify and explain etiology, clinical diagnosis, investigations & management of Intra Uterine Growth Restriction, Oligohydramnios and Polyhydramnios.	CC	MK	K	CD,D-BED,CBL,L&PPT	CBA,VV-Viva,OSCE,P-VIVA	F&S	II	-	NLHP5.2
CO1	Describe Gestational Trophoblastic diseases and Rh incompatibility - pathophysiology and prevention.	CK	DK	K	L&PPT	VV-Viva	F&S	II	-	LH
CO1	Identify Ectopic pregnancy. Explain causes, clinical features, differential diagnosis & management.	CC	MK	K	CBL,DIS,L&PPT	VV-Viva,P-VIVA,OSCE,S-LAQ	F&S	II	-	NLHP5.3
CO1	Describe *Antarmruta Garbha – Nidana, Samprapti, Lakshana, Chikitsa*.	CK	MK	K	L&PPT ,REC	P-VIVA,S-LAQ,P-REC,T-OBT	F&S	II	-	LH
CO1, CO6	Describe Intrauterine fetal demise (IUFD) - Definition, causes, diagnosis, management & complications.	CK	MK	K	CBL,L&PPT , CD,DIS	P-VIVA,P-EXAM,SBA,S-LAQ,V	S	II	-	NLHT5.3

					,X-Ray	V-Viva				
CO1, CO6	Diagnose and plan management of Intrauterine fetal demise.	CAP	MK	KH	CBL,X-Ray,PBL,SIM	PP-Practical,P-VIVA,SBA,VV-Viva,CBA	F&S	II	-	NLHP5.4
CO1	Explain *Rakta Gulma* - differential diagnosis and management.	CK	NK	K	L&PPT	VV-Viva,INT	F	II	-	NLHT5.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 5.1	Abortion	**(1 hr)** Teacher will discuss classification of abortion with aetiological factors, clinical features, investigations with medical and surgical management. Present case scenarios of abortion - threatened, inevitable, complete, incomplete, missed, septic and habirtual abortion. Students will analyze the clinical features of given scenarios and discuss timely referral.
NLHT 5.2	Intra uterine growth restriction	**(1 hr)** Teacher will discuss aetiological factors, classification, clinical diagnosis, Investigations & Management of IUGR as per gestational age. Students will have peer discussion of simulated cases / clincal cases.
NLHT 5.3	Intra uterine fetal demise.	**(1 hr)** Faculty will discuss case scenario of fetal demise based on clinical features ,investigations and explain management strategies Students will analyse the clinical features, identify appropriate investigations, complications and discuss management

NLHT 5.4	*Rakta Gulma*	**(1hr)** Teacher will discuss *Rakta Gulma* in terms of D*osha,Dushya* and clinical manifestations Students will differentiate conditions involving clinical features and underlying concept.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 5.1	*Garbhashaya Mukha Vistrutikarana evam Garbhasaya Lekhana* - Dilatation and Curettage *Garbhashaya Greeva Samvrutikarana* - Cervical Encirclage	**(3hrs)** Teacher will explain Indications of Dilatation and Curettage (diagnostic/therapeutic), complications and it's management with video demonstration. a. Dilatation and Curettage in Abortion. Prerequisites – Provisions of MTP act. Steps – 1. History of presenting complaint - Details such as onset, duration and amount of bleeding, whether mild, moderate or severe. 2. Examination i. General examination: Assessment of general condition ii. Systemic examination: CVS, RS, NS & Breast examination. iii. Per abdomen examination

		iv. Per speculum examination and vaginal examination 3. Investigations: Guided by clinical history & examination 4. Differential diagnosis i. Intra uterine pregnancy ii. Abortion iii. Ectopic pregnancy iv. Molar pregnancy Case discussion - Clinical Case scenarios Observation of procedure – Pre-requisites- consent, pre-operative preparations, operation, post operation. b. Cervical Encirclage Enlist Indications and observe methods of cervical encirclage in pregnancy. Demonstration of the Mc Donald and Shirodkar procedure through a video or on a mannikin. Students will observe the procedure and analyze the type of abortion and discuss management.

NLHP 5.2	Intra Uterine Growth Restriction, Oligohydramnios and Polyhydramnios	**(2 hrs)** Teacher will demonstrate clinical examination and diagnosis of following conditions. a. Intra Uterine Growth Restriction 1. Clinical examination - Per abdomen Essential points in Diagnosis Serial measurements of Symphysis Fundal Height (SFH) or Biometry Case demonstrations for normal growth vs restricted growth of fetus, assessment of amniotic fluid and management based on the gestational age. 2. Ultrasonography – Amniotic Fluid Index / Fetal biomertry / Expected Fetal Weight 3. Discussion - Enumeration of various causes of Growth restrictions like, Maternal, Fetal & Placental. b. Oligohydramnios and Polyhydramnios Case / scenario-based discussion with explaination of aetiology, clinical diagnosis, investigations & management. Students will be engaged interpreting clinical examination, ultrasound findings and differential diagnosis with selection of approriate treatment.

NLHP 5.3	Ectopic pregnancy	**(1 hr)** Teacher will present a case scenario of undiagnosed ectopic pregnancy (presenting with acute abdominal pain and bleeding p/v). Discussion on differential diagnosis, interpreting ultrasound findings, and selecting the appropriate treatment (medical vs. surgical).
NLHP 5.4	Intrauterine Fetal Demise (IUFD)	**(1 hr)** Teacher will present a case scenario of third trimester of pregnancy with absent fetal movements and discuss approach to the case as below Clinical findings Role of USG X-ray findings Investigations, management protocols and complications Counselling techniques Students will have peer discussion on clinical examination and plan management

Topic 6 Garbhini Vyapad - Minor Ailments and Major Disorders of Pregnancy (LH :6 NLHT: 0 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO3, CO6	Describe *Nidana, Lakshana, Chikitsa of Garbhini Vyapad - Aruchi, Hrillasa,Chardhi, Vibandha.*	CC	MK	K	L&PPT	S-LAQ,VV-Viva	F&S	II	-	LH
CO1, CO3, CO6	Describe Nidana, Lakshana, Chikitsa of Garbhini Vyapad - Atisara, Arsha, Parikartika, Udavarta, Vaivarnya, Kandu, Kikkisa.	CC	MK	K	DIS,L&PPT ,CBL	S-LAQ,VV-Viva	F&S	II	-	LH
CO1, CO3, CO6	Diagnose *Garbhini Pandu* - Anaemia in pregnancy, describe investigations and plan of management.	CAN	MK	KH	CBL,IBL,LRI,DA,CD	P-VIVA,P-CASE,RK	F&S	II	-	NLHP6.1

CO1, CO3, CO6	Diagnose *Garbhini Jwara* (fever in pregnancy) - clinical features, investigations and management protocol	CAN	MK	KH	DA,CD, CBL,LR I	VV-Viva,S-LAQ,P-CA SE,P-VIVA ,P-EXAM	F&S	II	-	NLHP6.2
CO1, CO3, CO6	Define Pregnancy-Induced Hypertension, Pre-Eclampsia and Eclampsia.Describe causative factors, clinical features, and management.	CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	II	-	LH
CO1, CO3, CO6	Diagnose Pregnancy induced hypertension, pre-eclampsia and eclampsia with clinical features, examination and investigations.	CAN	MK	SH	TBL,RP ,CD,D-BED,L RI	S-LAQ,VV -Viva,SP,P M,P-EXAM	F&S	II	-	NLHP6.3
CO1, CO3, CO5	Describe Gestational diabetes, Thyroid dysfunction and HIV - in pregnancy	CK	DK	K	CBL,LR I,CD,L &PPT	VV-Viva	F	II	H-KC	LH
CO1, CO3, CO6	Describe *Bahu-Apatya* (Multiple pregnancy) - Causes, clinical findings, diagnosis and plan of management.	CK	DK	K	CBL,L &PPT	VV-Viva	F	II	-	LH
CO1, CO3, CO6	Diagnose *Yamala-garbha* (Twin Pregnancy) and describe varieties, etiology, lie, presentation, complications and management.	CAN	DK	K	D-BED, LRI,CD ,D-M,CBL	VV-Viva,P-EXAM,CB A,P-VIVA,SBA	F&S	II	-	NLHP6.4
CO1, CO3, CO5	Define Antepartum Hemorrhage (APH) and enumerate causes, classification, clinical features and management guidelines.	CC	MK	K	L&PPT ,CD,CB L	CBA,VV-V iva,SBA,S-LAQ	F&S	II	-	LH
CO1, CO3, CO5	Diagnose Antepartum hemorrhage - Placenta previa with clinical features and confirmation by ultrasound. Plan management with timely referral.	CS	MK	KH	D-BED, LRI,CD ,PBL,L	VV-Viva,P-ID,P-VIVA	F&S	II	-	NLHP6.5

					&PPT					
CO1, CO3, CO5	Diagnose Antepartum hemorrhage - Abruptio placenta, clinical features, and confirmation by ultrasound. Plan management with knowledge of the need for referral.	CS	MK	KH	PBL,D-M,CBL,D,L&PPT	P-EXAM,P-VIVA,COM,S-LAQ	F&S	II	-	NLHP6.6

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 6.1	*Garbhini Pandu* - Anaemia in pregnancy.	**(1hr)** Faculty will present a case of Anaemia in pregnancy and explain 1. Symptoms exploration - Pallor, fatigability, breathlessness on exertion, giddiness, anorexia, tingling sensation in extremities 2. Analysis of history - Obstetric history (Mupltiparity), Menstrual History(Abnormal Uterine Bleeding) , Contraceptive history & Dietary history, bleeding piles etc 3. Examination - A) General Examination - Record vitals B) Systemic Examination - CVS , Respiratory & Nervous system examination C) Obstetric examination (e.g. -Twins & multiple pregnancy) D) Investigations – to assess severity of Anaemia as mild ,moderate or severe

		4. Plan Management as per the gestation ,severity & type of Anaemia Students will discuss the effects of Anaemia, clinical outcome and plan management as per severity and gestational age .
NLHP 6.2	*Garbhini Jwara* - fever in pregnancy.	**(1 hr)** Teacher will present a case /scenario of Fever in pregnancy and explain 1. Symptoms exploration - temperature, fatigability, giddiness, anorexia, dryness of mouth 2. Examination - A) General Examination - Record vitals with temperature. B) Systemic Examination – CVS , Respiratory & Nervous system examination C) Obstetric examination (to assure fetal wellbeing) D) Investigations – to assess the cause/aetiology of fever 4. Plan Management as per the cause and severity. Student will have peer discussion and record the case in prescribed journal proforma
NLHP 6.3	Hypertensive disorders in Pregnancy	**(1 hr)** Teacher will demonstrate clinical features in pregnancy induced hypertension and pre-eclampsia.Plan investigations, management, anticipate complications and explain timely referral. Demonstrate approach to a pregnant or puerperal woman presenting with convulsions. Demonstration of Eclampsia drill. Students will analyse the diagnosis,plan primary care,document the case and importance of timely referral to higher centre for advance care.
NLHP 6.4	*Yamala-garbha* - Twin Pregnancy (1 hr)	**(1 hr)** Teacher will demonstrate clinical diagnostic features,varieties,lie, presentation on manikin/ video/ clinical case . Discuss and Interpret investigation ,understand possible care,complications and plan management in

		pregnancy and labour Student will imitate examination of Twin pregnancy on manikin and have peer discussion on Antenatal care
NLHP 6.5	Antepartum Hemorrhage -Placenta previa	**(1 hr)** Teacher will enable students to - 1. Diagnose Antepartum hemorrhage - Placenta previa based on clinical features and confirmation by ultrasound. 2. Identify the degree of placenta previa. 3. Plan management, know the limitations 4. Analyze need for referral to higher centre Teacher will analyse the diagnostic skill and preparedness of student
NLHP 6.6	Antepartum Hemorrhage - Abruptio placenta	**(1hr)** Teacher will enable students to - 1. Diagnose Antepartum hemorrhage - Abruptio placenta based on clinical features and confirmation by ultrasound. 2. Identify the type of Abruptio placenta 3. Plan management, know the limitations

		4. Analyze need for referral to higher centre Teacher will analyse the diagnostic skill and preparedness of student

Topic 7 Prasava Vigyana - Labour (LH :10 NLHT: 1 NLHP: 17)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO4	Describe *Sutikagara nirmana and sangrahaneeya dravya*.	CK	MK	K	L&PPT	S-LAQ,VV-Viva	F&S	II	-	LH
CO3, CO4	Explain chemical composition, indication, contraindication, mode of action, dosage, shelf life, and complications of drugs commonly used during labour. Explain guidelines for use with pharmacotherapeutics.	CK	MK	K	DA,BL, L&PPT	VV-Viva	F	II	-	NLHT7.1
CO4, CO5	Visualize and Demonstrate Labour room set-up and labour room protocol according to National health Guidelines.	PSY-SET	MK	KH	DIS,D,FV,TPW, TBL	PA,VV-Viva	F&S	II	-	NLHP7.1
CO4, CO5	Define *Prasava*, explain *Prasavahetu* and *Prasava kala*.	CK	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	II	-	LH
CO4, CO5	Describe causes of onset of Labour & narrate Physiology of Labour.	CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	II	-	LH
CO4, CO5	Diagnose Labour - Identify true and false labour pain.	PSY-GUD	MK	SH	SIM,D-M,CBL, CD	CBA,VV-Viva,SBA,Mini-CEX	F&S	II	-	NLHP7.2
CO4, CO5	Describe anatomy of fetal skull with diameters, fontanelle, and importance in labour.	CC	MK	K	L&PPT	S-LAQ,VV-Viva	F&S	II	-	LH

CO4	Demonstrate anatomy of fetal skull with diameters, fontanelle, and their obstetric importance.	PSY-GUD	MK	SH	D,D-M	P-MOD,VV-Viva	F&S	II	-	NLHP7.3
CO4, CO5	Define and explain the *Avasthas - Prajayini, Upastitha Prasava, Asanna Prasava.*	CC	MK	K	REC,L &PPT	P-REC,VV-Viva,S-LAQ,PP-Practical	F&S	II	-	LH
CO4	Assess adequacy of pelvis.	CE	MK	SH	D-M,X-Ray,D,SIM	OSCE,VV-Viva,P-PRF,SBA	F&S	II	-	NLHP7.4
CO4	Define Avi Shoola and Grahi Shoola. Explain Prasuti Maruta and Garbhastithi Parivartana during Prasavakala.	CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	II	-	LH
CO4	Describe Stages of Labour.	CC	MK	K	L&PPT	S-LAQ,VV-Viva,COM	F&S	II	-	LH
CO4, CO5	Demonstrate events in each stage of labour.	PSY-GUD	MK	KH	D,D-BED,SIM, CBL,FV	RK,VV-Viva,CBA,P-VIVA,SP	F&S	II	-	NLHP7.5
CO4	Explain the Mechanism of labour.	CC	MK	K	L&PPT	S-LAQ,VV-Viva	F&S	II	-	LH
CO4	Demonstrate Mechanism of Labour	PSY-GUD	MK	SH	D,SIM, D-M	DOAP,VV-Viva,P-VIVA,P-MOD, S-LAQ	F&S	II	-	NLHP7.6
CO4	Describe Prasava Paricharya. Explain monitoring and	CC	MK	K	L&PPT	VV-Viva,S-LAQ,P-VIVA	F&S	II	-	LH

	management of all stages of labour.									
CO4	Explain the Importance of Partograph.	CC	MK	K	D,L&PPT	VV-Viva,CBA	F&S	II	-	LH
CO4	Monitor labour	CAN	MK	KH	CBL,D,FV,PT,SIM	P-PRF,P-VIVA,VV-Viva,SP	F&S	II	-	NLHP7.7
CO4	Monitor progress and manage stages of labour.	CAN	MK	KH	SIM,CD,D-BED,CBL,PT	VV-Viva,Log book,P-VIVA,OSCE,CBA	F&S	II	-	NLHP7.8
CO3, CO4	Plot Partograph.	PSY-GUD	MK	SH	D,SIM,PT,D-M	S-LAQ,DOPS,P-PRF,RK,DOAP	F&S	II	-	NLHP7.9
CO3, CO4	Demonstrate and practice Episiotomy on model and simulation.	PSY-SET	MK	SH	FV,D,D-M,L_VC,CBL	VV-Viva,P-PRF	F&S	II	-	NLHP7.10
CO4	Demonstrate applications of Intrapartum fetal monitoring techniques.	PSY-GUD	MK	SH	CBL,L_VC,D-M,FV,D	Log book,P-VIVA,VV-Viva	F&S	II	H-KB	NLHP7.11
CO4, CO5	Perform *Jatamatra Paricharya*	PSY-GUD	MK	KH	D-BED,CBL,PT,PBL,L_VC	PP-Practical,VV-Viva,P-CASE,P-VIVA	F&S	II	H-KB	NLHP7.12

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 7.1	Essential drugs for labour practice; as per National protocol.	**(1 hr)** Teacher will explain chemical composition, indication, contraindication, mode of action, dosage, shelf life, route of administration, and complications of drugs commonly used during labour- a) uterotonics b) analgesics c) ergot alkaloids e) anaesthetics. Explain guidelines for use with pharmacotherapeutics. Student will discuss and analyze the drugs commonly used during labour.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 7.1	Labour Room Setup	**(1hr)** Teacher will make students familiarize with standards of Labour room set up and gain competency in labour room practice protocol according to National Health Guidelines. Student will get acquainted with the labour room set up and demonstrate functionality with respect to labour room practice protocols according to National Health Guidelines.
NLHP 7.2	Diagnosis of Labour	**(1hr)** Teacher will equip students to develop clinical diagnostic skills in identifying true labour pains through case presentation and demonstration on model, simulator, clinical examination. Students will observe and imitate examination on model and explain the signs of true labour pains.
NLHP 7.3	Fetal skull and labour	**(1 hr)** Teacher will demonstrate anatomy of fetal skull with diameters and fontanelles, assessment of presenting part with discussion on obstetric importance. Students will imitate demonstration of fetal skull on models and discuss its outcome on labour.

NLHP 7.4	Adequacy of pelvis	**(1 hr)** Teacher will demonstrate different scenarios regarding pelvic diameters and engaging diameter of fetal skull. Clinical adequacy features of maternal pelvis through clinical pelvimetry and assess the presenting part. Student will observe and imitate skills of pelvic assessment on model.
NLHP 7.5	Stages of Labour	**(3 hrs)** Teacher will equip students to develop clinical skill to identify stages of labour with discussion on duration and events of labour. Teacher will use video demonstration of stages of labour/ simulator/case based demonstration of labour process. First stage: Assessment of cervical dilatation and effacement Second stage: Status of membranes, descent of fetus, station of head, expulsion of fetus Third stage: Signs of placental separation, expulsion of placenta, placenta and cord examination. Students will observe and discuss events of each stage of labour alongwith duration and record in prescribed journal proforma.
NLHP 7.6	Mechanism of Labour	**(2hrs)** Teacher will demonstrate events in Mechanism of labour on model and simulator - Engagement, Descent, Flexion, Internal rotation, Crowning, Extension, Restitution, External rotation, Expulsion. Students will practice, demonstrate on model / simulator and explain each event in mechanism of labour.
NLHP 7.7	Labour monitoring	**(1 hr)** Teacher will demonstrate the factors of assessment A) Interval, intensity and duration of uterine contractions B) Cervical changes- dilatation, effacement, position, consistency.

		C) Station of presenting part D) Status of membranes & Liquor Student will observe and document progress of labor in prescribed case proforma. Students will obseve and document in prescribed journal proforma.
NLHP 7.8	Management of stages of labour	**(1 hr)** Teacher will enable students to develop skill of management of labour. Steps of management of each stage beginning from observation, counseling, preparedness and implement action / intervention as needed. Students will demonstrate skills to identify the active stage and progress of labour with the steps of management. Record the findings in prescribed journal format.
NLHP 7.9	Plot partograph	**(2 hrs)** Teacher will enable students to monitor labour progress and plot partograph for proper management and timely intervention. Students will discuss the components of partogrpah - alert line, action line and other aspects and practice to plot. Teacher will evaluate and provide feedback.
NLHP 7.10	Episiotomy	**(2 hrs)** Teacher will demonstrate Episiotomy on manikin and discuss types -Medial ,Lateral, Mediolateral & J-shaped with administration of local anaesthesia. Explain the merits and demerits of different types of incision. Demonstrate repair in layers with suturing techniques. Student will practice episiotomy on manikin and imitate repair Discuss possible complications, post repair assessment and plan perineal care.

NLHP 7.11	Intrapartum fetal monitoring techniques	**(1 hr)** Teacher will demonstrate with video / clinical case and interpret the result of Intrapartum fetal monitoring. Student will discuss and analyse different techniques and its clinical importance.
NLHP 7.12	*Jatamatra Paricharya*	**(1hr)** Teacher will demonstrate immediate newborn care on model / case Student will practice newborn resuscitation on model.

Topic 8 Prasava Vyapad - Labour Complications & Obstetric Emergencies. (LH :6 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO4	Elaborate - *Paribhasa, Nidana, Samprapti, Lakshana and Chikitsa of Akala Prasava* (Preterm labour).	CC	MK	K	L&PPT	COM,VV-Viva,S-LAQ	F&S	III	-	LH
CO4	Analyze management of preterm labour through observation.	CAN	MK	KH	PBL,CD,CBL,D-BED	COM,S-LAQ,CBA,VV-Viva,SBA	F&S	III	-	NLHP8.1
CO4	Explain Pre-labour rupture of membranes (PROM)	CC	MK	KH	PBL,CBL,L&PPT ,CD	VV-Viva,COM,S-LAQ	F&S	III	-	LH
CO4	Elaborate - *Paribhasa, Nidana, Samprapti, Lakshana and Chikitsa of Vilambita Prasava* (Prolonged labour)	CC	MK	KH	L&PPT	VV-Viva,COM,S-LAQ	F&S	III	-	LH
CO4	Analyze causes and plan management in *Vilambita prasava* (Prolonged labour)	CAP	MK	K	L&PPT,CD,PBL,CBL	S-LAQ,VV-Viva,CBA	F&S	III	-	NLHT8.1

CO4	Elaborate *Kalateeta Prasava* and Postmaturity.	CC	MK	K	L&PPT ,CBL,P BL,CD	COM,S-LA Q,VV-Viva ,P-VIVA	F&S	III	-	NLHT8.2
CO4	Define Postpartum Hemorrhage.Describe classification and explain causes and clinical features.	CC	MK	K	L&PPT ,CBL	COM,S-LA Q,VV-Viva	F&S	III	-	LH
CO4	Describe complications and steps of management of postpartum haemorrhage.	CC	MK	K	L&PPT	VV-Viva,C OM,SBA,S -LAQ,P-VIVA	F&S	III	-	LH
CO4	Elaborate *Paribhasa, Nidana, samprapti, lakshana* and *chikitsa of Aparasanga* (Retained placenta)	CC	MK	K	L&PPT	S-LAQ,CB A,VV-Viva,COM	F&S	III	-	LH
CO4	Demonstrate causes and clinical features of Postpartum Hemorrhage (PPH).	CAP	MK	KH	CBL,L &PPT , SIM,DI S,PBL	P-VIVA,PP -Practical,V V-Viva,S-LAQ,CBA	F&S	III	-	NLHP8.2
CO4	Demonstrate management of Retained placenta.	PSY-SET	MK	SH	CBL,C D,D-M	P-MOD,SB A,CBA,S-L AQ,VV-Viva	F&S	III	-	NLHP8.3
CO4	Practice steps of management under guidance, in Postpartum Hemorrhage (PPH).	PSY-GUD	MK	SH	D-M,C BL,SIM ,D,TBL	PP-Practica l,TR,COM, VV-Viva,Log book	F&S	III	-	NLHP8.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 8.1	Prolonged Labour	**(1 hr)** Teacher will demonstrate - 1. Diagnosis of Prolonged Labour 2. Analysis of cause 3. Assessment of fetal wellbeing 4. Anticipate complications 5. Plan management. Student will discuss diagnosis, possible complications and plan of management
NLHT 8.2	Postmaturity	**(1 hr)** Teacher will demonstrate - 1. Diagnosis of Post maturity 2. Plan investigations 3. Assessment of fetal wellbeing 4. Anticipate complications 5. Plan management

		Student will discuss diagnosis, assessment methods, possible complications and plan of management.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 8.1	Preterm labour	**(1hr)** Teacher will discuss the methods of determining gestational age ,assess established labor and propose plan of management Students will observe and document.
NLHP 8.2	Postpartum Hemorrhage	**(1hrs)** Teacher will demonstrate - 1. Diagnosis of Postpartum hemorrhage. 2. Analyze underling cause 3. Assess the condition of patient and explain need of resuscitation. Student will discuss causes of postpartum hemorrhage - Tone, Trauma, Tissue, Thrombin. Peer discussion on clinical findings to know the cause.
NLHP 8.3	Retained placenta	**(1hr)** Teacher will demonstrate the signs of retained placenta and steps of management Student will observe, analyze the underlying cause and document
NLHP 8.4	Postpartum hemorrhage management.	**(1hr)** Teacher will -

		1. Demonstrate techniques for manual removal of the placenta and management of postpartum hemorrhage using simulation models. 2. Manage birth canal injuries. 3. Identification of Atonic uterus and demonstrate bimanual compression. 4. Demonstrate PPH (Postpartum Hemorrhage) drill. Students will participate in the drill and demonstrate management techniques.

Topic 9 Moodhagarbha - Obstructed Labour (LH :8 NLHT: 3 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO4	Explain- *Nirukti, Paribhasa, Nidana, Samprapti, Lakshana* of *Moodhagarbha*.	CC	DK	K	L&PPT	COM,VV-Viva,S-LAQ,P-REC	F&S	III	-	LH
CO4	Elaborate *Bheda, Gati* and *Chikitsa* of *Moodhagarbha.*	CC	MK	K	L&PPT ,D-M	VV-Viva,COM,S-LAQ ,P-REC	F&S	III	-	LH
CO4	Demonstrate *Bheda and Gati* of *Moodhagarbha* .	CAP	MK	KH	D-M,L &PPT ,PrBL,D	VV-Viva,PRN,S-LAQ, P-MOD	F&S	III	-	NLHT9.1
CO4	Enumerate different types of abnormal presentations.	CK	DK	K	L&PPT	VV-Viva	F	III	-	LH
CO4	Demonstrate Assisted Breech delivery techinques.	PSY-SET	DK	KH	SIM,D-M,L_VC	P-MOD,VV-Viva	F	III	-	NLHP9.1

CO4	Describe Cephalopelvic disproportion (CPD)	CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	III	-	LH
CO4	Diagnose Cephalopelvic disproportion (CPD).	CAN	MK	KH	SIM,D-M	VV-Viva,P-MOD	F	III	-	NLHP9.2
CO4	Describe U*padrava* of *Moodha garbha. - Garbhakosha Parasanga, Makkala* and *Yonisamvarana.*	CK	MK	K	L&PPT	S-LAQ,VV-Viva,P-REC	F	III	-	LH
CO4	Demonstrate *Upadrava* of *Moodha garbha - Garbhakosha Parasanga, Makkala* and *Yonisamvarana*	CAP	MK	KH	CBL,L&GD	VV-Viva	F	III	-	NLHP9.3
CO4	Describe obstetric emergencies with causes, clinical features and complications - cord prolapse, uterine inversion, amniotic fluid embolism, obstetric shock and uterine rupture.	CC	DK	K	L&PPT,CBL	VV-Viva	F	III	-	LH
CO4	Discuss causes, clinical features and findings of investigation in obstetric emergencies.	CC	DK	K	PSM,L_VC,SIM,D	INT,P-ID,VV-Viva	F	III	-	NLHT9.2
CO4	Describe Bishop's Score.Explain methods of induction and augmentation of labour.	CC	DK	K	L&PPT	S-LAQ,VV-Viva	F&S	III	-	LH
CO1, CO3, CO4	Explain -a. Indications, contraindications, procedure and complications of ventouse delivery.b. Indications, contraindications, procedure and complications of forceps delivery.c. Indications, types and procedure of caesarean section.	CC	MK	K	L&PPT,FV	COM,VV-Viva,S-LAQ	F&S	III	-	LH
CO1, CO3, CO4	Calculate and Interpret Bishop’s score.Demonstrate forceps application, vacuum extraction and Caesarean Section.Explain indications and complications for each mode of assistance.	CAP	DK	KH	D-M,L_VC,D	P-MOD,VV-Viva,COM	S	III	-	NLHP9.4
CO1, CO4	Demonstrate abnormal presentations - face, brow, shoulder	CAP	MK	KH	D-M,L&PPT	SBA,P-EXAM,VV-	S	III	-	NLHT9.3

						Viva					

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 9.1	*Moodhagarbha - Bheda and Gati*.	**(1 hr)** Teacher will demonstrate *Bheda* and *Gati* of *Moodhagarbha* on model/manikin/3D. Students will compile and present *Moodhagarbha* with peer discussion.
NLHT 9.2	Obstetric Emergencies	**(1 hr)** Teacher will demonstrate identification of obstetric emergency through examination and investigations. Plan mock Drill for timely referral to higher centers. Students will observe and participate.
NLHT 9.3	Abnormal presentations – face, brow, shoulder presentations	**(1 hr)** Teacher will demonstrate abnormal presentations – face, brow, shoulder presentations on model/manikin/3D video/case. Student will practice abnormal presentations on model and discuss its outcome on labour.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 9.1	Assisted Breech delivery.	**(2 hrs)** Teacher will demonstrate on manikin / model / with 3D video. 1. Clinical diagnosis of type of breech

		2. Determining positions (L.S.A/R.S.A/R.S.P/L.S.P.) 3. Preparedness 4. Steps of assisted breech delivery Student will observe and analyze steps of breech delivery.
NLHP 9.2	Assesment of Cephalo-Pelvic Disproportion	**(1 hr)** Teacher will demonstrate and guide student to assess cephalo pelvic disproportion by clinical assessment. Student will observe, discuss and emulate clinical examination to diagnose CPD.
NLHP 9.3	Complications of *Moodha Garbha*	**(1 hr)** Teacher will discuss the complications of obstructed labour and demonstrate outcomes-cervical dystocia and uterine rupture. Students will analyze the complications and discuss preventive strategies.
NLHP 9.4	1. Bishop’s score and Induction/ Augmentation of Labour 2. Assisted labour techniques	**(2 hrs)** 1. Teacher will demonstrate components of Bishop's score on model / clincial case and interpret the score favourable for induction of labour and decide the method of induction. Student will observe and document the components of Bishop's score. 2. Teacher will demonstrate assisted labour techniques namely forceps application, vaccum extraction, caesarean section through video /manikin / case. Students will observe and record in prescribed journal proforma.
Topic 10 Sootika Vigyana - Puerperium (LH :3 NLHT: 1 NLHP: 3)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO4	Define *Sootika* and explain *Sootika Kala* with *Paricharya.*Describe puerperial changes and explain post-partum care.	CC	MK	K	L&PPT ,REC	P-REC,S-LAQ,COM, VV-Viva	F&S	III	-	LH
CO4	Demonstrate clinical examination of a puerperal woman - abdominal, perineal, and breast.	PSY-GUD	MK	SH	CBL,D, D-BED, SIM,D-M	P-VIVA,P-CASE,VV-Viva	F&S	III	-	NLHP10.1
CO4	Describe *Nidana, Samprapti, Lakshana, Bheda* and *Chikitsa* of *Sootika Vyapad.*	CC	MK	K	PBL,CBL,L&PPT	S-LAQ,COM,VV-Viva	F&S	III	-	LH
CO4	Explain causes, clinical features, management and complications of puerperal diseases.	CC	MK	K	DIS,CBL,CD,PBL,L&PPT	COM,S-LAQ,VV-Viva	F&S	III	-	NLHT10.1
CO4	Present case study on *Sootika Vyadhi*.	PSY-GUD	MK	SH	D-BED, SIM,CD ,PER,PBL	VV-Viva,CL-PR,P-CASE,P-VIVA	F&S	III	-	NLHP10.2
CO4, CO5, CO6	Explain contraception and family planning methods.	CK	MK	K	L&PPT ,DIS	S-LAQ,VV-Viva,COM	F&S	III	-	LH
CO4, CO5	Justify selection of contraceptives with method and time of administration.	CE	MK	KH	DIS,TUT,D,D-M,SIM	VV-Viva,P-PRF,OSCE, PP-Practical	F&S	III	-	NLHP10.3

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 10.1	Puerperal diseases.	**(1 hr)** Teacher will describe and explain puerperal diseases and discuss plan of management. Student will analyze the causes of puerperal diseases and discuss preventive stragegies by implementation of *sootika paricharya.*
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 10.1	Examination of a puerperal woman - abdominal, perineal, and breast.	**(1 hr)** Teacher will - 1. Demonstrate breast examination 2. Demonstration of consistency and involution of uterus with other pelvic structures. 3. Demonstrate perineal examination 4. Explain characteristics of normal lochia. Student will observe and practice abdominal examination on model / manikin. Student will record in prescribed journal proforma.
NLHP 10.2	*Sootika Vyadhi*	**(1 hr)** Students will be divided into groups. They will record cases of *Sootika vyadhi* under guidance of teacher and present with peer discussion. Teacher will assess the skill of history taking, examination and provide feedback.
NLHP 10.3	Contraception	**(1 hr)**

		Teacher will discuss contraceptive methods. a. Temporary: Physical method/Oral contraceptives/Intra uterine contraceptive devices/ Emergency contraception. b. * Permanent methods. (* Details in Paper-II) 1. Select ideal method of contraception 2. Prerequisites for administration of contraceptives 3. Demonstrate the method of use / administration Student will be given case scenarios to select appropriate contraceptive method with time of administration.

Topic 11 Stanya Vigyana - Lactation (LH :2 NLHT: 2 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO4	Explain *Stanya Utpatti* and describe *Stanya Sampat Lakshana.*Describe physiology of lactation and components of breast milk.	CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	III	-	LH
CO4	Analyze Breast milk components and Learn breastfeeding techniques.	CAN	MK	KH	SIM,L&PPT	VV-Viva,S-LAQ	F&S	III	H-KB	NLHT11.1
CO4	Demonstrate breast feeding techniques.	PSY-GUD	MK	SH	RP,D-BED,CBL	VV-Viva	F	III	-	NLHP11.1
CO4	Describe *Nidana, Samprapti, Lakshana* of *Stanya*	CC	MK	K	L&PPT	VV-Viva,S-	F&S	III	-	LH

	Dushti and *Stana Vidradhi*.					LAQ				
CO4	Explain causes,clinical features,investigations and management of mastitis and breast abscess.	CC	MK	K	D,CD,DA,CBL,PBL	VV-Viva, C-VC,S-LAQ,P-CASE	F&S	III	H-SH	NLHT11.2
CO4	Diagnose Breast Engorgement, Mastitis, Breast abscess.	CAP	MK	KH	D,CBL,CD,PBL,D-BED	S-LAQ,P-CASE,P-VIVA,P-ID,VV-Viva	F&S	III	H-SH	NLHP11.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 11.1	Breast milk and feeding techniques.	**(1hr)** Teacher will discuss breast milk components with its importance and demonstrate breast feeding techniques. Student will observe and review the breast milk substitutes from literature and discuss the importance of breast feeding for maternal and child health.
NLHT 11.2	Mastitis and Breast Abscess.	**(1 hr)** Teacher will explain causes, clinical features and examination of breast for diagnosis of mastitis and breast abscess with plan of management. Student will observe and learn medical and surgical management of breast abscess.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 11.1	Techniques of Breastfeeding.	**(1 hr)** Students will be divided into groups and will emulate breast feeding technqiues in different postures. Teacher will assess the techniques and provide feedback.

NLHP 11.2	Breast Engorgement, Mastitis, Breast abscess	**(1hr)** Teacher will demonstrate Breast Engorgement, Mastitis, Breast abscess. with Video / Clinical case and explain plan of management Student will observe and identify the clinical features and discuss medical and surgical management

Paper 2 (STREE ROGA - GYNAECOLOGY)

A3 Course out come	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/sub	D3 MK / DK / NK	E3 Level	F3 T-L method	G3 Assessment	H3 Assessment Type	I3 Term	K3 Integration	L3 Type
Topic 12 Stree Prajanananga Nirmana and Vikruti - Development of Female Reproductive System with Anomalies. (LH :3 NLHT: 2 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Explain the development of the Female Reproductive system from the Mullerian duct - Stree Jananaga Vikara (Muillerian duct anomalies)	CC	MK	K	L&PPT	COM,S-LAQ,VV-Viva	F&S	I	-	LH
CO1, CO2	Demonstrate the anatomy of female reproductive system.	CAP	MK	KH	D-M,L_VC	S-LAQ,M-CHT,VV-Viva,P-ID,P-VIVA	F&S	I	-	NLHP12.1
CO1, CO2	Demonstrate the anomalies of Female Reproductive system.	CAP	MK	KH	D-BED, PBL,L&	P-VIVA,VV-Viva,P-I	F&S	I	-	NLHP12.2

					PPT ,CBL,D-M	D,S-LAQ,QZ				
CO1, CO2	Explain Neuendorocrinology in Puberty & Menopause	CC	MK	K	L&PPT	S-LAQ,VV-Viva	F&S	I	-	LH
CO1, CO2	Explain Anatomical and Physiological aspects of Puberty and Menopause.	CC	MK	K	L&PPT	S-LAQ,VV-Viva,COM	F&S	I	-	LH
CO2	Explain neuroendocrinology with respect to puberty - hormones and functions.	CC	MK	K	PER,DIS	VV-Viva,S-LAQ,CL-PR	F&S	I	-	NLHT12.1
CO2	Explain applied aspects of Puberty and Adolescence.	CAP	MK	K	DIS,PER	CL-PR,S-LAQ,VV-Viva	F&S	I	-	NLHT12.2
CO2	Demonstrate Pubertal changes –Thelarche, Pubarche and Menarche	CAP	MK	KH	PER,CBL,D	QZ ,VV-Viva	F&S	I	-	NLHP12.3
CO2	Identify normal and abnormal Pubertal changes.	CAN	MK	KH	D-M,CD,DIS	QZ ,VV-Viva	F&S	I	-	NLHP12.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 12.1	Neuroendocrinology with respect to Puberty	**(1hr)** Students will have class presentation,discussion and concluding remarks by teacher.
NLHT 12.2	Applied aspects - Puberty and Adolescence	**(1hr)** Students will have Class presentation ,Group discussion on healthy transition through Puberty and Adolescence followed by concluding remarks by the teacher.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 12.1	Development of Female reproductive system	**(1hr)** Teacher will demonstrate development Female reproductive system from Mullerian Duct system on model / with video Student will discuss and analyse the possible defects.
NLHP 12.2	Anomalies of Female reproductive system	**(1 hr)** Teacher will demonstrate the Structural anomalies of Female reproductive system on model / video/ case instances Student will observe and analyze the underlying cause.
NLHP 12.3	Puberty	**(1hr)** Teacher will demonstrate changes in Puberty on Model / Charts / Case Students will discuss Pubertal changes -Thelarche- Tanner's staging , Pubarche & Menarche.
NLHP 12.4	Identify normal and abnormal Pubertal changes.	**(1hr)** Teacher will demonstrate Normal changes and discuss Abnormal conditions on Video / Chart / Case. Students will analyze outcomes of abnormal Puberty.

Topic 13 Yantra evam Shastra - Instruments (LH :1 NLHT: 1 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO3	Elaborate instruments commonly used in procedures and surgeries in Stree Roga (Gynaecology) and Prasuti tantra (Obstetrics). Describe the type of Yantra (Blunt instruments) and its utilization. 1. Sandansha Yantra- (Pincer-like	CC	MK	K	L&PPT ,D	P-EXAM,D OPS,P-ID, VV-Viva,DOPS	F&S	I	-	LH

	or dissecting forceps) Annigraha - plain/ non-toothed forceps, Sannigraha - Toothed forceps.2. Swastika Yantra (Cruciform like forceps) - Allies forceps, Vulsellum, Sponge holding forceps, Artery forceps, Babcock,s forceps, Cheatle's forceps, Kocher's forceps, Needle holder, Artery forceps, Ovum forceps, Green armytage forceps, Cervical punch biopsy forceps. 3. Shalaka Yantra- (Rod like instruments) - Uterine sound, Hegar's dilator, Uterine curette, endometrial biopsy curette, Anterior vaginal wall retractor, Agnikarma Shalaka4. Tala Yantra- (scoop or spoon-shaped instruments) - Sim's speculum, Cusco's speculum, Doyen's retractor, Obstetric forceps, Endometrial curette. 5.Nadi Yantra - (Tubular instruments) - Yonivranekshana yantra, Endometrial biopsy cannula, HSG cannula/ Rubin's cannula, Suction cannula, Uttara basti cannula, Leech Wilkinson's cannula, Basti yantra. Describe types of Shastra (Sharp instruments) and utilization: 1. Kartari Shastra - Scissors;Atimukha Shastra - Episiotomy scissorsMandalagra Shastra, umbilical cord-cutting scissors,Shararimukha Shastra - Mayos scissors / simple scissors, Stich removing scissors. 2. Vriddhipatra Shastra - Scalpel 3. Suchi Shastra - different types of needles.									
CO3	Identify & Discuss the uses of instruments with method of sterilization.	CC	MK	K	PT,D	VV-Viva,P-EXAM,OSCE	F&S	I	-	NLHT13.1
CO3	Describe instrument sterilization methods	CC	MK	K	PT,D	INT,VV-Viva	F	I	H-SH	NLHP13.1
CO3	Demonstrate the techniques of holding and using instruments .Enlist uses in *Prasuti & Stree Roga -Sandansham and Swastika yantra*	PSY-GUD	MK	SH	D	VV-Viva,P-VIVA,P-EXAM	F&S	I	-	NLHP13.2
CO3	Demonstrate techniques of holding and using instruments .Enlist	PSY-	MK	SH	D	PP-Practica	F&S	I	-	NLHP13.3

	uses in *Prasuti & Stree Roga*- Shalaka, *Tala & Nadi yantra*	GUD				l,P-EXAM, VV-Viva,P-ID,P-VIVA				
CO3	Practice techniques of holding and using Sharp instruments. Enlist uses in *Prasuti and Stree roga*	PSY-GUD	MK	SH	D	P-ID,VV-Viva	F&S	I	-	NLHP13.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 13.1	Instruments used in Obstetrics and Gynaecology	**(1 hr)** Teacher will fecilitate students to get familiarize with Instruments commonly used in Obstetrics and Gynaecology and discuss methods of sterilization for blunt and sharp instruments Students will document instruments with, 1. Identification 2. Description 3. Uses 4. Advantages & Disadvantages

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 13.1	Instrument sterilization methods	**(1hr)** Teacher will enable students to experience the method processing of instruments Students will have exposure to - 1. Disinfection of Instruments 2.Scrubbing methods 3. Sterilization methods for blunt instruments 4 Serilization methods for sharp instruments

NLHP 13.2	Instruments -*Sandansha and Swastika yantra*	**(2hrs)** Teacher will demostrate techniques of holding and using instruments - *Sandanmsha and Swastika yantra* Students will practice the technique of holding and using - 1. *Sandansha Yantra* (Pincer like or dissecting forceps) – *Annigraha* – plain non-toothed forceps; Sannigraha – Toothed forceps 2. *Swastika Yantra* (Cruciform like Forceps) - Allies forceps, Vulsellum, Sponge holding forceps, Cheatle's forceps, Kocher's forceps, Babcock's forceps, Needle holder, Artery forceps, Babcock's forceps, Ovum forceps, Green armytage forceps, Cervical punch biopsy forceps.
NLHP 13.3	Instruments - Shalaka,*Tala & Nadi yantra*	**(2hrs)** Teacher will demonstrate techniques of holding & using instruments - Shalaka, Tala and Nadi yantra Students will practice the technique of holding and using - 3. Shalaka Yantra- (Rod like instruments) - Uterine sound, Hegar's dilator , Uterine curette, endometrial biopsy currette, Anterior vaginal wall retractor, Agnikarma shalaka. 4.*Tala Yantra* (Scoops or spoon-shaped instruments - *Dvi Tala yantra* - Sim's speculum, Endometrial curette, Cusco's speculum, Doyen's retractor, Obstetric forceps. 5. *Nadi Yantra* (Tubular instruments)- *Yonivranekshana yantra*, Leech Wilkinson's HSG cannula, Rubin's cannula, Suction cannula, *UttaraBasti* cannula, Vaginal douching syrrenge, *Basti yantra.*
NLHP 13.4	Sharp instruments.	**(1hr)** Teacher will demonstrate holding & using various *Shastra* (sharp instruments) Students will practice the technique of holding & using - 1. *Kartari Shastra* - Scissors; *Atimukha Shastra* - Episiotomy Scissors, *Mandalagra Shashtra* -Umbilical cord cutting Scissors, *Shararimukha Shastra* - Mayos Scissors / Simple scissors, Stitch removing Scissors 2. *Vriddhipatra Shastra* – Scalpel 3. *Suchi Shastra* – different types of needles

Topic 14 Stree Rugna Parikshana - Gynaecological Examination (LH :2 NLHT: 1 NLHP: 4)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO6	Enumerate history taking in Gynaecology.	CK	MK	K	DIS,L& PPT	P-CASE,P-VIVA,RK, PP-Practical,CL-PR	F&S	I	-	LH
CO2, CO6	Elaborate essential components of Gynaecological history taking.	CK	MK	K	CBL,L &PPT ,CD,DIS	PP-Practical,P-VIVA,SBA,P-CASE,P-EXAM	F&S	I	-	NLHT14.1
CO2, CO6	Acquire the knowledge of Gynecological examination- Breast examination, Abdominal examination, Pelvic , Per rectal examination and plan investigations	CAP	MK	SH	L&PPT ,PL	VV-Viva,P-PRF,P-EXAM,PP-Practical,P-VIVA	F&S	I	-	LH
CO2, CO6	Demonstrate General - Physical & Systemic examination in Gynaecology Breast examination.	PSY-GUD	MK	SH	D-M,CBL,SDL ,D-BED,RP	RK,P-CASE,P-PRF,P-EXAM,VV-Viva	F&S	I	-	NLHP14.1
CO2, CO6	Demonstrate Abdominal Examination in Gynaecology – Inspection, Palpation, Percussion & Auscultation	PSY-GUD	MK	SH	D-BED, SIM,D-M,D,CBL	P-PRF,P-VIVA,VV-Viva,DOAP,OSCE	F&S	I	-	NLHP14.2
CO2, CO6	Demonstrate Vaginal Examination - Inspection & Palpation of External genitalia.Speculum examination, Bimanual examination, Rectovaginal & Per Rectal examination.	PSY-GUD	MK	SH	SIM,DL ,PT,TBL,CD	OSCE,DOAP,P-CASE,P-EXAM ,P-PRF	F&S	I	-	NLHP14.3

CO2	Plan Diagnostic procedures - Cervical & Vaginal smear, Colposcopy, Endometrial sampling & Culdocentesis.	CS	MK	KH	L_VC,L &GD,L RI,CD, CBL	S-LAQ,VV -Viva,P-VI VA,P- EXAM	F&S	I	-	NLHP14.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 14.1	Gynaecological history taking.	**(1hr)** Teacher will discuss essential components of Gynaecological history taking based on case scenario / clinical case and on various essential components viz , Age, parity & complaint specific elicitation of history - Chief complaints in chronological order Important aspects of Gynaecological history Pelvic pain Vaginal discharge Menstrual abnormality & abnormal uterine bleeding Presence of Urinary / Fecal incontinence Something coming down per vagina Past Obstetric history Past Gynaecological history Past Medical & Surgical history Marital & Sexual history – Dyspareunia , Vaginismus Contraceptive history Drug history Students will comprehend ,discuss and record in prescribed case proforma.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

NLHP 14.1	Examination in Gynaecology including Breast	**(1hr)** Demonstration on Manikin / Clinical case by the teacher - Physical examination: Appearance, Built ,Nutrition, Height,Weight, Edema, Pallor, Cyanosis, Icterus, Clubbing, Secondary sexual characters, BP Pulse, Respiration & Temperature Systemic examination : C V S, Respiratory system, G I system, Neurological system Clinical Breast Examination: Breast size, Symmetry, Skin, Areola & Nipple Student will observe and emulate examination on Manikin / case under guidance. Teacher will provide feedback to improve skill of students.
NLHP 14.2	Abdominal Examination in Gynaecology	**(1hr)** Demonstration of Abdominal examination by the teacher on Model / Manikin / Clinical Case - Prerequisites : Obtain consent & introduce self Ask the patient to void urine Accompany female attendant Stand on right side of the patient Position of patient -Dorsal supine position Abdomen is exposed fully "9 region Abdominal assessment" Steps : 1.Inspection 2.Palpation 3.Percussion 4.Auscultation Students will observe and emulate Abdominal examination under guidance of teacher on Model/ Manikin/Clinical case. Teacher will provide feedback to improve skill of students.
NLHP 14.3	Vaginal ,Recto vaginal & Per Rectal examination	**(1hr)** Teacher will demonstrate examination of external genitalia, Internal genitalia & Recto vaginal examination

on Model / Manikin / Clinical case
Steps :

1. Pre-requisites - Consent, Privacy, good source of light, gloved hands & Examination specific preparedness –

Bladder emptying
Position : Dorsal supine position / Dorsal lithotomy position /Sim's or Lateral position

2. Demonstration of External Genital organs – Inspection & palpation

A .Inspection of External Genitalia – Vulva
Labia majora & Labia minora
Clitoris
Urethra
Fourchette
Vaginal Introitus
Bartholin's gland
Gynaecological perineum
Anus
B. Palpation of External Genitalia & Vagina
Urethra & Bartholin gland

3. Demonstration of Per speculum examination

		Visualization with Sim's speculum & Anterior vaginal wall retractor /Cusco's speculum Note the findings of Vagina on inspection & Speculum examination Note the cervical findings 4. Demonstration of Bimanual examination / Pelvic examination Note the Size ,Position & Mobility of Uterus Palpation of Fornices & Adnexa 5. Demonstration of Recto vaginal & Per rectal examination Inspection & Palpation of Rectovaginal area (Gynaecological perineum) -Palpate rectovaginal septum , Pouch of douglas , Posterior surface of uterus , fornices and uterosacral ligaments Per rectal examination - Understand indications and perform with gloved lubricated index finger Summarize the findings/case Students will emulate and document in the journal .
NLHP 14.4	Plan Diagnostic procedures	**(1hr)** Teacher will explain the indications and demonstrate diagnostic procedures -Cervical & Vaginal smear collection, Colposcopy, Endometrial sampling & Culdocentesis Students will plan the diagnostic procedure on the given case scenario.

Topic 15 Artava Vyapad - Menstrual Disorders (LH :6 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3

CO2	Explain *Nidana, Samprapti, Lakshana and Chikitsa of Ashta-Artava Dushti.*	CC	MK	K	L&PPT	P-VIVA,S-LAQ,P-REC,VV-Viva,COM	F&S	I	-	LH
CO2	Acquire comprehensive understanding of *Ashta-Artava Dushti.*	CAP	MK	KH	REC,DIS,L&PPT ,CBL,CD	S-LAQ,P-REC,CBA,VV-Viva	F&S	I	-	NLHT15.1
CO2	Explain *Nidana, Samprapti, Lakshana* and *Chikitsa of Artava kshaya* with understanding of Oligomenorrhoea and Hypomenorrhoea	CC	MK	K	DIS,L&PPT	VV-Viva,S-LAQ,P-REC	F&S	I	-	LH
CO2	Identify, record and plan the management of *Artava Kshaya* - Oligomenorrhoea & Hypomenorrhoea	CS	MK	KH	CBL,CD,DIS	SP,SBA,P-CASE,P-VIVA,VV-Viva	F&S	I	-	NLHP15.1
CO2	Explain polycystic Ovarian Syndrome (PCOS) – Aetiology, Pathophysiology, Clinical features, Investigations, consequences and management	CC	MK	K	L&PPT ,CD	S-LAQ,VV-Viva	F&S	I	-	LH
CO2	Describe *Nidana, Samprapti, Lakshana* and *Chikitsa of Anartava*Describe etiology, types, clinical features, differential diagnosis, diagnosis and management of Amenorrhoea.	CC	MK	KH	L&PPT ,CBL,CD	S-LAQ,CBA,P-VIVA	F&S	I	-	LH
CO2, CO6	Diagnose Amenorrhoea and plan management.	CS	MK	KH	D-BED, CBL,DIS,CD,PBL	CBA,SP,S-LAQ,P-VIVA,VV-Viva	F&S	I	-	NLHP15.2
CO2,	Diagnose and plan management of Poly Cystic Ovarian Syndrome	CS	MK	KH	CD,CB	SP,P-CASE	F&S	I	-	NLHP15.3

CO6	(PCOS)				L,LRI,DIS	,VV-Viva,RK,P-VIVA				
CO2, CO6	Explain *Nidana, Samprapti, Lakshana and Chikitsa of Asrugdara* and *Artava Vruddhi.*	CC	MK	K	CD,CBL,L&PPT	VV-Viva,CBA,COM,SBA,S-LAQ	F&S	I	-	LH
CO2, CO6	Describe etiology, types, clinical features, differential diagnosis, diagnosis and management of Abnormal uterine bleeding.	CC	MK	K	L&PPT,CD,CBL,LRI	S-LAQ,CBA,VV-Viva	F&S	I	-	LH
CO2, CO6	Describe - *Artava Kshaya, Anartava, Asrugdara & Artava Vruddhi.*	CC	MK	K	PER,REC,DIS,CBL	SBA,CBA, PM,CL-PR, VV-Viva	F&S	I	-	NLHT15.2
CO2, CO6	Identify the causes and plan management of *Asrugdara* and *Artava Vruddhi.*	CS	MK	KH	CD,LRI,D-BED,CBL,DIS	VV-Viva,SP,CBA,COM,S-LAQ	F&S	I	-	NLHP15.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 15.1	Ashtartava dusti	**(1hr)** Teacher will provide case scenarios pertaining to various artava dushti and students will analyse the characteristics of Artava and identify the respective dosha involvement with recitation of shlokas.
NLHT 15.2	*Artava kshaya, Anartava , Asrugdara & Artava vruddhi*	**(1hr)** Students will be divided into groups to present cases of *Artava kshaya, Anartava , Asrugdara & Artava vruddhi* Teacher will assess and give remark.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 15.1	Artava kshaya - Oligomenorrhoea & Hypomenorrhoea	**(1 hr)** Students will document the case in prescribed journal proforma and 1. Evaluate in relation to Age, Weight, H-P-O axis dysregulation, Endocrine Disorders, Androgen producing tomours, Tubercular endometritis and drugs 2. Plan management Teacher will assess and provide feedback.
NLHP 15.2	Anartava - Amenorrhoea evaluation and management	**(1hr)** Student will document the case in prescibed journal proforma and note the clinical type with 1. Evaluation- i) Clinical examination ii) In depth investigations 2. Plan of management; Shodhana / Shamana Teacher will assess and guide in planning the management based on the type of Amenorrhoea.
NLHP 15.3	Poly Cystic Ovarian Syndrome (PCOS)	**(1 hr)** Teacher will enable students to determine signs,symptoms, results of investigations and plan management of Poly Cystic Ovarian Syndrome based on case scenario / clinical case 1. Analyse main concerns – Menstrual abnormalities, Symptoms of hyperandrogenemia , subfertility, weight gain 2. Analyse diagnostic criteria -Biochemical abnormalities (Hyperandrogenemia,

		hyperinsulinemia, hyperlipidaemia, hyper prolactaenemia , low FSH , hyper secretion of LH) 3. Plan management -Conservative(sansodhana & sansamana)/ Surgery Students will comprehend and evaluate Poly Cystic Ovarian Syndrome.
NLHP 15.4	Management of *Asrugdara* and *Artava Vruddhi* - Structrual and Non-structural / Systemic causes	**(1hr)** Students will document the case in the prescibed journal proforma under the guidance of teacher with 1.Evaluation and classification i) Structural causes (PALM) -Polyp, Adenomyosis, Leiomyoma & Malignancy ii) Non-structural systemic causes(COEIN) -Coagulopathy, Ovulatory dysfunction, Endometrial, Iatrogenic and Not yet identified 2.Plan of management Teacher will assess and give remarks.

Topic 16 Rajonivritti - Menopause (LH :2 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Define *Rajonivrutti* – Menopause and explain the symptoms with changes in organs	CK	MK	K	LS,L&PPT	VV-Viva,CR-RED,S-LAQ	F&S	I	-	LH
CO2	Understand Endocrinology of Menopause and management options with emphasis on role of *Rasayana Chikitsa*	CK	MK	K	CD,L&PPT	VV-Viva,S-LAQ	F&S	I	-	LH
CO2, CO6	Discuss Hormone Replacement Therapy (HRT)	CK	NK	K	L&PPT,DA,DIS,CBL	INT,VV-Viva,CR-RED,PRN,CL-PR	F&S	I	-	NLHT16.1

CO2	Diagnose Menopause	CAN	MK	KH	CD,CBL,D-BED,LRI,SIM	P-PRF,P-CASE,CBA,VV-Viva	F&S	I	-	NLHP16.1
CO2	Plan management of Menopause	CS	MK	KH	DA,CBL,CD,DIS	P-CASE,RK,SP,CBA,S-LAQ	F&S	I	-	NLHP16.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 16.1	Hormone Replacement Therapy (HRT)	**(1hr)** Students will present Indications, Contraindications, Risk factors and complications of Hormone Replacement Therapy in Menopause. Review of research paper / publications Teacher will assess the presentations and discuss the alternate therapies .

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 16.1	Menopause	**(1hr)** Students will document following in the prescribed journal proforma under the guidance of teacher - 1. History taking with special reference to Age, Period of Amenorrhoea and Symptoms such as hot flash and night sweats 2. Physical examination 3. Hormonal Assay Teacher will assess and give remarks.

NLHP 16.2	Plan management of Menopause	**(1hr)** Teacher will present a case scenario and students will learn and present plan of management with following components - 1. Counselling 2. Advice on Diet, Life style and Meditation 3. Rasayana and Phytoestrogens 4. Symptomatic management

Topic 17 Yoni Vyapad - Disorders of Female Reproductive system (LH :13 NLHT: 3 NLHP: 10)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Enlist *Yonivyapad - S*ankhya, D*oshanusara bheda, Samanya Nidana, Upadrava and Sadhya-Asadhyata*	CC	MK	K	CBL,REC,L&PPT	VV-Viva,S-LAQ,P-REC	F&S	II	-	LH
CO2	Explain *Nidana, samprapti, Lakshana and Chikitsa of Udavarta, Vandhya, Vipluta ,Paripluta Vatala Yonivyapad.*	CC	MK	K	CBL,L&PPT ,REC	P-REC,VV-Viva,S-LAQ	F&S	II	-	LH
CO2	Explain *Nidana, samprapti, Lakshana and Chikitsa of Rudhirakshara, Vamini, Sramsini, Putraghni, Pittala Yonivyapad.*	CC	MK	K	CBL,REC,L&PPT	P-REC,S-LAQ,VV-Viva	F&S	II	-	LH
CO2	Explain *Nidana, Samprapti, Lakshana and Chikitsa of Atyananda, Karnini, Acharana, Aticharana, Shleshmala*	CC	MK	K	REC,CD,L&PPT	VV-Viva,S-LAQ,P-REC	F&S	II	-	LH
CO2	Explain *Nidana, Samprapti, Lakshana and Chikitsa of Shandi, Phalini, Mahati, Suchivaktra, Sarvaja*	CC	MK	K	REC,CD,L&PPT ,CBL	P-REC,VV-Viva,S-LAQ	F&S	II	-	LH

CO2	Explain *Nidana, samprapti, Lakshana and Chikitsa of Antarmukhi, Shuska, Arajaska, Lohita kshaya, Upapluta, Prakcharana Yonivyapad.*	CC	MK	K	L&PPT ,REC	VV-Viva,S-LAQ,P-REC	F&S	II	-	LH
CO2	Explain S*amanya Chikitsa Siddhanta* of *Yonivyapad* and *Pathya-Apathya.*	CC	MK	K	REC,CBL,CD, L&PPT ,PL	VV-Viva,PA,CBA,S-LAQ	F&S	II	-	LH
CO2	Diagnose and plan management of *Udavarta (Kastartava) / Vatala/ Vipluta /Paripluta Yonivyapad.*	CS	MK	KH	SIM,CD ,DA,PBL,LRI	VV-Viva,CBA,P-REC, RK,SBA	F&S	II	-	NLHP17.1
CO2, CO6	Diagnose and plan management of *Pittala/ Rudhirakshara/ Karnini/ Acharana/ Aticharana Yonivyapad.*	CS	MK	KH	DA,CD, CBL,D-BED,LRI	SP,P-CASE ,PM,P-VIVA,CBA	F&S	II	-	NLHP17.2
CO2	Memorize and recite S*hlokas* of *Yonivyapad.*	CK	MK	K	REC	VV-Viva,P-REC	F&S	II	-	NLHT17.1
CO2	Define Dysmenorrhoea. Expalin types – Primary & Secondary, aetiology, clinical signs and symptoms, investigations with treatment.	CC	MK	K	CBL,CD,L&PPT ,D-BED,DA	CBA,SP,S-LAQ,VV-Viva,PM	F&S	II	-	LH
CO2, CO6	Diagnose Dysmenorrhoea and plan management	CS	MK	SH	PBL,LRI,CD,DA,D-BED	P-CASE,VV-Viva,CBA,SBA	F&S	II	-	NLHP17.3
CO2	Define Endometriosis and Adenomyosis . Explain causes, clinical symptoms, investigations and treatment	CC	MK	K	L&PPT ,DA,LRI,CD,C	CBA,VV-Viva,S-LAQ	F&S	II	-	LH

					BL					
CO2, CO6	Diagnose and plan management of Endometriosis and Adenomyosis.	CS	MK	SH	LRI,PBL,CBL, D-BED, DA	VV-Viva,CBA,PM,P-CASE,SP	F&S	II	-	NLHP17.4
CO2	Define Pelvic Inflammatory Disease (PID). Explain aetiology, Types, clinical diagnostic criteria, Investigations, complications and management.	CC	MK	K	CD,LRI,DIS,L &PPT	S-LAQ,VV-Viva	F&S	II	-	LH
CO2, CO6	Diagnose and plan management of Pelvic Inflammatory Disease (PID)	CS	MK	SH	CD,D-BED,CBL,LRI,DA	SP,SBA,VV-Viva,CBA,P-CASE	F&S	II	-	NLHP17.5
CO2	Explain Role of *Panchakarma* in *Yoni Vyapad*	CAP	MK	K	DIS,CBL,PER, CD,LRI	VV-Viva,CR-RED,PRN,S-LAQ	F&S	II	-	NLHT17.2
CO2, CO6	Present case studies on *Yonivyapad*	AFT-RES	MK	SH	PER,D-BED,CD,CBL	P-PRF,CR-RED,VV-Viva,CL-PR,CBA	F&S	II	-	NLHP17.6
CO2	Explain Cervical erosion and Ectropion – Aetiology, Clinical features, Investigations and Management	CC	MK	K	L&PPT,CD,CBL,D	VV-Viva,S-LAQ,CBA	F&S	II	-	LH
CO2, CO6	Diagnose and Plan management of Cervical erosion.	CS	MK	SH	PBL,CD,D-BED,CBL,LRI	SP,DOAP, VV-Viva,CBA,P-CASE	F&S	II	-	NLHP17.7
CO2,	Diagnose and plan management of *Yoni Kandu* - Pruritus Vulvae.	CS	MK	SH	D-BED,	VV-Viva,P	F&S	II	-	NLHP17.8

CO6					CBL,CD,L&PPT	M,P-CASE				
CO2, CO6	Define Pelvic organ prolapse (POP) and explain entities with conservative and surgical treatment options -1.Vaginal Prolapse -Cystocele,Cystourethrocele, Rectocele, Enterocele 2.Uterovaginal prolapse -Uterine prolapse ,	CC	MK	K	CD,L&PPT	S-LAQ,VV-Viva	F&S	II	-	LH
CO2, CO6	Diagnose and plan management of Vaginal prolapse – Cystocele & Rectocele.	CS	MK	KH	D-BED,D-M,CBL,PBL,CD	VV-Viva,S-LAQ,P-VIVA,CBA,P-CASE	F&S	II	-	NLHP17.9
CO2, CO6	Diagnose and plan management of Uterovaginal prolapse.	CS	MK	KH	CBL,D,CD,DA,PBL	S-LAQ,P-CASE,CBA,SP,P-VIVA	F&S	II	-	NLHP17.10
CO2	Explain the causes and management of -1. Dyspareunia2. Vaginismus3. Presacral neuralgia4.Constitutional nymphomania 5. Effluvium seminis	CC	MK	KH	CD,L&PPT,CBL	VV-Viva,S-LAQ	F&S	II	-	LH
CO2, CO6	Present case studies on different *Yonivyapad.*	AFT-RES	MK	KH	DA,RP,DIS,LRI,PER	VV-Viva,P-EXAM,CL-PR,S-LAQ,P-VIVA	F&S	II	-	NLHT17.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 17.1	*Shlokas* of *Yonivyapad*	**(1 hr)** Students will recite *Shlokas* of *Yonivyapad* from *Brihatrayi*.

NLHT 17.2	*Panchakarma* in *Yonivyapad*	**(1 hr)** Teacher will divide students into groups and allot topics on *Shodhana Chikitsa* in *Yonivyapad*. Students will review research publications / clinical cases and present in class. Teacher will assess and discuss importance of *Panchakarma* in *Yonivyapad*.
NLHT 17.3	Case studies on different *Yonivyapad*	**(1hr)** Students will be divided into smaller groups, each group will be given a case scenario to present . Teacher will analyse and give remarks.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 17.1	*Udavarta (Kastartava) / Vatala/ Vipluta /Paripluta yonivyapad.*	**(1hr)** Teacher will provide case scenarios with clinical features of *Udavarta, Vatala, Vipluta* and *Paripluta Yonivyapad.* Students will diagnose by- 1. Analysis of *lakshana* 2. Discussion on *samprapti vighatana* based on *dosha* involved. 3. Examination and investigations. Student will discuss management plan with *Shodhana*, *Shamana* and *Sthanik Chikitsa and* document in prescribed journal proforma. Teacher will assess and provide feedback.

NLHP 17.2	*Pittala/ Rudhirakshara/ Karnini/ Acharana/ Aticharana yonivyapad*	**(1hr)** Teacher will provide case scenarios with clinical features of *Pittala/ Rudhirakshara/ Karnini/ Acharana/ Aticharana yonivyapad.* Students will diagnose by- 1. Analysis of *lakshana* 2. Discussion on *samprapti vighatana* based on *dosha* involved. 3. Examination and investigations. Student will discuss management plan with *Shodhana*, *Shamana* and *Sthanik Chikitsa and* document in prescribed journal proforma. Teacher will assess and provide feedback.
NLHP 17.3	Dysmenorrhoea	**(1hr)** Student will document case in prescribed journal proforma. 1. History taking to elicit Primary / Secondary dysmenorrhea Menstrual history - Age of Menarche & relation of the onset Dysmenorrhoea with menarche. Obstetric history : Association of Dysmenorrhoea with previous delivery History of Intra Uterine Contraceptive Device use, Oral Contraceptive Pills ,Depot Medroxyprogesterone acetate (DMPA), Progestin Intrauterine System 2. General physical examination

		3. Abdominal examination 4. Pelvic examination 5. Investigations 6. Plan management -Primary / Secondary Teacher will assess and provide feedback.
NLHP 17.4	Endometriosis and Adenomyosis.	**(1 hr)** Student will document the case in prescribed journal proforma. 1. History taking : Chief complaints with reference to severe cyclical pain in lower abdomen mostly during menstruation - Dysmenorrhoea, Dyspareunia and Dyschezia 2. Gynaecological examination - i) Abdominal examination ii) Vaginal examination : Bimanual examination : Uterus-size Rectovaginal mobility Tenderness Fornices Adnexae Palpation of Pouch of douglas

		Rectovaginal septum iii) Rectal examination 4.Investigations : 5.Differential diagnosis 6.Plan management of Endometriosis /Adenomyosis Teacher will discuss cases with clinical outcome.
NLHP 17.5	Pelvic Inflammatory Disease (PID)	**(1 hr)** Student will document case in prescribed journal proforma. 1. History taking – Analysis of symptoms - Pain abdomen, Vaginal discharge, Menstrual disturbance (menorrhagia) 2. General examination : Acute / Chronic Record vitals – Temperature, Pulse, Respiratory rate Per abdomen : Elicitation of tenderness in lower abdomen Per vaginal : Offensive vaginal discharge, tenderness on movement of cervix , fornices tenderness and fullness of posterior fornix 3. Differential diagnosis 4. Investigations Teacher will assess and discuss management plan.

NLHP 17.6	Case presentation on *Yonivyapad*	**(1hr)** Teacher will divide students into groups and allot topics of Yonivyapad to each group. Student will review clinical case studies / systematic review of research publications of Yonivyapad alloted to them and present in class. Teacher will discuss and assess the presentations on clinical cases and provide feedback.
NLHP 17.7	Cervical erosion	**(1 hr)** Student will document case in prescribed journal proforma. 1. History taking – Analysis of symptoms 2. General examination Per abdomen : Per speculum : Vagina, Cervix - lesion/ breach in portion to be documented, white discharge, any spotting / bleeding Per vaginal – Uterus / Fornices 3. Investigations : 4. Plan management Teacher will discuss management options and provide feedback on cases.

NLHP 17.8	*Yoni kandu* - Pruritus Vulvae	**(1hr)** Teacher will discuss a case scenario / clinical case of Yoni Kandu -Pruritus Vulvae 1.History taking and examination 2. Analyse aetiology –Vaginal discharge, local skin lesions, infections, allergy, systemic diseases 3.Plan management -i) Locl hygiene ii) Drug application - local and/or systemic Students will discuss and document in the prescribed journal proforma.
NLHP 17.9	Cystocele & Rectocele	**(1hr)** Teacher will explain and demonstrate Cystocele & Rectocele on manikin / clinical case with discussion on following - 1. Histrory taking – i) Predisposing (acquired /congenital) ii) Aggravating (postmenopausal atrophy, chronic cough, constipation, obesity, multiparity, weight lifting, under nutrition, smoking 2 Examination : i. General – Body Mass Index , Signs of myopathy or neuropathy, features of chronic airway disease, abdominal mass ii. Composite examination- Inspection and Palpation : Vaginal, Rectal and Recto vagina. 1. Diagnosis - Cystocele / Urethrocele / Rectocele / Enterocele/ Vault prolapse 2. Plan of management Students will observe and document in the precibed journal proforma

NLHP 17.10	Uterovaginal prolapse	**(1hr)** Teacher will expalin and demonstrate Uterovaginal prolapse on manikin / clinical case with discussion on - 1. Histrory taking – i) Predisposing (acquired /congenital) ii) Aggravating (postmenopausal atrophy, chronic cough, constipation, obesity, multiparity, weight lifting, under nutrition, smoking 2. Examination : i) General – Body Mass Index , Signs of myopathy or neuropathy , features of chronic airway disease , abdominal mass ii) Composite examination- Inspection and Palpation : Vaginal , Rectal and Recto vagina 3. Diagnosis : Uterine prolapse / Uterovaginal prolapse 4. Assigning degrees of Uterine prolapse - First/Second/Third/Procedentia 5. Plan of management – conservative / surgical Students will observe, discuss and record in the prescribed journal proforma.

Topic 18 Vandhyatwa - Infertility (LH :4 NLHT: 3 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Elaborate the concept of *Vandhyatwa, Bheda* and *various Nidana - Aharaja, Viharaja,Yoni Vyapadjanya , Shukra Doshaja, Artava Doshaja, Akalyoga* and *Atmadoshajanya.*	CC	MK	K	L&PPT	P-VIVA,VV-Viva,S-LAQ,P-EXAM	F&S	II	-	LH
CO2	Describe *Vandhyatwa Chikitsa and Pathya-Apathya.*	CC	MK	K	L&PPT ,DIS	P-VIVA,VV-Viva,S-LAQ	F&S	II	-	LH
CO2, CO3	Discuss Role of *Panchakarma in Vandhyatwa.*	CC	MK	K	CD,TBL,PER,FC,L&GD	CBA,P-VIVA,PM,P-EXAM,VV-Viva	F&S	II	H-PK	NLHT18.1

CO2	Define Infertility and elaborate Female factors of Infertility, Investigations and guidelines of management.	CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	II	-	LH
CO2, CO6	Perform Evaluation of Female partner in Infertility.	CAP	MK	KH	DIS,CD,PBL,PT,CBL	P-VIVA,SPS,S-LAQ,VV-Viva,P-CASE	F&S	II	-	NLHP18.1
CO2	Describe Male factors of Infertility with Investigations and guidelines of management.	CC	MK	K	L&PPT	VV-Viva,S-LAQ,COM	F&S	II	-	LH
CO2, CO6	Perform evaluation of Male partner in Infertility.	CAP	MK	SH	DIS,CBL,LRI,CD,D-BED	P-CASE,SBA,CR-RED,SP,INT	F&S	II	-	NLHP18.2
CO2	Discuss *Shukra Dushti* and semen abnormalities.	CC	MK	K	DL,CD,LRI,CBL,PER	CL-PR,VV-Viva	F&S	II	-	NLHT18.2
CO2	Demonstrate Semen Analysis and Interpretation of parameters.	CAP	MK	KH	LRI,PT,DL,CD,CBL	P-EXAM,VV-Viva,P-VIVA,CBA	F	II	-	NLHP18.3
CO2	Demonstrate and interpret Ultrasound / Follicular study.	CAP	MK	KH	LRI,L&PPT,CBL,CD	VV-Viva,P-VIVA	F	II	-	NLHP18.4
CO2	Evaluate Tubal Patency by Hystero Salpingography (HSG).	CE	DK	KH	X-Ray,D,L_VC,CD,CBL	CBA,S-LAQ,P-ID,VV-Viva	F&S	II	-	NLHP18.5

CO2	Demonstrate cervical mucous study / test -Fern testSpinbarkket	PSY-GUD	MK	KH	LRI,D,PT	INT,P-CASE	F	II	-	NLHP18.6
CO2	Describe Assisted Reproductive Techniques (ART) and ART act.	CK	NK	K	L_VC,L &PPT , CBL,DIS	COM	F	II	-	NLHT18.3
CO2	Gain insight of Intra Uterine Insemination (IUI).	CK	DK	K	D,L_VC	VV-Viva,PP-Practical	F	II	-	NLHP18.7
CO2	Present case of Infertility.	AFT-RES	MK	SH	PBL,X-Ray,D-BED,PER,CBL	CL-PR,VV-Viva,P-CASE,SBA,PRN	F&S	II	-	NLHP18.8

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 18.1	Role of *Panchakarma in Vandhyatwa*	**(1hr)** Students will have Class presentation / Class seminar / Group discussion / Project work/ Flipped class room on *Panchakarma t*reatment options in *Vandhytwa.* Teacher will assess and provide feedback.
NLHT 18.2	Shukra Dushti and semen abnormalities	**(1hr)** Teacher will discuss identification of *Shukra Dusti* and various abnormalities of Semen Student will analyze various nomenclature related to abnormalities of Semen viz, Aspermia, Hypospermia, Oligozooospermia,Polyzoospermia, Azoospermia , Asthenozoospermia,Leucocytospermia, Necrozoospermia Teratozoospermia and

		Oligoasthenoteratozoospermia.
NLHT 18.3	Assisted Reproductive Techniques (ART)	**(1hr)** Teacher will help students familiarize with various Assisted Reproductive Techniques (ART) with help of Video demonstration and discuss about ART act.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 18.1	Female partner evaluation in Infertility	**(1hr)** Teacher will guide the students for - History taking : Specify & discuss with reference to Age,Duration and type of Infertility, Contraceptive history, Sexual history, Menstrual history, Previous treatment history, Obstetric history, Gynaecological history, History of past illness, Personal and Family history General Physical, Systemic and Local examination Investigations Teacher will assess the findings,counsel and plan the management.
NLHP 18.2	Male partner evaluation in Infertility	**(1hr)** Teacher will guide the students for - 1. History taking; Specify & discuss with reference to Age, Occupation, Habits, Duration, Environmental exposure, Sexual history, Past illness 2. General Physical, systemic and local examination 3. Investigations Teacher will assess,counsel and plan management.
NLHP 18.3	Semen Analysis.	**(1hr)** Teacher will discuss time and method of collection, Interpretation of report and plan the management

		Students will comprehend and discuss.
NLHP 18.4	Interpret Ultrasound / Follicular study	**(1hr)** Teacher will discuss - 1. Pelvic Ultrasound – Assessment of Uterine cavity / Size / Endometrial Thickness, free fluid in pouch of douglas 2. Follicular study – Interpret the follicular size / Ovulation 3.Counsel and Plan management Student will comprehend and discuss.
NLHP 18.5	Hysterosalpingography (HSG)	**(1hr)** Teacher will demonstrate Hysterosalpingography and discuss about the consent, time of procedure, method, precautions and possible complications with the help of Video /X-ray film. Students will comprehend,understand and document.
NLHP 18.6	Cervical mucous tests	**(1hr)** Teacher will demonstrate Fern test and Spinbarkette 1. Procedure of collecting cervical mucous under aseptic precautions 2. Observation and interpretation Students will observe ,assess and document
NLHP 18.7	Intra Uterine Insemination (IUI)	**(1hr)** Teacher will demonstrate Intra uterine Insemination (IUI) with Video /Clinical case. Students will observe and analyze.

NLHP 18.8	Practical case presentation on Infertility	**(1hr)** Student will present case of Infertility focusing on - History taking Examination – Male / Female Investigations Interpretation / Identify the cause Plan management - *Shodhana / Shamana / Sthanika upakrama*/ Integrative Teacher will evaluate and give remarks

Topic 19 Vyadhi Vinischaya Upaya - Diagnostic Tools and Techniques (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Discuss various diagnostic procedures in Gynaecology viz PAP smear, Colposcopy, Cervical biopsy, Endometrial biopsy, Ultrasound, Hysteroscopy, Laproscopy, Magnetic resonance imaging, Computed Tomography.	CC	DK	K	X-Ray, CBL,L &PPT	CBA,INT	F&S	II	-	LH
CO2	Interpret Ultrasound, Hysteroscopy, Laparoscopy, Magnetic resonance imaging, Computed Tomography in Gynaecology.	CC	DK	K	LRI,CD ,X-Ray, CBL,L &PPT	INT,SBA,V V-Viva,CO M,CBA	F	II	-	NLHT19.1
CO2	Perform PAP test, Visual inspection examination and Colposcopy.	CAP	DK	KH	CD,CB L,D-M, L_VC,D	INT	F	II	-	NLHP19.1
CO2, CO6	Observe the procedure for Cervical biopsy and Endometrial biopsy	CC	DK	K	CBL,D-M,L_V C	INT	F	II	-	NLHP19.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 19.1	Diagnostic tools	**(1hr)** Teacher will assist students in comprehending and interpreting Ultrasound, Hysteroscopy, Laparoscopy, Magnetic resonance imaging, Computed Tomography reports in Gynaecology.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 19.1	PAP test,Visual inspection and Colposcopy	**(1hr)** Teacher will demonstrate the procedures of PAP test, Visual inspection methods and Colposcopy on model / manikin / clinical case/video. Students will perform and analyze the steps - 1 . Prerequisites and Procedure : Educate about the time of test Consent Collection of required material for respective test i) PAP test - Gloves , Instruments ,Spatula , Slides ii) Visual Inspection : Visual Inspection with Acetic acid (VIA) and Visual inspection with Lugol's Iodine (VILI) iii) Colposcopic visualization 2. Procedure 3. Interprete findings.
NLHP 19.2	Cervical biopsy and Endometrial biopsy	**(1hr)** Teacher will demonstrate the procedures of collecting Cervical and Endometrial Biopsy on model / manikin / clinical case / video. Students will discuss-

		1. Prerequisites : Consent, premedication, sterilized instruments 2. Procedure of collection and preservation 3. Interpretation of results 4. Conselling and referral for further management

Topic 20 Sthanika Upakrama - In situ Treatment Modalities (LH :1 NLHT: 2 NLHP: 7)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO3	Discuss the role of *Sthanika Upakrama* in *Streeroga - Yoni dhavana ,Yoni prakshalana , Pichu dharana, Yoni varti, Yoni lepana, Yoni avachurnana, Yoni purana, Yoni dhoopana, Kshara karma, Agni karma and Uttarabasti.*	CC	MK	K	L&PPT ,L_VC	RK,S-LAQ, COM,VV-Viva,P-VIVA	F&S	II	-	LH
CO3	Discuss *Purvakarma, Pradhana Karma* and *Paschat Karma* of - *Kshara Karma* and *Agni Karma* with indications, contraindications, precautions and time of procedure.	CC	MK	K	L_VC,L &PPT ,CD,CB L	C-VC,VV-Viva,SP,CB A	F&S	II	-	NLHT20.1
CO3, CO6	Discuss *Purvakarma, Pradhana Karma* and *Paschat Karma* of *Uttarabasti* with indications, contraindications, precautions and time of procedure.	CC	MK	K	D-M,L &PPT	P-VIVA,VV-Viva,COM	F&S	II	-	NLHT20.2
CO3, CO6	Perform *Yonidhavana and Yoniprakshalana*	PSY-GUD	MK	SH	CBL,D-M,D	DOPS,OSCE,DOPS,VV-Viva,P-VIVA	F&S	II	-	NLHP20.1
CO2	Perform *Yoni - Pichu dharana*	PSY-GUD	MK	SH	D,PT	DOAP,DOPS,DOPS,P	F&S	II	-	NLHP20.2

						-PRF,VV-Viva				
CO2	Perform *Yoni-varti* insertion.	PSY-GUD	MK	SH	PT,RLE	DOPS,VV-Viva,DOPS,OSCE,P-PRF	F&S	II	-	NLHP20.3
CO2	Perform *Yoni lepana.*	PSY-GUD	MK	SH	RLE,PT,D	P-PRF,VV-Viva,OSCE,DOAP	F&S	II	-	NLHP20.4
CO2	Perform *Yoni- avachoornana.*	PSY-GUD	MK	SH	D,PT	DOPS,OSCE,DOPS,DOAP,P-PRF	F&S	II	-	NLHP20.5
CO2	Perform *Yonipurana*	PSY-GUD	MK	SH	RLE,D,PT	DOAP,DOPS,DOPS,P-PRF,VV-Viva	F&S	II	-	NLHP20.6
CO2	Perform *Yoni dhoopana.*	PSY-GUD	MK	SH	PT,RLE,D	P-PRF,OSCE,DOPS,VV-Viva,DOPS	F&S	II	-	NLHP20.7

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 20.1	*Kshara karma and Agni karma*	**(1hr)** Teacher will discuss *Purvakarma, Pradhana karma* and *Paschat karma* of - *Kshara karma* and *Agni karma* with indications, contraindications, precautions and time of procedure. Students will comprehend.

NLHT 20.2	*Uttara Basti*	**(1hr)** Teacher will discuss *Purvakarma, Pradhana Karma* and *Paschat karma* of *Uttarabasti* with indications, contraindications, precautions and time of procedure. Students will comprehend.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 20.1	*Yonidhavana and Yoniprakshalana*	**(1 hr)** Teacher will debrief the Indications, contraindications, time of procedure and ensure prerequisites - Consent, preparation of Kashaya / Kwatha (decoction) as per Standard Operating Procedure (SOP), Sterilized instruments, gloves, linen, Syringe, Douche can, procedure Student will perform *Yonidhavana and Yoniprakshalana* and discuss special precautions Complete documentation of the procedure in prescibed journal.
NLHP 20.2	*Yoni-Pichu dharana*	**(1hr)** Teacher will debrief the Indications and contraindications,time of procedure and ensure prerequisites :Consent, medication -Taila (oil) / Ghrita (ghee) / Kwatha (decoction) / other proposed drug form,as per Standard Operating Procedure,Sterilized instruments,linen,Sterile Pichu (Tampoon) Students will perform the procedure and discuss special precautions Complete documentation of the procedure in the prescribed journal proforma
NLHP 20.3	*Yoni-varti*	**(1hr)** Teacher will debrief the Indications,contraindications,time of procedure and ensure prerequisites : Consent,Sterilized instruments, linen,Varti / Suppository Students will perform the procedure of insertion of Yoni varti and discuss special precautions Complete documentation of the procedure in prescribed journal proforma.

NLHP 20.4	Yoni lepana	**(1 hr)** Teacher will debrief the indication,contraindications,time of procedure of Yoni lepana and ensure prerequisites : consent ,sterilized instruments, drug of application, linen. Students will perform the procedure of Yonilepana and discuss special precautions Complete documentation of the procedure in the prescribed journal proforma.
NLHP 20.5	*Yoni-avachoornana*	**(1hr)** Teacher will debrief the Indications, contraindications, time of procedure and ensure prerequisites :consent , sterilized instruments, linen, drug Students will perform the procedure *Yoni-Avachoornana* and discuss on special precautions Complete documentation of the procedure in the prescribed journal proforma.
NLHP 20.6	*Yonipurana*	**(1hr)** Teacher will debrief the indications,contraindications, time of procedure and ensure prerequisites : consent, sterilized instruments, linen,oil /decoction Students will perform the procedure Yonipurana and discuss special precautions Complete documentation of the procedure in the prescribed journal proforma.
NLHP 20.7	*Yoni dhoopana*	**(1hr)** Teacher will debrief the Indications,contraindications,time of procedure and ensure prerequisites: consent, sterilized instruments,linen,dhoopana yantra,dhoopana drugs. Students will perform the procedure*Yoni dhoopana* and discuss special precautions. Complete documentation of the procedure in the prescribed journal proforma.

Topic 21 Stree Jananganga Granthi Evam Arbuda - Benign & Malignant lesions of Female Reproductive System (LH :4 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2,	Elaborate *Nidana, Samprapti, Bheda, Lakshana and*	CC	MK	K	L&PPT	S-LAQ,VV-	F&S	III	-	LH

CO3	*Chikitsa* of *Yonyarsha* and *Yonikanda*.					Viva				
CO2, CO3	Explain the pathologies, clinical features, investigations and treatment of Bartholinitis, Bartholin's abscess and Bartholin's cyst	CAP	MK	K	L&PPT	S-LAQ,VV-Viva	F&S	III	-	LH
CO2, CO3	Diagnose and manage Bartholin abscess / Cyst.	CAN	MK	KH	D-M,CBL,D	S-LAQ,COM,SBA,RK,VV-Viva	F&S	III	-	NLHP21.1
CO2, CO3	Explain the pathology, clinical features, investigations and treatment of Polyp – Cervical and Endometrial (Fibroid polyp)	CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	III	-	LH
CO2, CO3	Diagnose and manage Uterine Polyp	CAN	MK	KH	PBL,D-M,CD,CBL,D	COM,INT,CBA,VV-Viva,SBA	F&S	III	-	NLHP21.2
CO2, CO3	Explain Fibroid Uterus -Types, Clinical features, Investigations and Management	CC	MK	K	DIS,L&PPT	COM,S-LAQ,VV-Viva	F&S	III	-	LH
CO2, CO3	Diagnose and manage Fibroid Uterus.	CAN	MK	KH	D-BED,CBL,D-M,PBL,CD	P-PS,P-PRF,VV-Viva,P-VIVA,P-CASE	F&S	III	-	NLHP21.3
CO2, CO3, CO6	Elaborate Benign conditions of Ovary – Ovarian tumour and Tubo-ovarian mass	CC	MK	K	L&PPT,D,CBL,PBL,CD	S-LAQ,COM,VV-Viva,SBA	F&S	III	-	NLHT21.1
CO2, CO3	Diagnose and plan management of Tubo-ovarian mass	CS	MK	KH	CD,D,CBL,D-M,LRI	S-LAQ,SBA,CBA,QZ,INT	F	III	-	NLHP21.4
CO2, CO3	Identify Premalignant and Malignant lesions of Female reproductive organs.Analyze Vaccination in cervical cancer.	CC	DK	K	CD,CBL,L&PP	SBA,COM,CBA,INT,	F	III	-	NLHT21.2

					T ,X-Ray,LRI	VV-Viva				

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 21.1	Benign conditions of Ovary and Fallopian tube	**(1 hr)** Teacher will elaborate and demonstarte benign conditions of Adnexa (ovary and fallopian tube) Students will discuss differential diagnosis and investigation methods.
NLHT 21.2	Premalignant and Malignant lesions	**(1 hr)** Teacher will elaborate clinical diagnosis of premalignant and malignant lesions of Female reproductive organs and discuss diagnostic aids. students will analyze complains, clinical examination and laboratory findings and importance of Vaccination in cervical cancer.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 21.1	Diagnose and plan management of Bartholin Cyst /Abscess	**(1 hr)** Teacher will demonstrate following on case of Bartholin abscess or Cyst / model / with video - 1. Clinical examination of vulva with swelling and pain. 2. Surgical management of - a) Cyst – Excision / Marsupialization b) Abscess – Incision and Drainage Student will discuss differential diagnosis and observe Excision/Marsupialization/Incision and Drainage and document.
NLHP 21.2	Uterine Polyp	**(1 hr)** Students will analyze signs and symptoms and discuss differential diagnosis with following steps -

		1. History taking - clinical presentations; Vaginal discharge, Pain in lower abdomen,Intermenstrual bleeding, Irregular bleeding 2. General examination 3. Pelvic examination : Per speculum : any mass Uterus : size 4. Investigations : 5. Differential diagnosis Teacher will demonstrate polypectomy on model/ video/ case
NLHP 21.3	Fibroid Uterus.	**(1 hr)** Students will discuss following steps and analyze diagnosis; 1. History taking - clinical presentation; Heavy, Painful and Irregular menstruation, lump in abdomen, Pain in lower abdomen, pressure symptoms 2. General examination 3. Abdominal examination : with / without enlarged firm mass 4. Pelvic examination : Uterus - size , aditional mass 5. Investigations 6. Differential diagnosis Teacher will guide students to plan conservative management and demonstrate surgical management of fibroid uterus.

NLHP 21.4	Ovarian tumour / Tubo-ovarian mass	**(1 hr)** Teacher will demonstarte a diagnosed case of Tubo-ovarian mass and surgical management with help of video/ case. Students will analyze method of diagnosis and appropiate treatment option with following steps - 1. History taking - clinical presentation; Pain in lower abdomen and heaviness / associated symptoms 2. General examination 3. Abdominal examination : Abdominal mass 4. Pelvic examination : Tuboovarian mass 5. Investigations : 6. Differential diagnosis : 7. Complications : 8. Plan treatment : Young patient vs Parous woman

Topic 22 Guhya Roga - Sexually Transmitted Diseases (LH :2 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3	Describe *Hetu, Samprapti, Lakshana, Upadrava,* and *Chikitsa* of *Upadamsha, Firanga,* and *Puyameha*	CC	MK	KH	L&PPT	COM,S-LAQ,VV-Viva	F	III	-	LH
CO2, CO3	Describe Sexually Transmitted Diseases with causative micro-organisms, pathology, clinical features, investigations and management.	CC	MK	KH	L&PPT	VV-Viva,S-LAQ	F&S	III	-	LH
CO2, CO3, CO6	Diagnose and plan management of *Guhya Roga* (Sexually Transmitted Diseases)	CS	MK	KH	L&GD, CD,LRI	CBA,QZ ,VV-Viva,SBA	F&S	III	-	NLHT22.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 22.1	*Guhya roga* (Sexually Transmitted Diseases)	**(1 hr)**

		Teachers will elaborate clinical features, diagnosis and management of *Guhya roga* (STDs) Students will have Group discussion and analysis of preventive measures.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 23 Yoni srava - Vaginal Discharge (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3	Describe *Hetu, Samprapti, Lakshana and Chikitsa of Shweta Pradara*.	CC	MK	KH	L&PPT	VV-Viva,S-LAQ	F&S	III	-	LH
CO2, CO3	Explain Infections of Pelvic organs ; i) Due to a specific infection ii) Due to sensitive reaction iii) Due to Vaginal discharge or urinary contamination	CC	MK	K	DIS,PER,L&PPT ,D-BED,CBL	P-PRF,CL-PR,SP,P-VIVA,PRN	F&S	III	-	NLHT23.1
CO2, CO3, CO6	Diagnose and manage Abnormal Vaginal Discharges / Leucorrhoea (Non-infective)	CAN	MK	SH	CBL,PBL,D,CD,DA	CBA,P-CASE,OSCE,VV-Viva,DOAP	F&S	III	-	NLHP23.1
CO2, CO3, CO6	Diagnose and manage Abnormal Vaginal Discharges (Infective)	CAN	MK	SH	PT,DA,D-BED,CBL,CD	P-CASE,P-VIVA,VV-Viva,P-PRF,DOAP	F&S	III	-	NLHP23.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 23.1	Infections of Pelvic organs	**(1 hr)**

		Students will be asigned with research project on Infections of Pelvic organs and have peer discussion on underlying etiology. Teacher will elaborate Infections of Pelvic organs - i) Due to specific infection ii) Due to sensitive reaction iii) Due to Vaginal discharge or urinary contamination

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 23.1	Abnormal Vaginal Discharges / Leucorrhoea	**(1 hr)** Teacher will diagnose and manage Abnormal Vaginal Discharge (Non-infective) Students will discuss importance of steps involved - History taking, General Physical Examination, Pelvic Examination, Investigation, Differential diagnosis and analyze management of Lucorrhoea.
NLHP 23.2	Abnormal Vaginal Discharges (Infective)	**(1 hr)** Teacher will diagnose and manage Abnormal Vaginal Discharge (Infective) Students will discuss importance of steps involved - History taking, General Physical Examination, Pelvic Examination, Investigation, Differential diagnosis and analyze management.

Topic 24 Stana Roga - Breast Disorders (LH :3 NLHT: 1 NLHP: 3)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2	Explain the Anatomy of Breast and Anatomical defects.	CAP	MK	K	L&PPT	S-LAQ,COM,VV-Viva	F&S	III	-	LH
CO2, CO3		CC	MK	K	L&PPT	VV-Viva,S-LAQ	F&S	III	-	LH

	Elaborate Stana Roga - Stana Keelaka, Stana Granthi and Stanarbuda with Nidana, Samprapti, Lakshana and Chikitsa.									
CO2, CO3	Describe causative factors, etiopathogenesis, clinical features, investigations, complications and management of Mastalgia, Fibroadenoma, Carcinoma breast.	CC	DK	K	L&PPT	S-LAQ,VV-Viva	F&S	III	-	LH
CO2	Demonstrate Self Breast examination	PSY-SET	MK	KH	SIM,D-M,L_VC,CBL,D	P-PRF,VV-Viva,DOAP,OSCE,SP	F&S	III	-	NLHT24.1
CO2, CO3, CO6	Illustrate Investigations in diseases of Breast - 1. Sono-mammogram 2. Fine Needle Aspiration Cytology (FNAC)3. Biopsy	CAN	MK	KH	CBL,CD,LRI,L_VC,L&PPT	P-VIVA,PM,VV-Viva,SP,P-EXAM	F&S	III	-	NLHP24.1
CO2, CO3, CO6	Diagnose and manage Fibroadenoma Breast	CAN	MK	KH	D-M,CBL,CD,X-Ray	VV-Viva,P-CASE,S-LAQ,CBA,SBA	F	III	-	NLHP24.2
CO2, CO3, CO6	Diagnose Breast carcinoma	CAN	MK	K	CBL,LRI,L&PPT ,CD	SBA,VV-Viva,CBA	F&S	III	-	NLHP24.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 24.1	Self Breast examination	**(1hr)** Teacher will demonstrate steps of self breast examination by Video / Pictorial demonstration. Students will discuss the importance of Self Breast examination.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 24.1	Investigations in diseases of Breast	**(1 hr)** Teacher will discuss various methods of investigation in the diseases of Breast and demonstrate procedure by Video / Pictorial demonstration Students will analyze and interprete - i) Sono-mammogram ii) Fine Needle Aspiration Cytology (FNAC) iii) Biopsy
NLHP 24.2	Fibroadenoma Breast	**(1 hr)** Teacher will demonstarte diagnosis and management of Fibroadenoma Breast on case/ model. Students will elaborate following steps in cases of Fibroadenoma Breast - 1. History taking 2. Examination 3. Investigations 4. Counselling 5. Management 6. Indications for referral
NLHP 24.3	Clinical diagnosis of Breast carcinoma	**(1 hr)** Teacher will demonstarte clinical features and methods of diagnosis of Breast carcinoma on case/ model. Students will elaborate following steps in cases of diagnosis of Breast carcinoma - 1. History taking 2. Examination 3. Provisional diagnosis

		4. Need of Investigations 5. Diagnosis and referral

Topic 25 Shastra Karma in Stree Roga - Surgical Procedures in Gynaecology (LH :4 NLHT: 1 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO3	Elaborate Preoperative preparation with respect to *Prasuti Stree Roga*	CC	NK	K	L&PPT	S-LAQ,VV-Viva	F	III	-	LH
CO3	Explain Postoperative care in *Prasuti Stree Roga*	CC	NK	K	L&PPT	S-LAQ,VV-Viva	F	III	-	LH
CO3	Explain *Granthi Nirharana* (Cystectomy)	CC	DK	K	L&PPT	S-LAQ,VV-Viva	F&S	III	-	LH
CO3	Explain *Garbhashaya Arbuda Nirharana* (Myomectomy)	CC	DK	K	L&PPT	VV-Viva,COM,S-LAQ	F	III	-	LH
CO3	Explain the Steps of Laparoscopic Tubal Ligation.	CC	DK	K	L_VC	P-VIVA,VV-Viva	F&S	III	-	NLHT25.1
CO3, CO6	Describe the steps of surgical procedure in *Udaragata Garbhashaya Nirharana* - Abdominal Hysterectomy	CC	DK	K	D,CBL, L_VC	VV-Viva,COM,S-LAQ	F&S	III	-	NLHP25.1
CO3, CO6	Describe the steps of surgical procedure in *Yonimarga-gata Garbhashaya Nirharana* - Vaginal Hysterectomy	CC	DK	K	D,CBL, L_VC	S-LAQ,VV-Viva,COM	F&S	III	-	NLHP25.2
CO3, CO6	Describe the steps of surgical procedure in *Garbhashayamukha Vistrutikarana* and *Lekhana*. (Dilatation and Curettage)	CC	DK	K	D,D-M,CBL	S-LAQ,P-VIVA,VV-Viva,COM	F&S	III	-	NLHP25.3
CO3, CO6	Describe the steps of Surgical sterilization – Tubectomy and Vasectomy	CC	DK	K	L_VC,D	VV-Viva,S-LAQ	F&S	III	-	NLHP25.4

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 25.1	Laparoscopic Tubal Ligation	**(1 hr)** Teacher will demonstrate laparoscopic procedure of Tubal Ligation through Video / Case Students will observe and document steps of Laparoscopic Tubal Ligation.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 25.1	Abdominal Hysterectomy	**(1 hr)** Teacher will demonstrate the steps of surgical procedure in *Udaragata Garbhashaya Nirharana* - Abdominal Hysterectomy on Video / Case. Students will observe the steps of Abdominal Hysterectomy, discuss precuations and possible complications.
NLHP 25.2	Vaginal Hysterectomy	**(1 hr)** Teacher will demonstrate the steps of surgical procedure in *Yonimarga-gata Garbhashaya nirharana* - Vaginal Hysterectomy on Video / Case. Students will observe the steps of Vaginal Hysterectomy, discuss precuations and possible complications.
NLHP 25.3	Dilatation and Curettage	**(1 hr)** Teacher will demonstrate steps of Dilatation and Curettage and explain the possible complications on Video / Case. Students will observe, discuss the indications and document.
NLHP 25.4	Tubectomy and Vasectomy	**(1 hr)**

		Teacher will demonstrate steps of Surgical sterilization – Tubectomy and Vasectomy and explain the possible complications on Video / Case. Students will observe,analyze the methods and document.

Topic 26 Stree Roga Sambandhi Aushadhi- Classical Formulations (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO3	Demonstrate Vishishta Phalashruti (Indication) of Formulations used in Prasuti and Streeroga. Churna Kalpana: Pushyanuga Churna, Shatpushpa Churna, Shatavari Churna, Nagakeshara Churna,Ghrita Kalpana: Phalaghrita, Kashmaryadi Ghrita, Vidaryadi GhritaTaila Kalpana: Dahtakyadi taila, Shatpushpa taila, Jatyadi Taila, Narayana Taila,Asava and Arishta: Ashokarishta, Kumaryasava,Rasa aushadhi: Rajahpravartini Vati, Pratapalankeshwar Rasa, Garbhapala Rasa, Pushpadhanva Rasa,Kwatha : Nyagrodhadi Kwatha, Dashmoola Kwatha, Panchavalakala KwathaPaka Kalpana: Sobhagya Shunthi Paka, Puga Khanda/ Puga Paka,Avaleha: Jeerakavaleha, Kushmandavaleha	CAP	MK	KH	L&GD, DA	INT,VV-Viva	F&S	III	-	LH
CO3	Adapt the indication and importance of formulation used in *Prasuti Stree Roga.*	CAP	MK	KH	L&GD, PL,PER ,DIS,D A	SP,CL-PR, PRN,QZ	F	III	-	NLHT26.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 26.1	Application of Formulations in *Prasuti Stree Roga*	**(1 hr)** Students will have class room presentation/ Peer discussion Teacher will guide students to devlope critical thinking about use of formulations in *Prasuti Stree*

		Roga.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 27 National Maternal Health Programs (LH :1 NLHT: 2 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Explain the aims, objectives, and benefits of Maternal and Child Health care programs -"Janani Suraksha yojana""Janani Shishu Suraksha Karyakram""Pradhan Mantri Surakshit Matritva Abhiyan""Mission Indradhanush""Menstrual hygiene""LaQshya Program""MAA program"	CC	MK	K	L&PPT	QZ ,S-LAQ ,VV-Viva,COM	F&S	III	-	LH
CO5	Follow Sexual and Reproductive Health Rights.	AFT-REC	MK	KH	BL,DIS, PL,FC	COM,VV-Viva,INT,QZ	F	III	-	NLHT27.1
CO5	Explain the goals, objectives, and strategies of Reproductive and Child Health programme.	CC	MK	K	FV,DIS	QZ ,VV-Viva,RK	F&S	III	-	NLHT27.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 27.1	Sexual and Reproductive Health Rights	**(1 hr)** Students will do research on Sexual and Reproductive Health rights and have peer discussion. Teacher will explain the key points on sexual health, sexual rights, reproductive health and reproductive rights
NLHT 27.2	Reproductive and Child health care services	**(1 hr)**

		Teacher will equip students to get familiarized with Health care facility and functionality. Students will discuss and document the aspects of early identification and tracking of the individual beneficiary throughout the reproductive lifecycle of women and promote, monitor and support the reproductive, maternal, new-born and child health (RMNCH) schemes/programme delivery and reporting.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 28 Medical ethics, Record keeping and Audit in Obstetrics and Gynaecology (LH :1 NLHT: 1 NLHP: 1)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO6	Explain the importance of Medical ethics and documentation in Obstetrics & Gynaecology	CC	MK	K	L&PPT	S-LAQ,RK, VV-Viva	F&S	III	-	LH
CO6	Demonstrate documentation and audit in *Prasuti Stree Roga*	CAP	MK	KH	DIS,PT	RK	F&S	III	-	NLHT28.1
CO6	Practice documentation - Antenatal Care, Intranatal care, Postnatal care, Tubectomy, Birth registry, Surgery and referral.	CAP	MK	KH	FV,BL,IBL,PT	VV-Viva,RK	F&S	III	-	NLHP28.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 28.1	Documentation and audit	**(1 hr)** Teacher will demonstrate documentation and audit in *Prasuti Stree Roga.* Students will observe and analyze Medical records - registers, consent sheets, case sheets and explain components in audit process.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

NLHP 28.1	Medical record documentation	**(1 hr)** Teacher will enable students to gain competency in documentation. Students will Practice documentation in Antenatal Care, Intranatal care, Postnatal care, Tubectomy, Birth registry, Surgery and referral.

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
1.1	CO1	Anatomy of female genital organs
1.2	CO1	*Asthi, Sandhi* and *Parimana* of *Stree Shroni*
2.1	CO2	Concept of *Raja, Artava and Shukra*.
2.2	CO1	Physiology of Menstruation.
2.3	CO1	Importance of *Rutukala*
2.4	CO1	*Tridosha* and *Panchamahabhuta* in *Rutuchakra*.
3.1	CO1	*Garbha* and *Garbhavakranti*
3.2	CO1	*Apara, Nabhinadi* and *Garbhodaka Vikaras* (abnormalities of placenta, umbilical cord and amniotic fluid) with clinical significance.
3.3	CO1	*Garbha Poshana* (fetal nourishment) and *Garbha Vridhhikara Bhava.*
3.4	CO1	Month wise fetal development
4.1	CO1	*Garbhini Nidana*: Diagnosis of pregnancy
4.2	CO1,CO4	High Risk Pregnancy
4.3	CO1,CO5	Demographic Statistics in Obstetrics
5.1	CO1,CO5	Abortion
5.2	CO1	Intra uterine growth restriction
5.3	CO1,CO6	Intra uterine fetal demise.
5.4	CO1	*Rakta Gulma*

7.1	CO3,CO4	Essential drugs for labour practice; as per National protocol.
8.1	CO4	Prolonged Labour
8.2	CO4	Postmaturity
9.1	CO4	*Moodhagarbha - Bheda and Gati.*
9.2	CO4	Obstetric Emergencies
9.3	CO1,CO4	Abnormal presentations – face, brow, shoulder presentations
10.1	CO4	Puerperal diseases.
11.1	CO4	Breast milk and feeding techniques.
11.2	CO4	Mastitis and Breast Abscess.
12.1	CO2	Neuroendocrinology with respect to Puberty
12.2	CO2	Applied aspects - Puberty and Adolescence
13.1	CO3	Instruments used in Obstetrics and Gynaecology
14.1	CO2,CO6	Gynaecological history taking.
15.1	CO2	Ashtartava dusti
15.2	CO2,CO6	*Artava kshaya, Anartava , Asrugdara & Artava vruddhi*
16.1	CO2,CO6	Hormone Replacement Therapy (HRT)
17.1	CO2	*Shlokas* of *Yonivyapad*
17.2	CO2	*Panchakarma* in *Yonivyapad*

17.3	CO2,CO6	Case studies on different *Yonivyapad*
18.1	CO2,CO3	Role of *Panchakarma in Vandhyatwa*
18.2	CO2	Shukra Dushti and semen abnormalities
18.3	CO2	Assisted Reproductive Techniques (ART)
19.1	CO2	Diagnostic tools
20.1	CO3	*Kshara karma and Agni karma*
20.2	CO3,CO6	*Uttara Basti*
21.1	CO2,CO3,CO6	Benign conditions of Ovary and Fallopian tube
21.2	CO2,CO3	Premalignant and Malignant lesions
22.1	CO2,CO3,CO6	*Guhya roga* (Sexually Transmitted Diseases)
23.1	CO2,CO3	Infections of Pelvic organs
24.1	CO2	Self Breast examination
25.1	CO3	Laparoscopic Tubal Ligation
26.1	CO3	Application of Formulations in *Prasuti Stree Roga*
27.1	CO5	Sexual and Reproductive Health Rights
27.2	CO5	Reproductive and Child health care services
28.1	CO6	Documentation and audit

Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Practical No*	CO No	Practical Activity details
1.1	CO1	*Tryavarta Yoni*
1.2	CO1	Spatial orientation and Blood supply of uterus and adnexa
1.3	CO1,CO4	Female bony pelvis
2.1	CO1	*Rajaswala paricharya*
3.1	CO1	*Garbha Samskara* and *Pumsavana Samskara*.
3.2	CO1,CO4	Fetus-in-utero
4.1	CO1	Clinical Diagnosis of pregnancy
4.2	CO1	*Garbha Vikruti*
4.3	CO1,CO4	Antenatal History taking and Examination
4.4	CO1,CO5	Investigations in pregnancy
5.1	CO1	Ectopic pregnancy
5.2	CO1,CO5	*Garbhashaya Mukha Vistrutikarana evam Garbhasaya Lekhana* - Dilatation and Curettage *Garbhashaya Greeva Samvrutikarana* - Cervical Encirclage
5.3	CO1	Intra Uterine Growth Restriction, Oligohydramnios and Polyhydramnios
5.4	CO1,CO6	Intrauterine Fetal Demise (IUFD)
6.1	CO1,CO3,CO6	*Garbhini Pandu* - Anaemia in pregnancy.
6.2	CO1,CO3,CO6	*Yamala-garbha* - Twin Pregnancy (1 hr)

6.3	CO1,CO3,CO6	*Garbhini Jwara* - fever in pregnancy.
6.4	CO1,CO3,CO6	Hypertensive disorders in Pregnancy
6.5	CO1,CO3,CO5	Antepartum Hemorrhage -Placenta previa
6.6	CO1,CO3,CO5	Antepartum Hemorrhage - Abruptio placenta
7.1	CO4,CO5	Labour Room Setup
7.2	CO4,CO5	Diagnosis of Labour
7.3	CO4	Fetal skull and labour
7.4	CO4	Adequacy of pelvis
7.5	CO4	Mechanism of Labour
7.6	CO4	Management of stages of labour
7.7	CO3,CO4	Plot partograph
7.8	CO4	Intrapartum fetal monitoring techniques
7.9	CO4,CO5	Stages of Labour
7.10	CO4	Labour monitoring
7.11	CO3,CO4	Episiotomy
7.12	CO4,CO5	*Jatamatra Paricharya*
8.1	CO4	Preterm labour
8.2	CO4	Postpartum Hemorrhage
8.3	CO4	Retained placenta

8.4	CO4	Postpartum hemorrhage management.
9.1	CO4	Assisted Breech delivery.
9.2	CO4	Assesment of Cephalo-Pelvic Disproportion
9.3	CO4	Complications of *Moodha Garbha*
9.4	CO1,CO3,CO4	1. Bishop's score and Induction/ Augmentation of Labour 2. Assisted labour techniques
10.1	CO4	Examination of a puerperal woman - abdominal, perineal, and breast.
10.2	CO4	*Sootika Vyadhi*
10.3	CO4,CO5	Contraception
11.1	CO4	Techniques of Breastfeeding.
11.2	CO4	Breast Engorgement, Mastitis, Breast abscess
12.1	CO1,CO2	Development of Female reproductive system
12.2	CO1,CO2	Anomalies of Female reproductive system
12.3	CO2	Puberty
12.4	CO2	Identify normal and abnormal Pubertal changes.
13.1	CO3	Instrument sterilization methods
13.2	CO3	Instruments -*Sandansha and Swastika yantra*
13.3	CO3	Instruments - Shalaka,*Tala & Nadi yantra*
13.4	CO3	Sharp instruments.

14.1	CO2,CO6	Examination in Gynaecology including Breast
14.2	CO2,CO6	Abdominal Examination in Gynaecology
14.3	CO2	Plan Diagnostic procedures
14.4	CO2,CO6	Vaginal ,Recto vaginal & Per Rectal examination
15.1	CO2	Artava kshaya - Oligomenorrhoea & Hypomenorrhoea
15.2	CO2,CO6	Anartava - Amenorrhoea evaluation and management
15.3	CO2,CO6	Poly Cystic Ovarian Syndrome (PCOS)
15.4	CO2,CO6	Management of *Asrugdara* and *Artava Vruddhi* - Structrual and Non-structural / Systemic causes
16.1	CO2	Menopause
16.2	CO2	Plan management of Menopause
17.1	CO2	*Udavarta (Kastartava) / Vatala/ Vipluta /Paripluta yonivyapad.*
17.2	CO2,CO6	*Pittala/ Rudhirakshara/ Karnini/ Acharana/ Aticharana yonivyapad*
17.3	CO2,CO6	Dysmenorrhoea
17.4	CO2,CO6	Endometriosis and Adenomyosis.
17.5	CO2,CO6	Pelvic Inflammatory Disease (PID)
17.6	CO2,CO6	Case presentation on *Yonivyapad*
17.7	CO2,CO6	Cervical erosion
17.8	CO2,CO6	*Yoni kandu* - Pruritus Vulvae
17.9	CO2,CO6	Cystocele & Rectocele
17.10	CO2,CO6	Uterovaginal prolapse

18.1	CO2,CO6	Male partner evaluation in Infertility
18.2	CO2,CO6	Female partner evaluation in Infertility
18.3	CO2	Semen Analysis.
18.4	CO2	Interpret Ultrasound / Follicular study
18.5	CO2	Hysterosalpingography (HSG)
18.6	CO2	Cervical mucous tests
18.7	CO2	Intra Uterine Insemination (IUI)
18.8	CO2	Practical case presentation on Infertility
19.1	CO2	PAP test,Visual inspection and Colposcopy
19.2	CO2,CO6	Cervical biopsy and Endometrial biopsy
20.1	CO3,CO6	*Yonidhavana and Yoniprakshalana*
20.2	CO2	*Yoni-Pichu dharana*
20.3	CO2	*Yoni-varti*
20.4	CO2	Yoni lepana
20.5	CO2	*Yoni-avachoornana*
20.6	CO2	*Yonipurana*
20.7	CO2	*Yoni dhoopana*
21.1	CO2,CO3	Diagnose and plan management of Bartholin Cyst /Abscess
21.2	CO2,CO3	Uterine Polyp

21.3	CO2,CO3	Fibroid Uterus.
21.4	CO2,CO3	Ovarian tumour / Tubo-ovarian mass
23.1	CO2,CO3,CO6	Abnormal Vaginal Discharges / Leucorrhoea
23.2	CO2,CO3,CO6	Abnormal Vaginal Discharges (Infective)
24.1	CO2,CO3,CO6	Investigations in diseases of Breast
24.2	CO2,CO3,CO6	Fibroadenoma Breast
24.3	CO2,CO3,CO6	Clinical diagnosis of Breast carcinoma
25.1	CO3,CO6	Abdominal Hysterectomy
25.2	CO3,CO6	Vaginal Hysterectomy
25.3	CO3,CO6	Dilatation and Curettage
25.4	CO3,CO6	Tubectomy and Vasectomy
28.1	CO6	Medical record documentation

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (200)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-PS	2	200	100	60	10 (Set-TA)	30	200	400

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	3 PA & First TT	3 PA & Second TT	3 PA	**UE****

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
**University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 5	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

Topics for Periodic Assessments

PA	PAPER 1	PAPER 2
PA 1	Topic 1 Topic 2	Topic 12
PA 2	Topic 3	Topic 13 Topic 14
PA 3	Topic 4	Topic 15
TERM TEST 1 – Entire syllabus of Term 1 of Paper 1 and 2		
PA 4	Topic 5	Topic 17
PA 5	Topic 6	Topic 18
PA 6	Topic 7	Topic 20
TERM TEST 2 – Entire syllabus of Term 2 of Paper 1 and 2		
PA 7	Topic 9	Topic 21
PA 8	Topic 10	Topic 23
PA 9	Topic 11	Topic 24

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-PS
PAPER-I
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II.

6 F : Distribution of theory examination

Paper 1 (PRASUTI TANTRA - OBSTETRICS)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
1	**Stree Vishishta Shareera Vigyana - Anatomy of Female Reproductive System**	30	Yes	Yes	Yes
2	**Rutuchakra - Menstrual Cycle**		Yes	Yes	Yes
3	**Garbha Vigyana - Embryology & Fetal Development**		Yes	Yes	Yes
4	**Garbhini Vigyana - Physiology of Pregnancy & Antenatal Care**		Yes	Yes	Yes
5	**Garbha Vyapad - Fetal Pathologies**	40	Yes	Yes	Yes
6	**Garbhini Vyapad - Minor Ailments and Major Disorders of Pregnancy**		Yes	Yes	Yes
7	**Prasava Vigyana - Labour**		Yes	Yes	Yes
8	**Prasava Vyapad - Labour Complications & Obstetric Emergencies.**	30	Yes	Yes	Yes
9	**Moodhagarbha - Obstructed Labour**		Yes	Yes	Yes
10	**Sootika Vigyana - Puerperium**		Yes	Yes	Yes
11	**Stanya Vigyana - Lactation**		Yes	Yes	No
Total Marks		**100**			

Paper 2 (STREE ROGA - GYNAECOLOGY)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
12	**Stree Prajanananga Nirmana and Vikruti - Development of Female Reproductive System with Anomalies.**	30	Yes	Yes	Yes
13	**Yantra evam Shastra - Instruments**		Yes	Yes	No
14	**Stree Rugna Parikshana - Gynaecological Examination**		No	Yes	No
15	**Artava Vyapad - Menstrual Disorders**		Yes	Yes	Yes
16	**Rajonivritti - Menopause**		Yes	Yes	Yes
17	**Yoni Vyapad - Disorders of Female Reproductive system**	40	Yes	Yes	Yes
18	**Vandhyatwa - Infertility**		Yes	Yes	Yes
19	**Vyadhi Vinischaya Upaya - Diagnostic Tools and Techniques**		Yes	Yes	No

20	**Sthanika Upakrama - In situ Treatment Modalities**		Yes	Yes	Yes
21	**Stree Jananangа Granthi Evam Arbuda - Benign & Malignant lesions of Female Reproductive System**	30	Yes	Yes	Yes
22	**Guhya Roga - Sexually Transmitted Diseases**		Yes	Yes	No
23	**Yoni srava - Vaginal Discharge**		Yes	Yes	Yes
24	**Stana Roga - Breast Disorders**		Yes	Yes	Yes
25	**Shastra Karma in Stree Roga - Surgical Procedures in Gynaecology**		Yes	Yes	Yes
26	**Stree Roga Sambandhi Aushadhi- Classical Formulations**		Yes	Yes	No
27	**National Maternal Health Programs**		Yes	Yes	No
28	**Medical ethics, Record keeping and Audit in Obstetrics and Gynaecology**		No	Yes	No
Total Marks		**100**			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 100-mark question paper shall contain:
   - 20 MCQs
   - 8 SAQs
   - 4 LAQs

7. MCQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 3.
   - Questions from the Nice to Know part of syllabus shall not exceed 2.

8. SAQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 1.
   - No questions shall be drawn from the Nice to Know part of syllabus.
   - SAQs shall assess understanding, application, and analysis, rather than simple recall.

9. LAQs:
   - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
   - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
   - Number of LAQs should not exceed one per topic unless maximum marks exceed 20 for the topic.

10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

S.No	Heads	Marks
1	Case Taking - 2 cases (15 marks each) • Prasuti - 1 case • Stree Roga - 1 case	30
2	Spotting of Instruments, Drugs, Models and Specimen - • 10 Instruments - Identification, use • 2 Drugs - Identification, indication • 2 Models - Identification • 1 Specimen - Identification	30
3	Clinical Skill Based Examination.	20
4	Structured Viva-Voce - • Shloka recitation - 10 marks • Conceptual knowledge - 10 marks • Diagnostic interpretation - 10 marks • Procedures and practical applications - 10 marks • Therapeutics and management - 10 matks • Preventive care and recent advances - 10 marks	60
5	Practical record - • Prasuti Tantra - 5 Garbhini (Antenatal), 5 Prasava (Labour), 5 Sutika (Postnatal) • Stree Roga - 10 Stree roga(Gynaecological disorders), 5 Sthanika Upakrama (In-situ treatment modalities)	20
6	Internal Assessment	30

7	Electives Set -TA	10
Total Marks		**200**

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18	Kapoorchand H, Hysterosalpingography simplified for AYUSH Practitioners, 1st ed., Varanasi, Chaukhambha Vishvabharati, 2021
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20	Konar H., DC Dutta's Textbook of Gynecology, 9th ed., New Delhi, Jaypee Brothers Medical Publishers Pvt. Ltd, 2024
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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)

Kaumarabhritya
(Pediatrics)

(SUBJECT CODE : AyUG-KB)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

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BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026

NCISM

III Professional Ayurvedacharya
(BAMS)
Subject Code : AyUG-KB

Kaumarabhritya
(Pediatrics)

Summary

Total number of Teaching hours: 275			
Lecture (LH) - Theory		**100**	**100(LH)**
Paper I	100		
Non-Lecture (NLHT)		**53**	**175(NLH)**
Paper I	53		
Non-Lecture (NLHP)		**122**	
Paper I	122		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	100	60	10 (Set-TB)	30
Sub-Total	100	200			
Total marks	300				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

Kaumarabhritya, the branch of Ayurveda dedicated to child health, has been restructured to align with the principles of an outcome-based dynamic curriculum. This revised syllabus ensures that BAMS graduates are well-prepared to address the comprehensive healthcare needs of children, starting from preconception through early childhood and beyond. A key focus of this curriculum is the first 1000 days of life, a crucial period that shapes a child's future health and development. By integrating Ayurvedic wisdom with modern medical knowledge, the syllabus provides a holistic approach to pediatric care, allowing students to understand Ayurveda’s role in preventing and managing childhood diseases while complementing contemporary healthcare practices.

The curriculum emphasizes a systematic and interconnected understanding of the human body, moving beyond a linear approach to highlight the interdependence of different bodily systems. Practical learning is given priority, with hands-on training in Bala Panchakarma procedures, Ayurvedic therapies, and modern pediatric interventions. The course also focuses on research updates, effective communication skills, and building strong relationships with children and caregivers. To ensure successful implementation, a supportive academic environment is emphasized, encouraging continuous learning and collaboration among students and faculty.

At the end of the course, students will be able to assess normal growth and development, identify deviations, and provide Ayurvedic-based preventive and curative solutions. The syllabus also instills a deep understanding of child rights, diversity, and ethical considerations in pediatric healthcare. In alignment with national health policies, this curriculum contributes to building a healthy future generation and serves as a valuable reference for academicians, researchers, and practitioners in Ayurveda and integrative medicine.

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Course Code and Name of Course

Course code	Name of Course
AyUG-KB	Kaumarabhritya

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-KB At the end of the course AyUG-KB, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO 1	Evaluate normal growth and development and its deviation in children.	PO1,PO2
CO 2	Diagnose and manage Bala Roga (Paediatric diseases) using both Ayurveda principles and contemporary medical science.	PO1,PO2,PO3,PO5,PO9
CO 3	Demonstrate knowledge and skills in assessing and intervening child health through Ayurveda with research updates.	PO2,PO5,PO7,PO9
CO 4	Demonstrate effective communication skills to build a good rapport with child/care taker that encourage participation in the shared decision making for the child health care.	PO3,PO5,PO6
CO 5	Formulate Ayurveda methods of building good health and immunity for a child	PO1,PO2
CO 6	Construct the ability to customize the Ahara and Vihara with respect to Vaya, Ahara Prakarana, Prakruti and Roga Avasta of the child	PO1,PO3,PO7,PO8,PO9
CO 7	Demonstrate the skill of handling the child and perform the Panchakarma in Balaroga.	PO4,PO5,PO9
CO 8	Advocate the child rights, Respect the diversity and abide to the ethical and legal code of conduct in the child health care	PO5,PO6

Table 2 : Contents of Course

Paper 1 (KAUMARABHRITYA)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Introduction to Kaumarabhritya** 1. Definitions of Kaumarabhritya, Scope and importance of Kaumarabhritya and terminologies used in Kaumarabhritya. 2. Vayobedha (Classification of age with recent Understanding) along with its rationale.	1	1	2	0	0
2	**Bala Samvardhana (Growth and Development)** 1. Growth, Shareera Vridhikara Bhavas (Factors affecting growth of child). 2. Patterns of growth. 3. Parameters used for assessment of growth in infants, children and adolescents 4. Status of Dhatu in a child with reference to growth assessment. 5. Development, factors influencing the development. 6. Childhood Samskaras 7. Developmental milestones. 8. Developmental assessment. 9. Developmental delay 10. Danta Vijnana	1	7	5	3	13
3	**Navajata Vijnana (Neonatology)** 1. Garbha Vridhi and Vikasa 2. Terminologies used in neonatology. 3. Navajata Shishu Paricharya 4. Pranapratyagamana (Neonatal resuscitation) 5. Definition and management of Term, Pre term, Post term and High Risk Neonate. 6. Examination of newborn and assessment of gestational age. 7. Ayu Pariksha Vidhi [Assessment of Longevity and Standard of Living] 8. Etiology, clinical features and management of Navajata Rogas- Swasavarodha (Respiratory distress), Ulbaka (Meconium aspiration syndrome),	1	11	13	3	12

	Birth Injuries, Upashirshaka, Haemorhagic diseases, Kamala (Jaundice), Hypoglycaemia, Akshepaka (Seizures), Abhishyanda (Neonatal Conjunctivitis).					
4	**Stanya Vijnana (Breast Milk)** 1. Stanyotpatti (physiology of lactation), Stanya Guna, Shuddha Stanya Lakshana (Qualities of normal Breast Milk), Piyusha (Colostrum), Composition and types of breastmilk. 2. Stanyapana (breastfeeding), techniques and contraindications of breastfeeding. 3. Stanya Abhava and Complementary feeding 4. Stanyapanayana 5.Stanya Dusti, Stanya Kshaya and Stanya Vruddi. 6.Stanyadushti Rogas-Ksheeralasaka, Ahiputana and Kumarashosha. 7. Concept and practice of Prashana	1	11	5	5	4
5	**Bala Poshana (Child Nutrition) & Vyadhikshamatva (Immunity)** 1. Importance of Ahara in health and disease, Age-related nutritional needs including micronutrients and vitamins. 2. Nutritional assessment 3. Assess the status of Dhatu and Dhatu Pradoshaja Vikara 4. Nutritional diet in different ages. 5. Methods to improve Vyadhikshamatwa and Bala, Swarnaprashana and Lehana. 6. Universal Immunization Program and National Immunization Schedule. 7. Reproductive Child Health (RCH) program 8. Garbhopakrama, Sutikopakrama, Balaparicharya up to 2 years (Care during the First 1000 days of life).	1		5	5	8
6	**Kuposhana Rogas (Nutritional disorders)** 1. Phakka Roga, Kumarasosha, Karshya, Parigarbhika and Sthaulya. 2. Severe Acute Malnutrition (SAM), Moderate Acute Malnutrition (MAM) and Failure to thrive (FTT) 3. Concept of deficiency diseases with respect to Ahara Guna, Koshta, Agni and other disease conditions.	2	7	6	3	4
7	**Balaroga Pariksha Vidhi & Chikitsa**	2		5	0	16

	Siddhantha (Pediatric Examination and treatment principles) 1. Paediatric Examination and Case-Taking 2. Vedana Parijnana 3. Samanya Chikitsa Siddhanta 4. Oushadha Matra Nirdharana (Posology)					
8	**Kulaja and Sahaja Rogas (Genetic and Congenital Disorders)** 1. Kulaja Vikaras, Muscular Dystrophies (DMD) and Thalassemia. 2. Sahajavikaras, Congenital disorders like Sahaja Hridaya Vikara (Congenital Heart Disease), Khandaushtha (Cleft lip), Khanda Talu (Cleft Palate), Pada Vikruti (Talipes), Sannirudha Guda (Imperforated Anus) and Neural Tube Defects, Down syndrome, Turners syndrome 3. Preconception care for healthy Ritu, Kshetra, Ambu and Beeja.	2	5	5	2	5
9	**Graha Rogas and Aupasargika Rogas (Infectious Diseases)** 1. Graharogas 2. Romantika (Measles), Karnamoola Sotha (Mumps), Rubella, Masurika (Chickenpox), Hand Foot Mouth Disease, Rohini (Diphtheria), Typhoid, Tuberculosis, Pertussis, Dhanurvata (Tetanus), Meningitis, Malaria, Dengue and Hepatitis. 3. Krimiroga (Helminthic infestation).	2	8	7	4	3
10	**Swasana Rogas [Disorders of Respiratory system]** 1. Pratishaya, Kasa and Shwasa(Common Cold, Tonsilitis, Pharyngitis, Talukantaka, Adenoid hypertrophy, Bronchial Asthma, Pneumonia). 2. Knowledge of medicines, procedure-based therapies, Pathyapathya, counseling of the parent and Referral criteria.	2	10	5	4	6
11	**Mahasrota Roga [Gastro Intestinal Disorders]** 1. Examination of Annavaha Srotas 2. Chardi (Vomiting), Atisara, Grahani and Pravahika- (Diarrheal disease), Vibanda (Constipation), Udara Soola (Infantile Colic and Abdominal Pain) and Parikartika (Fissure in ano),	2		6	3	6

	Mukha Paka (Stomaitis). 3. Dehydration and Oral Rehydration Therapies. 4. Knowledge of medicines, Procedure-based therapies, Pathyapathya, counseling of the parent and Referral criteria.					
12	**Rasa Rakta Rogas [Disorders of blood and cardiovascular system]** 1. Examination of Rasavahas Srotas and Raktavaha Srotas 2. Pandu (Anemia), Kamala (Jaundice), Raktapitta (Haemorrhagic disease), Yakrit Udara and Pleehodara (Hepatosplenomegaly) 3. Knowledge of medicines, procedure-based therapies, Pathyapathya, Counseling of the parent and Referral criteria.	2	10	3	3	6
13	**Antahsravee Granthi Rogas (Disorders of Endocrine System)** 1. Sahaja Prameha (Type 1 Diabetes), Thyroid dysfunctions and Precocious and Delayed Puberty. 2. Knowledge of medicines, procedure-based therapies, Pathyapathya, counseling of the parent and Referral criteria.	2		3	2	2
14	**Mutravaha Sroto Rogas (Disorders of Genito urinary system)** 1. Examination of Mutravaha srotas 2. Niruddha Prakasha (Phimosis) 3. Mutra Rogas (UTI, Glomerular Nephritis, Chronic Renal Failure, Nephrotic syndrome, Hematuria, Proteinuria). 4. Knowledge of medicines, procedure-based therapies, Pathyapathya, counseling of the parent and Referral criteria.	3	5	3	2	2
15	**Sandhi Rogas (Rheumatological Disorders)** 1. Amavata, Vatarakta, Sandigata Vata(Rheumatological disorders). 2. Knowledge regarding medicines, Procedure-based therapies, Pathyapathya, counseling of the parent and Referral criteria.	3		3	2	2
16	**Twak Rogas (Dermatological Disorders)** 1. Kushta, Charmadala, Arumshika and Visarpa (Scabies, Eczema, Atopic Dermatitis and	3	13	3	2	3

	Psoriasis). 2. Knowledge of medicines, Procedure-based therapies, Pathyapathya, counseling of the parent and Referral criteria.					
17	**Sira Snayu Rogas (Nervous system disorders)** 1. Examination of the nervous system 2. Jalaseershaka (Hydrocephalus), Apasmara (Epilepsy) Ataxia, Floppiness, Cerebral Palsy. 3. Knowledge of medicines, procedure-based therapies, Pathyapathya, counseling of the parent and Referral criteria.	3		7	3	9
18	**Unmada Rogas (Behavioral and Neurobehavioral disorders)** 1. Bala Unmada (ADHD, ASD, Temper tantrum) 2. Learning Disabilities, Scholastic backwardness, Breath holding spells, Mritbhakshana (Pica), Thumb sucking and Shayyamutra (Enuresis). Buddhi Mandya (Mental retardation). 3. Integrated Child Development Centre. 4. Knowledge of medicines, procedure-based therapies, Pathyapathya, counseling of the parent and Referral criteria.	3		3	4	9
19	**Atyayika Rogas (Emergency Paediatrics)** 1. Paediatric emergencies–Status epilepticus, Febrile seizures, Acute breathlessness, Poisoning, Shock, Burns, Foreign body Aspiration, Insect bite, Cardiorespiratory Arrest. 2. Fluid resuscitation techniques, IV access, Nebulization and PR medications in different conditions.	3	12	3	2	3
20	**Bala Panchakarma** Practice of Panchakarma in children -Rukshana, Snehana, Swedana, Vamana, Virechana, Basti, Nasya, Raktamokshana, Netrakalpa, Nasa, Karna procedures.	3		5	0	8
21	**Kishora Swasthya (Adolescent Health)** 1. Knowledge regarding adolescent health and diseases 2. Sexual Maturity Rating Scale	3		2	0	1
22	**Anya Rogas (Miscellaneous Diseases)**	3		1	1	0

	Inborn Errors of Metabolism, Congenital Rubella Syndrome, Celiac Disease, Spinal Muscular Atrophy, Guillain Barre Syndrome, Sickle Cell Anemia, Wilsons Disease,Kukunaka, Utphullika, Ajagallika and TaluKantaka.					
Total Marks			**100**	**100**	**53**	**122**

Table 3 : Learning objectives of Course

Paper 1 (KAUMARABHRITYA)										
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Introduction to Kaumarabhritya (LH :2 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 1,CO 3	Define Kaumarabhritya	CK	MK	K	DIS,REC,L	INT,PUZ	F&S	I	-	LH
CO 1,CO 3	Enlist the scope and importance of Kaumarabhritya. Explain the term Jatamatra, Navajata, Sadyojata, Bala, and Kumara.	CC	DK	K	L&PPT,DIS	CR-W,S-LAQ,WP	F&S	I	-	LH
CO 1,CO 3	Explain Vayo Bheda. Enlist terminologies associated with different stages of life. Classify age as per recent advances. Analyse rationale behind Vayo Bheda.	CAN	MK	KH	BS,L&GD	INT,CR-W,DEB	F&S	I	-	LH
Non Lecture Hour Theory										
S.No	**Name of Activity**	**Description of Theory Activity**								
Non Lecture Hour Practical										
S.No	**Name of Practical**	**Description of Practical Activity**								
Topic 2 Bala Samvardhana (Growth and Development) (LH :5 NLHT: 3 NLHP: 13)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**

CO 1,CO 3	Define Growth and Describe factors affecting Growth and Development	CK	MK	K	BS,DIS, L&PPT	INT,T-CS	F&S	I	-	LH
CO 1,CO 3	Recognise patterns of Growth during Infancy,Childhood and Adolescence.	CK	MK	KH	BS,L&P PT ,DIS	PA,QZ ,M-MOD	F&S	I	-	LH
CO 1,CO 3	Demonstrate different parameters used for assessment of growth in infants, children and adolescents including WHO standard and Indian Standard Parameters.	PSY-GUD	MK	SH	D,D-BED,PT	SP,P-PRF,CHK	F&S	I	-	NLHP2.1
CO 1,CO 3	Screen and plot normal and abnormal growth in different age groups independently.	PSY-MEC	MK	SH	PT,D,D-BED	CHK,PP-Practical,P-PRF	F&S	I	-	NLHP2.2
CO 1,CO 3	Examine the status of Dhatu in a child with reference to growth assessment.	CAP	MK	SH	D,PT	CHK,P-SUR,PP-Practical	F&S	I	-	NLHP2.3
CO 1,CO 3	Measure Anthropometry, investigate undernourishment and evaluate the nutritional status of child	PSY-MEC	MK	SH	PT,PBL ,D	Mini-CEX,P-PRF	F&S	I	-	NLHP2.4
CO 1	Define Development, enlist normal developmental milestones in - Gross Motor, Fine Motor skills, Personal-Social and general understanding, Language, Vision and Hearing.	CK	MK	K	EDU,L &PPT ,L_VC	O-GAME,PA,M-MOD	F&S	I	-	LH
CO 1,CO 2,CO 3	Define Developmental Delay	CK	MK	K	L_VC,L &PPT	INT	F&S	I	-	LH
CO	Assess Developmental Milestones in normal child & interpret the	CE	MK	SH	PBL,SI	Mini-CEX,	F&S	I	-	NLHP2.5

1,CO 4	observations.				M,PT	CHK,P-CASE				
CO 1,CO 2,CO 4	Assess Developmental Delay in children using DDST -Denver developmental screening test	CE	MK	SH	W,PBL, PT	P-PRF,CHK,P-CASE	F&S	I	-	NLHP2.6
CO 1,CO 2,CO 4	Record a case of Developmental Delay using the skill of history taking and DDST assessment.	PSY-MEC	MK	SH	CD,CBL,SIM	P-CASE,SP,CHK	F&S	I	-	NLHP2.7
CO 1	Describe Danta and enlist types of Danta.	CK	DK	K	DIS,L&GD	M-MOD,WP,INT	F&S	I	-	LH
CO 1,CO 3	Describe primary and secondary Dentition.	CK	MK	K	DIS,L&PPT	M-MOD,PRN,INT	F&S	I	-	LH
CO 1,CO 3	Explain process of Dantotpatti.	CC	DK	K	BL,L&GD	INT,M-CHT,PRN	F&S	I	-	LH
CO 1,CO 2,CO 3	Enlist complications of Dantotpatti and explain its management.	CC	MK	K	RLE,L&GD,PSM	PM,T-CS	F&S	I	-	LH
CO 1,CO 3,CO 5,CO 6	Explain Childhood Samskaras.	CC	NK	K	L&GD,BS,L_VC	INT,WP,O-GAME	F&S	I	-	LH

CO 1,CO 3,CO 5,CO 6	Analyse the role of Samskaras in the process of development.	CAN	DK	KH	DIS,BS, FC	CHK,COM, M-MOD	F&S	I	-	NLHT2.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 2.1	Childhood Samskaras	**Prerequisite\ preparation** **By the Teacher** - The teacher provides resource material (PPT/Video/Research articles) one week prior to the activity. **By the Student** - Students are expected to go through the resource materials prior to the activity. **Class Activity: Group discussion- 1 hour** 1. Students are divided in groups (min 5 and max 10 students/group). 2. Each group is assigned 1 or 2 Childhood Samskara based on class strength and number of groups. 3. Students are given time for group discussion Key points of discussion - Role of Samskara in the process of development. Example – Analyse how Nishkramana Samskara helps child to adjust with the external environment and what are development milestones the child must achieve by that age. **Class Activity: Presentation and evaluation - 2 hours** 1. Group leader present their inputs to the class. 2. Other groups are expected to add to the discussion. 3. Record and submit the summary of the discussion. **Role of Teacher during Activity** 1. Facilitate group discussion. 2. Assess teamwork and presentation through the checklist. **Checklist: Yes/No** 1. Pre-preparedness of the subject 2. Accurately identifies the milestone during the samskara 3. Analyse the role of samskara in child development with example 4. Justifies the query raised

		5. Active collaboration
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 2.1	Assessment of Growth I	**Duration:** 3 hours **Pre-preparation** **By the Teacher:** Arranging the equipment necessary for assessment of growth. **By the Students:** Student is expected to come prepared with the concept of growth and its assessment. **Clinical Classroom:** 1. Students are briefed about the parameters used for the assessment of growth including anthropometry (weight, height, head circumference, chest circumference, MAC other relevant parameters) 2. Demonstration of measurement on Patient/Student by the teacher. **Bedside:** 1. Students are divided into groups (min 5 to max 10) and sent to OPD/IPD 2. Each group is assigned 1 or 2 patients. 3. Students are instructed to take proper anthropometry of the given child by using fibre glass measuring tape, stadiometer, weighing machine and other equipment. Use appropriate growth formulae for assessing growth. **Clinical Classroom** 1. Discussion: Check for Growth deviations if any, age-specific growth, Indian and WHO standard. 2. Students present their observations and record. **Evaluation:** Teacher evaluates student performance using a checklist. **Checklist:** Yes/No 1. Pre-preparedness of the subject 2. Check for Zero level of scale 3. Handles baby/child gently 4. Remove parallax while taking the reading 5. Record the measurement accurately

		6. Compare with formulas and standard chart
NLHP 2.2	Assessment of Growth II	**Duration:** 1 hour **Pre-Preparation:** **By the Teacher:** Measurement Instruments are to be arranged prior to the activity. **By the Student:** Students are expected to come prepared with the knowledge of Growth and its assessment. **Activity** **Clinical classroom:** 1. Students are initially briefed on the factors affecting the growth, and anthropometric measurements according to the different age classification and their variations. 2. Students are sent to OPD/IPD. **Bedside** 1. Students are instructed to take proper anthropometric measurements of the given child to screen for normal and abnormal growth independently. 2. Use appropriate growth formulas (WHO & Indian standard parameters) to differentiate normal and abnormal growth. 3. Take a brief history of the child. 4. Plot normal & abnormal growth according to different age groups. **Clinical Classroom** Students present their findings and variations found and discuss the factors that affected the growth. **Evaluation:** Students are evaluated using the checklist/observation. **Checklist:** Yes/No 1. Record the measurements accurately 2. Plot the measurement on the growth chart 3. Interpret the graph 4. List the possible factors affecting growth
NLHP 2.3	Status of Dhatu	**Duration:** 1 hour **Pre-Preparation**

		By the Teacher: Group division and arranging the Case for discussion. **By the Student:** The student is expected to come prepared with the knowledge of Dhatu Sara Lakshana, Dhatu Vriddhi Lakshana and Dhatu Kshaya Lakshana. **Clinical Classroom:** 1. Students are briefed with Dhatu Sara Lakshana, Vriddhi and Kshaya Lakshanas 2. Students are grouped into batches(min 4 to max 8)and sent to OPD/IPD **Bedside:** 1. Students are instructed to examine the assigned child for proper Rasa, Rakta, Mamsa and other Dhatu Sara Lakshana, Vriddhi and Kshaya Lakshanas. Record the observations. **Clinical Classroom:**Each group will discuss their assessment. **Evaluation:** Teacher assesses students' performance using a checklist. **Checklist:** Yes/No 1. Rapport building with the child and caretaker 2. Demographic data recorded 3. Ask appropriate questions to assess the status 5. Assess Dhatu Sara, Vruddi and Kashya Lakshana precisely 6. Presents their finding confidently
NLHP 2.4	Undernourished child	**Duration:** 1 hour **Pre-Preparation** **By the Teacher:** 1. Group division and arranging real case/case vignettes. 2. Arranging necessary equipment for measurements. **By the Students:** Student is expected to come prepared with the knowledge of anthropometry, growth chart, nutritional assessment and the features of micro-nutrient and vitamin deficiencies. **Activity** **Clinical classroom:** Students are divided in groups and sent to OPD/IPD **Bedside** 1. Rapport building 2. Record anthropometric measurements and plot on the graph.

		3. Examine the features of micro-nutrients and vitamin deficiencies. **Clinical classroom** 1. Discuss the anthropometric measurements of the given case 2. Evaluate the nutritional status of the child 3. Make a judgment on the nutritional status of the child. **Role of Teacher**: Observe the communication skills during Case Taking, provide inputs on the case and Assess student performance through a checklist.
NLHP 2.5	Assessment of Developmental Milestones in normal child	**Duration** : 3 hours **Pre-preparation** **By the Teacher:** 1. Arranging the materials or objects necessary for assessment of development. 2. Arranging Real Patient/Videos **By the Students**: Student is expected to come prepared with developmental milestones before the session. **Clinical Classroom:** Students are briefed about the parameters used for the assessment of development. **Bedside (In real case)** 1. Students are divided in groups (8-12 in one group). 2. Students are sent to OPD/IPD 3. Students should assess the developmental milestones of a given child. **Clinical Classroom** Students present and record their observations. **Role of Teacher:** The teacher evaluates student performance using a checklist. **Checklist**: Yes/No 1. Pre-preparedness of the topic. 2. Rapport building established. 3. Handle the baby/child gently. 4. Ask relevant questions to find the age of achievement of milestones. 5. Interpret the development as per age accurately.

NLHP 2.6	Assessment of Developmental Delay	**Duration:** 2 hours **Pre-preparation** **By the Teacher:** 1. Arranging the materials or objects necessary for assessment of development. 2. Arranging Real Patient/Videos **By the Students**: Student is expected to come prepared with developmental milestones and DDST scale before the session. **Clinical Classroom:** Students are briefed about DDST Scale in the classroom. **Bedside** (In real case) 1. Students are divided in groups (8-12 in one group). 2. Students are sent to OPD/IPD 3. Students should assess the developmental milestones of a given child using DDST Scale. **Clinical Classroom** Students present and record the observations. **Role of Teacher:** Teacher evaluates student performance using a checklist. **Checklist:** Yes/No 1. Rapport building established 2. Handle the baby/child gently 3. Use DDST scale to assess the developmental milestone accurately 4. Interpret the development as per age accurately
NLHP 2.7	Case of Developmental Delay	**Duration:** 2 hours **Pre-Preparation -** **By the Teacher:** Group division and arranging the Case for discussion **By the Student:** The student is expected to come prepared with the knowledge of Developmental milestones, Developmental delay and history taking. **Bedside activity:** 1. Students are divided in groups (Min 4 max 8) and sent to OPD/IPD 2. Each group is assigned a developmental delay case. (Real case/Simulated case/Clinical case video)

		3. Students are expected to - A. Build Rapport with the patient and guardian. History taking (More importance to be given on developmental milestones like when baby achieves social smile, neck control, and other developmental milestones which include gross motor, fine motor, social and language development). B. Assess the child using DDST scale. C. Record the case **Clinical Classroom:** Present the case and discuss the observation. **Role of Teacher:** Observe the communication skills during Case Taking, provide inputs on the case and Assess student performance through a checklist. **Checklist:** Yes/No 1. Pre-preparedness of the topic 2. Rapport building established 3. Demographic data and family history documented 4. Developmental milestones assessed using DDST scale 5. History of developmental delay explained. 6. Analyse the probable cause for developmental delay based on history.

Topic 3 Navajata Vijnana (Neonatology) (LH :13 NLHT: 3 NLHP: 12)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1	Explain Garbha Vriddhi and Vikasa. Explain fetal development.	CC	NK	K	L_VC,L &PPT	QZ ,M-CHT,O-GAME	F&S	I	H-SP	LH
CO 1,CO 2,CO 3	Define the terms - SGA, LGA, AGA, LBW, VLBW, ELBW, Fetus, Live birth and Stillbirth. Describe the characteristics of Normal Term Neonate. Describe the characteristics of High-Risk Neonate. Recite Swasta Bala Lakshana.	CK	MK	K	DIS,L&PPT ,REC	O-GAME,INT,WP	F&S	I	-	LH
CO 2,CO 3	Explain Navajata Shishu Paricharya including Pranapratyagamana. Explain recent advances in neonatal care.	CC	MK	K	L_VC,L &PPT	S-LAQ,M-CHT,INT	F&S	I	-	LH

CO 2,CO 3	Explain Nabhi Nala Chedana. Enlist and explain complications of Nabhi Nala Chedana, Nabhi Paka, Umbilical sepsis and its management. Explain the management of Umbilical Hernia	CC	MK	K	L&GD, L_VC,DIS	C-VC,T-CS	F&S	I	-	LH
CO 3,CO 7,CO 8	Analyse the scientificity of Navajata Shishu Paricharya & Pranapratyagamana with respect to: Receiving the baby, Temperature maintenance, Stimulation of breathing and Cord care	CAN	MK	KH	BS,FC,IBL	PRN,CHK, DEB	F&S	I	-	NLHT3.1
CO 1,CO 2,CO 3	Explain the care of Post term and Preterm Neonates.	CC	MK	K	L&PPT ,L_VC, CD	QZ ,T-CS, C-VC	F&S	I	-	LH
CO 2,CO 3	Explain Neonatal Resuscitation. Enlist complications of Neonatal Resuscitation and Explain management. Recognise the Preventive Strategies at the time of delivery.	CC	MK	KH	D-M,BS ,L&PPT	CL-PR,INT ,O-GAME	F&S	I	-	LH
CO 3,CO 7,CO 8	Perform Neonatal Resuscitation on manikin. Demonstrate Intranatal care and receiving a baby in normal delivery.	PSY-GUD	MK	SH	D-M,W,PT	CHK,DOPS,OSCE,DOPS	F&S	I	-	NLHP3.1
CO 1,CO 7	Examine Newborn baby and assess gestational age of Newborn.	PSY-GUD	MK	SH	D-M,W,PT	CHK,OSCE,P-PRF	F&S	I	-	NLHP3.2
CO 3,CO 4,CO 7	Demonstrate Navajata Abhyanga, Snana and administer Prashanam. Counsel and educate the caretakers regarding "Newborn Care after discharge"	PSY-GUD	MK	SH	D-M,RP	CHK,PA,RS	F&S	I	-	NLHP3.3
CO 3,CO	Explain Rakshakarma Vidhi. Analyse scientificity of Raksha Karma.	CAN	MK	KH	SDL,L&GD	CL-PR,DEB,PUZ	F&S	I	-	LH

5										
CO 1,CO 3	Infer Ayu Pariksha Vidhi [Assessment of Longevity and Standard of Living]	CAN	NK	KH	W,EDU ,PL	RS,CHK,P-SUR	F&S	I	-	NLHT3.2
CO 2,CO 3	Describe the etiology, clinical features and management of neonatal respiratory distress. Describe the etiology, clinical features and management of meconium aspiration syndrome. Explain Ulbakam and its Chikitsa.	CC	MK	K	L&PPT ,LRI,X-Ray	T-CS, C-VC,INT	F&S	I	-	LH
CO 2,CO 3	Enlist and analyze complications of Akalapravahana. Define and enumerate birth injuries and analyze their causes. Describe the clinical features, pathophysiology and management of Caput succedaneum and cephalohematoma. Explain Upasheershakam and its Chikitsa. Describe the clinical features, pathophysiology and management of Erb's Palsy.	CAN	MK	KH	L&PPT ,DIS,C D	C-VC,PUZ ,T-CS	F&S	I	-	LH
CO 2,CO 3	Describe etiology, clinical features and management of haemorrhagic diseases.	CK	MK	K	CD,DIS ,L&PPT	PM,CBA,T-CS	F&S	I	-	LH
CO 2,CO 3	Diagnose Neonatal seizures. Analyse the concept of Akshepaka and Skandapasmara in the context of neonatal seizures	CE	MK	KH	SIM,CB L,PT	SBA,Mini-CEX,CHK	F&S	I	-	NLHP3.4
CO 2,CO 3	Describe etiology, clinical features and management of Neonatal hypothermia, Neonatal hypoglycemia and neonatal seizures.	CK	MK	K	L_VC,C D,L&PP T	CBA,T-CS	F&S	I	-	LH
CO 2,CO	Diagnose Neonatal Hypothermia, Hypoglycemia, Septicemia, Conjunctivitis, Respiratory Distress, Meconium Aspiration	PSY-GUD	MK	SH	CBL,C D,PT	CHK,Mini-CEX,P-	F&S	I	-	NLHP3.5

3	Syndrome, Caput Succedaneum, Cephalohematoma, Erbs palsy, Hemorrhagic diseases. Diagnose Umbilical Hernia and sepsis. Observe the umbilical area of neonates and screen for umbilical sepsis/hernia. Recognize red flags for referrals of umbilical sepsis.					CASE				
CO 2,CO 3	Describe etiology, clinical features and management of neonatal septicemia and neonatal conjunctivitis.	CC	MK	K	CD,L& PPT	T-CS,O-GAME	F&S	I	-	LH
CO 2,CO 3	Explain mechanism of Neonatal jaundice. Describe etiology, clinical features and management of Neonatal Jaundice.	CC	MK	K	L_VC,L &PPT ,LRI	M-CHT, C-VC	F&S	I	-	LH
CO 2,CO 3	Diagnose and manage the case of Neonatal Jaundice.	PSY-GUD	MK	SH	PT,LRI, CBL	CHK,Mini-CEX,P-CASE	F&S	I	-	NLHP3.6
CO 3,CO 5,CO 6	Outline the scope of complimentary approach of Ayurveda principles and practices in the management and prevention of hypothermia, hypoglycemia, seizure, septicemia, conjunctivitis and jaundice in neonate.	CAN	NK	KH	TBL,FC ,BS	CHK,DEB, CL-PR	F&S	I	-	NLHT3.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 3.1	Navajata Shishu Paricharya and Pranapratyagamana	**Duration:** 1 hour **Pre-Preparation:** **By the teacher:** Scheduling the topic of discussion, dividing the students in groups (Min 15 Max 20) one week before the session. **By the Student:** 1. Identify a question (Which Procedures of Navajata Shishu Paricharya and Pranapratyagamana have a role or impact in receiving the baby, temperature maintenance, stimulation of breathing and cord care.)

		2. Conduct background research (Explore or study the topics such as Ashmanosanghatanokarnayormulam , Sheetodakenaushnodakena Mukha Parisheka, and initial steps involved in the labour room) 3. Formulate hypothesis if necessary: Predict how specific Paricharya helps in stimulation of breathing, maintenance of temperature and card care. 4. Plan and conduct investigations (interview with senior Ayurveda pediatricians or collecting research articles) 5. Analyse Data: Gather and analyse information. **Class activity:** 1. Group discussion on collected findings - 10 mins 2. Communicate findings: one group leader presents the findings through a report/presentation. 3. Open discussion/ debate on the findings of each group. 4. Submit the report.
NLHT 3.2	Ayu Pariksha Vidhi	**Duration:** 1 hour **Pre-Preparation** **By the Teacher:** 1. Prepare a questionnaire of each organ character. 2. Group division (5-8 in one group) **By the Student:** Student is expected to come prepared with the knowledge of Lakshana Adhyaya **Activity:** 1. Teacher briefs about Ayupariksha Vidhi and the questionnaire prepared 2. Examine peers/children 2. Mark each character based on its presence 3. Cross-check with their current health status/professional status etc as interpretation 4. Discuss based on opportunities received, lifestyle adapted etc 5. Discuss on the feasibility of Lakshan Adhyaya. **Role of a teacher:** 1. Guide students on interpreting the questionnaire 2. Evaluation: The teacher evaluates students using the Checklist form and gives feedback. **Checklist:** Yes/No

		1. Correctly identify the features 2. Interprets the inference 3. Active participation
NLHT 3.3	Neonatal disorders	**Duration :** 1 hour **Prerequisite\ preparation -** **By the Teacher:** 1. Dividing the class into six groups and assigning one condition to each group (hypothermia, hypoglycemia, seizure, septicemia, conjunctivitis and jaundice) one-two weeks prior to the session. 2. Guiding the student to collect references and document the findings **By the Student:** Student is expected to collect references, document and present their opinion. **Class Activity** 1.Students gather in assigned groups and discuss: 10 mins 2. One from each group is expected to present the Ayurveda principles and practices in the management and prevention of allotted disease with their peers. (For example : Stanyapana (Exclusive breastfeeding) in the management and prevention of neonatal hypoglycemia, Triphala Kwatha Parisheka in neonatal conjunctivitis) 3. Debate and Discuss the presented findings. **Role of a teacher:** 1.Facilitate group discussion 2.Evaluation is done using a checklist and inputs are provided based on their performance. **Checklist:** Yes/No 1. Pre-preparedness on the topic 2. Correctly identify the preventive and complementary strategies 3. Justifies the strategies with evidence 4. Good collaboration 5.Presents the finding logically
Non Lecture Hour Practical		

S.No	Name of Practical	Description of Practical Activity
NLHP 3.1	Neonatal Resuscitation and Intranatal care.	**Duration:** 3 hours **Pre-Preparation** **By the Teacher:** Arranging the Manikins, instruments and equipment necessary for Neonatal resuscitation. **By the Student:** Student is expected to come prepared with the knowledge of Neonatal resuscitation. **Activity in clinical classroom/simulation lab:** 1. Teacher enlists the aseptic measures and Neonatal resuscitation and 2. Demonstration of neonatal resuscitation and intranatal care by the trainer. 3. Demonstration of communication skills with the mother during birth by the trainer. 4. Students are divided in groups.(6-10 in each group) 5. Each group is provided with manikin. 6. Students are instructed to perform neonatal resuscitation in turns. **Role of a teacher:** 1. Guide students on appropriate methods of performing neonatal resuscitation. 2. Teacher evaluates students using the Checklist/DOAP form. **Checklist:** Yes/No 1. Handling the manikin gently 2. Follow the proper steps of resuscitation 3. Quick decision taken during change of procedures 4. Performs the steps efficiently and skillfully.
NLHP 3.2	Examination of Newborn and Assessment of gestational age.	**Duration:** 2 hours **Pre-Preparation** **By the Teacher:** Arranging the Manikin/Real case and instruments and equipment necessary for Neonatal examination. **By the Student:** Student is expected to come prepared with the knowledge of the Neonatal examination **Activity in clinical classroom/simulation lab:** 1. Students are divided in groups.(6-10 in each group)

		2. Each group is provided with a manikin/real case. 3. Teacher demonstrates the newborn examination on a manikin/real case. 4. Students perform the following examination on a manikin/real case. a. Examination immediately after birth b. Examination on the second day of life c. Examination on the day of discharge **Role of a teacher:** 1. Guide students on appropriate methods of performing neonatal examination. 2. Teacher evaluates students using the Checklist form. **Checklist:** Yes/No 1. Establish rapport with parent/caretaker 2. Handle the baby/manikin gently 3. Performs the examination efficiently 4. Identifies the gestation maturity based on the physical and neurological maturity of the child.
NLHP 3.3	Newborn care after discharge	**Duration:** 2 hours **Pre-Preparation** **By the Teacher:** 1. Arranging the Manikin and instruments necessary for demonstrating Navajata abhyanga, Snana and administering Prashanam. 2. Preparing a Role Play skit/pre-recorded video of the demonstration By the Student: Student is expected to come prepared with the knowledge of Abhyanga, Snana and Prashanam. **Activity in clinical classroom/simulation lab:** 1. Teacher demonstrates the Newborn care post discharge including Abhyanga, Snana and Prashanam on Manikin or real baby/displays the pre-recorded video. 2. Students gather in groups to practice on Manikin and with peers. Components of role-play demonstration include: 1. Building a Rapport with the mother and ensuring her on Newborn Care. 2. Explaining the signs of a healthy baby and a sick baby. 3. Demonstrating the breastfeeding position and burping. Explaining the frequency

		4. Demonstrating Abhyanga and Snana 5. Demonstrating Prashanam. 6. Explaining cleaning and clothing of the baby 7. Demonstrating Cord care 8. Demonstrating Shiro Pichu 9. Ensuring if the mother has understood the communication and has no doubts. **Role of a teacher:** 1. Demonstration of Role play and guide students on right practice. 2. Teacher evaluates the student skill by using Check list and gives feedback. **Checklist:** Yes/No 1. Rapport building established 2. Explains signs of healthy baby and sick baby efficiently. 3. Demonstrates the breastfeeding position and burping 4. Demonstrates Abhyanga, Snana and Prashanam. 5. Explains the cleaning and clothing of the baby. 6. Demonstrates Cord care and Shiro Pichu. 7. Ensures that the mother has understood the communication.
NLHP 3.4	Neonatal seizures /Akshepaka and Skandapasmara.	**Duration:** 1 Hour **Preparation /pre-requisites** **By the teacher:** 1. Scheduling the case taking and arranging the case (Real Patient / simulated patient/ Case Vignette) 2. Make the student understand the OPD/IPD manners during case-taking 3. Preparing the checklist for the concerned activity. **By the student:** 1. Student is expected to come prepared with the content of Nidana Panchaka and Chikitsa Apasmara, the concept of Akshepaka and Skandapasmara and neonatal seizure. 2. Rapport building, proper history taking, thorough examination, appropriate Investigation **ACTIVITY** **In clinical classroom**: Students are divided in groups (5-8 members in one group) and assigned one case (Real/Simulated/Case Vignette)

		Bedside: Case taking as per the format (in case of real patients) 1. Building rapport with patient 2. History taking 3. Clinical examination **In clinical classroom:** 1. Students discuss the Nidana Panchaka in the allotted group, differential diagnosis, plan investigations if needed & identify the Samprapti Ghatakas 2. Plan the management and justify the Samprapti Vighatana 3. Analyse the Symptoms with the Lakshana of Akshepaka and Skandapasmara 4. Presentation of the case [Each group will present entire case or any sub-point of the case] 5. Recording the case in the record book. **Teacher's role:** Teacher evaluates students' performance based on a checklist/rating scale. **Checklist:** Yes/No 1. Rapport building established 2. Explain the history and symptoms in sequence 3. Plans the management and justifies 4. Analyze the Symptoms with Akshepaka and Skandapasmara 5. Good collaboration
NLHP 3.5	Neonatal diseases	**Duration:** 3 Hours **Preparation /pre-requisites** **By the teacher:** 1. Scheduling the case taking and arranging the case (Real Patient / simulated patient/ Case Vignette) 2. Make the student understand the OPD/IPD manners during case-taking 3. Preparing the checklist for the concerned activity. **By the student:** 1. The student is expected to come prepared with the concept of Neonatal Diseases 2. Rapport building, proper history taking, thorough examination, appropriate Investigation **ACTIVITY** **In clinical classroom:** Students are paired and assigned one case (Real/Simulated/Case Vignette) of Neonatal Hypothermia, Hypoglycemia, Septicemia, Conjunctivitis, Respiratory distress, Meconium

		aspiration syndrome, Caput Succedaneum, Cephalohematoma, Erbs palsy, Hemorrhagic diseases, Umbilical Hernia and Umbilical sepsis. **Bedside:** Case taking as per the format (in case of real patients) – 1 hour 1. Building rapport with patient 2. History taking 3. Clinical examination **In clinical classroom**: 2 hour 1. Students discuss the diagnosis, interpret the investigation report 2. Identify red flag signs for referral 3. Plan the management and justify 4. Presentation of the case [Each group will present the case assigned to them] 5. Recording the case in the record book. **Teacher's role:** The teacher evaluates students' performance based on a checklist/rating scale. **Checklist:** Yes/No 1. Rapport building established in real case 2. Explain the birth history and symptoms in sequence 3. Interpret the investigation report accurately 4. Diagnose the case and justifies the differential diagnosis 5. Plan the possible management 6. Good collaboration
NLHP 3.6	Case of Neonatal Jaundice.	**Duration:** 1 Hour **Preparation /pre-requisites** **By the teacher:** 1. Scheduling the case taking and arranging the case (Real Patient / simulated patient/ Case Vignette) 2. Make the student understand the OPD/IPD manners during case-taking 3. Preparing the checklist for the concerned activity. **By the student:** 1. The student is expected to come prepared with the concept of Neonatal Jaundice 2. Rapport building, proper history taking, thorough examination, appropriate Investigation

		ACTIVITY **In clinical classroom:** Students are divided in groups (5-8 members in one group) and assigned one case (Real/Simulated/Case Vignette) of varying severity of Neonatal Jaundice (Physiological/Pathological) **Bedside:** Case taking as per the format (in case of real patients) 1. Building rapport with patient 2. History taking 3. Clinical examination **In clinical classroom:** 1. Students discuss the diagnosis, interpret the investigation 2. Plan the management and justify 3. Discuss the practical challenges in the management plan and alternatives 4. Presentation of the case [Each group will present the entire case or any sub-point of the case] 5. Recording the case in the record book.

Topic 4 Stanya Vijnana (Breast Milk) (LH :5 NLHT: 5 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 3,CO 5,CO 6	Define Stanya. Explain the process of Stanyotpatti and the physiology of lactation. Enlist Stanya Guna and Shuddha Stanya Lakshana. Enumerate properties of normal breast milk. Define colostrum and enlist the advantages.	CC	MK	K	DIS,L& PPT ,GBL	M-CHT,W P,O-GAME	F&S	I	-	LH
CO 3,CO 5,CO 6	Explain the Advantages of Breastfeeding. Recognize the wrong practices of Breastfeeding. Identify Complementary feeding arrangements in the absence of Stanya. Identify Complementary feeding arrangements in the absence of Breastmilk. Explain Stanyapanayana.	CC	MK	K	TUT,L_ VC,DIS	WP,M-CH T,O-GAME	F&S	I	-	LH
CO 4,CO 7,CO	Demonstrate techniques of breastfeeding.	AFT-RES	MK	SH	RP,SIM ,D	CHK,M-POS,P-RP	F&S	I	-	NLHP4.1

8										
CO 5,CO 6	Identify Complementary feeding arrangements in the absence of Stanya.	CC	DK	KH	FC,DIS, TBL	PRN,CHK, DEB	F&S	I	-	NLHT4.1
CO 5,CO 6	Discuss Complementary feeding arrangements in absence of Breastmilk	CK	MK	K	FC,TBL ,DIS	PUZ,CHK, M-CHT	F&S	I	-	NLHT4.2
CO 5,CO 6	Discuss the Complementary feeding arrangements in the absence of breast milk	CAN	MK	KH	FV,TP W	CR-W,COM	F&S	I	-	NLHP4.2
CO 1,CO 2,CO 3	Explain Nidana, Bheda, Lakshana and Chikitsa of Stanya Dushti. Explain Nidana, Lakshana of Stanya Vriddhi and Kshaya. Recite Stanya Vardhaka Gana and Stanya Shodhana Gana.	CC	MK	K	REC,L &GD,T UT	QZ ,WP,T-CS	F&S	I	-	LH
CO 1,CO 3,CO 4,CO 8	Analyse Nidana, Lakshana of Stanya Vriddhi and Kshaya. Perform Stanya Pareeksha.	PSY-GUD	MK	SH	DL,W, KL	CHK,P-SUR,DOPS,DOPS	F&S	I	-	NLHP4.3
CO 2,CO 3,CO 6	Enlist the Diseases due to Stanyadushti. Explain Nidana, Samprapti, Lakshana and Chikitsa of Ksheeralasaka. Explain Nidana, Samprapti, Lakshana and Chikitsa of Ahiputana/GudaKutta.	CC	MK	K	DIS,L& PPT ,CD	T-CS, C-VC,SBA	F&S	I	-	LH
CO 2,CO 3,CO 5,CO	Explain Nidana, Samprapti, Lakshana and Chikitsa of Kumarashosha. Describe etiopathogenesis, features, investigations and management of Lactose Intolerance. Explain method and practices of Swarnaprashana.	CC	MK	K	DIS,CD ,L&PPT	T-CS,S-LAQ,CBA	F&S	I	-	LH

6										
CO 3,CO 5	Analyse the scientific benifits of Swarnaprashana.	CAN	DK	KH	BS,IBL, DIS	DEB,CHK, CR-RED,CL-PR	F&S	I	-	NLHT4.3
CO 5,CO 7	Prepare and Administer Swarnaprashana	PSY-GUD	MK	SH	PT,D	P-PRF,DOPS,Log book,DOPS	F&S	I	-	NLHP4.4
CO 4,CO 5,CO 8	Participate in breast feeding week celebration.	AFT-RES	NK	SH	TPW,RLE	INT,C-INT	F	I	-	NLHT4.4
CO 2,CO 3	Analyse Ksheeralasaka with Malnutrition and Chronic GI diseases in Breastfeeding babies.	CAN	MK	KH	PBL,FC	CHK,RS,CL-PR	F&S	I	-	NLHT4.5

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 4.1	Complementary feeding I (in the absence of Stanya)	**Duration:** 1 hour **Pre-preparation** **By the Teacher:** 1. Students are divided in groups (8-12 students in one group) 2. The teacher assigns the topic of discussion and the list of references one week before the class activity. **By the Student**: Students are expected to study the concept and come prepared for discussion. Key points of discussion: Stanya Abhave kim Dheyam (complementary or alternative feeding arrangements) **Class Activity :** 1. Students gather in divided groups.

		2. Facilitator open the discussion. 3. Students are expected to discuss Complementary feeding arrangements in absence of Stanya in their respective groups with their peers. 4. Each group will identify a complementary feeding arrangement. 5. Students are supposed to justify the answers with references. 6. One group leader presents the key points of discussion.
NLHT 4.2	Complementary feeding II (in the absence of Breastmilk)	**Duration**: 1 hour **Pre-preparation** **By the Teacher:** 1. Students are divided in groups (8-12 students in one group) 2. The teacher gives the topic of discussion and the list of references one week before the class activity. **By the Student:** Students are expected to study the concept and come prepared for discussion. Key points of discussion: complementary or alternative feeding arrangements **Class Activity :** 1. Students gather in divided groups. 2. Facilitator open the discussion. 3. Students are expected to discuss Complementary feeding arrangements in absence of breastmilk in their respective groups with their peers. 4. Each group will identify complementary feeding arrangement. 5. Students are supposed to justify the answers with references. 6. One group leader presents the key points of discussion.
NLHT 4.3	Swarnaprashana	**Duration:** 1 hour **Pre-preparation** **By the Teacher:** Teacher informs the topic and group division (Min 10 to 12) 1 week before the class activity. **By the Student:** 1. Identify a Question on the topic.

		2. Conduct Background Research: Literature research, Collecting articles/research work on Swarnaprashana 3. Formulate a hypothesis if needed 4. Plan and Conduct Investigations: Interviewing healthcare professionals about Swarnaprashana they use in their practice and thier benifits. Surveys can also be planned in public. 5. Analyse Data: Analyse data from surveys or interviews to understand the scientific benefits of Swarnaprashana. **Class activity:** 1. Students gather in their respective groups 2. Group discussion: 10 mins 3. Communicate findings: Present findings through a report/presentation with evidence. **Role of a Teacher:** 1. Direct the research and facilitate group discussion 2. Evaluate students' performance based on checklist/rating scale **Checklist:** Yes/No 1. Preparation: evidence of prior study and research 2. Participation: All group members actively contribute to the discussion 3. Justification: The scientific benefits of Swarnaprashana are justified with appropriate evidence and answers the query with justification. 4. Communication: clear and confident expression during the discussion and presentation 5. Presentation: Presentation well-organized, relevant, and delivered effectively
NLHT 4.4	Breast feeding week program.	Students are expected to attend Breastfeeding Week program celebration either online or offline mode. The main aim of the program is to educate, encourage breastfeeding and promote good health in children. **Objectives of attending the program.** 1. Learning about breastfeeding benefits for mother. 2. Learning about breastfeeding benefits for children. 3. Importance of breastfeeding. 4. Educating families regarding breastfeeding. **Outcome:** Students are able to encourage and educate the importance of breastfeeding to public.

NLHT 4.5	Ksheeralasaka	**Duration:** 1 hour **Pre-preparation** **By the Teacher:** Teacher divides the group and assigns one problem/Case Vignette to each group one week before the acivity. **By the Student:** Student is expected to understand the problem and study various resources available and prepare for group discussion. **Class activity:** Introduction: Teacher introduces students to the problem or case to be solved and provides an overview of Ksheeralasaka, malnutrition and chronic GI diseases. 1. Students gather in divided groups (8-12 in one group). 2. Students should analyze the symptoms of malnutrition and chronic GI diseases in a given case vignette with Ksheeralasaka by considering its Nidana, Samprapti and Lakshanas in groups. 3. The group leader presents their opinion or observations to the class.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 4.1	Breastfeeding techniques	**Duration:** 1 Hour **Pre-preparation** **By the Teacher:** 1. Dividing the groups and arranging the manikin. 2. Sharing the PPT/Prerecorded video 3. Guiding the students to build a script and validate it before the session. **By the Student:** 1. The student is expected to study breastfeeding techniques before the session. 2. Build a script for role play (Explaining the breastfeeding technique to the parent/caretaker with Do’s and Don’ts) **Activity:** 1. Introduction: The teacher introduces students to different techniques of breastfeeding and its importance on a child's health.

		2. Students assemble in groups and role-play the script. **Role of Teacher:** Facilitate group discussion, feedback & evaluation. Students performance will be evaluated using a checklist. **Checklist:** Yes/No 1. Self-introduction and rapport building 2. Demonstrates the different techniques of breastfeeding efficiently. 3. Demonstrates burping 4. Explains the frequency and duration of Breastfeeding 5. Clear explanation in simple and local language 6. Feedback of communication (Made sure that parents understood the technique)
NLHP 4.2	Complementary feeding Survey	**Duration:** 1 hour **Pre-Preparation:** **By the Teacher:** 1. Teacher has to identify the place of the survey visit and make necessary arrangements. 2. Divide the students in groups **By the Student:** 1. Students has to come prepared with the complementary feedings used in the absence of breastmilk. **Activity** 1. Students should visit nearby pharmacy/dispensary to identify the present complementary food available according to age groups. 2. Compare the composition of different companies and different age groups. 3. Analyse the difference in combinations of different companies. 4. Submit a report of the findings and its reflection. **Role of a teacher:** Teacher evaluates student based on the survey report and team performance.
NLHP 4.3	Stanya Vriddhi, Stanya Kshaya and Stanya Pareeksha	**Duration:** 1 Hour **Activity 1:** To perform Stanya Pareeksha (30Mins) **Pre-Preparation :** **By the Teacher:**

		1. Equipment needed for Stanya Pareeksha to be arranged 2. Sample of Stanya to be arranged **By the Students:**Students are expected to study in detail about Stanya and its examination before coming to the session. **Activity :** 1. Teacher will brief about Stanya Pareeksha in the beginning of class. 2. Students are divided in groups.(5-8 students in each group) 3. Each group is sent to IPD /OPD/lab for sample collection 4. Students are expected to perform examination of stanya by putting a drop of Stanya in to water and note the findings. 5. New methods of Stanya Pareeksha can be practiced if available. **Activity 2:** Survey (30 mins) **Pre-Preparation:** **By the Teacher:** Provide references and guide students on building a questionnaire/online form for assessment. **By the Student:** Students are expected to understand the Stanya Vriddhi and Kshaya Lakshanas and prepare a questionnaire (For both offline and online assessment) **Activity** 1. Student conduct survey offline (OPD/IPD) or online (feeding mothers) 2. Submit the report of the survey and analyze the results in the group 3. Students are expected to analyze the cause for Stanya Vriddhi and Kshaya Lakshanas if observed or noted. **Teachers role:** Teacher assess students by using checklist. **Checklist:** Yes/No 1. Perform Stanya Pareeksha efficiently 2. Questionnaire prepared includes all the Stanya Vriddhi and Kshaya Lakshanas 3. Analyse the probable Nidana of Stanya Vriddhi and Kshaya Lakshanas in lactating mothers 4. Demonstrate good communication skills and rapport-building during the survey
NLHP 4.4	Preparation of Swarnaprashana	**Duration:** 1 hour **Pre-Preparation:**

		By the Teacher: Introduction: Initially teacher will brief about different methods of preparation of Swarnaprashana and its administration through Handouts/videos. **By the Student**: Students are expected to study Swarnaprashana preparation in detail before coming to the class. **Activity** 1.Students are divided into groups. 2. Each group is instructed to follow any one method of preparation of Swarnaprashana or a method that they adopt or practice in college or in their particular region. 3. Students are instructed to prepare Swarnaprashana followed by administration of the same. 4. Analyse the dose according to age

Topic 5 Bala Poshana (Child Nutrition) & Vyadhikshamatva (Immunity) (LH :5 NLHT: 5 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 5,CO 6	Describe age related nutritional needs of infants, children and adolescents	CK	MK	K	DIS,BL, L&PPT	INT,PRN,O-QZ	F&S	I	V-SW	LH
CO 1,CO 5,CO 6	Describe the method of calculating micronutrients in children	CC	NK	KH	EDU,PSM,L&PPT	T-CS,O-GAME,PRN	F	I	-	LH
CO 1,CO 3,CO 5	Describe the tools and methods for assessment of nutrition in children.Classify the nutritional status of infants, children and adolescents	CC	MK	K	DIS,L&PPT ,PSM	O-QZ,T-CS	F&S	I	-	LH
CO 1,CO	Assess and classify the nutrition status of infants, children and adolescents and recognize deviations. Assess the quality of each	AFT-RES	MK	SH	D-BED, SIM,PT	CHK,DOPS,DOPS,P-	F&S	I	V-SW	NLHP5.1

4,CO 5,CO 6	Dhatu and its deviations. Assess the Ayurveda attributes of Ahara in a given child. [Agni, Guna of Ahara, Satmya and Asatmya]. Educate parents and child regarding the importance of Ahara, Pathya, Apathya and other possible Ahara Gunas. Plan an appropriate diet for each child using nutritional principles and Ahara Niyamas and communicate the plan to caregivers.					CASE				
CO 3,CO 5	Analyse factors affecting Vyadhikshamatwa/ Bala and Immunity in the present era.	CAN	MK	KH	FC,DIS, BS	INT,PRN,C HK	F&S	I	-	NLHT5.1
CO 3,CO 5,CO 6	Enlist methods to improve Vyadhikshamatwa / Bala and Immunity including Oushadhas, Kriyakramas, Lehana, Rasayana, Prakarayoga, Samskara and Immunization	CK	MK	K	FC,SDL ,TBL	CR-W,CO M,CHK	F&S	I	-	NLHT5.2
CO 3,CO 4,CO 5	Counsel the parents about methods to improve Immunity in children.	AFT-RES	MK	SH	SIM,RP ,EDU	RS,CHK,P-RP	F&S	I	-	NLHP5.2
CO 4,CO 5,CO 6	List and explain the components, Key strategies, and highlights of the Reproductive Child Health (RCH) program. Explore Ayurveda concept, practices and scope of preconception and antenatal care aimed at ensuring the birth of a healthy child. Construct the care plan for the first 1,000 days of the child's life from conception until 2 years of age (24 months).	CAN	MK	KH	IBL,PrB L,TPW	CHK,COM, PRN	F&S	I	-	NLHT5.3
CO 5,CO 8	Explain the Universal Immunization Program	CC	MK	K	L&GD, ML,L_ VC	PRN,QZ ,O-GAME	F&S	I	-	LH
CO	Demonstrate the correct administration of different vaccines on a	PSY-	MK	SH	RP,D-	DOPS,OSC	F&S	I	-	NLHP5.3

4,CO 5,CO 7,CO 8	manikin. Observe the method of administration and recognize the adverse events following Immunization. Document Immunization in an Immunization record	GUD			M,PT	E,DOPS,CHK				
CO 5,CO 8	Explain the components of National Immunisation Schedule.	CC	MK	K	L&GD, L_VC,EDU	PRN,M-CHT,QZ	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 5.1	Vyadhikshamatwa and Immunity I	**Duration:** 1 hour **Pre-Preparation:** 1. The teacher informs the topic of discussion one week prior to the activity. 2. The student is expected to come prepared for the group discussion. **Key points for discussion:** 1. Concept of Immunity in the Pediatric Population 2. Role of environmental factors, diet and regimen in Immune regulation **Class Activity** 1. Students will be divided into groups (15-20 in one group) 2. The facilitator will open the discussion 3. Students are expected to discuss and analyze the factors affecting Vyadhikshamatwa 4. Each group will present their opinions 5. Consensus building; students will draw an opinion near the conclusion.
NLHT 5.2	Vyadhikshamatwa and Immunity II	**Pre-Preparation:** 1. The teacher informs the topic of discussion 1 week before the activity. 2. Students are expected to come prepared with the topic discussion. **Key points for discussion:** 1. Concept of Immune modulation

		2. Role of medicines and procedure-based therapies in Immune regulation 3. Concept of Lehana, Bala Rasayana, Prakarayoga and Samskaras 4. National Immunization Schedule - updated version **Class Activity:** Group Discussion 1 hour 1. Students will be divided into groups (15-20 in one group) 2. The facilitator will open the discussion 3. Students are expected to discuss the methods to improve Vyadhikshamatwa **Presentation:** 1 hour 1. Each group will present their opinions 2. Consensus building; students will draw an opinion near the conclusion **Teachers Role:**Student's performance will be evaluated using a checklist. **Checklist**- Yes/No 1. Pre-preparedness of the subject 2. Factors modulating immunity detailed 3. Role of Oushadha in Immune modulation detailed 4. Role of Kriyakrama in Immune modulation detailed 5. Role of Lehana and Rasayana in Immune modulation detailed 6. Role of Prakarayoga in Immune modulation detailed 7. Role of Samskara in Immune modulation detailed 8. Active participation
NLHT 5.3	RCH programmes and Perinatal care for Healthy Child	**Pre-preparation** **By the Teacher:** The teacher informs the topic and group division (Min 6 to 10) 1 week before the class activity. **By the Student:** 1. Identify a Question: What factors in the Antenatal & Postnatal period have an impact on a child's growth and development? 2. Conduct Background Research: Explore topics such as nutrition, breastfeeding, immunization, preconception, antenatal, perinatal and post-natal care. Factors affecting Vyadhikshamatwa in children. Role of Garbhopakrama, Soothikopakrama and Balopakrama (first 1000 day care) in Immune modulation.

		3. Formulate Hypothesis: Predict how specific factors (e.g., breastfeeding, maternal diet) might influence a child's physical and cognitive development. RCH programs and their effect on child health. Role of Garbhini, Soothika and Bala Upakrama in Immune modulation. 4. Plan and Conduct Investigations: Interviewing healthcare professionals about the impact of Antenatal & Postnatal on the child's growth and development. Surveys can also be planned in public. 5. Analyze Data: Analyze data from surveys or interviews to understand the impacts of various factors. **Class activity** **Group Discussion:** 1hour 1. Students sit in their respective groups and discuss on the assigned topic. **Presentation:** 1 hour 1. Communicate findings: Present findings through a report/presentation emphasizing the importance of Antenatal (Garbhopakrama) & Postnatal (Soothikopakrama & first 1000-day child care)in shaping a child’s future. **Teachers role:** 1. Facilitate group discussion and guide students with references 2. Evaluate student's performance based on checklist/rating scale
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 5.1	Nutritional Assessment in children	**Duration:** 3 hours **Preparation /Pre-requisites** **By the teacher:** 1. Arrange Healthy children and malnourished cases/ simulated patient/ case vignettes in all age groups - infants, children and adolescents 2. Equipment for recording anthropometry **By the Student:**Student is expected to come prepared with the knowledge of methods for assessment and classification of nutritional status, age-related nutritional needs of infants, children and adolescents, normal functions of each Dhatu, Vridhi Kshaya Lakshana, Ahara guna and Ahara niyamas **Activity** **Clinical Classroom**

		Students are divided into 6 groups (3-8 members in one group) and sent to OPD/IPD. Each group will be assigned a healthy/ malnourished case from a specific age group. Group I – Healthy infant Group II – Malnourished infant Group III – Healthy child Group IV – Malnourished child Group III – Healthy adolescent Group V – Malnourished adolescent **Bedside -** Case taking -1 hour 1. Rapport building 2. History taking (Details on diet and regimen) 3. Clinical examination **Clinical classroom** -2 hours 1. Discuss the assessment of nutritional status in the allotted group 2. Discuss Ahara Guna, level of Agni and other factors affecting poshana 3. Plan a diet schedule in the given case considering Ahara Niayamas 4. Presentation of the case [Each group will present the assigned case] 5. Role-play – Counsel the parent and child regarding the importance of Ahara, Pathya, Apathya and other Ahara gunas 6. Recording case in the record book. T**eachers role:**Teachers evaluate students' performance through a checklist/DOAP Form. **Checklist-** Yes/No 1. Pre-preparedness of the subject 2. Rapport building with the patient was good 3. Chronology of the case sheet maintained 4. Nutritional status assessed 5. Quality of each Dhatu assessed 6. Attributes of Ahara assessed 7. Educating parents regarding the importance of diet and regimen
NLHP 5.2	Parent Counselling on Immune modulation	**Duration -** 2 hours

		Roles and Responsibilities 1. One student will be assuming the role of parent of an Immunocompromised child 2. One student will be assuming the role of physician providing Counselling to the parent **Pre-preparation by the students** 1. The Student has to be aware of the role of Oushadha, Ahara, Vihara, Rasayana and samskara in Immunity 2. Read the references 3. Students should have empathy and good communication skills **Execution of Role Play:** Enacting the role of the parent and the physician providing Counseling after establishing good rapport **Feedback and Debriefing:** The teacher evaluates students' performance based on a checklist/rating scale and provides inputs. The teacher summarises the points to be noted during Parental counseling. **Checklist- Yes/No** 1. Pre-preparedness of the subject 2. Role of Oushadha, Ahara, Vihara, Rasayana and Samskara in Immunity explained 3. Active participation 4. Empathetic 5. Good Communication skills 6. Ensure that parents understand the instructions
NLHP 5.3	Immunization in children	**Duration -** 3 hours **Preparation /Pre-requites by teacher** 1. Identifying children who are fit for vaccination: Provide handouts 1 week before the session 2. Procure the vaccines in the NIS 3. Preparation of equipment and manikin and its sizes/numbers for vaccination 4. Check for the expiry of vaccination if any 5. Check for colour changes of vaccines if any 6. Check if cold storage is maintained **Preparation /Pre-requites by student** The student is expected to come prepared with the knowledge of the National Immunization schedule,

		different vaccines with dosage schedules, mode of administration and contraindications **Observation (1 hour)** Students are divided into groups (3-8 members in one group) and sent to vaccination centre. Each group will be given a chance to observe vaccination in children. 1. Observe for fitness of vaccination 2. Observe the procedure of vaccination and check for any adverse events **Clinical classroom (2 hours)** 1. Discuss different vaccines, with dosage schedules, mode of administration and contraindications 2. Discuss the adverse effects 3. Presentation of the case [Each group will present one case of vaccination] 4. Document the case in the record book. 5. Teacher the demonstrates the administration of vaccine on a manikin. Each group will be demonstrates the entire procedure of vaccination on a manikin. **Teachers Role:** Evaluation using checklist **Checklist**- Yes/No 1. Checks for fitness for immunization 2. Choose the correct vaccines according to age 3. Check for expiry of the vaccine. 4. Administers vaccine on manikin efficiently.

Topic 6 Kuposhana Rogas (Nutritional disorders) (LH :6 NLHT: 3 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 2,CO 3	Define Malnutrition and Classify Undernutrition according to WHO. Define Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM). Describe the etio-pathogenesis, clinical features, complication and management of Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM)	CC	MK	K	CD,DIS ,L&PPT	T-CS,CBA, C-VC	F&S	II	-	LH
CO 2,CO 3	Define Failure to Thrive(FTT) and describe the etiopathogenesis, clinical features and management of a child with FTT	CK	MK	K	L_VC,C D,DIS	T-CS,CBA, PM	F&S	II	-	LH

CO 2,CO 3	Define Phakka Roga and explain the Nidana, Bheda, Samprapti, Lakshana and Chikitsa of Phakka Roga.	CC	MK	K	L&GD, RLE,CD	T-CS, C-VC,PM	F&S	II	-	LH
CO 2,CO 3,CO 6	Define Kumara Shosha and explain nidana, samprapti, lakshana and chikitsa of Kumara Shosha	CC	MK	K	L&GD, CD	CBA,T-CS,PM	F&S	II	-	LH
CO 2,CO 3,CO 6	Explain nidana, samprapti, lakshana and chikitsa of Karshya. Define Parigarbhikam and explain the nidana, samprapti, lakshana and chikitsa of Parigarbhikam	CC	MK	KH	L&GD, CD,L_VC	INT,T-CS, C-VC	F&S	II	-	LH
CO 2,CO 3	Analyse Phakka Roga with Neuromotor disabilities, SAM, MAM and Failure to thrive and plan the management	CAN	MK	KH	CD,CBL,PBL	C-VC,T-CS	F&S	II	-	NLHT6.1
CO 2,CO 3	Compare and analyse Kumarashosha, Karshya and Parigarbhika with SAM, MAM and Failure to thrive	CAN	MK	KH	FC,BS, BL	CHK,DEB, PRN	F&S	II	-	NLHT6.2
CO 2,CO 3,CO 6	Diagnose and plan the management of a case of malnutrition and analyse the lakshana, samprapthi and management of Kumarashosha, Karshya and Parigarbhika	PSY-GUD	MK	SH	CBL,PT,RP	CHK,SP,P-CASE	F&S	II	-	NLHP6.1
CO 2,CO 3	Describe causes, diagnosis and management of Iron deficiency anemia.	CK	MK	K	LRI,L&PPT,CD	PM,O-QZ,T-CS	F&S	II	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 6.1	Concept of Phakka Roga	**Preparation /Pre-requisites** **By the Teacher:** Assign a case vignette for each group 1 week before the activity. **By the Student:** Student is expected to come prepared with etiopathology, symptomatology and management of Phakka Roga. **Clinical classroom discussion - 1 hour** Groups are expected to: 1. Track the development of the child - gross, fine, language and social 2. Check out for status of nutrition and classify. 3. Analyse the etiopathology and symptoms of the case with Neuromotor disabilities, SAM, MAM and Failure to thrive. 4. Frame the Samprapti for the disease in the given case. 5. Plan management and justify Samprapti. **Presentation - 1 hour** 1. Each group will present their case and analyse Phakka Roga with Neuromotor disabilities, SAM, MAM and Failure to thrive and plan the management 2. Role-play – Explain the care plan, Pathya Ahara and Vihara to the child and parent.
NLHT 6.2	Kuposhana Janya Vyadhis and Nutritional Deficiency Disorders	**Duration** - 1 hour **Activity: Group discussion** 1. Students will be divided into groups (15-20 in one group) 2. The facilitator will open the discussion 3. Students expected to discuss the key points in Differential Diagnosis of Kuposhana Janya Vyadhis and compare it with Nutritional deficiency disorders 4. Each group will present their opinions 5. Consensus building; students will draw an opinion near the conclusion **Teacher's Role:** Facilitate group discussion and provide inputs.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 6.1	Case Discussion: Malnutrition	**Preparation /Pre-requisites** **By the Teacher:** Arrange Real Case/ Simulated case/ Case Vignette **By the Student:** 1. The student is expected to come prepared with etiopathology, symptomatology, management, and pathya-apathya of Malnutrition, Kumarashosha, Karshya and Parigarbhika. 2. Growth chart, measuring tape, weight and height machine. **Activity** Students are divided into groups of 5-8 members and sent to OPD/IPD. Assign 2 cases to each group. **Bedside (in real case) Case taking/ Building the case – 2 hours** 1. Rapport building 2. History taking 3. Clinical Examination and Anthropometric evaluation **Clinical classroom discussion - 2 hours** Groups are expected to: 1. Plot the measurement on a graph and analyze the growth of the child. 2. Classify Malnutrition according to WHO. 3. Analyse the etiopathology and symptomatology of Malnutrition with Karshya/ Parigarbhika/ Kumara Shosha. 4. Frame the Samprapti for the disease in the given case. 5. Plan management and justify Samprapti Vigatana. 6. Each group will present their case. 7. Role-play – Explain the care plan, Pathya Ahara and Vihara to the child and parent. 8. Record the case in a record book. **Teachers role**: Guide students in analyzing the case and evaluate using a checklist. **Checklist**- Yes/ No 1. Rapport building established 2. Empathy & communication skills noticed 3. Record the case history in detail 4. Performs clinical examination and anthropometric screening effectively 5. Proper utilization and recording of the Growth chart

		6. Frames Samprapti accurately. 7. Management strategy framed effectively 8. Explain diet and regimen to the patient effectively

Topic 7 Balaroga Pariksha Vidhi & Chikitsa Siddhantha (Pediatric Examination and treatment principles) (LH :5 NLHT: 0 NLHP: 16)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 3,CO 4,CO 8	Construct a Paediatric case taking format	CAP	MK	KH	W,L&GD,DIS	INT,CWS	F&S	II	V-RN	LH
CO 2,CO 3,CO 8	Explain Bheshaja Matra for Shodana and Shamana in children	CC	MK	K	L&PPT,ML,DIS	T-CS,WP	F&S	II	-	LH
CO 2,CO 3	Explain different methods of drug dose determination in paediatric population	CC	MK	K	TUT,L&GD,ML	P-PS,T-CS,O-GAME	F&S	II	-	LH
CO 2,CO 3	Demonstrate calculation of different drug dosages in paediatric conditions.	PSY-MEC	MK	SH	PBL,EDU,PSM	T-CS,P-PS,CHK	F&S	II	-	NLHP7.1
CO 2,CO 3,CO 8	Explain general treatment principles in children	CC	MK	K	L&GD,TUT	DEB,WP,CR-W	F&S	II	-	LH
CO 2,CO 3	Analyse Vedana Vijnana and observe various clinical presentations	CAN	MK	KH	BS,DIS,L&GD	DEB,INT	F&S	II	-	LH

CO 2,CO 4,CO 7	Demonstrate examination of Dosha, Dhatu, Koshta, Agni, possible Prakriti, Rogamarga of each disease in Paediatric case.	PSY-MEC	MK	SH	SIM,PT, D-BED	CHK,P-CASE,SP	F&S	II	-	NLHP7.2
CO 2,CO 3	Formulate a possible Samprapti for various diseases (using Nidana, Poorvarupa, Roopa and Upashaya)	CAP	MK	KH	PT,FC, CBL	CHK,T-CS,M-CHT	F&S	II	-	NLHP7.3
CO 2,CO 3,CO 6,CO 7	Perform clinical case taking including history taking, clinical examination, diagnostic workup, analysis of Samprapti Ghatakas and Chikitsa Nirnaya.	PSY-GUD	MK	SH	SIM,D-BED,PT	CWS ,CHK ,P-CASE	F&S	II	-	NLHP7.4
CO 2,CO 4,CO 6,CO 8	Educate the caretaker on the prescription including name of the medicine, mode of administration, anupana and time of administration.	AFT-RES	MK	SH	SIM,RP ,TBL	CHK,SP,P-RP	F&S	II	-	NLHP7.5
CO 2,CO 3,CO 6	Identify commonly used single drugs in Paediatric practice and discuss their medicinal uses	CK	DK	K	FV	P-ID,QZ ,O-QZ	F	II	V-DG	NLHP7.6

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 7.1	Calculation of Pediatric Drug Doses	**Duration -** 2 hours

		Pre-Preparation **By the teacher:** Arrange real case/case vignette. Provide reference or handout on overview of Posology **By the Student:** The student is expected to study drug dosage schedules in different ages with different Kalpanas in specific therapeutic indications like Shamana and Shodhana **Activity** 1. Students are divided in groups 2. Assigned 1 real case / Case Vignette 3. Students are expected to– a. Record the weight of the child b. Assess the status of Agni and Koshta c. Calculate drug dosage in different ages/ Kalpanas / therapeutic indications d. Record dosage, Anupama and Oushadha kala **Clinical classroom** 1. Discuss the assessment of drug dose in the allotted group 2. Discuss role of age, level of Agni, other factors affecting dosage like Oushadha Kalpana and treatment indications like Shamana, Sodhana **Teacher's Role**: The teacher will assess using a checklist. **Checklist -** Yes/ No 1. Assess the status of Agni and Koshta effectively. 2. Calculated drug dosage in different ages, Kalpanas & therapeutic indications efficiently. 3. Explains dosage schedule, Anupana and Oushadha kala in a given case accurately.
NLHP 7.2	Application of Samprapti Gatakas in a Pediatric Case: Part I	**Duration:** 2 hours **Pre-preparation:** **By the Teacher**: Arrange the real case/Simulated case/ Case Vignette. Provide an overview of Samprapthi ghatakas **By the Student :** The student is expected to know Samprapti Ghatakas **Activity** Students are divided into groups (3-8 members in one group) and sent to OPD/ IPD. Each group will be given cases for assessment

		Bedside: 1 hour 1. Rapport building 2. Clinical examination 3. Comment on Prakruti of child 4. Assess the Dosha and Dhatu 5. Assess the status of Agni, Koshta 6. Frame Samprapti of disease and comment on Rogamarga **Clinical classroom:** 1 hour 1. Group discussion about Vyadhi Ghatakas 2. Justify analysis of Vyadhi Ghatakas with logical explanations and classical references 3. Presentation of the case [Each group will present one case] 4. Recording the case in the record book.
NLHP 7.3	Application of Samprapti Gatakas in a Pediatric Case: Part II	**Duration:** 1 hour **Pre-preparation:** **By the Teacher:** Arrange the real case/Simulated case/ Case Vignette. Provide an overview of Samprapthi Ghatakas **By the Student :** The student is expected to know Nidana Panchaka and Samprapti Ghatakas **Activity** Students are divided into groups (3-8 members in one group) and sent to OPD/ IPD. Each group will be given cases for assessment **Bedside –** 1. Rapport building 2. Clinical examination 3. Analyzing the history and clinical examination findings concerning Samprapti Ghatakas 4. Frame Samprapti of disease and comment on Nidana Panchaka **Clinical classroom** 1. Group discussion about Nidana Panchaka and Vyadhi Ghatakas 2. Justify the analysis of Vyadhi Ghatakas with logical explanations and classical references 3. Discussion on Samprapti and Nidana Panchaka 4. Presentation of the case [Each group will present one case]

		5. Recording the case in the record book.
NLHP 7.4	Clinical case taking	**Duration** - 9 hours (One group should analyze, present and record minimum 5 cases) **Pre-preparation:** **By the Teacher**: Arrange and assign the real case/Simulated case/ Case Vignette. **By the Student:** Student is expected to have knowledge about clinical case taking and Samprapti ghatakas. **Activity** Students are divided into groups (3-8 members in one group) and sent to OPD/ IPD. Each group will be assigned cases for analysis **Bedside** 1. Rapport building 2. History taking 3. Clinical examination 4. Analyse evidence from history and clinical examination findings in respect to Samprapti Ghatakas 5. Frame Samprapti of disease and comment on Nidana Panchaka **Clinical classroom** 1. Group discussion about Vyadhi Ghatakas 2. Justify the analysis of Vyadhi Ghatakas with logical explanations and classical references 3. Discussion on Samprapti and Nidana Panchaka 4. Perform the diagnostic workup with investigations and differential diagnosis 5. Frame a management protocol for the disease (Teacher will provide a prescription with logical explanations) 6. Discuss the Upasaya and Anupasaya of the given treatment. 7. Presentation of the case [Each group will present a Minimum of 5 cases] 8. Record the case in a record book.
NLHP 7.5	Conseling regarding patient care	**Duration** - 1 hour Purpose – Sensitise parents regarding the administration of medicine.

		Pre -Preparation **By the Teacher:** Arrange prescriptions of common diseases. **By the Student:** Students should have the knowledge about the common medications, pediatric posology, Anupana, Oushadhakala and mode of administration. **Activity:** Students are assigned prescriptions and are expected to role-play randomly. Roles and Responsibilities 1. One student will be assuming the role of parent 2. One student will assume the role of Kaumarabhritagyna, educating to the parent on the administration of medicine. 3. Execution of Role Play **Teacher role:** Feedback and Debriefing Summarise the points to be noted during Parental education on the administration of medicine.
NLHP 7.6	Pediatric Ethobotonical Survey of Herbal Garden	**Duration** - 1 hour **Pre-Preparation:** **By the Teacher:** Identify common single drugs that can be used in Paediatric practice in Herbal garden and plan the visit. **By the student:** The student is expected to know about commonly used single drugs in Paediatric Practice Activity **Herbal garden:** 40 mins 1. Teachers introduce the single drugs that can be used in Paediatric practice in Herbal garden 2. Students are divided into groups (3-8 members in one group) and sent to the Herbal garden. Each group will be given a drug for a detailed study 3. Plant identification with morphological features 4. Identify the medicinal part of the plant 5. Rasa, Guna, Veerya, Vipaka, Prabhava and Amayika Prayoga **Clinical classroom:** 20 mins 1. Discuss the Pharmacodynamics 2. Group discussion about different uses of the drug, dose and Anupama 3. Justify with classical references if any

		4. Presentation of the drug details [Each group will present one drug]								
Topic 8 Kulaja and Sahaja Rogas (Genetic and Congenital Disorders) (LH :5 NLHT: 2 NLHP: 5)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 2,CO 3	Describe the clinical presentations of Cleft Palate, Cleft Lip and Tracheo-Esophageal Fistula.	CK	DK	K	TUT,L &PPT	QZ ,P-ID, C-VC	F&S	II	-	LH
CO 2,CO 3	Describe the clinical presentations of Spinal Dysraphism and Congenital Talipes Equinovarus.	CK	DK	K	L_VC,L &PPT	O-QZ, C-VC	F&S	II	-	LH
CO 2,CO 3	Describe the clinical presentations of Congenital Hypertrophic Pyloric Stenosis and Congenital Anomalies of Anus.	CK	DK	K	TUT,L &PPT ,L_VC	P-ID,O-GAME, C-VC	F&S	II	-	LH
CO 2,CO 3	Describe the clinical presentations of Congenital Heart Disease.	CK	DK	K	L&PPT ,L_VC, LRI	O-QZ,P-ID, C-VC	F&S	II	-	LH
CO 2,CO 3,CO 6,CO 8	Analyse the scope of Kriyakrama (Procedure based therapies) and Oushadhas in Sahaja Vyadhis	CAN	DK	K	CBL,FC ,EDU	PRN,CHK, CBA	F&S	II	-	NLHT8.1
CO 2,CO 3,CO 8	Recognise the indications of surgical intervention and referral criteria in different Congenital and Chromosomal disorders.	CAN	DK	KH	CBL,DIS,FC	CBA,SBA, CHK	F&S	II	-	NLHT8.2
CO	Identify the Chromosomal abnormality, clinical features,	CAN	MK	KH	FC,LRI,	P-CASE, C-	F&S	II	-	NLHP8.1

2,CO 3,CO 8	diagnosis, risk factors and and plan the management in a case of Turner syndrome				CBL	VC,CHK				
CO 2,CO 3,CO 8	Identify the Chromosomal Abnormality, clinical features, diagnosis, risk factors and plan the management in a case of Down syndrome. Interpret normal Karyotype and recognize Trisomy 21	CAN	MK	KH	LRI,FC, CBL	C-VC,CH K,P-CASE	F&S	II	-	NLHP8.2
CO 2,CO 3,CO 4,CO 8	Analyze the role of preconception care (ideal Ritu, Kshetra, Ambu and Beeja) in preventing congenital diseases. Educate the caregivers about the scope of Ayurveda in the prevention of congenital anomalies through preconception care.	AFT-RES	DK	SH	BS,RP, FC	CHK,P-RP,CR-W	F&S	II	-	NLHP8.3
CO 2,CO 3,CO 6	Explain Muscular Dystrophies and enlist prevalent Muscular Dystrophies. Describe the etiopathogenesis, clinical features and management of Duchenne Muscular dystrophy (DMD). Derive complementary and alternative treatment protocol to DMD.	CAP	MK	K	TUT,DIS,L&PPT	T-CS, C-VC	F&S	II	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 8.1	Procedure based therapies and Oushadhas in Sahaja Vyadhis	**Duration** - 1 hour **Pre-preparation** **By the teacher:** Arrange the problem /case to be solved & provide an overview of the Ayurveda perspective on Sahaja Vyadhis and procedure-based therapies through handouts or PPT. **By the Student:** Student is expected to study Sahaja Vyadhis, general treatment guidelines and a therapeutic indication of Kriyakrama (Procedure based therapies) **Activity** 1. Students are divided in groups and assigned a case vignette to each group 2. Students gather in groups and are expected to – A. Note clinical features of Sahaja Vyadhis and interpret the Dosha, Dhathu and analyse the Samprapti

		B. Plan management strategy and suitable procedure-based therapies C. Discuss the management plan with the selection of medicines D. Discuss the Samprapti Ghatakas of the specific Sahaja Vyadhi E. Discuss specific stages of the disease and change in the selection of Kriyakrama and analyze the Samprapti Vighatana
NLHT 8.2	Surgical intervention and referral criteria of Congenital and Chromosomal disorders	**Duration** - 1 hour **Pre-preparation** **By the teacher:** The teacher introduces the students to the problem /case to be solved & provides an overview of the scope of surgical intervention in Sahaja Vyadhis one week before the activity. Divide the students in group and assign one case to each group. **By the Student:** Student is expected to study Sahaja Vyadhis and management strategy. **Activity** 1. Students gather in group 2. Students are expected to discuss- A. Note clinical features and clinical examination findings of given Sahaja Vyadhis B. Screen for any emergency situations if any C. Screen for the scope of surgical intervention in the given case. D. Discuss the referral criteria in the case E. Counsel the parent for referral and give a proper Referral card F. Present the findings to the class.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 8.1	Turner syndrome	**Duration** - 1 hour **Pre-preparation** **By the teacher:** Provide an overview of Turner syndrome and its Ayurveda perspective through handouts/PPT/Pre-recorded Video. **By the student:** Student is expected to study Turner syndrome and analyse the Samprapti Ghatakas of

		the disease **Activity** 1. Students are divided in groups 2. Provide 1 real case/ simulated case/ case vignette/ case video to each group 3. Students are expected – A. Perform/record clinical examination of given Turner syndrome case (Bedside if real case) B. Analyze the Samprapti Ghatakas C. Discuss the Karyotype report D. Discuss the management protocol considering the Samprapti Ghatakas E. Enlist the risk factors and complications
NLHP 8.2	Down syndrome	**Duration** - 3 hours **Objective:** 1. Discuss the genetic composition and clinical features of Down syndrome 2. Frame diagnostic workout including Karyotyping 3. Frame management protocol 4. Enlist the risk factors and complications **Pre-preparation** **By the teacher:** 1. Provide an overview of Down syndrome and its Ayurveda perspective through handouts/PPT/Pre-recorded Video. 2. Divide the students in group and assign one real case/case vignette (Different presentation of down syndrome to each group) By the Student: The student is expected to study Down syndrome and analyze the Samprapti Ghatakas of the disease **Bedside** (in real case) 1 hour 1. Students are divided into 5- 6 groups and assigned a case 2. Students are expected to– A. Take the history B. Perform/record clinical examination C. Check for any associated diseases

		D. Check whether antenatal screening was done E. Check for etiology and predisposing factors F. Collect the Karyotype report G. Enlist the risk factors and complications **Clinical classroom discussion and presentation** - 2 hours Each group will be allotted a specific topic for discussion and will be given 10 minutes to present their findings 1. Discuss the clinical features and examination findings of given Down syndrome 2. Discuss the etiology and predisposing factors 3. Discuss the antenatal screening measures 4. Discuss the common associations 5. Discuss the diagnostic workup 6. Discuss Rehabilitation measures 7. Discuss the Samprapti Ghatakas and frame management strategy 8. Analyze the risk factors 9. Conclusion and summarise the disease by the teacher. **Teacher Role**: Facilitate group discussion and guide on interpretation of investigation reports.
NLHP 8.3	Prevention of Congenital anomalies	**Duration** - 1 hour **Pre-preparation** **By the Teacher:** 1. Divide the students in 2 groups and assign the activity 1 week prior. 2. Pre-validation of role play. **Roles and Responsibilities** 1. One student will be assuming the role of parent 2. One student will assume the role of Kaumarabhritagyna educating the caregiver. **By the Student:** 1. The student has to be aware of the details of preconception care for the prevention of Congenital anomalies 2. Analyze the role of preconception care (ideal Ritu, Kshetra, Ambu and Beeja) in preventing congenital diseases.

		Clinical classroom 1. First group presents the of role of preconception care (ideal Ritu, Kshetra, Ambu and Beeja) in preventing congenital diseases. 2. Second group executes the Role Play. Enacting the role of the parent and the Physician providing Counseling after establishing a good rapport **Feedback and Debriefing** Summarise the points to be noted during Parental education and the role of preconception care (ideal Ritu, Kshetra, Ambu and Beeja) in preventing congenital diseases by the teacher.

Topic 9 Graha Rogas and Aupasargika Rogas (Infectious Diseases) (LH :7 NLHT: 4 NLHP: 3)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3	Explain Lakshana(clinical features) and Chikitsa(management) of Rohini(Diphtheria), Masurika(Chicken pox), Romantika(Measles).	CC	MK	K	LRI,L& PPT ,CD	T-CS, C-VC,WP	F&S	II	-	LH
CO 2,CO 3	Explain Lakshana(clinical features) and Chikitsa(management) of Karnamoola Shotha(Mumps), Hand foot Mouth Disease(Masurika).	CC	MK	K	CD,LRI ,L&PPT	QZ , C-VC,T-CS	F&S	II	-	LH
CO 2,CO 3	Describe etiopathogenesis, clinical features, complications and management(Chikitsa) of Malaria, Hepatitis and Dengue.	CK	MK	K	LRI,L& GD,CD	T-CS, C-VC,O-QZ	F&S	II	-	LH
CO 2,CO 3	Describe etiopathogenesis, clinical features, complications and management(Chikitsa) of Whooping cough and Tuberculosis.	CK	MK	K	X-Ray, L&GD, CD	INT,T-CS	F&S	II	-	LH
CO 3,CO 6,CO 8	Discuss the management(Chikitsa) of tuberculosis with the caregivers.	AFT-RES	MK	SH	TBL,RP	CHK,RS	F&S	II	-	NLHT9.1

CO 2,CO 3	Describe pathogenesis, clinical features, diagnosis and management(Chikitsa) of Tetanus and Meningitis.	CK	MK	K	L&PPT ,LRI	INT, C-VC,PM	F&S	II	-	LH
CO 2,CO 3	Discuss concept of Graha Roga in context of infectious diseases. Describe Samanyalakshana Purvarupa and Bheda of Graharogas.	CAP	DK	KH	TBL,DIS,PER	INT,CHK,RS	F&S	II	-	NLHT9.2
CO 3,CO 6	Analyze the concept and management of Jwara with respect to different types of fever. Identify Dosha and Dushya involved in different types of fevers. Enlist Oushadha Yogas indicated in Jwara. Enlist the ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas used in Jwara Chikitsa.	CAN	MK	KH	FC,DIS,TBL	RS,CL-PR,CHK	F&S	II	-	NLHT9.3
CO 2,CO 3	Explain Nidana, Lakshana, Samprapti, Bheda and Chikitsa of different types of Krimi.	CC	MK	K	TUT,L&GD,CD	WP,T-CS	F&S	II	-	LH
CO 2,CO 3	Describe etiopathogenesis, clinical features, complications and management of helminthic infestations in children.	CK	MK	K	L&PPT ,CD	T-CS,PUZ	F&S	II	-	LH
CO 2,CO 3	Enlist Oushadha yogas used for Krimi Chikitsa. Enlist ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas used in Krimi Chikitsa and analyze its Samprapti Vighatana.	CC	MK	K	TBL,CBL,FC	CL-PR,RS,CHK	F	II	-	NLHT9.4
CO 2,CO 3,CO 4	Examine a case of Aupasargika Jwara(Fever of Infectious origin) and Krimi Roga. Analyze Nidanpanchaka, Management(Chikitsa) & Samprapti Vighatana of Aupasargika Jwara's.	PSY-GUD	MK	SH	LRI,D-BED,CBL	P-CASE,CHK,CWS	F&S	II	-	NLHP9.1

CO 6,CO 8	Perceive two Kriyakrama(Procedure based therapy) used in the management of Jwara. Perceive two Kriyakrama used in the management of Krimi. Plan Ahara and Vihara for different types of Jwara. Plan Ahara and Vihara for different types of Krimi.	PSY-SET	MK	KH	D-M,D	CHK,INT	F&S	II	-	NLHP9.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 9.1	Management(Chikitsa) of tuberculosis in children.	**Duration**: 1 Hour **Pre-preparation:** **By the Teacher:** 1. Dividing the class into 3 groups and assigning the topic to each group one week prior to the activity. A. Group 1: Complementary management approach in tuberculosis Enlist the complications of tuberculosis in the anatomy & physiology of lungs and Side effects of AKT that may happen in tuberculosis and enlist the possible Ayurveda management. B. Group 2: Alternative management approach in tuberculosis Post AKT Management, Pathya-Apathya and Rasayana (Adjuvant approach) C. Group 3: List the criteria for referral and the importance of case registration (District Tuberculosis Center) through role-play. 2. Provide references for preparation 3. Validate the role-play script. **By the Student:** 1. Students are expected to prepare the topic for presentation. Gather information using resources as directed by the teacher. 2. Role play group is expected to write the script and validate before the activity. **Activity:** 1. Students discuss with the groups assigned -10 mins 2. Presentation of the assigned topic by the group leader -20 mins 3. Role play by group 3 -10 mins **Role of Teacher:** Facilitate group discussion and summarize the key points in parental education on the disease.

NLHT 9.2	Concept of Graha Roga in context of infectious diseases.	**Duration:** 1 Hour **Pre-Preparation:** **By the Teacher:** 1. Dividing the class into groups and assigning one Graha to each group one week prior to the activity. 2. Guide the students about references and guidelines for comparison with one example. **By the Student:** 1. Students are expected to study literature regarding Graha Roga and Samanya Lakshana Purvarupa and Bheda of Graharoga. 2. Comparison of different Graha Rogas with infectious and noninfectious diseases prior to class. **Activity:** 1. Students discuss in groups -10 mins 2. Presentation of each Graha Roga and related infectious and noninfectious diseases by group leader – 45 mins 3. Compilate the discussion of all the groups.
NLHT 9.3	Management of different type of Jwara.	**Duration:** 1 Hour **Pre-preparation** **By the Teacher:** Dividing the class into groups and assigning each group with one type of Jwara one week prior to class activity. **By the Student:** 1. Students are expected to study the type of Jwara assigned to them. Compare with different types of fever 2. Identify Dosha and Dushya involved. 3. Enlist Oushadha Yogas indicated in Jwara. 4. Enlist the ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas used in Jwara Chikitsa. 5. Understand the Samprapti Vighatana **Class Activity** 1. Students discuss with the groups assigned -10 mins 2. Presentation of assigned topic by the group leader -40 mins

		3. Open discussion between group and feedback 4. Compile discussion of all the group. **Role of the Teacher:** Evaluate the students using checklist/rating scale. **Checklist:** Yes/No 1. Pre-preparedness on the topic 2. Proper use of recourses provided 3. Discuss and Compare Jwara type with different types of fever. 4. Identify Dosha and Dushya involved in Jwara. 5. Enlist Oushadha Yogas indicated in Jwara 6. Enlist the ingredients and indications of Samanya and Vishesha Oushadha Yogas use in regional practice 7. Discuss the Oushadha Yogas and Justify Samprapti Vighatana 8. Shows active collaboration in group and justifies the queries raised
NLHT 9.4	Oushadha yogas used for Krimi Chikitsa.	**Duration:** 1 Hour **Pre-preparation** **By the Teacher:** 1. Preparation of Case Vignette (Different type/presentation of Krimi) 2. Divide the Class into groups (Min 5 to Max 8). 3. Assign one/two case to each group one week prior to the class activity. **By the Student:** 1. Study the Krimi Roga and its Chikitsa in detail. 2. Analyse the case assigned **Class Activity:** 1. Students discuss with the groups assigned -10 mins 2. Presentation of case by the group leader - 40 mins A. Analyze the case assigned B. Diagnose the case 3. Enlist Oushadha yogas used for Krimi Chikitsa. 4. Enlist ingredients and indications of at least two Samanya Oushadha Yoga and Vishesha Yogas used in Krimi Chikitsa and its role in Samprapti Vighatana.

		5. Open discussion between group and summarize the key points by the teacher.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 9.1	Case Discussion: Auspasagika Jwara and Krimi Roga	**Duration:** 2 Hours **Preparation /Pre-Requisites** **By the teacher:** 1. Scheduling the case taking and arranging the case (Real Patient / simulated patient/ Case Vignette) 2. Preparing the checklist for evaluation **By the student:** 1. Student is expected to come prepared with the content of Nidana Panchaka and Chikitsa of Aupasargika Jwara and Krimi Roga 2. Rapport building, proper history taking, thorough examination, appropriate Investigation 3. Present their views in clinical classroom discussion **Activity** **In the clinical classroom:**Students are divided in groups (5-8 members in one group) and sent to OPD/IPD for Bedside - Case taking **Bedside:** Case taking as per the format(Real case) 1. Building rapport with patient 2. History taking 3. Clinical examination **In the clinical classroom:** 1. Students discuss the Nidana Panchaka in the allotted group, differential diagnosis, plan investigations if needed & identify the Samprapti Ghatakas 2. Plan the management and justify the Samprapti Vighatana 3. Presentation of the case [Each group will present one disease or any sub-point of the case] **Role-Play** 1. Explain the care plan, Ahara Vihara & prognosis to parent. 2. Recording the case in record book. **Role of the Teacher:** Teacher evaluates student’s performance based on a checklist/rating scale.

		Checklist: Yes/No 1. Pre-preparedness of the topic 2. Rapport building established 3. Explain the history and symptoms of Aupasargika Jwara in sequence. 4. Explain the history and symptoms of Krimi Rogas in sequence. 5. Local and systemic clinical examination performed. 6. Explain the examination findings accurately. 7. Explain Nidana Panchaka and identify the Dosha-Dushya. 8. Plan Investigations and finalize the diagnosis. 9. Plan the management and Justify Samprapti Vighatana. 10. Explain the care plan and Ahara Vihara to the parent. 11. Explain the prognosis to the parent. 12. Showed active collaboration in group and justifies the queries raised.
NLHP 9.2	Pathya and Kriyakrama used in Jwara and Krimi.	**Duration:** 1 Hour **Activity 1:** 40 minutes Perceive two Kriyakrama used in the management of Jwara. Perceive two Kriyakrama used in the management of Krimi. **Pre-preparation:** **By the Teacher:** 1. Identify the Kriyakrama (Procedure based therapy) used in Jwara 2. Identify the Kriyakrama (Procedure based therapy) used in Krimi 3. Scheduling the demonstration and arranging the patient. **By the Student:** Students are expected to study the Jwara and Krimi and its management in detail prior to the Activity. **Activity:** 1. Teacher/therapist demonstrate the kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure specific to procedure (like Handwashing, Wearing Cap/gloves/mask if needed, Collecting the ingredients and equipment's, preparation of medicine, getting the consent, fitness certificate if required, counselling the patient and caretaker)

		B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post procedure specific to procedure and explaining the Do's and Don't to follow. 3. Assignment: Write the mode of action/Samprapti Vigatana of the procedure) **Activity 2: - 20 mins** Plan Ahara and Vihara for different types of Jwara. Plan Ahara and Vihara for different types of Krimi. **Pre-preparation:** **By the teacher:** 1. Dividing the class into 2 groups and assigning disease to each group one week prior to the class. 2. Guiding the students to prepare the Ahara and Vihara chart of the particular disease assigned. **By the student:** Students are expected to study the disease in detail and prepare the Ahara Vihara chart based on the guidelines given by the teacher. **Activity:** 1. Each group present their Ahara and Vihara chart of the particular disease assigned. 2. Peer discussion on the chart.

Topic 10 Swasana Rogas [Disorders of Respiratory system] (LH :5 NLHT: 4 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3	Describe possible etiology, clinical features, diagnosis and management of Recurrent Upper Respiratory Tract Infections i) Common Cold	CK	MK	K	L&PPT ,CD	PM,CBA,T-CS	F&S	II	-	LH
CO 2,CO 3	Describe the etiology, clinical features, diagnosis and management of Recurrent Upper Respiratory Infection ii) Tonsillitis. Describe the etiology, clinical features, diagnosis and management of Recurrent Upper Respiratory Infection iii) Pharyngitis	CK	MK	K	CD,L& PPT	PM,T-CS, C-VC	F&S	II	-	LH
CO	Describe the etiology, clinical features, diagnosis and	CK	MK	K	X-Ray,	PM,T-CS	F&S	II	-	LH

2,CO 3	management of Recurrent Upper Respiratory Infection iv) Adenoid Hypertrophy.				L&PPT ,CD					
CO 2,CO 3	Describe the etiology, clinical features, diagnosis and management of Pneumonia.	CK	MK	K	X-Ray, CD,L& PPT	C-VC,PM, T-CS	F&S	II	-	LH
CO 2,CO 3	Describe the etiology, clinical features, diagnosis and management of Bronchial Asthma.	CK	MK	K	X-Ray, L&PPT ,CD	C-VC,PM, INT	F&S	II	-	LH
CO 2,CO 3	Enlist Oushadha yogas used for Pratishaya, Kasa, Shwasa. Enlist the ingredients and indications of atleast two Samanya Oushadha Yogas and two Vishesha (condition specific) Yogas used in Pratishaya, Kasa, Shwasa Chikitsa and analyze its Samprapti Vighatana.	CAN	MK	KH	TBL,FC ,DIS	CHK,INT, QZ	F	II	-	NLHT10.1
CO 4,CO 6,CO 8	Plan and explain Ahara and Vihara for Pratishaya, Kasa, Shwasa.	AFT-RES	MK	SH	RP,PER	CHK,P-RP,RS	F&S	II	-	NLHT10.2
CO 2,CO 3,CO 7	Perform otoscopic examination of ear. Perform throat examination in the case of Adenoid Hypertropy, Pharyngitis or Tonsillitis.	PSY-GUD	MK	SH	L_VC, W,KL, D	C-VC,DOP S,CHK,DO PS	F&S	II	H-SHL	NLHP10.1
CO 2,CO 3,CO 4	Demonstate examination, diagnosis and plan Chikitsa for a case of Pratishyaya.	PSY-GUD	MK	SH	RP,D-B ED,CB L	P-CASE,R S,CHK	F&S	II	-	NLHP10.2
CO 2,CO	Demonstate examination, diagnosis and plan Chikitsa for a case of Kasa. Identify the referral criteria for Kasa Roga.	PSY-GUD	MK	SH	D-BED, RP,CBL	CHK,CWS ,P-CASE	F&S	II	-	NLHP10.3

3,CO 4										
CO 2,CO 3,CO 4	Demonstrate examination, diagnosis and plan the Chikitsa for a case of Shwasa. Identify the referral criteria for Shwasa Roga.	PSY-GUD	MK	SH	CD,D-BED,CBL	Mini-CEX, P-CASE,CHK	F&S	II	-	NLHP10.4
CO 7,CO 8	Perceive two Kriyakrama used in the management of Pratishaya, Kasa & Shwasa. Analyse Samprapti Vighatana in Pratishaya, Kasa & Shwasa	PSY-SET	MK	KH	D-BED, D-M	CHK,INT, QZ	F&S	II	H-PK	NLHP10.5

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 10.1	Oushadha Yoga in Pratishaya, Kasa, Shwasa..	**Pre-Preparation:** **By the Teacher:** 1. The teacher will give an overview of the formulations used in Pratishaya, Kasa, Shwasa along with their rationale. 2. Select any two relevant formulations used in Pratishaya, Kasa, Shwasa, which are referenced in Ayurveda Classical Texts and are frequently used by practitioners of the respective state/ region. **By the Student:** Students are expected to come with knowledge of the management of Pratishaya, Kasa, Shwasa. **Activity:** 1 Hour 1. Discuss the list of formulations used in Pratishaya and highlight the two relevant formulations used in Pratishaya. 2. Explain the formulation 3. Discuss the conceptual meaning and interpretation. 4. Divide the students in group 5. Analyze the Samprapti Vighatana in group. 6. Encourage questions and discussion in group. **Activity:** 1 Hour

		1. Discuss the list of formulations used in Kasa, Shwasa, and highlight the two relevant formulations used in Kasa and Shwasa. 2. Explain the formulation 3. Discuss the conceptual meaning and interpretation. 4. Divide the students in group 5. Analyze the Samprapti Vighatana in group. 6. Encourage questions and discussion in group.
NLHT 10.2	Ahara and Vihara for Pratishaya, Kasa, Shwasa	**Pre-preparation:** **By the Teacher:** 1. Divide the class into 3 groups 2. Assign 1 disease to each group (eg Pratishaya, Kasa, Shwasa) 3. Provide guidelines to prepare the Ahara Vihara Chart, role play and highlight the important component of communication. 4. Validate the Role Play script prepared by the student Prior to the activity. 5. Ensure the language is simple and easy to understand by the local people. **By the Student:** 1. Students is expected to understand the disease, Ahara Vihara which is indicated for the particular disease assigned to them. 2. Student is expected to prepare the Ahara Vihara chart and the script of the role and get it validated by the teacher prior to the activity **Activity: Group discussion 1 hour** 1. Students assemble in groups assigned. 2. Group leader present the Ahara Vihara Chart in different types of Pratishaya, Kasa and Shwasa. **Activity: Role play 1 hour** 1. Each group executes the role play **Role of a Teacher:** Teacher evaluates students' performance based on a checklist/rating scale. **Checklist:** 1. Clear explanation of the chart 2. Plans the Diet Chart effectively. 3. List of activities that can be performed

		4. Mentions Satvavajaya Chikista if needed 5. Yoga/Pranayama (Demonstration and explanation) 6. Any internal medications (Explain the importance, dose, route and frequency) 7. Demonstrates empathy and understanding of the patient's emotional state 8. Actively engage the patient, allowing for questions and checking if the caretaker/patient understood. 9. Maintains appropriate eye contact throughout the interaction/presentation 10. Maintains professionalism throughout the interaction/presentation.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 10.1	Examination of Ear and Throat	**Duration -** 1 Hour **Pre-Preparation** **By the Teacher:** 1. Keeping the examination video ready 2. Keeping the Otoscope and other tools required for throat examination ready 3. Dividing the class into groups 4. Arranging the real cases/clinical video cases and assigning them to each group. By the student: Studying the ENT examination before the session **Activity** 1. Teacher displays the video of Otoscopic and throat examination 2. Special precautions and handling the child shall be explained by the teacher. 3. Teacher explains the interpretation of examination finding in different diseases 4. Students gather in the groups assigned 5. Examine the assigned patient/ interpret the examination finding in the given video cases 6. Group leader presents the finding to the class
NLHP 10.2	Case Discussion: Pratishyaya.	**Duration:** 1 Hour **Preparation /Pre-Requisites** **By the Teacher:** Scheduling the case taking and arranging different type of Partishaya case (Real

		Patient / simulated patient/ Case Vignette) **By the student:** 1. Student is expected to come prepared with the content of Nidana Panchaka and Chikitsa of Pratishyaya 2. Rapport building, proper history taking, thorough examination, appropriate Investigation **ACTIVITY** **Clinical classroom:** Students are divided in groups (5-8 members in one group) and sent to OPD/IPD for Bedside - Case taking **Bedside:** Case taking as per the format 1. Building rapport with patient 2. History taking 3. Clinical examination **In clinical classroom:** 1. Students discuss the Nidana Panchaka in the allotted group, differential diagnosis, plan investigations if needed & identify the Samprapti Ghatakas 2. Plan the management and justify the Samprapti Vighatana 3. Presentation of the case [Each group will present any one sub point of the case] 4. ROLE-PLAY – Explain the care plan, Ahara vihara & prognosis to parent. 5. Recording the case in record book.
NLHP 10.3	Case Discussion: Kasa.	**Duration:** 1 Hour **Preparation /Pre-Requisites** **By the teacher:** Scheduling the case taking and arranging different types of Kasa Case (Real Patient / simulated patient/ Case Vignette) **By the student:** 1. Student is expected to come prepared with the content of Nidana Panchaka and Chikitsa of Kasa 2. Rapport building, proper history taking, thorough examination, appropriate Investigation **ACTIVITY** **In clinical classroom:** Students are divided in groups (5-8 members in one group) and sent to OPD/IPD for Bedside - Case taking **Bedside**: Case taking as per the format

		1. Building rapport with patient 2. History taking 3. Clinical examination **In clinical classroom:** 1. Students discuss the Nidana Panchaka in the allotted group, differential diagnosis, plan investigations if needed & identify the Samprapti Ghatakas 2. Plan the management and justify the Samprapti Vighatana 3. Presentation of the case [Each group will present any one sub point of the case] 4. Identify the referral criteria for Kasa Roga. 5. ROLE-PLAY – Explain the care plan, Ahara vihara & prognosis to parent. 6. Recording the case in record book.
NLHP 10.4	Case Discussion: Shwasa.	**Duration:** 1 Hour **Preparation /Pre-Requisites** **By the teacher:** Scheduling the case taking and arranging different types of Shawsa Case (Real Patient / simulated patient/ Case Vignette) **By the student:** 1. Student is expected to come prepared with the content of Nidana Panchaka and Chikitsa of Shwasa 2. Rapport building, proper history taking, thorough examination, appropriate Investigation **ACTIVITY** **In clinical classroom:** Students are divided in groups (5-8 members in one group) and sent to OPD/IPD for Bedside - Case taking **Bedside:** Case taking as per the format 1. Building rapport with patient 2. History taking 3. Clinical examination **In clinical classroom:** 1. Students discuss the Nidana Panchaka in the allotted group, differential diagnosis, plan investigations if needed & identify the Samprapti Ghatakas 2. Plan the management and justify the Samprapti Vighatana 3. Presentation of the case [Each group will present any one sub point of the case]

		4. Identify the referral criteria for Shawsa Roga. 5. ROLE-PLAY – Explain the care plan, Ahara vihara & prognosis to parent. 6. Recording the case in record book.
NLHP 10.5	Kriyakrama used in management of Pratishaya,Kasa & Shwasa	**Duration:** 2 Hour **Pre-preparation:** **By the Teacher:** 1. Identify the Kriyakrama (Procedure based therapy) used in Pratishaya,Kasa and Shwasa 2. Scheduling the demonstration and arranging the patient. **By the Student:** Students are expected to study the concept of Pratishaya,Kasa & Shwasa and its management in detail prior to the Activity. **Activity:** 1. Teacher/therapist demonstrates the kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure specific to the procedure (like Handwashing, Wearing Cap/gloves/mask if needed, Collecting the ingredients and equipment, preparation of medicine, getting the consent, fitness certificate if required, counseling the patient and caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post procedure specific to procedure and explain the Do's and Don't to follow. 3. Assignment: Write the mode of action/Samprapti Vigatana of the procedure) 4. Recording the procedure in the record book.

Topic 11 Mahasrota Roga [Gastro Intestinal Disorders] (LH :6 NLHT: 3 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3,CO 6	Describe etio-pathogenesis, classification, clinical presentation and management(Chikitsa) of diarrheal diseases in children. Describe stages of diarrheal dehydration.	CK	MK	K	L&PPT ,CD,DI S	T-CS,PM,S BA	F&S	II	-	LH

CO 2,CO 3	Diagnose and plan Chikitsa for Atisara, Grahani and Pravahika in children. Analyze Samprapti Vigatana.	CE	MK	KH	L&PPT ,CD	T-CS,PM,SBA	F&S	II	-	LH
CO 2,CO 3,CO 6	Describe etio-pathogenesis, classification, clinical presentation and management(Chikitsa) of vomiting in children. Diagnose and plan Chikitsa for Chhardi in children.	CE	MK	KH	CD,L& PPT	T-CS,SBA, PM	F&S	II	-	LH
CO 2,CO 3,CO 6	Define constipation, describe the etiology, diagnosis, complication and management(Chikitsa) of constipation. Diagnose and plan Chikitsa for Vibandha in children. Analyse Samprapti Vigatana.	CE	MK	KH	CD,L& PPT ,DIS	T-CS,PM	F&S	II	-	LH
CO 2,CO 3	Describe etio-pathogenesis, clinical presentation and management(Chikitsa) of stomatitis, rectal prolapse and Fissure in Ano in children.	CK	MK	K	DIS,L& PPT ,CD	PM,T-CS,SBA	F&S	II	-	LH
CO 2,CO 3	Explain etio-pathogenesis, clinical presentation and management(Chikitsa) of Infantile Colic.	CC	MK	K	L&PPT ,CD,DIS	T-CS, C-VC,PM	F&S	II	-	LH
CO 3,CO 4,CO 6	Enlist the Oushadha Yogas used in Atisara, Grahani and Pravahika. Enlist the ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition-specific) Yogas used for Aatisara, Grahani, and Pravahika Chikitsa and analyze its Samprapti Vighatana. Communicate the plan of Ahara and Vihara for Atisara, Grahani and Pravahika to the caregivers.	AFT-RES	MK	SH	FC,RP, CBL	QZ ,CHK,RS	F&S	II	-	NLHT11.1
CO 3,CO 4,CO 6	Enlist Oushadha Yoga use for Chhardi. Enlist ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas used for Chhardi and analyze Samprapti Vighatana.	AFT-RES	MK	SH	TBL,RP ,FC	P-RP,CHK, RS	F&S	II	-	NLHT11.2

	Communicate the plan of Ahara and Vihara for Chhardi to the caregivers.									
CO 2,CO 3,CO 6	Enlist Oushadha Yoga use for Vibandha. Enlist ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas used in Vibandha and analyze its samprapti Vighatana. Communicate the plan of Ahara and Vihara for Vibandha to the caregivers.	AFT-RES	MK	SH	PER,FC ,RP	P-RP,RS,C HK	F&S	II	-	NLHT11.3
CO 3,CO 4,CO 6	Analyse physiological basis of ORT. Compare composition of various types of ORS. Communicate and educate parents on home based ORS.	AFT-RES	MK	SH	RP,IBL	CL-PR,RS, CHK	F&S	II	-	NLHP11.1
CO 3,CO 7,CO 8	Perceive two Kriyakrama used in the management of Chhardi and analyse its Samprapti Vighatana.	PSY-SET	MK	KH	D-BED,D	INT,CHK, QZ	F&S	II	-	NLHP11.2
CO 3,CO 7,CO 8	Perceive two Kriyakrama used in the management of Vibandha and analyse its Samprapti Vighatana.	PSY-SET	MK	KH	D-M,D-BED	QZ ,CHK,INT	F&S	II	H-PK	NLHP11.3
CO 2,CO 3	Diagnose and plan Chikitsa for Mukhapaaka, Gulma, Gudabramsa and Parikartika in children and analyse Samprapti Vighatana.	CE	DK	SH	FC,CBL ,PBL	CWS ,RS,CHK	F&S	II	-	NLHP11.4
CO 2,CO 3	Identify the signs and symptoms of GI and Liver disorders (Jaundice, Pallor, Gynaecomastia, Spider angioma, Palmar erythema, Icthyosis, Caput medusa, Clubbing, Failing to thrive). Identify Dosha and Dhatu involved in GI and Liver disorders. Identify signs and symptoms of Vitamin A and D deficiency.	CAP	MK	KH	FC,PBL ,PL	CHK,P-ID,RS	F&S	II	-	NLHP11.5

	Identify the referral criteria of Mahashrotogata Vikaras									
CO 2,CO 3,CO 4	Examine and plan the management for a case of Maha Stroto Vikaras.	PSY-GUD	DK	SH	CD,PT, D-BED	SP,P-CASE,CH K	F&S	II	-	NLHP11.6

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 11.1	Oushadha Yogas, Pathya in Aatisara, Grahani and Pravahika.	Duration: 1 Hour Pre-Preparation: By the Teacher: 1. Prepare the list of Oushadha Yogas used for Atisara, Grahani and Pravahika 2. Divide the class into 3 groups 3. Assign 1 disease to each group (eg Atisara, Grahani and Pravahika) 4. Provide guidelines to prepare the Ahara Vihara Chart, role play and highlight the important component of communication. 5. Validate the Role Play script prepared by the student Prior to the activity. 6. Ensure the language is simple and easy to understand by the local people. By the Student: 1. Students is expected to understand the disease, Prepare the list of Oushadha Yogas, Ahara Vihara which is indicated for the particular disease assigned to them. 2. Student is expected to prepare the Ahara Vihara chart and the script of the role play and get it validated by the teacher prior to the activity. Activity: 1. Students assemble in groups assigned. 2. Teacher will give an overview of formulations used in Atisara, Grahani and Pravahika along with their rationale. 3. Select the relevant 2 formulations used in Atisara, Grahani and Pravahika, with reference and which are frequently used by practitioners of respective state/ region. 4. Enlist ingredients, indications and explain Practical relevance and role in Samprapti Vighatana.

		5. Group leader present the Ahara Vihara Chart in Atisara, Grahani and Pravahika. 6. Each group executes the role play. Role of Teacher: Facilitate group discussion and provide inputs
NLHT 11.2	Oushadha Yogas and Pathya used in Chhardi.	**Duration:** 1 Hour **Pre-Preparation:** **By the Teacher:** 1. Prepare the list of Oushadha Yogas used for Chhardi. 2. Divide the class into 5 groups 3. Assign 1 type of Chhardi to each group 4. Provide guidelines to prepare the Ahara Vihara Chart, role play and highlight the important component of communication. 5. Validate the Role-Play script prepared by the student Prior to the activity. 6. Ensure the language is simple and easy to understand by the local people. **By the Student:** 1. Students is expected to understand the disease, Oushadha Yogas which is indicated for Chhardi and analyze Samprapti Vighatana. 2. Student is expected to prepare the Ahara Vihara chart and the script of the role play and get it validated by the teacher prior to the activity. **Activity:** 1. Students assemble in groups assigned. 2. Teacher will give an overview of formulations used in Chhardi along with their rationale. 3. Select the relevant 2 formulations used in Chhardi with reference and which are frequently used by practitioners of respective state/ region. 4. Analyze the Samprapti Vighatana in Chhardi. 5. Enlist ingredients, indications and explain Practical relevance. 6. Group leader present the Ahara Vihara Chart in different types of Chhardi. 7. Each group executes the role play. **Role of Teacher:** Facilitate group discussion and provide feedback on participation and analysis.

NLHT 11.3	Oushadha Yoga and Pathya in Vibandha.	**Duration:** 1 Hour **Pre-Preparation:** **By the Teacher:** 1. Prepare the list of Oushadha Yogas used for Vibandha. 2. Divide the class into 5 groups 3. Assign 1 stimulated or hypothesised cases of Vibandha (varying level of severity/different age groups) 4. Provide guidelines to prepare the list of Oushadha Yogas Ahara Vihara Chart, role play and highlight the important component of communication. 5. Validate the Role- play script prepared by the student prior to the activity. 6. Ensure the language is simple and easy to understand by the local people. **By the Student:** 1. Students is expected to understand the disease, enlist Oushadha Yogas which is indicated for the Vibandha and analyze its samprapti Vighatana. 2. Student is expected to prepare the Ahara Vihara chart and the script of the role play and get it validated by the teacher prior to the activity. **Activity:** 1. Students assemble in groups assigned. 2. Teacher will give an overview of formulations used in Vibandha along with their rationale. 3. Select the relevant 2 formulations used in Vibandha with reference and which are frequently used by practitioners of the respective state/ region. 4. Analyze the samprapti Vighatana in Vibandha. 5. Enlist ingredients, indications and explain practical relevance. 6. Group leader present the Ahara Vihara Chart in different types of Vibandha. 7. Each group executes the role play. **Role of Teacher:** Facilitate group discussion and provide feedback on participation and analysis.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 11.1	Physiological basis and composition of various ORT	**Duration:** 1 Hours **Pre-preparation** **By the Teacher:** 1. Teacher informs the topic and group division (Min 6 to 10) 1 week before the class activity. Group 1: Analyse physiological basis of ORT. Group 2: Comparison of various types of ORS. Group 3: Advice and instruct parents on home-based ORS – Role play 2. Validate the role play script before the session. 3. Prepare the checklist for evaluation. **By the Student:** 1. Identify a Question: Physiological basis of ORT, Comparison of various types of ORS and Preparation of Home-based ORS 2. Conduct Background Research: Visit nearby Pharmacy/dispensaries. 3. Formulate hypothesis if needed 4. Plan and Conduct Investigations: Interviewing healthcare professionals about ORTs they use in their practice. Surveys can also be planned in public. 5. Analyze Data: Analyze data from surveys or interviews to understand the physiological basis of ORT, compare various types of ORS and Preparation of Home based ORS **Class Activity:** 1. Students sit in their respective groups 2. Group discussion: 10 mins 3. Communicate findings: Present findings through a report/presentation on the physiological basis of ORT, and compare various types of ORS. 4. Group 3 role play to plan and instruct the parents on home-based ORS. **Teachers' role:** Facilitate group discussion and guide students on resources.
NLHP 11.2	Kriyakrama used in the management(Chikitsa) of Chhardi.	**Duration:** 1 Hour **Pre-preparation:** **By the Teacher:** 1. Identify two Kriyakrama (Procedure based therapy) used in Chhardi 2. Scheduling the demonstration and arranging the patient.

		By the Student: Students are expected to study the concept of Chhardi and its management in detail prior to the Activity. **Activity:** 1. Teacher/therapist demonstrates the Kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure specific to the procedure (like Handwashing, Wearing Cap/gloves/mask if needed, Collecting the ingredients and equipment, preparation of medicine, getting consent, fitness certificate if required, counseling the patient and caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post procedure specific to procedure and explain the Do's and Don't to follow. 3. Record the procedure in the record book. 4. Assignment: Write the mode of action/Samprapti Vighatana of the procedure)
NLHP 11.3	Kriyakrama used in the management of Vibandha.	**Duration:** 1 Hour **Pre-preparation:** **By the Teacher:** 1. Identify two Kriyakrama (Procedure based therapy) used in Vibandha 2. Scheduling the demonstration and arranging the patient. By the Student: Students are expected to study the concept of Vibandha and its management in detail prior to the Activity. **Activity:** 1. Teacher/therapist demonstrates the Kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure specific to the procedure (like Handwashing, Wearing Cap/gloves/mask if needed, Collecting the ingredients and equipment, preparation of medicine, getting consent, fitness certificate if required, counseling the patient and caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post procedure specific to procedure and explain the Do's and Don't to follow. 3. Record the procedure in the record book. 4. Assignment: Write the mode of action/Samprapti Vighatana of the procedure)

NLHP 11.4	Case Discussion:Mukhapaaka, Gulma, Gudabramsa and Parikartika.	**Duration:** 1 Hour **Preparation /Pre-Requisites** **By the Teacher:** 1. Diving the students in 4 groups and assigning structured case vignette for each group (Mukhapaaka, Gulma, Gudabramsa and Parikartika respectively) one week before the session **By the Student:** 1. Understand the case assigned, diagnose and plan the management 2. Ask for more triggers or direction to solve the case before the session **Activity:** In the clinical classroom: 1. Students discuss the Nidana Panchaka in the allotted group, differential diagnosis, and identify the Samprapti Ghatakas. 2. Plan the management and justify the Samprapti Vighatana 3. Presentation of the case [Each group will present the assigned case] 4. Recording the case in record book.
NLHP 11.5	Signs and symptoms of GI and Liver disorders	**Duration:** 1 Hour **Pre-preparation** **By the Teacher** 1. Preparing the resource material which includes signs and symptoms of GI and liver disorders. 2. Dividing the students in groups and assigning case vignette to each group **By the students (SDL)** 1. Learning the resource material and Identifying signs and symptoms of GI and liver disorders in the case vignette assigned. 2. Identify Dosha and Dhatu involved in GI and liver disorders. 3. Identify signs and symptoms of Vitamin A and D deficiencies. **Activity:** 1. Introduction: Teacher briefly explains the objectives and importance of diagnosing GI and liver disorders in Ayurveda and contemporary medicine. 2. Case Discussion: Each group present their findings briefly. 3. Teacher Facilitate a discussion to referral criteria of Mahashrotogata Vikaras

NLHP 11.6	Case Discussion: Maha Stroto Vikara.	**Duration:** 1 Hour **Preparation /Pre-Requisites** **By the teacher:** 1. Scheduling the case taking and arranging the case (Real Patient / simulated patient/ Case vignette) 2. Make the student understand the OPD/IPD manners during case-taking 3. Preparing the checklist for the concerned activity. **By the student:** 1. Student is expected to come prepared with the content of Nidana Panchaka and Chikitsa Maha Stroto Vikara 2. Rapport building, proper history taking, thorough examination, appropriate Investigation 3. Present their views in clinical classroom discussion **Activity:** **In the clinical classroom:** Students are divided in groups (5-8 members in one group) and sent to OPD/IPD for Bedside - Case taking **Bedside:** Case taking as per the format (in case of real patients) A. Building rapport with patient B. History taking C. Clinical examination **In the clinical classroom:** 1. Students discuss the Nidana Panchaka in the allotted group, differential diagnosis, plan investigations if needed & identify the Samprapti Ghatakas 2. Plan the management and justify the Samprapti Vighatana 3. Presentation of the case [Each group will present one disease or any sub-point of the case] 4. Recording the case in the record book.

Topic 12 Rasa Rakta Rogas [Disorders of blood and cardiovascular system] (LH :3 NLHT: 3 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO	Describe etio-pathogenesis, clinical features, classification, diagnosis and approach to a child with anaemia.	CK	MK	K	LRI,L& PPT	PM,T-CS	F&S	II	-	LH

3										
CO 2,CO 3	Explain Mritbhakshanajanya Pandu. Enumerate diseases originating from Mritikabhakshana.	CC	MK	K	L&PPT ,L_VC, CD	PM,INT,T-CS	F&S	II	-	LH
CO 2,CO 3	Diagnose and plan Chikitsa for Kamala in children. Define and describe types, etiology, clinical features, diagnosis and management(Chikitsa) of Jaundice in children. Identify referral criteria for cases of Jaundice.	CS	MK	KH	L_VC,LRI,CD	INT,T-CS, C-VC	F&S	II	-	LH
CO 2,CO 3	Analyze Bheda of Pandu with Anemia. Identify referral criteria for cases of anaemia.	CAN	MK	KH	PBL,FC	RS,CHK,PRN	F	II	-	NLHT12.1
CO 2,CO 3	Enlist haemorrhagic diseases in children. Discuss etio-pathogenesis, clinical features and management(Chikitsa) of Haemolytic anemia, Thalassemia Major, Sickle Cell Anemia, Hereditary Spherocytosis. Diagnose and plan management(Chikitsa) of Haemolytic anemia, Thalassemia Major, Sickle cell anaemia, Hereditary spherocytosis.	CS	DK	KH	CBL,FC ,LRI	CHK,PRN, RS	F&S	II	-	NLHT12.2
CO 2,CO 3	Enumerate causes of hepatomegaly and splenomegaly. Analyze concept of Udara Roga with reference to hepatomegaly and splenomegaly.	CAN	DK	KH	BS,DIS	CHK,RS,INT	F	II	-	NLHT12.3
CO 2,CO 3,CO 6	Plan complementary and alternative scope of treatment protocol for cases of Anemia. Communicate the plan of Ahara and Vihara for Pandu to the caregivers. Enlist Oushadha Yogas used in Pandu. Enlist ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas used in Pandu Chikitsa and analyze its Samprapti Vighatana.	AFT-RES	MK	SH	CBL,FC ,RP	PRN,CHK, RS	F&S	II	-	NLHP12.1

CO 3,CO 7,CO 8	Perceive two Kriyakrama used in the management of Pandu. Analyse Samprapti Vighatanah in Pandu	PSY-SET	MK	KH	D-BED,D	INT,CHK	F&S	II	-	NLHP12.2
CO 2,CO 3,CO 6	Plan complementary and alternative scope of Ayurveda treatment protocol for the cases of Kamala. Communicate the plan of Ahara and Vihara for Kamala to the caregivers. Enlist Oushadha Yogas used in Kamala. Enlist ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas used in Kamala Chikitsa and analyze its Samprapti Vighatana.	AFT-RES	MK	SH	RP,CBL,L&GD	PRN,RS,CHK	F&S	II	-	NLHP12.3
CO 3,CO 7,CO 8	Perceive two Kriyakrama used in the management of Kamala. Analyse Samprapti Vighatana in Kamala	PSY-SET	MK	KH	D,D-BED	INT,CHK	F&S	II	-	NLHP12.4
CO 2,CO 3,CO 4,CO 6	Examine and Plan the treatment for cases of Pandu, Anaemia and Kamala.	PSY-GUD	DK	SH	CBL,D-BED	RS,P-CASE,CHK	F	II	-	NLHP12.5

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 12.1	Bheda and referral criteria of Pandu and Anemia.	**Duration:** 1 Hour **Pre-preparation:** **By the Teacher:** Dividing the students in groups (Min 8 and Max 10 groups) and assigning case vignette to each group (different kind of Pandu and varying severity) 1 week before the activity. **By the students (SDL)**

		1. Identifying the problem and ask for triggers 2. Diagnose the type of Pandu and type of Anaemia 3. Analyze Bheda of Pandu with Anaemia. 4. Identify referral criteria for cases of anaemia 5. Ask for triggers to find the answers prior to the session **Activity:** 1. Introduction: Teacher briefly explains the objectives of the session and activity. 2. Case Discussion: Each group present their findings briefly. 3. Students discuss the new knowledge of comparison and the process of learning 4. Teacher facilitates a discussion to correct misconceptions and reinforce key points.
NLHT 12.2	Haemorrhagic Diseases in children.	**Duration:** 1 Hour **Pre-preparation:** **By the Teacher:** Preparing the resource material (Hemorrhagic Diseases in children) and sharing it to the students (handouts/recorded videos/ppts) 1-2 week prior to the class activity. Dividing the students in groups and assigning case vignettes to each group. **By the students (SDL):** 1. Learning the resource material and understanding the etiopathogenesis, clinical features and management (Chikitsa) of Hemolytic anemia, Thalassemia Major, Sickle Cell Anemia, Hereditary Spherocytosis. 2. Diagnosing the case vignette assigned and planning the management. **Activity:** 1. Introduction: Teacher briefly explain the objectives and list out the hemorrhagic diseases in children. 2. Group discussion: Students discuss in group on assigned case vignette 3. Case Discussion: Each group present their findings briefly and explain the etio-pathogenesis, clinical features and management (Chikitsa) of the case assigned to the group. 4. Teacher Facilitate a discussion to correct misconceptions and reinforce key points.
NLHT 12.3	Udara Roga: hepatomegaly and splenomegaly.	**Duration:** 1 Hour

		Pre-preparation: By the Teacher: Preparing the list of references (Udara Roga, hepatomegaly and splenomegaly) and sharing it with students. **By the students (SDL):** 1. Understanding the concept of Udara Roga, hepatomegaly and splenomegaly from the given references. 2. Carrying the references to the session **Activity:** 1. Introduction: Teacher briefly explain the objectives of the session and activity. 2. Diving the class into group (min 6-8 in one group) 3. Group discussion: Students discuss in groups on the causes of hepatomegaly and splenomegaly and also analyze concept of Udara Roga with reference to hepatomegaly and splenomegaly using the references. 4. Each group present their discussion. 5. Teacher facilitates discussion among different groups to correct misconceptions and reinforce key points.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 12.1	Complementary, alternative treatment protocol, Pathya in Anemia.	**Duration:** 1 Hour **Pre-Preparation:** **By the Teacher:** 1. Prepare the list of Oushadha Yogas used in Pandu 2. Divide the students into 5 groups 3. Assign 1 real case/ stimulated or case vignette (different types of Pandu/Anemia) 4. Provide guidelines to prepare the Ahara Vihara Chart, role play and highlight the important components of communication. 5. Validate the Role Play script prepared by the student Prior to the activity. 6. Ensure the language is simple and easy to understand by the local people. **By the Student:**

		1. Students is expected to understand the disease, Ahara Vihara which is indicated for the particular disease assigned to them. 2. Student is expected to prepare the Ahara Vihara chart and the script of the role play which explains the Ahara Vihara Chart to the parents/caretaker and get it validated by the teacher prior to the activity. 3. Student is expected to enlist the Oushadha Yogas use in Pandu Chikitsa and study the details of any two Samanya & Vishesh Yogas. **Activity:** 1. Students assemble in groups assigned. 2. Teacher explains the Plan complementary and alternative scope of treatment protocol for cases of Anemia. 3. Teacher will give an overview of formulations used in Pandu along with their rationale. 4. Select the relevant 2 formulations used in Pandu with reference and which are frequently used by practitioners of respective state/ region. 5. Enlist ingredients, indications and explain Practical relevance. 6. Discuss the Oushadha Yogas and justify Samprapti Vighatana. 7. Group leader present the Ahara Vihara Chart in different types of Pandu. 8. Each group executes the role play.
NLHP 12.2	Kriyakrama used in management of Pandu	**Duration:** 1 Hour **Pre-preparation:** **By the Teacher:** 1. Identify two Kriyakrama (Procedure-based therapy) used in Pandu. 2. Scheduling the demonstration and arranging the patient. **By the Student:** Students are expected to study the concept of Pandu and its management in detail prior to the Activity. **Activity:** 1. Teacher/therapist demonstrates the Kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure specific to the procedure (like Handwashing, Wearing Cap/gloves/mask if needed, Collecting the ingredients and equipment, preparation of medicine, getting the consent, fitness certificate if required, counseling the patient and caretaker)

		B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post procedure specific to procedure and explain the Do's and Don't to follow. 3. Record the procedure in the record book. 4. Assignment: Write the mode of action/Samprapti Vighatana of the procedure.
NLHP 12.3	Complementary, alternative treatment protocol, Pathya in Kamala.	**Duration:** 1 Hour **Pre-Preparation:** **By the Teacher:** 1. Prepare the list of Oushadha Yogas used in Kamala 2. Divide the students into 3 groups 3. Assign 1 real case/ stimulated or case vignette (varying level of severity) 4. Provide guidelines to prepare the Ahara Vihara Chart, role play and highlight the important components of communication. 5. Validate the Role Play script prepared by the student Prior to the activity. 6. Ensure the language is simple and easy to understand by the local people. **By the Student:** 1. Students is expected to understand the disease, Ahara Vihara which is indicated for the particular disease assigned to them. 2. Student is expected to prepare the Ahara Vihara chart and the script of the role play which explains the Ahara Vihara Chart to the parents/caretaker and get it validated by the teacher prior to the activity. **Activity:** 1. Students assemble in groups assigned. 2. Teacher explains the Plan complementary and alternative scope of treatment protocol for cases of Kamala. 3. Teacher will give an overview of formulations used in Kamala along with their rationale. 4. Select the relevant 2 formulations used in Pandu with reference and which are frequently used by practitioners of respective state/ region. 5. Enlist ingredients, indications and explain Practical relevance. 6. Discuss the Oushadha Yogas and justify Samprapti Vighatana. 7. Group leader present the Ahara Vihara Chart in different types of Kamala. 8. Each group executes the role play.

NLHP 12.4	Kriyakrama used in the management of Kamala.	**Duration:** 1 Hour **Pre-preparation:** **By the Teacher:** 1. Identify two Kriyakrama (Procedure-based therapy) used in Kamala. 2. Scheduling the demonstration and arranging the patient. **By the Student:** Students are expected to study the concept of Kamala and its management in detail prior to the Activity. **Activity:** 1. Teacher/therapist demonstrates the Kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure specific to the procedure (like Handwashing, Wearing Cap/gloves/mask if needed, Collecting the ingredients and equipment, preparation of medicine, getting the consent, fitness certificate if required, counseling the patient and caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post procedure specific to procedure and explain the Do's and Don't to follow. 3. Record the procedure in the record book. 4. Assignment: Write the mode of action/Samprapti Vighatana of the procedure.
NLHP 12.5	Case Discussion: Pandu, Anaemia and Kamala.	**Duration**: 2 Hour **Preparation /Pre-Requisites:** **By the Teacher:** 1. Scheduling the case taking and arranging the cases of Pandu, Anemia and Kamala. (Real Patient / simulated patient/ Case Vignette) 2. Preparing the checklist for the concerned activity. **By the student:** 1. Student is expected to come prepared with the content of Nidana Panchaka and Chikitsa of Pandu and Kamala. 2. Rapport building, proper history taking, thorough examination, appropriate Investigation **Activity:** **Clinical classroom:** Students are divided in groups (5-8 members in one group) and sent to OPD/IPD for Bedside - Case taking

		Bedside (in case of real case): Case taking as per the format 1. Building rapport with patient 2. History taking 3. Clinical examination **In clinical classroom:** 1. Students discuss the Nidana Panchaka in the allotted group, differential diagnosis, plan investigations if needed & identify the Samprapti Ghatakas 2. Plan the management and justify the Samprapti Vighatana 3. Presentation of the case [Each group will present any one sub point of the case] 4. ROLE-PLAY – Explain the care plan, Ahara vihara & prognosis to parent. 5. Recording the case in record book. **Teacher's role**: Teacher evaluates students' performance based on checklist/rating scale. **Checklist: Yes/No** 1. Rapport building established 2. Explains the history and symptoms in sequence of disease Pandu, Anemia and Kamala accurately. 3. Explains local and systemic clinical examination performed. 4. Identifies the Nidana Panchaka accurately and discuss differential diagnosis. 5. Identifies the Samprapti Ghatakas in disease Pandu, Anemia and Kamala as per the allotment of respective groups. 6. Plan the management and Justifies Samprapti Vighatana. 7. Explain care plan, Ahara vihara & prognosis to parent. 8. Shows active collaboration in group and justifies the queries raised. 9. Language is simple and easy to understand by the local people.

Topic 13 Antahsravee Granthi Rogas (Disorders of Endocrine System) (LH :3 NLHT: 2 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3,CO 6	Enlist Thyroid dysfunctions. Define Hyperthyroidism, Hashimoto's Thyroiditis in children. Analyze Samprapti in Thyroid dysfunction and plan Chikitsa. Diagnose and manage Hypothyroidism.	CE	MK	KH	LRI,L& PPT ,L&GD	T-CS,QZ , C-VC	F&S	II	-	LH

CO 2,CO 3	Interpret and explain Neonatal and Childhood Thyroid screening report. Identify referral criteria for the cases of Thyroid dysfunction	CC	MK	K	TUT,L &PPT ,LRI	T-CS,SBA, O-QZ	F&S	II	-	LH
CO 2,CO 3,CO 6	Explain Sahaja Prameha. Describe etio-pathogenesis, clinical features, diagnosis, complications ,management and referral criteria of Type-1 Diabetes mellitus. Analyze the concept of Prameha with reference to Diabetes.	CAN	MK	KH	DIS,BS, L&PPT	CR-W,SBA ,T-CS	F&S	II	-	LH
CO 2,CO 3,CO 6	Enlist ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition-specific) Yogas used for T1DM and analyse the Samprapti Vigatana. Prescribe and explain Ahara - Vihara for Thyroid Dysfunctions and T1DM.	CS	MK	KH	BS,L& GD,ML	CL-PR,O-QZ,WP	F&S	II	-	LH
CO 2,CO 3,CO 4,CO 6	Plan Chikitsa for Diabetes Mellitus (Prameha), glycaemic control and analyze Samprapti Vagatana. Identify referral criteria for the cases of Diabetes Mellitus. Prescribe and explain Ahara- Vihara for T1DM.	CS	MK	KH	PBL,FC ,CBL	CHK, C-VC,SP	F&S	II	-	NLHT13.1
CO 2,CO 3,CO 7	Enlist and perceive any two Kriyakrama used in the management of T1DM . Analyse Samprapti Vighatana	PSY-SET	MK	KH	D-M,D,PT	QZ ,INT,CHK	F&S	II	-	NLHP13.1
CO 1,CO 2,CO 3,CO 6	Predict the case of precocious and delayed puberty. Identify deviations in growth and plan appropriate management.	CAP	NK	KH	FC,PER ,SDL	QZ ,CHK,RS	F&S	II	-	NLHT13.2
Non Lecture Hour Theory										

S.No	Name of Activity	Description of Theory Activity
NLHT 13.1	Diabetes Mellitus (Prameha)	**Duration:** 1 hour **Pre-Preparation:** **By the Teacher:** 1. Preparation of Case Vignette (different age group/different glycemic levels/) 2. Divide the Class into groups. 3. Assign one case to each group one week prior to the class activity. **By the Students:** Student is expected to study Diabetes Mellitus & glycemic control measures Ahara Vihara, referral criteria, by referring classical texts or by conduct a survey before the session. **Activity:** 1. Students assemble in assigned group 2. Group Discussion on the assigned topic. 3. Students are expected to present:- A. Chikitsa Sutra if any B. Shamana Protocol and analyze Samprapti Vighatana if any C. Prescribe dose a/c to age D. Shodana protocol if needed and justify the indication. E. Satvavajaya measures if any F. Glycemic control measures G. Prescribe a diet regimen H. follow-up plan I. Criteria to refer **Role of the Teacher:** Facilitate group discussion and summarize the key points.
NLHT 13.2	Precocious and Delayed Puberty	**Duration:** 1 Hour **Pre-Preparation** **By the Teacher:** Dividing the students in groups (Min 8 and Max 10 groups) and assigning the topic one week before the activity. **By the Students:** Students are expected to study puberty & growth deviations before coming to class **Activity:**

		1. Students are divided into three groups (precocious, delayed, and deviated growth). 2. Provide one case to each group 3. Students are expected to identify – a. Types of puberty b. Chronological development of signs & symptoms during puberty. d. Current manifestations/ symptoms e. Familial history if any f. Principle of growth and development g. Growth patterns in the charts h. Causative factors for deviated growth if any **Teacher's role:** Teacher asses using a checklist. **Checklist:** Yes/ No 1. Identifies Puberty types accurately 3. Mentions Chronological development of puberty symptoms accurately 4. Explains current manifestations/ symptoms 5. Mentions appropriate Causative factors 6. Mentions familial history 7. Analysis of growth and development 8. Explains the growth pattern using the chart.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 13.1	KriyaKrama in T1DM	**Duration:** 2 hours **Pre-preparation:** **By the Teacher:** 1. Identifying Kriyakrama used in T1DM 2. Scheduling the demonstration and arranging the patient. By the Student: Students are expected to study the disease and its management in detail prior to the activity. **Activity:**

		1. Teacher/therapist demonstrates Kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure (Handwashing, Wearing Cap/gloves/mask, Collecting the ingredients and equipment's, preparation of medicine, getting the consent, fitness certificate if required, counselling the patient and caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post procedure (Explaining the Do's and Don't to follow) 3. Assignment: Students are asked to write the mode of action/Samprapti Vighatana of the procedure)

Topic 14 Mutravaha Sroto Rogas (Disorders of Genito urinary system) (LH :3 NLHT: 2 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3,CO 6	Diagnose and plan the Chikitsa of Mutrakrichra in children. Diagnose and plan the management of Urinary Tract infection in children. Describe the etiopathogenesis, clinical features, diagnosis, complications and management of Glomerular Nephritis in children.	CE	MK	KH	L&PPT ,DIS,LR I	PM,T-CS, C-VC	F&S	III	-	LH
CO 2,CO 3,CO 6	Explain the approach to the case of Proteinuria and Hematuria. Describe the etio-pathogenesis, clinical features, diagnosis complications and management of Chronic Renal Failure in Children. Describe the etio-pathogenesis, clinical features, diagnosis complications and management of Nephrotic Syndrome in Children	CC	MK	K	L&PPT ,DIS,LR I	PM, C-VC,T-CS	F&S	III	-	LH
CO 2,CO 3	Identify referral criteria for Proteinuria, Hematuria. Identify referral criteria for Genitourinary disorder	CK	MK	K	EDU,F C,PBL	C-VC,QZ ,O-GAME	F&S	III	H-SH	NLHT14.1
CO 2,CO	Enlist the ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas	CE	MK	KH	L_VC,D IS,L&P	C-VC,SBA ,T-CS	F&S	III	H-SH	LH

3,CO 6	used in Genito Urinary disease and Analyse the Samprapti Vigatana. Diagnose Niruddha Praksha/Niruddha Mani in children and plan the Chikitsa. Diagnose and Plan the management for Phimosis.				PT					
CO 2,CO 3,CO 6	Formulate complementary and alternative scope of Ayurveda treatment protocol for the cases of Mutra Vaha Sroto Vikara. Prescribe and Explain Ahara and Vihara for Genitourinary disease	CS	MK	KH	TBL,PBL,L&GD	P-PS,SBA,CBA	F&S	III	-	NLHT14.2
CO 2,CO 3,CO 4	Examine status of Kelda, Agni, Koshta in a case of Mutra and Shukra Vaha Sroto Dusti.	PSY-GUD	MK	SH	D-BED,PT	P-PRF,CHK,P-CASE	F&S	III	-	NLHP14.1
CO 3,CO 4,CO 7	Perceive two Kriyakrama used in the management of Mutra Vaha Sroto Vikara. Analyze Samprapti Vighatana	PSY-SET	MK	KH	D-M,D	CHK,INT,QZ	F&S	III	-	NLHP14.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 14.1	Refererral criteria of Genito urinary disorders	**Duration:** 1 hour **Pre-Preparation:** **By the Teacher:** 1. Dividing the class into four groups one week prior to the activity. Guide the students about references 2. Preparation of Case Vignette 3. Assign one/two cases to each group ((Proteinuria, Haematuria, Genito urinary, Phimosis) one week prior to the class activity **By the Student:** Students are expected to study available literature prior to class and understand the case assigned to them.

		Activity: 1. Facilitator opens discussion 2. Students are expected to A. Explain the history and symptoms in the case. B. Mention the examination findings. C. Interpret the investigation findings. D. Diagnose the case and its subtype. E. Explain the referral criteria and justify the reason.
NLHT 14.2	Scope of treatment & ahara-vihara plan in Mutra vaha Sroto Vikara	**Duration:** 1 hour **Pre-Preparation:** **By the Teacher:** Dividing the class into groups (different Mutra Vaha Sroto Vikara)one week prior to the activity and assigning them a problem. Guide the students about references **By the Student:** 1. Students are expected to study available literature regarding Mootra Vaha Sroto Vikara. 2. Understand the case and plan Ahara and Vihara for the case **Activity:** 1. Teacher explains the complementary and alternative scope of Ayurveda treatment protocol for the cases of Mutra Vaha Sroto Vikara. 2. Students are expected to diagnose the case and present the Ahara Vihara chart of given case. 3. Analyse the chart and discuss the complementary and alternative scope of Ayurveda treatment protocol.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 14.1	Examination of kleda agni kosta in mutra and shukra vaha srotas	**Duration:** 1 Hour **Pre Preparation** **By The Teacher** 1. Introduce students about the importance of Agni, Kosta, Kleda examination in Mutra Sukra Vaha

		Srotas through handouts. 2. Divide students in groups with 10-15 students in a team 3. Provide a real case/case vignette to each group 3. Prepare questionnaire to assess Kelda, Agni, Koshta. **By The Student:** Student should understand the questionnaire. **Activity:** 1. Students gather in group. 2. Bedside (real case) A. Build rapport B. Examine the child. C. Assess Agni (Krura, Madhyama, Mrudu, Sama) D. Assess Kleda parameter in all types of Kostas (Krura ,Madhyama ,Mrudu, Sama) Clinical Classroom: Discuss the findings and difficulties faced in assessment.
NLHP 14.2	Kriya karma in Mutra Vaha Sroto Vikara	**Duration:** 1 hour **Pre-preparation:** **By the Teacher:** 1. Identifying Kriyakrama (procedure-based therapy) used in Mutra Vaha Sroto Vikara 2. Scheduling the demonstration and arranging the patient/ model By the Student: Students are expected to study the disease and its management in detail prior to the Activity. **Activity:** 1. Teacher/therapist demonstrates the Kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure (Handwashing, Wearing Cap/gloves/mask, Collecting the ingredients and equipment, preparation of medicine, getting consent, fitness certificate if required, counseling the patient and caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post-procedure (Explaining the Do's and Don't to follow) D. Assignment: Students are asked to write the mode of action/Samprapti Vigatana of the procedure)

Topic 15 Sandhi Rogas (Rheumatological Disorders) (LH :3 NLHT: 2 NLHP: 2)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 2,CO 3,CO 6	Enumerate Rheumatological problems in children. Diagnose and plan Chikitsa of Amavata.	CE	MK	KH	L_VC,L &PPT ,X-Ray	T-CS, C-VC,CBA	F&S	III	-	LH
CO 2,CO 3,CO 6	Diagnose and plan Chikitsa of Sandhigata Vata.	CE	MK	KH	CD,X-Ray,L&GD	C-VC,T-CS,SBA	F&S	III	-	LH
CO 2,CO 3,CO 6	Diagnose and plan Chikitsa of Vatarakta. Enlist ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition specific) Yogas used for Rheumatological disorders and Analyse the Samprapti Vigatana.	CE	MK	KH	L&PPT ,DIS,LRI	C-VC,T-CS	F&S	III	-	LH
CO 2,CO 3,CO 6	Identify referral criteria in Rheumatological disorders. Prescribe and explain Ahara-Vihara in Rheumatological disorders.	CS	MK	KH	CD,PBL ,CBL	RS,Mini-CEX,CHK	F&S	III	-	NLHT15.1
CO 2,CO 3,CO 6	Formulate integrated treatment protocol for the cases of Rheumatological disorders	CS	DK	KH	FC,BS, TBL	RS,SBA,PRN	F&S	III	-	NLHT15.2
CO 3,CO 7,CO 8	Perceive two Kriyakrama used in the management of Rheumatological disorders. Analyse Samprapti Vighatana	PSY-SET	MK	KH	D,D-M,PT	QZ ,CHK,INT	F&S	III	-	NLHP15.1

CO 2,CO 3,CO 4,CO 7	Examine, diagnose and plan the management of child with Amavata.	PSY-GUD	MK	SH	D-BED, CBL	P-CASE,CHK,Mini-CEX	F&S	III	-	NLHP15.2
CO 2,CO 3,CO 4	Demonstarte the case history of Rheumatology and explain nidana panchaka	PSY-GUD	MK	SH	CBL,CD,D-BED	P-CASE,CHK,Mini-CEX	F&S	III	-	NLHP15.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 15.1	Referral criteria & Pathya in Rheumatological disorders.	**Duration :** 1 hour **Pre-Preparation:** **By the Teacher:** 1. Dividing the class into groups one week prior to the activity. Guide the students about references 2. Preparation of Case Vignette 3. Assign one/two case to each group one week prior to the class activity **By the Student:** Students are expected to study available literature prior to class. **Activity:** Students are expected to- 1. Diagnose the case 2. Interpret the investigations 3. Explain referral criteria 4. Explain Ahara for all stages of the disease if any. 5. Explain vihara for all stages of the disease if any.
NLHT 15.2	Integrated treatment for Rheumatological Disorders	**Duration:** 1 hour **Pre-Preparation:** **By the Teacher:**

		1. Dividing the class into groups one week prior to the activity. 2. Provide references on the integrated approach through PPT/Handouts/pre-recorded videos. **By the Student:** 1. Students are expected to study literature prior to class. 2. Collect and study scientific articles on the topic. **Activity:** Students are expected to- 1. Discuss the scope of Ayurveda and complementary medicine in the treatment of Sandhigata Roga in children. 2. Discuss recent advances in Ayurveda & other systems 3. Present new research points available from the journals and analyse them. 4. Build a stage-wise protocol (mind mapping) 5. Discuss the advantages and limitations of the treatments 6. Discuss the availability of medicine and duration of treatment aspects in all system 7. Each group present their findings. 8. Teacher summarises the key points on the integrated approach.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 15.1	Kriya Krama in Rheumatological disorders	**Duration:** 1 Hour **Pre-preparation:** **By the Teacher:** 1. Identifying Kriyakrama used in Rheumatological disorders 2. Scheduling the demonstration and arranging the patient. By the Student: Students are expected to study the disease and its management in detail prior to the Activity. **Activity:** 1. Teacher/therapist demonstrates the kriyakrama on the patient. 2. Students are expected to observe – A. Pre-procedure (Handwashing, Wearing Cap/gloves/mask, Collecting the ingredients and equipment, preparation of medicine, getting consent, fitness certificate if required, counseling the patient and

		caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post-procedure (Explaining the Do's and Don't to follow) 3. Assignment: Students are asked to write the mode of action/Samprapti Vigatana of the procedure)
NLHP 15.2	Case Discussion: Amavata	**Duration:** 3 Hours **Pre-Preparation:** **By the Teacher:** Divide the class into groups (5-8/group) assign 1/2 real case/simulated case/case vignette (different presentation of Amavata) **By the Student:** Student is expected come prepared with the knowledge of Nidanapanchaka and Chikitsa of diseases Amavata. **Activity:** Student gather in group and build the case **Bedside (in real case)** 1. Rapport building 2. History taking 3. Clinical Examination (General & Joint Examination) **Clinical classroom:** 1. Students will discuss Samprapti Ghatakas of given case of Amavata. 2. Plan the management and justify Samprapti Vigatana 3. Students are asked to present different cases/ parts of a case (e.g. History, Examination, Differential Diagnosis, Investigations, Management) 4. Teacher has to facilitate discussion to clear doubts of students. 5. Explain the care plan, Ahara and Vihara to parent/ guardian with a help of Role Play 6. Students will record the case in record book. **Role of a teacher:** Facilitate group discussion and evaluate the student using a checklist. **Checklist**: Yes/No 1. Rapport building established 2. Record history precisely. 3. Performs/explain General and specific examination 4. Interprets investigation report accurately. 5. Justifies differential diagnosis

		6. Accurately diagnose the case and explain the Avastha 7. Plans the treatment protocol and justifies the Samprapti Vigatana 8. Plans the Ahara Vihara efficiently. 9. Explains the prognosis of diseases and treatment effectively.
NLHP 15.3	Nidanapnachaka of Rheumatological disorders	**Duration:** 1 Hour **Pre-preparation** **By the teacher:** 1. Scheduling the case taking and arranging the case (Real Patient / simulated patient/ Hypothesised Case) 2. Make the student understand the OPD/IPD manners during case-taking **By the student:** 1. Students are expected to come prepared with history taking & the content of Nidana Panchaka of Rheumatological disorders 2. Rapport building, proper history taking, Nidana Panchaka finding in the given patient 3. Present their views in clinical classroom discussion **Activity:** In clinical classroom: Students are divided in groups (5-8 members in one group) and sent to OPD/IPD for Bedside - Case taking **Bedside:** (in real case) 1. Building rapport with patient 2. History taking **In the clinical classroom** 1. Students discuss the case in group 2. Frame the Nidana Panchaka and Samprapti Gatakas. 3. Present the history, examination finding and interpret the investigation reports. 3. Presents the Nidana Panchaka and Samprapti Gatakas to the class. 4. Teachers summarise the key points.
Topic 16 Twak Rogas (Dermatological Disorders) (LH :3 NLHT: 2 NLHP: 3)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3,CO 6	Enumerate Twak Rogas in Children. Diagnose and plan Chikitsa for Kushta.	CE	MK	KH	L&PPT ,L_VC, TUT	PM, C-VC,T-CS	F&S	III	V-AT	LH
CO 2,CO 3,CO 6	Diagnose and plan Chikitsa for Visarpa and Charmadala.	CE	MK	KH	L_VC,L &PPT ,TUT	PM,T-CS, C-VC	F&S	III	-	LH
CO 2,CO 3,CO 4,CO 6	Examine, diagnose and plan the management of Kusta/ Charmadala/ Visarpa. Identify the referral Criteria for Twak Rogas	PSY-GUD	MK	SH	SIM,CB L,D-BED	P-CASE,CH K	F&S	III	-	NLHP16.1
CO 2,CO 3,CO 6	Diagnose and plan Chikitsa for Arumshika.	CE	MK	KH	DIS,L& PPT	C-VC,PM	F&S	III	-	NLHT16.1
CO 2,CO 4,CO 6	Communicate the plan of Ahara and Vihara for Twak Rogas to caregivers.	AFT-RES	MK	SH	RP,SIM	CHK,RS,P-RP	F&S	III	-	NLHT16.2
CO 2,CO 3,CO 6	Describe etiopathogenesis, clinical features, complications and management of Scabies and Eczema.	CK	MK	K	ML,L& PPT ,TUT	C-VC,T-CS	F&S	III	-	LH
CO	Diagnose and plan the management of Erythema Toxicum	CE	DK	KH	ML,L_	C-VC,O-G	F&S	III	-	LH

2,CO 3,CO 6	Neonatorum, Adenoma Sebaceum, Cutis Marmorata and Seborrheic Dermatitis.				VC,L& PPT	AME,T-CS				
CO 2,CO 3	Enlist Oushadha Yoga used in the Twak Roga. Enlist ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition-specific) Oushadha Yoga used in Twak Roga and analyze Samprapthi Vighatana.	CK	MK	KH	TBL,L &GD,D IS	INT,P-ID,WP	F&S	III	-	NLHT16.3
CO 4,CO 7,CO 8	Perceive two Kriyakrama (Procedure based therapy) used in the management of Twak Roga and analyze the Samprapti Vighatana.	PSY-SET	MK	KH	D,D-BED	INT,CHK	F&S	III	-	NLHP16.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 16.1	Case Discussion: Arumshika	**Duration:** 20 Minutes **Pre-preparation** **By the Teacher:** Introduces the topic covering the prevalence of the disease Arumshika in children and its Nidana Panchaka and Chikitsa [PPT/ Handouts or Video]. **By the Student:** Expected to come prepared with a detailed Knowledge of Arumshika. **Activity:** 1. The teacher will lead the discussion, incorporating key points and utilizing images, videos or a Power Point presentation. 2. Discuss on Different presentations of Arumshika in children 3. Discuss Differential diagnosis of the clinical presentation 4. Twak Pareeksha & Clinical examination. 5. Final diagnosis of Arumshika 6. Management and different medications and their application **Role of teacher:** Facilitate the discussion with required inputs.

		Students are evaluated using Clinical Video Cases.
NLHT 16.2	Pathya in Twak Roga.	**Duration:** 40 Minutes **Pre-preparation:** **By the teacher:** Divide the group and assign the topic/Case one week before the session **By the Student:** 1. Frame the Ahara and Vihara Chart for Twak Roga 2. Writes the script and validate it before the class Script contains A. Name of the student: Role played by the student B. Script dialogues C. Using of Manikins/task trainers wherever necessary **Activity**: (Clinical classroom/class) 1. Faculty introduce the topic 2. Groups execute the role play 3. Discussions on points to be highlighted A. Ahara in different Twak Roga B. Vihara in different Twak Roga
NLHT 16.3	Oushadha Yogas used in Twak Roga	**Duration:** 1 Hour **Pre-Preparation:** **By the teacher:** 1. The teacher will give an overview of the formulations used in Twak Roga 1 week before the session. 2. Select any two relevant formulations used in Twak Roga, which are referenced in Ayurveda Classical Texts and are frequently used by practitioners of the respective state/ region. **By the student:** 1. Students are expected to come with knowledge of the Management of Twak Roga. 2. Collect the references of Oushadha Yoga used in the Twak Roga from various Samhitas. **Activity:** 1. Students enlist Oushadha Yoga used in the Twak Roga from various Samhitas

		2. Enlist two Samanya Oushadha Yoga and two Vishesha (condition-specific) Oushadha Yoga used in Twak Roga by the teacher 3. Explain the Sloka word-by-word and highlight key terms. 4. Discuss the conceptual meaning and interpretation. 5. Explain Practical relevance. 6. Encourage questions and participant involvement. 7. Analyze the role of formulation in Samprati Vighatana 8. Analyze the practical application of the formulations in multiple disease conditions. 9. Cross-reference with related Sloka or commentaries. **Role of Teacher:** Ensure proper pronunciation and understanding of appropriate meaning.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 16.1	Case Discussion: Kusta/ Charmadala/ Visarpa.	**Duration:** 2 Hours **Pre - Preparation:** **By the teacher:** 1. Schedule and ensure the availability of real/ simulated cases/ Case vignettes of Kusta/ Charmadala/ Visarpa 2. Students are divided into groups (5-8 members in one group) and assigned a case. 3. Make the student understand the OPD/IPD manners during case-taking 4. Preparing the checklist for the concerned activity. By the student: The student is expected to come prepared with the knowledge of Nidanapanchaka and Chikitsa of diseases Kusta/ Charmadala/ Visarpa. **Activity** In the clinical classroom: Assign one case to each group Kusta/ Charmadala/ Visarpa (real case/ simulated case) **Bedside:** Case taking as per the protocol (in real case) A. Rapport building B. History taking C. Clinical Examination (General & Skin and integumentary system)

		Back in the clinical classroom: 1. Students will discuss Samprapti Ghatakas of the given case of Kusta/ Charmadala/ Visarpa. 2. Students are asked to present different cases/ parts of a case (e.g. History, Examination, Differential Diagnosis, Investigations, Management) 3. Plan the management and justify Samprapti Vighatana 4. Role play - Explain the care plan, Ahara-Vihara and prognosis to the parent/ guardian 5. Teacher opens the discussion on referral Criteria for Twak Rogas 6. Record the case in the record book.
NLHP 16.2	Kriyakramas (Procedure-based therapy) in Twak Roga.	**Duration:** 1 Hour **Pre-Preparation:** **By the Teacher:** 1. Identify two Kriyakrama (procedure-based therapy) used in Twak Roga that are referred to in Ayurveda Classical Texts and are frequently used by practitioners of the respective state/ region. 2. Scheduling the demonstration and arranging the patient/ manikin. By the Student: Students are expected to study Twak Roga and its management in detail before the Activity. **Activity:** 1. The teacher/therapist demonstrates the kriyakrama on the patient/manikin. 2. Students are expected to observe – A. Pre-procedure specific to the procedure (like Handwashing, Wearing Cap/gloves/mask if needed, Collecting the ingredients and equipment, preparation of medicine, getting consent, fitness certificate if required, counselling the patient and caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post-procedure specific to procedure and explain the Do's and Don't to follow. 3. Discuss the mode of action (Samprapti Vighatana) of the procedure 4. Record the procedure.

Topic 17 Sira Snayu Rogas (Nervous system disorders) (LH :7 NLHT: 3 NLHP: 9)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**

CO 2,CO 3,CO 6	Explain Nidana Lakshana & Chikitsa of Jalasheershaka. Describe etiopathogenesis, classification, clinical features, complications and management of Hydrocephalus.	CC	MK	K	L_VC,LRI,L&PPT	T-CS, C-VC,INT	F&S	III	-	LH
CO 2,CO 3,CO 4	Diagnose and plan the management for a case of Jalasheershaka (Hydrocephalus).	CE	MK	KH	SIM,D, CBL	CHK,RS,P-CASE,SP	F&S	III	-	NLHT17.1
CO 2,CO 3,CO 6	Diagnose and plan Chikitsa of Apasmara.	CE	MK	KH	CD,L&GD,L_VC	C-VC,T-CS	F&S	III	-	LH
CO 2,CO 3	Analyse the concept of Skanda Apasmara with epilepsy.	CAN	NK	KH	L&GD, BS,DIS	INT,CR-RED,CR-W	F	III	-	LH
CO 2,CO 3	Describe etiopathogenesis, clinical features, complications and management of Febrile Seizures in children. Define Epilepsy. Describe the pathogenesis, types, clinical features, diagnosis and management of Epilepsy in children.	CK	MK	K	L&PPT ,L_VC, LRI	T-CS, C-VC	F&S	III	-	LH
CO 2,CO 3,CO 4,CO 7	Examine and plan the management for a case of Apasmara.	PSY-GUD	MK	SH	D-BED, CBL,SIM	P-CASE,CHK,SP	F&S	III	-	NLHP17.1
CO 2,CO 3	Enumerate the causes of floppiness in an infant and discuss the differential diagnosis and management.	CC	DK	K	L_VC,BS,L&GD	INT,T-CS	F&S	III	-	LH

CO 2,CO 3	Describe etiopathogenesis, clinical features and management of Ataxia in children.	CK	MK	K	L_VC,L &PPT	C-VC,PM, T-CS	F&S	III	-	LH
CO 2,CO 3	Define Cerebral Palsy. Describe the etiology, types, clinical features, diagnosis and management of a child with Cerebral Palsy.	CK	MK	K	L&PPT ,TUT,L _VC	C-VC,T-C S,O-GAME	F&S	III	-	LH
CO 2,CO 3,CO 4,CO 7	Examine and plan the management for a case of Cerebral palsy.	PSY-GUD	MK	SH	D-BED, CBL,SI M	CHK,SP,P-CASE	F&S	III	-	NLHP17.2
CO 2,CO 3	Describe the classification, clinical features and management of Communication Disorders.	CK	MK	K	L&PPT ,TUT,L _VC	T-CS,PM, C-VC	F&S	III	-	LH
CO 2,CO 3,CO 4,CO 7	Diagnose and plan the management for a case of Communication Disorders.	CE	MK	SH	CBL,D-BED,SI M	SP,P-PS,C HK,RS	F&S	III	-	NLHT17.2
CO 4,CO 6,CO 8	Communicate the plan of Ahara and Vihara for Neurological Disorders to the caregivers.	AFT-RES	MK	SH	SIM,RP	RS,P-RP,CHK	F&S	III	-	NLHT17.3
CO 2,CO 3	Enlist the Oushadha Yogas used in Neurological Disorders. Enlist the ingredients and indications of at least two Samanya Oushadha Yoga and two Vishesha (condition-specific) Yogas used for Neurological Disorders and analyze their role in Samprapti Vighatana, Identify the referral criteria in Neurological	CK	MK	K	L&GD, BS,DIS	O-GAME,I NT,WP	F&S	III	-	NLHT17.4

	Disorders.									
CO 2,CO 3,CO 7,CO 8	Perceive two Kriyakramas (Procedure-based therapy) used in the management of Neurological Disorders in children and analyse the Samprapti Vighatana.	PSY-SET	MK	KH	D-M,D, D-BED	DOPS,DOPS	F&S	III	-	NLHP17.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 17.1	Jalasheershaka (Hydrocephalus)	**Pre-preparation** **By the Teacher:** 1. Schedule and give simulated cases/case vignettes of Jalasheershaka (Hydrocephalus). 2. Students are divided into groups (5-8 members in one group) and assign cases with different presentations of Jalasheershaka (Hydrocephalus) to each group **By the Student:** The student is expected to come prepared with the knowledge of etiopathology, types, clinical features and management of the disease Jalasheershaka (Hydrocephalus). **Activity in the classroom: Group Discussion - 1 hour** 1. Teacher gives a brief introduction of Jalasheershaka (Hydrocephalus) 2. Students gather in assigned groups 3. Develop the case as per the protocol with a complete history and clinical examination 4. Discuss Samprapti Ghatakas of a given case of Jalasheershaka 5. Plan the management and with Samprapti Vighatana **Presentation - 1 hour** 1. Students are asked to present different cases/ parts of a case (e.g. History, Examination, Differential Diagnosis, Investigations, Management) 2. Explain the management plan and justify the Samprapti Vigatana. 3. ROLE-PLAY - Explain the care plan, Ahara-Vihara, and prognosis to the parent/ guardian 4. Record the case in the record book. 5. Teacher summarizes the key points on the management of Jalasheershaka (Hydrocephalus).

NLHT 17.2	Communication Disorders.	**Duration:** 1 Hour **Pre-preparation** **By the Teacher:** 1. Schedule and give simulated cases/case vignette of Communication Disorder. 2. Students are divided into groups (5-8 members in one group) and assign cases with different presentations of Communication Disorder to each group **By the Student:** The student is expected to come prepared with the knowledge of etiopathology, types, clinical features and management of disease Communication Disorders. **Activity in the classroom** 1. Students gather in assigned groups 2. Develop the case as per the protocol with a complete history and clinical examination 3. Discuss Samprapti Ghatakas of a given case of Communication Disorder 4. Plan the management and with Samprapti Vighatana 5. Each group present different cases/ parts of a case (e.g. History, Examination, Differential Diagnosis, Investigations, Management) 6. Explain the management plan and justify the Samprapti Vigatana. 7. Explain the care plan, Ahara-Vihara, and prognosis to the parent/ guardian 8. Record the case in the record book.
NLHT 17.3	Pathya in Neurological Disorders.	**Duration:** 1 Hour **Pre-preparation:** **By the teacher:** Divide the students into groups and assign the topic one week before the session **By the Student:** 1. Frame the Ahara and Vihara Chart for Neurological Disorders. 2. Writes the script and validate it before the class Script contains A. Name of the student: Role played by the student B. Script dialogues (in local langugae/ esay to understand dialogues) C. Using of Manikins/task trainers wherever necessary **Activity:** (Clinical classroom/class) 1. Faculty introduce the topic

		2. Groups execute the role play 3. Discussions on points to be highlighted A. Ahara in different Neurological Disorders B. Vihara in different Neurological Disorders.
NLHT 17.4	Oushadha Yogas used in Neurological Disorders.	**Duration:** 1 Hour **Pre-Preparation:** **By the teacher:** 1. The teacher will give an overview of formulations used in Neurological Disorders along with their rationale. 2. Select the relevant 2 formulations used in Neurological Disorders, which have a reference in Ayurveda Classical Texts and are frequently used by practitioners of the respective state/ region. **By the student:** 1. Students are expected to come with the knowledge of Management of Neurological Disorders. 2. Collect the references of Oushadha Yogas used in Neurological Disorders **Activity:** 1. Enlist the Oushadha Yogas used in Neurological Disorders by the students mentioned in different Samhitas 2. Enlist the two Samanya Oushadha Yoga and two Vishesha (condition-specific) Yogas used for Neurological Disorders by the teacher 3. Explain the Sloka word-by-word and highlight key terms. 4. Discuss the conceptual meaning and interpretation. 5. Explain Practical relevance. 6. Encourage questions and participant involvement. 7. Analyze the Samprapti Vighatana 8. Analyze the practical application of the formulations in multiple disease conditions. 9. Discuss the referral criteria in Neurological Disorders.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 17.1	Case Discussion: Apasmara.	**Duration:** 3 Hours **Preparation:** **By the teacher:** 1. Schedule and ensure the availability of real/simulated case/case vignette of Apasmara (different tyeps of Apasmara) 2. Students are divided into groups (5-8 members in one group) and assigned a case. 3. Make the student understand the OPD/IPD manners during case-taking **By the student:** The student is expected to come prepared with the knowledge of Nidanapanchaka and Chikitsa of the disease Apasmara. **Activity** In the clinical classroom: Assign 1/2 real case/ simulated case/Case Vignette of Apasmara to each group **Bedside:** Case taking as per the protocol(real case) A. Rapport building B. History taking C. Clinical Examination **Back in the clinical classroom:** 1. Students will discuss Samprapti Ghatakas of a given case of Apasmara. 2. Students are asked to present entire cases/ parts of a case (e.g. History, Examination, Differential Diagnosis, Investigations, Management) 3. Explain the management and justify Samprapti Vighatana 4. ROLE-PLAY - Explain the care plan, Ahara-Vihara and prognosis to the parent/ guardian 5. Record the case in the record book.
NLHP 17.2	Case Discussion: Cerebral palsy	**Duration:** 3 Hours **Preparation:** **By the teacher:** 1. Schedule and ensure the availability of real/simulated cases/case vignette of Cerebral Palsy (Different types of Cerebral Palsy) 2. Students are divided into groups (5-8 members in one group) and assigned a case. 3. Make the student understand the OPD/IPD manners during case-taking

		4. Preparing the checklist for the concerned activity. **By the student:** The student is expected to come prepared with the knowledge of Nidanapanchaka and Chikitsa of diseases Cerebral Palsy. **Activity** In the clinical classroom: Assign 1/2 real case/ simulated case/case vignette of Cerebral Palsy to each group **Bedside:** Case taking as per the protocol (in real case) A. Rapport building B. History taking C. Clinical Examination **Back in the clinical classroom:** 1. Students will discuss Samprapti Ghatakas of a given case of Cerebral Palsy. 2. Students are asked to present different cases/ parts of a case (e.g. History, Examination, Differential Diagnosis, Investigations, Management) 3. Explain the management and justify Samprapti Vighatana 4. ROLE-PLAY - Explain the care plan, Ahara-Vihara and prognosis to the parent/ guardian 5. Record the case in the record book.
NLHP 17.3	Kriyakramas (Procedure-based therapy) in Neurological Disorders in Children	**Duration**: 3 Hour **Pre-Preparation:** **By the Teacher:** 1. Identify two Kriyakramas (Procedure-based therapy) used in Neurological Disorders in children that have a reference in Ayurveda Classical Texts and are frequently used by practitioners of the respective state/ region. 2. Scheduling the demonstration and arranging the patient/ Simulator. **By the Student:** Students are expected to study Neurological Disorders in children and their management in detail before the Activity. **Activity:** 1. The teacher/therapist demonstrates the Kriyakrama to the patient. 2. Students are expected to observe – A. Pre-procedure specific to the procedure (like Handwashing, Wearing Cap/gloves/mask if needed,

		Collecting the ingredients and equipment, preparation of medicine, getting consent, fitness certificate if required, counselling the patient and caretaker) 2. Procedure (Technique of procedure, communication with the patient and caretaker) 3. Post-procedure specific to procedure and explain the Do's and Dont's to follow. 4. Discuss mode of action/Samprapti Vigatana of the procedure 5. Discuss the complementary approach. 6. Record the Procedure.

Topic 18 Unmada Rogas (Behavioral and Neurobehavioral disorders) (LH :3 NLHT: 4 NLHP: 9)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3	Diagnosis and management of Bala Unmada.	CE	MK	KH	CD,L& PPT ,DIS	C-VC,T-CS	F&S	III	-	LH
CO 2,CO 3	Enlist Behavioural and Neurobehavioral Disorders in Children. Describe the aetiology, clinical features, diagnosis and management of a child with Autism Spectrum Disorders (ASD).	CK	MK	K	DIS,ML ,L&PPT	O-GAME, C-VC,T-CS	F&S	III	-	LH
CO 2,CO 3	Diagnosis and management of Buddhi Mandya.	CE	DK	KH	BS,L& GD,DIS	T-CS, C-VC	F&S	III	-	LH
CO 2,CO 3,CO 8	Describe the etiology, clinical features, diagnosis and management of a child with Intellectual Disability (Mental retardation). Describe the types, clinical features, diagnosis and management of a child with Learning Disability and Scholastic Backwardness.	CK	MK	K	L&PPT ,BS,DIS	C-VC,O-GAME,T-CS	F&S	III	-	LH
CO 2,CO 3,CO	Describe the etiology, clinical features, diagnosis and management of a child with Attention Deficit Hyperactivity Disorder (ADHD). Describe the diagnosis and management of a	CK	MK	K	CD,L& PPT ,L_VC	T-CS, C-VC,PUZ	F&S	III	-	LH

8	child with Temper Tantrums and Breath-holding spells.									
CO 2,CO 3,CO 4,CO 7	Demonstrate the skill in diagnosis and management of ASD/ ADHD/ Intellectual Disability/ Learning Disability.	PSY-GUD	MK	SH	D-BED, CBL,SIM	CWS ,CHK ,P-CASE	F&S	III	-	NLHP18.1
CO 2,CO 3	Explain the etiology, types, clinical features, diagnosis and management of a child with Shayyamutra (Enuresis), Mritbhakshana (Pica) and Thumbsucking.	CC	MK	K	FC,CBL ,BL	C-VC,CHK,PM	F&S	III	-	NLHT18.1
CO 2,CO 3,CO 4,CO 7	Demonstrate the skill in diagnosis and management of Shayyamutra/ Breath-holding spells. Discuss the referral criteria for Neurobehavioural Disorders.	PSY-GUD	MK	SH	CBL,D-BED,SIM	CWS ,P-CASE,CHK	F&S	III	-	NLHP18.2
CO 2,CO 3,CO 8	Predict the multidisciplinary approach in children with Behavioural and Neurobehavioral Disorders.	CAP	MK	KH	CBL,FC ,DIS	CL-PR,CHK,QZ	F	III	-	NLHT18.2
CO 3,CO 8	Explain Integrated Child Development Centre (ICDC).	CC	MK	KH	RLE,FV	CR-W,RK	F	III	-	NLHP18.3
CO 4,CO 6,CO 8	Plan and Explain the Ahara and Vihara for Behavioral and Neurobehavioral Disorders.	AFT-RES	MK	SH	SIM,RP	CHK,P-RP,RS	F&S	III	-	NLHT18.3
CO 2,CO	Enlist the Oushadha Yogas used in the Behavioural and Neurobehavioural Disorders. Enlist the ingredients and	CAN	MK	K	DIS,L	WP,QZ	F&S	III	-	NLHT18.4

3	indications of at least two Samanya Oushadha Yoga and two Vishesha (condition-specific) Yogas used for Behavioral and Neurobehavioral Disorders and analyze their role in Samprapti Vighatana.									
CO 2,CO 3,CO 4,CO 7	Perceive two Kriyakrama (Procedure-based therapy) used in the management of Behavioral and Neurobehavioral Disorders and Analyse the Samprapti Vighatana for Behavioral and Neurobehavioral Disorders.	PSY-SET	MK	KH	D	DOPS,DOPS	F&S	III	-	NLHP18.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 18.1	Shayyamutra (Enuresis), Breath Holding Spells, Mritbhakshana (Pica) and Thumbsucking.	**Duration:** 1 Hour **Pre- Preparation:** **By the teacher:** 1.Provide resource material on Shayyamutra (Enuresis), Breath Holding Spells, Mritbhakshana (Pica) and Thumbsucking (PPT/Tutorial video/Handouts) 2.Divide the students into group(8-10 students) 3. Assign one case to each group **By the Student:** Expected to study the resource material and apply it to solve the case. **Activity** 1. Students assemble in assigned groups 2. Group discussion on assigned case -10 mins 3. Students are expected to – 1. Brief about the disease from the resource material 2. Identify the symptoms 3. Identify the etiology 4. Diagnose the case and identify the type. 5. Plan the Samprati 6. Design the management plan.

		6. Justify the treatment plan.
NLHT 18.2	Multidisciplinary approach in Behavioural and Neurobehavioral Disorder	**Duration:** 1 Hour **Pre-preparation** **By the Teacher:** 1.Divide the students in groups (5 to 8 students each) and assign different cases of Behavioural and Neurobehavioral Disorders. 2.Provide the references of multidisciplinary approach in Behavioural and Neurobehavioral Disorders. **By the Student:** 1.Students are expected to come prepared with different multidisciplinary management approaches in children with Behavioural and Neurobehavioral Disorders. 2.Understand the case assigned and apply the multidisciplinary approach. **Activity:** 1. Students assemble in groups 2. Group Discussion 10 mins 3. One of the group member presents the following A. Explain the status of the child in brief B. Point out the required multidisciplinary integration for the management of the child based on present status. C. Frame a multidisciplinary management protocol. D. Explain the mode of action of all disciplines and the pivotal role of Ayurveda in the management of present behavioral and neurobehavioral disorders.
NLHT 18.3	Pathya Behavioral and Neurobehavioral Disorders	**Duration:** 1 Hour **Pre-preparation:** **By the teacher:** Divide the group and assign the topic well in advance **By the Student:** 1. Frame the Ahara and Vihara Chart for Neurological Disorders. 2. Writes the script and validate it before the class Script contains

		A. Name of the student: Role played by the student B. Script dialogues C. Using of Manikins/task trainers wherever necessary **Activity**: (Clinical classroom/class) 1. Faculty introduce the topic 2. Groups execute the role play 3. Discussions on points to be highlighted A. Ahara in different Behavioral and Neurobehavioral disorders B. Vihara in different Behavioral and Neurobehavioral disorders **Role of the faculty during activity**: The teacher evaluates the students using a rating scale/checklist and provides feedback and inputs based on their performance. Rating scale 1. Clarity of explanation - 1 (Poor) to 5 (Excellent) 2. Demonstrates empathy and understanding of the patient's emotional state - 1 (Poor) to 5 (Excellent) 3. Uses understandable words for explaining Ahara and Vihara - 1 (Poor) to 5 (Excellent) 4. Actively engages the patient, allowing for questions and checking the reception of information - 1 (Poor) to 5 (Excellent) 5. Maintains appropriate eye contact throughout the interaction - 1 (Poor) to 5 (Excellent) 6. Displays open and approachable body language – 1 (Poor) to 5 (Excellent) 7. Manages tone of voice to suit the context. – 1 (Poor) to 5 (Excellent) 8. Maintains professionalism throughout the interaction - 1 (Poor) to 5 (Excellent).
NLHT 18.4	Oushadha Yogas used in Behavioural and Neurobehavioural Disorders.	**Duration:** 1 Hour **Pre-Preparation:** **By the teacher:** 1. The teacher will give an overview of formulations used in Behavioural and Neurobehavioural Disorders along with their rationale. 2. Select two relevant formulations used in Behavioural and Neurobehavioural Disorders, which have a reference in Ayurveda Classical Texts and are frequently used by practitioners of the respective state/ region. **By the student:**

		1. Students are expected to come with the knowledge of Management of Behavioural and Neurobehavioural Disorders. 2. Collect the reference of Oushadha Yogas used in the Behavioural and Neurobehavioural Disorders from various Samhita **Activity:** 1. Enlist the Oushadha Yogas used in the Behavioural and Neurobehavioural Disorders by the students 2. Enlist two Samanya Oushadha Yoga and two Vishesha (condition-specific) Yogas used for Behavioral and Neurobehavioral Disorders 3. Group chanting of the full Sloka (at least 3 times). 4. Explain the Sloka word-by-word and highlight key terms. 5. Discuss the conceptual meaning and interpretation. 6. Explain Practical relevance. 7. Encourage questions and participant involvement. 8. Analyze the role of formulation in Samprapti Vighatana 9. Analyze the practical application of the formulations in multiple disease conditions. **Role of Teacher:** Ensure proper pronunciation and understanding of appropriate meaning.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 18.1	Case Discussion: ASD/ ADHD/ Intellectual Disability/ Learning Disability	**Duration:** 3 Hours **Pre - Preparation:** **By the teacher:** 1. Schedule and ensure the availability of real or simulated cases/ case vignettes of ASD/ ADHD/ Intellectual Disability/ Learning Disability 2. Students are divided into groups (5-8 members in one group) and assigned a case. 3. Make the student understand the OPD/IPD manners during case-taking. **By the student:** The student is expected to come prepared with knowledge of Nidanapanchaka and Chikitsa for the diseases ASD/ ADHD/ Intellectual Disability/ Learning Disability. **Activity** In the clinical classroom: Assign a real/ simulated case/case vignette of ASD/ ADHD/ Intellectual

		Disability/ Learning Disability to each group Bedside: Case taking as per the protocol (in real case) A. Rapport building B. History taking C. Clinical Examination **Back in the clinical classroom:** 1. Students will discuss Samprapti Ghatakas of a given case of ASD/ ADHD/ Intellectual Disability/ Learning Disability. 2. Students are asked to present different cases/ parts of a case (e.g. History, Examination, Differential Diagnosis, Investigations, Management) 3. Explain the management and justify Samprapti Vighatana 4. Roleplay - Explain the care plan, Ahara-Vihara and prognosis to the parent/ guardian 5. Record the case in the record book.
NLHP 18.2	Case Discussion: Shayyamutra (Enuresis)/ Breath-Holding Spells	**Duration:** 3 Hours **Preparation:** **By the teacher:** 1. Schedule and ensure the availability of real/simulated cases/case vignette of Shayyamutra (Enuresis)/ Breath Holding Spells. 2. Students are divided into groups (5-8 members in one group) and assigned a case. 3. Make the student understand the OPD/IPD manners during case-taking **By the student:** The student is expected to come prepared with the knowledge of Nidanapanchaka and Chikitsa of diseases Shayyamutra (Enuresis)/ Breath Holding Spells. **Activity** **In the clinical classroom:** Assign real or simulated cases of Shayyamutra (Enuresis)/ Breath Holding Spells to each group **Bedside:** Case taking as per the protocol (in real case) A. Rapport building B. History taking C. Clinical Examination **Back in the clinical classroom:**

		1. Students will discuss Samprapti Ghatakas of a given case of Shayyamutra (Enuresis)/ Breath Holding Spells. 2. Students are asked to present different cases/ parts of a case (e.g. History, Examination, Differential Diagnosis, Investigations, Management) 3. Explain the management and justify Samprapti Vighatana 4. ROLE-PLAY - Explain the care plan, Ahara-Vihara and prognosis to the parent/ guardian 5. Record the case in the record book. 6. The teacher should discuss the referral criteria for Neurobehavioural Disorders.
NLHP 18.3	Integrated Child Development Center	**Duration:** 2 Hours **Objective:** To provide students with a comprehensive understanding of the function of the Integrated Child Development Centre (ICDC) and how various health, nutrition and stimulation activities are carried out in collaboration with different caregivers. **Pre-Preparation:** **By the Teacher:** The teacher has to identify the suitable ICDC for the visit and make necessary arrangements. **By the Student:** Students have to come prepared with different types of multidisciplinary interventions in a child with Behavioural and Neuro-Developmental Disorders of children. **Activity** 1. Students should visit the identified ICDC and observe the ongoing interventions. 2. The teacher assists in clarifying queries of the students or facilitates it by arranging interaction with the staff of ICDC. 3. Each student will submit a brief report of the observations in ICDC and structured feedback. Evaluation: The teacher evaluates the student based on the report and feedback.
NLHP 18.4	Kriyakramas (Procedure-based therapy) in Behavioural and Neurobehavioral Disorders.	**Duration:** 1 Hour **Pre-Preparation:** **By the Teacher:** 1. Identify two Kriyakrama (procedure-based therapy) used in Behavioural and Neurobehavioral Disorders, which are referenced in Ayurveda classical texts and frequently used by practitioners of the

		respective state/ region. 2. Scheduling the demonstration and arranging the patient/ Simulator. By the Student: Students are expected to study Behavioural and Neurobehavioral Disorders and their management in detail before the Activity. **Activity:** 1. The teacher/ therapist demonstrates the Kriyakrama to the patient. 2. Students are expected to observe – A. Pre-procedure specific to the procedure (like Handwashing, Wearing Cap/gloves/mask if needed, Collecting the ingredients and equipment, preparation of medicine, getting consent, fitness certificate if required, counseling the patient and caretaker) B. Procedure (Technique of procedure, communication with the patient and caretaker) C. Post-procedure specific to the procedure and explain the Do's and Don't to follow. 3. Assignment: Write the mode of action/ Samprapti Vighatana of the procedure 4. Record the procedure.

Topic 19 Atyayika Rogas (Emergency Paediatrics) (LH :3 NLHT: 2 NLHP: 3)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3	Define Status Epilepticus and describe the symptoms and management of Status Epilepticus.	CK	MK	K	CD,L&PPT ,L_VC	T-CS,PM, C-VC	F&S	III	-	LH
CO 2,CO 3	Describe the symptoms and management of Acute Breathlessness, Cardiorespiratory Arrest and Foreign Body in Respiratory Tract.	CK	MK	K	L_VC,CD,L&PPT	PM, C-VC,T-CS	F&S	III	-	LH
CO 2,CO 3	Describe the symptoms and management of Poisoning and Insect bites.	CK	MK	K	CD,L_VC,L&GD	PM, C-VC,PUZ	F&S	III	-	LH
CO 2,CO	Describe the symptoms and management of Shock in children.	CK	MK	K	CD,L&PPT	T-CS,O-QZ,PM	F	III	-	LH

3					,L_VC					
CO 2,CO 3	Apply the fluid resuscitation methods and techniques in paediatric emergencies.	CAP	DK	KH	PBL,FC ,D	O-GAME, CHK,PM	F&S	III	-	NLHT19.1
CO 2,CO 4,CO 7	Demonstrate the procedure of IV cannulation on pediatric task trainers.	PSY-GUD	DK	SH	RP,W,D-M	CHK,DOPS,RS,DOPS	F&S	III	-	NLHP19.1
CO 2,CO 7,CO 8	Demonstrate the steps to revive an unconscious child.	PSY-GUD	DK	SH	RP,SIM ,W,D-M	CHK,DOPS,DOPS,RS	F&S	III	-	NLHP19.2
CO 2,CO 3	Prepare for the administration of nebulization and per rectal medications used in paediatric practice.	CAP	DK	KH	EDU,FC,GBL	CHK,O-GAME,RS	F&S	III	-	NLHT19.2
CO 2,CO 3	Identify life-saving medications and enlist their indication.	CAP	DK	K	EDU,FC,GBL	O-GAME, CHK,RS	F	III	-	NLHP19.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 19.1	Fluid resuscitation methods and techniques.	**Duration** – 1 hour **Pre-Preparation** **By the Teacher** 1. Preparing the resource material on fluid resuscitation methods and techniques in paediatric emergencies (PPT/Videos/Handouts) 2. Manikin/real patient, Instruments, and equipment to demonstrate By the student: Study the resource material provided thoroughly.

		Activity: 1. Dividing the class into small groups for edutainment 2. Faculty displays a case vignette (which includes assessment of fluid status and weight measurement) at each round of the game with varying difficulty. 3. Student is expected to select the Type of fluid and plan the dose. 4. Demonstration of the fluid resuscitation technique on manikin or real patient by the faculty. 5. Compile fluid resuscitation methods and techniques in paediatric emergencies.
NLHT 19.2	Nebulization and per rectal medications used in Paediatric practice.	**Duration:** 1 Hour **Pre preparation** **By the Teacher :** 1. The teacher briefly introduces students to various indications of nebulization and per-rectal medications in paediatric practice by sharing the handouts/PPTs. 2. Required material /case vignettes (video, animations, movie clips, respiratory sounds, clinical case recordings, clinical drama, images, etc) to be collected before the session. **By the student:** Student is expected to have minimum/prior knowledge about indications of nebulization and per rectal medications before the session. **Activity** 1. Students are divided into groups 2. The teacher randomly displays animation/videos/sounds/movie clips etc related to the indication of the above procedures with varying levels of case difficulty at each level. 3. Students should identify the following a. Disease b. Procedure required c. Select a suitable drug, duration and dose **Role of a Teacher:** The teacher evaluates students' performance based on a checklist /rating scale/Scorecard.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 19.1	IV cannulation	**Duration -** 1 hour **Prerequisite /preparation** **By the Teacher:** 1. Prepare the IV cannula KIT, Manikin/task trainer before the session. 2. Share the resource material(PPT/Video/recorded lecture) on IV cannulation 1 week before the activity. **By the Student:** Students are expected to study the resource material before the activity. **Activity –** 1. Demonstration of IV cannulation by the faculty on task trainer/mannikin. 2. Students are divided into groups (5-8 students in one group) 3. Students are asked to demonstrate the procedure to their peers and practice the procedure. 4. Record the standard operative procedure in the activity record/logbook **Evaluation:** Faculty will evaluate using rating scale based on the student's performance. **Rating Scale** [Done: 2, Partly done: 1, Not Done: 0] **1. Pre-procedure:** A. Rapport building and assuring the patient for the procedure B. Hand hygiene and gloving C. Tourniquet application D. Site cleansing **2. Procedure:** A. Stabilize the vein B. Cannula selection C. Inserting the cannula and remove the needle D. Securing the cannula **3. Post-procedure:** A. Care for an IV cannula.
NLHP 19.2	Cardio-pulmonary resuscitation	**Duration:** 1 hour **Prerequisite/preparation** **By the Teacher:** 1. Sharing the resource material on CPR (Handout and Video)

		2. Preparing the instrument/equipment and paediatric Manikins before the session. **By the Student:** 1. Learning the resource material before the session. **Activity –** 1. Students are divided into groups (5-8 members in one group) 2. Demonstration of CPR on the paediatric manikin by the faculty 3. Demonstration of CPR on the paediatric manikin by the students in the group 4. Record the procedure. **Role of a Teacher**: The teacher evaluates students' performance based on a checklist /rating scale/Scorecard. **Rating Scale:** [Done: 2, Partly done: 1, Not done: 0] **Pre - Procedure :** Rapport building and assuring the caretaker for the procedure.(if present) **Procedure** 1. Assessing the patient by stimulus 2. Call for help 3. Position the manikin 4. Position of the rescuer 5. Perform chest compressions 6. Perform rescue breaths 7. Continue CPR/ weaning CPR **Post-procedure:** 1. Monitoring the patient.
NLHP 19.3	Lifesaving medications.	**Duration:** 1 Hour **Pre-Preparation** **By the Teacher:** 1. The teacher briefly introduces students to various emergency medicines (Related to Acute Breathlessness, Cardiorespiratory Arrest, Shock, Poisoning and Status Epilepticus) used in paediatric practice by sharing the handouts/PPT.A list of emergency medicines will be given to students.(See Appendix)

2. Required material /case vignettes (video, animations, movie clips, respiratory sounds, clinical case recordings, clinical drama, images) to be collected before the session.

By the student: The student is expected to come prepared with the provided resource material.

Activity:

1. Students are divided into groups
2. The teacher randomly displays emergency conditions through animation/videos/sounds/movie clips with varying levels of case difficulty at each level.
3. Students should identify the following

a. Diagnose the condition

b. Identify life-saving medications

c. Enlist their indication.

Role of a Teacher: The teacher evaluates students on their performance.

LIST OF EMERGENCY MEDICINES USED IN PAEDIATRICS

Respiratory Emergencies

- Swasanandam Gulika
- Rasasindooram
- Swasakutara rasa
- Abraka Bhasma
- Kastooribhairava rasa
- Salbutamol (Albuterol) – Bronchodilator for asthma and bronchospasm
- Ipratropium bromide – Anticholinergic bronchodilator
- Adrenaline (Epinephrine) – For anaphylaxis and severe asthma
- Dexamethasone – Corticosteroid for croup or severe asthma

2. Cardiovascular Emergencies

- Prabhakara vati
- Danwantharam Gulika

- Sringabhasma
- Yogendra rasa
- Sidhamakaradwaja
- Adrenaline (Epinephrine) – Cardiac arrest, anaphylaxis, bradycardia
- Atropine – For bradycardia or heart block
- Amiodarone – Antiarrhythmic for ventricular arrhythmias
- Dopamine – Inotropic support for shock or heart failure
- Norepinephrine (Noradrenaline) – Vasopressor for septic shock

3. Seizures and Neurological Emergencies

- Mansyadi kashaya
- Vatakulanthaka rasa
- Brihatvata Chintamani rasa
- Kalyanaka Grita
- Samvardhana ghrita
- Vacha churna
- Diazepam – For status epilepticus or febrile seizures
- Midazolam – For status epilepticus (intranasal or IV)
- Phenytoin – For seizure management
- Phenobarbital – For neonatal seizures or status epilepticus

4. Infections/Sepsis

- Rasasindoora
- Kaisoragulgulu
- Gandhakarasayana
- Rasamanikya
- Rasapippari

- Ceftriaxone – Broad-spectrum antibiotic for sepsis or meningitis
- Ampicillin – Antibiotic for bacterial infections, including meningitis
- Vancomycin – For resistant bacterial infections
- Clindamycin – For anaerobic infections and toxic shock syndrome

5. Metabolic and Endocrine Emergencies

- Karpoora rasa
- Balarka rasa
- Sankabhasma
- Sanjeevani vati
- Dextrose 10%, 25%, or 50% – For hypoglycemia
- Calcium gluconate – For hypocalcemia, hyperkalemia, or cardiac support
- Hydrocortisone – For adrenal insufficiency or severe shock
- Insulin – For diabetic ketoacidosis (DKA)

6. Allergic Reactions/Anaphylaxis

- Haridrakhanda
- Gandhakarasayana
- Arogyavardhini Rasa
- Laghusootasekhara rasa
- Adrenaline (Epinephrine) – First-line treatment for anaphylaxis
- Diphenhydramine (Benadryl) – Antihistamine for allergic reactions
- Methylprednisolone – Corticosteroid for severe allergic reactions

7. Fluid and Electrolyte Management

- Panchamrutha parpati
- Rasaparpati
- Karpoora churna
- Normal saline (0.9% NaCl) – For dehydration and shock
- Ringer’s lactate – Fluid resuscitation
- Oral Rehydration Solution (ORS) – For mild to moderate dehydration
- Potassium chloride – For hypokalemia

8. Pain and Fever Management

- Swarnamuktadi gulika
- Vettumaran Gulika
- Anandhabhairava rasa
- Sudarsana ghana vati
- Guluchee satwa
- Sootasekhara rasa
- Gulgulutiktakam ghrita
- Paracetamol (Acetaminophen) – For fever and mild pain
- Ibuprofen – For pain, fever, and inflammation

9. Poisoning and Overdose

- Villwadi Gulika
- Doshee vishari Gulika
- Sireeshadi vati
- Activated charcoal – For ingested poisons
- Naloxone – For opioid overdose
- N-Acetylcysteine (NAC) – For paracetamol (acetaminophen) overdose

		10. Miscellaneous • Magnesium sulfate – For torsades de pointes, severe asthma, or eclampsia • Sodium bicarbonate – For severe metabolic acidosis, hyperkalemia, or certain poisonings • Furosemide – For fluid overload or pulmonary edema

Topic 20 Bala Panchakarma (LH :5 NLHT: 0 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 3,CO 7	Enlist Rukshana methods. plain the indications, contraindications and methods of Udwartana.	CC	MK	K	L_VC,L &GD	CL-PR,WP, M-POS	F&S	III	-	LH
CO 3,CO 7,CO 8	Analyze the selection of medicines for Udwartana. Perceive the steps of Udwartana.	PSY-SET	MK	KH	D-M,D, DIS	P-PRF,INT, SBA	F&S	III	-	NLHP20.1
CO 3,CO 7	Enlist Bahya and Abhyanthara Snehana methods. Explain the indications, contraindications and methods of Abhyanaga, Moordhnitaila and Snehapana.	CC	MK	K	RLE,L_ VC,L& GD	CL-PR,M-POS,QZ	F&S	III	-	LH
CO 3,CO 7,CO 8	Analyze the selection of medicines for Abhyanaga, Moordha Taila and Snehapana. Demonstrate Abhyanga & Pichu.	PSY-GUD	MK	SH	D,D-BE D,DIS, D-M	P-PRF,SBA ,INT	F&S	III	-	NLHP20.2
CO 3,CO 7	Enlist types and methods of Swedana. Explain the indications, contraindications and methods of Pinda Sweda, Nadisweda and Upanaha.	CC	MK	K	L_VC,L &GD	M-MOD,W P,PUZ	F&S	III	-	LH
CO 3,CO	Analyze the selection of medicine and duration for Pinda Sweda, Nadisweda and Upanaha.	CAN	MK	KH	DIS,L& GD,D	INT,SBA	F&S	III	-	NLHP20.3

7,CO 8										
CO 3,CO 4,CO 7,CO 8	Demonstrate Shashtika Shali Pinda Sweda, Nadisweda and Upanaha.	PSY-GUD	MK	SH	D-M,D-BED,D	DOPS,CHK,P-PRF,DOPS	F&S	III	-	NLHP20.4
CO 3,CO 8	Explain the Indications, Contraindications, selection of medicines and SOPs of Vamana, Virechana, Nasya and Rakthamokashana. Explain the indications, contraindications, selection of medicines and SOPs of Vasti.	CC	MK	K	L&GD,DIS,SDL	INT,M-CHT	F&S	III	-	LH
CO 7,CO 8	Perceive Vamana, Virechana, Vasti, Nasya and Raktamokashana.	PSY-SET	MK	KH	PT,D,D-M	Log book,INT,CHK	F&S	III	-	NLHP20.5
CO 3,CO 7	Discuss the application of other Karmas - Ashchyotana, Seka, Anjana, Tarpana, Karnapurana, Karnadhoopana, Kavala, Gandusha.	CC	DK	KH	DIS,RLE,L&GD	M-POS,PUZ,INT	F	III	-	LH
CO 2,CO 4,CO 7,CO 8	Perceive Kriyakalpa in children (Ashchyotana, Seka, Tarpana and Karnapurana)	PSY-SET	MK	KH	D-M,PT,D	CHK,INT,Log book	F	III	H-SH	NLHP20.6

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

NLHP 20.1	Udwartana.	**Duration:** 1 Hour **Pre-Preparation** **By the Teacher:** 1. Arranging the real patient/manikin/pre-recorded video for a demonstration of Udwartana 2. Collection of various Udwartana Churna used in paediatric practice. **By the student**: Students should come prepared with Rukshana Methods in children and Udwartana procedure **Activity** 1. Teacher or therapist demonstrates the method of Udwartana in Children 2. The teacher opens a discussion on different kinds of Udwartana Churna used in different disease 3. Record the procedure **Role of a Teacher:** Demonstration of procedure and making sure that students analyse the selection of medicine. The teacher evaluates students based on the interaction and by giving a case scenario and asking the students to choose the appropriate Udwartana Churna.
NLHP 20.2	Snehana.	**Duration:** 1 Hour **Pre-Preparation** **By the Teacher:** 1. Arranging the real patient/manikin/pre-recorded Video for demonstration of Abhyanaga, Moordha Taila and Snehapana in children. 2. Collection of various Snehanas (Different Ghrita/Taila etc) used in Kaumarabhritya practice. By the student: Students should come prepared with the topic Snehana in children. **Activity** 1. The teacher or therapist demonstrates the method of Abhyanga, Moordha Taila and Snehapana in children. 2. The teacher opens a discussion on different kinds of Snehana used in different disease 3. Observe and record the post-procedure regimens and activity. 4. Hands-on training of different methods of Snehanas. **Role of a Teacher:** Demonstration of procedure and making sure that students analyse the selection of medicine. The teacher evaluates the students based on the interaction and by giving a case scenario and

		asking the students to choose the appropriate method of Snehana and appropriate medicine.
NLHP 20.3	Swedana I - Selection of method and dravya	**Duration:** 1 Hour **Pre-Preparation** **By the Teacher:** 1. Arranging the real patient/clinical video of patients requiring Pinda Sweda, Nadisweda and Upanaha 2. Collection of various Swedana Dravya **By the student:** Students should come prepared with the topic Swedana in children. **Activity** 1. The teacher opens a discussion on different methods of Swedana in different diseases in children. 2. The teacher presents different clinical cases of patients requiring Pinda Sweda, Nadisweda and Upanaha and discusses different Dravyas used. **Role of a Teacher:** The teacher evaluates students based on the interaction by giving a case scenario and asking the students to choose the appropriate method of Swedana and appropriate Dravya.
NLHP 20.4	Swedana II.	**Duration:** 1 Hour **Pre-Preparation** **By the Teacher:** 1. Arranging the real patient/manikin/recorded Video for demonstration of Shashtika Shali Pinda Sweda, Nadisweda and Upanaha in children. 2. Collection of various Swedana Dravya and equipment used in paediatric practice. **By the student:** Students should come prepared with the topic Swedana in children. **Activity** 1. The teacher or therapist demonstrates the method of Shashtika Shali Pinda Sweda, Nadisweda and Upanaha in children. 2. Observe and record the post-procedure regimens and activity. 3. Hands-on training of different methods of Swedana i.e., Shashtika Shali Pinda Sweda, Nadisweda and Upanaha in children. **Role of a Teacher:** The teacher evaluates students based on their performance using a checklist. **Checklist: Yes/No**

		1. Explains the procedure and take the consent 2. Explains the pre-procedure 3. Perform Shashtika Shali Pinda Sweda, Nadisweda and Upanaha optimally. 4. Explain the post-procedure regimens efficiently.
NLHP 20.5	Panchakarma in children	**Duration**: 3 hours **Prerequisite /preparation** **By the Teacher:** 1. Arranging the real patient/recorded Video for demonstration of Vamana, Virechana, Vasti, Nasya and Raktamokshana in children. 2. Ensure the arrangements in the theatre with all necessary prerequisites for the procedure. 3. Instruct the students about the code of conduct during the procedure. By the student: Students are expected to come prepared with the topic Panchakarma in children. **Activity –** 1. Demonstration of Vamana, Virechana, Vasti, Nasya and Raktamokshana in children on real patient/ pre-recorded video. 2. Discussion on Pre-procedure, Procedure and Post-procedure regimen and activity. 3. Record the procedure in the log book. **Role of a Teacher:** The teacher evaluates students based on the interaction and Checklist **Checklist:** 1. Skills of obtaining the consent: Perceived/Not perceived 2. Pre-procedure: Perceived/Not perceived A. Rapport building and assuring the patient of the procedure B. Collection of necessary Dravya and equipment 3. Procedure (SOP of Vamana, Virechana, Vasti, Nasya, and Raktamokashana in children): Perceived/Not perceived 4. Post-procedure (Post procedure regimens and activity): Perceived/Not perceived.
NLHP 20.6	Kriyakalpa in children	**Duration:** 1 hour **Pre-preparation:**

		By the Teacher: 1. Arranging the real patient/recorded video for a demonstration of Ashchyotana, Seka, Tarpana and Karnapurana in children. 2. Ensure the arrangements in the theatre with all necessary prerequisites for the procedure. 3. Instruct the students about the code of conduct during the procedure. **By the student:** Students are expected to come prepared with the topic of Ashchyotana, Seka, Tarpana and Karnapurana. **Activity –** 1. Demonstration of Ashchyotana, Seka, Tarpana and Karnapurana on real patient/ pre-recorded video. 2. Discussion on Pre-procedure, Procedure and Post-procedure regimen and activity. 3. Record the procedure. **Role of a Teacher**: The teacher evaluates students based on the interaction.

Topic 21 Kishora Swasthya (Adolescent Health) (LH :2 NLHT: 0 NLHP: 1)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 3,CO 8	Analyze the understanding of Kishora Swasthya (adolescent health) in Ayurveda. Define adolescence. Explain the stages of adolescence. Explain the physical, physiological and psychological changes during adolescence.	CAN	DK	KH	PER,PL ,FC,DIS	CL-PR,INT ,DEB	F&S	III	-	LH
CO 1,CO 3	Assess the physical, physiological and psychological changes during adolescence.	CE	DK	KH	GBL,PB L,EDU	O-QZ,O-GAME	F&S	III	-	NLHP21.1
CO 1,CO 2,CO 8	Enlist the health problems during adolescence. Explain adolescent sexuality	CC	MK	K	DIS,L& PPT	WP,O-QZ,QZ	F&S	III	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 21.1	Adolescence.	**Duration:** 1 Hour **Pre-Preparation** **By the Teacher:** 1. Dividing the students into groups 2. Case vignettes (videos/images) to be arranged before the session. **By the student:** The student is expected to come prepared with the topic **Activity** 1. Students gather in groups. 2. Teacher randomly displays videos/images. 3. Students should assess the physical, physiological and psychological changes. **Role of a Teacher:** The teacher evaluates students' performance based on a checklist /rating scale/Scorecard. **Checklist:** 1. Identifies the normal growth and development according to age accurately 2. Identifies physical, physiological and psychological changes in adolescence precisely 3. Identify the deviation in normal changes during adolescence. 4. Good Team Collaboration.

Topic 22 Anya Rogas (Miscellaneous Diseases) (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 2,CO 3	Describe the Inborn errors of metabolism, Congenital Rubella Syndrome, Celiac Disease, Spinal Muscular Atrophy, Guillain Barre Syndrome, Sickle Cell Anemia, Wilson's Disease, Utpullika, Ajagallika, Kukunaka and Talu Kantaka.	CK	DK	K	DIS,L_ VC,L& PPT	O-GAME,QZ ,WP	F	III	-	LH

CO 2,CO 3	Diagnose Inborn errors of metabolism, Congenital Rubella Syndrome, Celiac Disease, Spinal Muscular Atrophy, Guillain Barre Syndrome, Sickle Cell Anemia, Wilson's Disease, Utphullika, Ajagallika, Kukunaka and Talu Kantaka.	CE	DK	KH	PBL,FC ,ML,ED U	CHK,RS,O-GAME	F	III	-	NLHT22.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 22.1	Miscellaneous diseases	**Duration:** 1 Hour **Pre-Preparation** **By the Teacher:** 1. Dividing the students into groups 2. Case vignettes (videos/images) to be collected before the session. **By the student:** 1. Student is expected to come prepared with the topic Inborn errors of metabolism/ Congenital Rubella Syndrome/ Celiac Disease/ Spinal Muscular Atrophy/ Guillain Barre Syndrome/ Sickle Cell Anemia/ Wilson's Disease/Utphullika/Ajagallika/ Kukunaka/Talu Kantaka before coming to the session. **Activity** 1. Students gather in groups 2. Teacher randomly displays videos/images 3. Students are expected A. Identify the symptoms B. Diagnose the case **Role of a Teacher:** The teacher evaluates students' performance based on a checklist/rating scale/Scorecard. **Checklist:** 1. Identifies the symptom accurately 2. Diagnose the case correctly. 3. Good collaboration.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
2.1	CO 1,CO 3,CO 5,CO 6	Childhood Samskaras
3.1	CO 3,CO 7,CO 8	Navajata Shishu Paricharya and Pranapratyagamana
3.2	CO 1,CO 3	Ayu Pariksha Vidhi
3.3	CO 3,CO 5,CO 6	Neonatal disorders
4.1	CO 5,CO 6	Complementary feeding I (in the absence of Stanya)
4.2	CO 5,CO 6	Complementary feeding II (in the absence of Breastmilk)
4.3	CO 3,CO 5	Swarnaprashana
4.4	CO 4,CO 5,CO 8	Breast feeding week program.
4.5	CO 2,CO 3	Ksheeralasaka
5.1	CO 3,CO 5	Vyadhikshamatwa and Immunity I
5.2	CO 3,CO 5,CO 6	Vyadhikshamatwa and Immunity II
5.3	CO 4,CO 5,CO 6	RCH programmes and Perinatal care for Healthy Child
6.1	CO 2,CO 3	Concept of Phakka Roga
6.2	CO 2,CO 3	Kuposhana Janya Vyadhis and Nutritional Deficiency Disorders
8.1	CO 2,CO 3,CO 6,CO 8	Procedure based therapies and Oushadhas in Sahaja Vyadhis
8.2	CO 2,CO 3,CO 8	Surgical intervention and referral criteria of Congenital and Chromosomal disorders
9.1	CO 3,CO 6,CO 8	Management(Chikitsa) of tuberculosis in children.

9.2	CO 2,CO 3	Concept of Graha Roga in context of infectious diseases.
9.3	CO 3,CO 6	Management of different type of Jwara.
9.4	CO 2,CO 3	Oushadha yogas used for Krimi Chikitsa.
10.1	CO 2,CO 3	Oushadha Yoga in Pratishaya, Kasa, Shwasa..
10.2	CO 4,CO 6,CO 8	Ahara and Vihara for Pratishaya, Kasa, Shwasa
11.1	CO 3,CO 4,CO 6	Oushadha Yogas, Pathya in Aatisara, Grahani and Pravahika.
11.2	CO 3,CO 4,CO 6	Oushadha Yogas and Pathya used in Chhardi.
11.3	CO 2,CO 3,CO 6	Oushadha Yoga and Pathya in Vibandha.
12.1	CO 2,CO 3	Bheda and referral criteria of Pandu and Anemia.
12.2	CO 2,CO 3	Haemorrhagic Diseases in children.
12.3	CO 2,CO 3	Udara Roga: hepatomegaly and splenomegaly.
13.1	CO 2,CO 3,CO 4,CO 6	Diabetes Mellitus (Prameha)
13.2	CO 1,CO 2,CO 3,CO 6	Precocious and Delayed Puberty
14.1	CO 2,CO 3	Refererral criteria of Genito urinary disorders
14.2	CO 2,CO 3,CO 6	Scope of treatment & ahara-vihara plan in Mutra vaha Sroto Vikara
15.1	CO 2,CO 3,CO 6	Referral criteria & Pathya in Rheumatological disorders.
15.2	CO 2,CO 3,CO 6	Integrated treatment for Rheumatological Disorders

16.1	CO 2,CO 3,CO 6	Case Discussion: Arumshika
16.2	CO 2,CO 4,CO 6	Pathya in Twak Roga.
16.3	CO 2,CO 3	Oushadha Yogas used in Twak Roga
17.1	CO 2,CO 3,CO 4	Jalasheershaka (Hydrocephalus)
17.2	CO 2,CO 3,CO 4,CO 7	Communication Disorders.
17.3	CO 4,CO 6,CO 8	Pathya in Neurological Disorders.
17.4	CO 2,CO 3	Oushadha Yogas used in Neurological Disorders.
18.1	CO 2,CO 3	Shayyamutra (Enuresis), Breath Holding Spells, Mritbhakshana (Pica) and Thumbsucking.
18.2	CO 2,CO 3,CO 8	Multidisciplinary approach in Behavioural and Neurobehavioral Disorder
18.3	CO 4,CO 6,CO 8	Pathya Behavioral and Neurobehavioral Disorders
18.4	CO 2,CO 3	Oushadha Yogas used in Behavioural and Neurobehavioural Disorders.
19.1	CO 2,CO 3	Fluid resuscitation methods and techniques.
19.2	CO 2,CO 3	Nebulization and per rectal medications used in Paediatric practice.
22.1	CO 2,CO 3	Miscellaneous diseases

Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Practical No*	CO No	Practical Activity details
2.1	CO 1,CO 3	Assessment of Growth I
2.2	CO 1,CO 3	Assessment of Growth II
2.3	CO 1,CO 3	Status of Dhatu
2.4	CO 1,CO 3	Undernourished child
2.5	CO 1,CO 4	Assessment of Developmental Milestones in normal child
2.6	CO 1,CO 2,CO 4	Assessment of Developmental Delay
2.7	CO 1,CO 2,CO 4	Case of Developmental Delay
3.1	CO 3,CO 7,CO 8	Neonatal Resuscitation and Intranatal care.
3.2	CO 1,CO 7	Examination of Newborn and Assessment of gestational age.
3.3	CO 3,CO 4,CO 7	Newborn care after discharge
3.4	CO 2,CO 3	Neonatal seizures /Akshepaka and Skandapasmara.
3.5	CO 2,CO 3	Neonatal diseases
3.6	CO 2,CO 3	Case of Neonatal Jaundice.
4.1	CO 4,CO 7,CO 8	Breastfeeding techniques
4.2	CO 5,CO 6	Complementary feeding Survey
4.3	CO 1,CO 3,CO 4,CO 8	Stanya Vriddhi, Stanya Kshaya and Stanya Pareeksha

4.4	CO 5,CO 7	Preparation of Swarnaprashana
5.1	CO 1,CO 4,CO 5,CO 6	Nutritional Assessment in children
5.2	CO 3,CO 4,CO 5	Parent Counselling on Immune modulation
5.3	CO 4,CO 5,CO 7,CO 8	Immunization in children
6.1	CO 2,CO 3,CO 6	Case Discussion: Malnutrition
7.1	CO 2,CO 3	Calculation of Pediatric Drug Doses
7.2	CO 2,CO 4,CO 7	Application of Samprapti Gatakas in a Pediatric Case: Part I
7.3	CO 2,CO 3	Application of Samprapti Gatakas in a Pediatric Case: Part II
7.4	CO 2,CO 3,CO 6,CO 7	Clinical case taking
7.5	CO 2,CO 4,CO 6,CO 8	Conseling regarding patient care
7.6	CO 2,CO 3,CO 6	Pediatric Ethobotonical Survey of Herbal Garden
8.1	CO 2,CO 3,CO 8	Turner syndrome
8.2	CO 2,CO 3,CO 8	Down syndrome
8.3	CO 2,CO 3,CO 4,CO 8	Prevention of Congenital anomalies
9.1	CO 2,CO 3,CO 4	Case Discussion: Auspasagika Jwara and Krimi Roga
9.2	CO 6,CO 8	Pathya and Kriyakrama used in Jwara and Krimi.
10.1	CO 2,CO 3,CO 7	Examination of Ear and Throat
10.2	CO 2,CO 3,CO 4	Case Discussion: Pratishyaya.
10.3	CO 2,CO 3,CO 4	Case Discussion: Kasa.

10.4	CO 2,CO 3,CO 4	Case Discussion: Shwasa.
10.5	CO 7,CO 8	Kriyakrama used in management of Pratishaya,Kasa & Shwasa
11.1	CO 3,CO 4,CO 6	Physiological basis and composition of various ORT
11.2	CO 3,CO 7,CO 8	Kriyakrama used in the management(Chikitsa) of Chhardi.
11.3	CO 3,CO 7,CO 8	Kriyakrama used in the management of Vibandha.
11.4	CO 2,CO 3	Case Discussion:Mukhapaaka, Gulma, Gudabramsa and Parikartika.
11.5	CO 2,CO 3	Signs and symptoms of GI and Liver disorders
11.6	CO 2,CO 3,CO 4	Case Discussion: Maha Stroto Vikara.
12.1	CO 2,CO 3,CO 6	Complementary, alternative treatment protocol, Pathya in Anemia.
12.2	CO 3,CO 7,CO 8	Kriyakrama used in management of Pandu
12.3	CO 2,CO 3,CO 6	Complementary, alternative treatment protocol, Pathya in Kamala.
12.4	CO 3,CO 7,CO 8	Kriyakrama used in the management of Kamala.
12.5	CO 2,CO 3,CO 4,CO 6	Case Discussion: Pandu, Anaemia and Kamala.
13.1	CO 2,CO 3,CO 7	KriyaKrama in T1DM
14.1	CO 2,CO 3,CO 4	Examination of kleda agni kosta in mutra and shukra vaha srotas
14.2	CO 3,CO 4,CO 7	Kriya karma in Mutra Vaha Sroto Vikara
15.1	CO 3,CO 7,CO 8	Kriya Krama in Rheumatological disorders
15.2	CO 2,CO 3,CO 4,CO 7	Case Discussion: Amavata
15.3	CO 2,CO 3,CO 4	Nidanapnachaka of Rheumatological disorders
16.1	CO 2,CO 3,CO 4,CO	Case Discussion: Kusta/ Charmadala/ Visarpa.

	6	
16.2	CO 4,CO 7,CO 8	Kriyakramas (Procedure-based therapy) in Twak Roga.
17.1	CO 2,CO 3,CO 4,CO 7	Case Discussion: Apasmara.
17.2	CO 2,CO 3,CO 4,CO 7	Case Discussion: Cerebral palsy
17.3	CO 2,CO 3,CO 7,CO 8	Kriyakramas (Procedure-based therapy) in Neurological Disorders in Children
18.1	CO 2,CO 3,CO 4,CO 7	Case Discussion: ASD/ ADHD/ Intellectual Disability/ Learning Disability
18.2	CO 2,CO 3,CO 4,CO 7	Case Discussion: Shayyamutra (Enuresis)/ Breath-Holding Spells
18.3	CO 3,CO 8	Integrated Child Development Center
18.4	CO 2,CO 3,CO 4,CO 7	Kriyakramas (Procedure-based therapy) in Behavioural and Neurobehavioral Disorders.
19.1	CO 2,CO 4,CO 7	IV cannulation
19.2	CO 2,CO 7,CO 8	Cardio-pulmonary resuscitation
19.3	CO 2,CO 3	Lifesaving medications.
20.1	CO 3,CO 7,CO 8	Udwartana.
20.2	CO 3,CO 7,CO 8	Snehana.
20.3	CO 3,CO 7,CO 8	Swedana I - Selection of method and dravya
20.4	CO 3,CO 4,CO 7,CO 8	Swedana II.
20.5	CO 7,CO 8	Panchakarma in children
20.6	CO 2,CO 4,CO 7,CO 8	Kriyakalpa in children
21.1	CO 1,CO 3	Adolescence.

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (200)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-KB	1	100	100	60	10 (Set-TB)	30	200	300

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	3 PA & First TT	3 PA & Second TT	3 PA	**UE****

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
**University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 6	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total _/60 Marks	Term Assessment (…./30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

Topics for Periodic Assessments

	Paper 1
PA 1	Topic 1,2
PA 2	Topic 3
PA 3	Topic 4
Term Test 1	Entire Syllabus of Term 1
PA 4	Topic 6,7,8
PA 5	Topic 9,10,11
PA 6	Topic 11,12
Term Test 2	Entire Syllabus of Term 2
PA 7	Topic 14,15,16
PA 8	Topic 16,17,18
PA 9	Topic 19,20,21

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-KB
PAPER-I
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

6 F : Distribution of theory examination

Paper 1 (KAUMARABHRITYA)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
1	**Introduction to Kaumarabhritya**	1	Yes	No	No
2	**Bala Samvardhana (Growth and Development)**	7	Yes	Yes	No
3	**Navajata Vijnana (Neonatology)**	11	Yes	Yes	Yes
4	**Stanya Vijnana (Breast Milk)**	11	Yes	Yes	Yes
5	**Bala Poshana (Child Nutrition) & Vyadhikshamatva (Immunity)**		Yes	Yes	Yes
6	**Kuposhana Rogas (Nutritional disorders)**	7	Yes	Yes	No
7	**Balaroga Pariksha Vidhi & Chikitsa Siddhantha (Pediatric Examination and treatment principles)**		Yes	Yes	No
8	**Kulaja and Sahaja Rogas (Genetic and Congenital Disorders)**	5	Yes	Yes	No
9	**Graha Rogas and Aupasargika Rogas (Infectious Diseases)**	8	Yes	Yes	No
10	**Swasana Rogas [Disorders of Respiratory system]**	10	Yes	Yes	Yes
11	**Mahasrota Roga [Gastro Intestinal Disorders]**		Yes	Yes	Yes
12	**Rasa Rakta Rogas [Disorders of blood and cardiovascular system]**	10	Yes	Yes	Yes
13	**Antahsravee Granthi Rogas (Disorders of Endocrine System)**		Yes	Yes	Yes
14	**Mutravaha Sroto Rogas (Disorders of Genito urinary system)**	5	Yes	Yes	No
15	**Sandhi Rogas (Rheumatological Disorders)**		Yes	Yes	No
16	**Twak Rogas (Dermatological Disorders)**	13	Yes	Yes	Yes
17	**Sira Snayu Rogas (Nervous system disorders)**		Yes	Yes	Yes
18	**Unmada Rogas (Behavioral and Neurobehavioral disorders)**		Yes	Yes	Yes
19	**Atyayika Rogas (Emergency Paediatrics)**	12	Yes	Yes	Yes
20	**Bala Panchakarma**		Yes	Yes	Yes
21	**Kishora Swasthya (Adolescent Health)**		Yes	No	No
22	**Anya Rogas (Miscellaneous Diseases)**		Yes	No	No
Total Marks		**100**			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 100-mark question paper shall contain:
   - 20 MCQs
   - 8 SAQs
   - 4 LAQs

7. MCQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 3.
   - Questions from the Nice to Know part of syllabus shall not exceed 2.

8. SAQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 1.
   - No questions shall be drawn from the Nice to Know part of syllabus.
   - SAQs shall assess understanding, application, and analysis, rather than simple recall.

9. LAQs:
   - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
   - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
   - Number of LAQs should not exceed one per topic unless maximum marks exceed 20 for the topic.

10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

S.No	Heads	Marks
1	**Skill based Examination** 1. Diagnostic station (Lab report/Xray Report/USG report etc): 5 marks 2. Demonstration Station (Newborn resuscitation/Breastfeeding/Breast milk examination etc): 10 marks 3. Case-based evaluation/Situational Judgment test & referral Station: 5 marks 4. Prescription writing Station: 5 marks 5. Dosage station/PathyaPathya Station: 5 marks	30 Marks
2	**Practical CaseTaking** A. History taking: 5 marks B. Preliminary data, Growth, and Development Assessment: 5marks C. Systemic examination: 10 marks D. Dosha, Dhatu Pareesha: 5 marks E. Investigations: 5 marks F. Differential Diagnosis/diagnosis: 5 marks G. Treatment protocol and justification: 10 marks H. Prescription and counseling of parent/ caretaker: 10 marks I. Communication skill, Confidence, Body language: 5 marks	60 Marks
3	**Structured Viva** Total 15 questions of varied difficulty level like easy, medium and difficult. • Question 1: Topic 1,2,3 • Question 2: Topic 4,5 • Question 3: Topic 6,7,8,9 • Question 4: Topic 10,11,12,13 • Question 5: Topic 14,15,16	60 Marks

	• Question 6: Topic 17,18,19 • Question 7: Topic 20,21,22 • Question 8: Topic 1,2,3,4,5 • Question 9: Topic 6,7,8,9, • Question 10: Topic 10,11,12,13 • Question 11: Topic 14,15,16,17, • Question 12: Topic 18,19,20,21,22 • Question 13: Topic 1,2,3,4,5 • Question 14: Topic 6,7,8,9,10,11,12,13 • Question 15: Topic 14,15,16,17,18,19,20,21,22 **Communication & Confidence**: 5 Marks	
4	**Practical Record** 1. Comprehensive and Veracity (2 mark) 2. Complete case record (2 mark) 3. Documentation and presentation (2 marks) 4. Minimum number of cases (4 marks) **Record Content** - • Neonatal Case Sheet - 3 • Assessment of Growth (Status of Dhatu and Undernourishment) - 4 • Developmental Disorder Case Sheet - 4 • Nutrition Assessment Case Sheet - 2 • Nutritional deficiency Disorders -2 • Sroto Vikara Case Sheet - 10	10 Marks
5	**Elective**	10 Marks
6	**Internal Assessment**	30 Marks
Total Marks		**200**

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S.No	Resources
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Syllabus Committee

KAUMARABHRITYA	
Eminent Recourse Panel - Kaumarbharitya (UG)	
1.	Vaidya Jayant Deopujari, Chairperson NCISM
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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)

Samhita Adhyayan-3
(Study of Ayurveda Classical Text)

(SUBJECT CODE : AyUG-SA3)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

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NCISM

III Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-SA3

Samhita Adhyayan-3

(Study of Ayurveda Classical Text)

Summary

Total number of Teaching hours: 150			
Lecture (LH) - Theory		**50**	**50(LH)**
Paper I	50		
Non-Lecture (NLHT)		**100**	**100(NLH)**
Paper I	100		
Non-Lecture (NLHP)		**0**	
Paper I	0		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	100	-	75	10 (Set-TC)	15
Sub-Total	100	100			
Total marks	200				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

Samhita Adhyayan-3 (SA-3) is designed to enhance students' understanding of Ayurvedic classical texts by focusing on their textual structure, explanatory methods, and clinical applications. Recognizing the Charaka Samhita's vast contributions, SA-3 takes it as a model text. This curriculum revision ensures that students not only appreciate the traditional and classical significance of Samhitas but also apply their principles in clinical practice. A key focus is on decoding tools such as Tantrayukti and Vyakhya, which aid in comprehending the structured presentation of Ayurvedic knowledge.

The curriculum integrates innovative teaching methods, blending ancient learning approaches like Patha (recitation), Avabodha (comprehension), and Anushthana (application and evaluation) with modern clinical skill development. The content comprises 54 chapters from Charaka Samhita Uttarardha, including Chikitsasthana, Kalpasthana, and Siddhisthana, ensuring a comprehensive grasp of Ayurvedic treatment principles, detoxification therapies, and procedural mastery. Each chapter follows a structured approach, beginning with Adhyaya Parichaya (introduction), Siddhanta-Vivarana (explanation of key principles), and Adhyaya Samgraha (summary) to help students systematically understand the text.

To encourage active learning, SA-3 incorporates practical, research-oriented activities, such as applying Tantrayukti, analyzing commentaries (Vyakhya), comparing Samhita concepts, evaluating Panchakarma procedures in clinical settings, and engaging in manuscript studies. Additional activities like case studies, flipped classroom discussions, and practitioner interviews bridge theoretical knowledge with real-world practice. This approach ensures that students develop strong interpretative skills, practical expertise, and a deeper appreciation of Ayurvedic wisdom, preparing them for both academic and clinical excellence.

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Course Code and Name of Course

Course code	Name of Course
AyUG-SA3	Samhita Adhyayan-3

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-SA3 At the end of the course AyUG-SA3, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Justify the methodology of structuring Samhitas and assess the importance of decoding Samhitas using Tantrayukti and Vyakhya.	PO2,PO9
CO2	Apply Samhita Sutras for clinical decision-making in patient care.	PO1,PO3
CO3	Interpret stage-wise treatment plans based on the principles outlined in Samhitas.	PO3,PO5
CO4	Appraise Rasayana and Vajikarana, its significance in health promotion and management of diseases.	PO1,PO5
CO5	Evaluate therapeutic procedures and identify potential complications along with their management.	PO4,PO5
CO6	Analyze the principles for appropriate selection of formulations and their application in Chikitsa.	PO3,PO5
CO7	Recognize the importance of Samhita-based practices in achieving positive therapeutic outcomes, supported by research evidence and clinical studies that validate traditional methodologies and their efficacy in contemporary healthcare.	PO5,PO6,PO7
CO8	Develop and implement ethical principles, moral values, and effective communication skills as healthcare professionals.	PO1,PO8,PO9

Table 2 : Contents of Course

Paper 1 (Samhita Adhyayan - 3)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Cha.Chi.1.Rasayana Adhyaya** **1. Abhayamalakiya Rasayana Pada** 1.1. Bheshaja Paryaya, classification of medicines (Bheshaja & Abheshaja Prakara), benefits of Rasayana and Vajikarana, and detailed types of Rasayana. 1.2 Indications and contraindications of Haritaki Prayoga and key formulations like Brahma Rasayana, Chyawanaprasha, and Haritaki Yoga. **2. Pranakamiya Rasayana Pada** 2.1 Gramya Ahara & Vihara and their effects on health. 2.2. Rasayana Yogas - Amalaki Rasayana, Nagabala Rasayana, and Bhallataka Rasayana. **3. Karapratichitiya Rasayana Pada** 3.1Amalakayasa Rasayana Kevala Amalaka Rasayana, Lauhadi Rasayana, Medhya Rasayana, Pippali Rasayana, Pippali Vardhaman Rasayana, Triphala Rasayana, and Shilajatu Rasayana. **4. Ayurveda Samutthaniya Rasayana Pada** 4.1 Indrokta Rasayana and Achara Rasayana 4.2 Importance of Pranacharya Vaidya, ethical aspects of Chikitsa.	1	40	1	0	0
2	**Cha.Chi. 2.Vajikarana Adhyaya** **1. Samyogasharamuliya Vajikaran Pada** 1.1. Importance of Vajikarana	1		1	0	0

	1.2. Various Vajikarana Yoga -Brumhani Gutika, Vajikarana Ghrita Vrushya Yoga, etc. **2.Asikta Ksheerik Vajikaran Pada** 2.1 Vrukshya Ksheera, Vrushya Dadhisara, Vrushya shashtika Odan etc. **3. Mashaparnabhritiya Vajikaran Pada.** 3.1Specific cow's milk for Vajikaran, Shatavari ghrita etc. **4.Pumanjatabaladikam Vajikaran Pada.** 4.1 Shukra Pravritti, Prashasta ShukraGuna 4.2 Vajikarana Nirukti					
3	**Cha. Chi .3. Jwara Chikitsitam** 1. Jwara Prakruti, Pravritti, Prabhava, Poorvarupa, Adhishthana, Pratyatma Lakshana. 2. Jwara classification, Jwara Samanya Samprapti Lakshana, Sadhyasadhyata. 3. Jwara Chikitsa Sutra, Tarun Jwara Chikitsa Sutra, Dhatugata Jwara Chikitsa Sutra, Samsrustha Jwara Chikitsa Sutra, Sannipataj Jwara Chikitsa Sutra. 4. Vishama Jwara Chikitsa, Punaravartak Jwara Chikitsa Sutra, Shadanga Paneeya, ten types of Yavagupaan in Jwara. 5. Ghruta Prayoga, Ksheera Prayoga in Jeerna Jwara, Samshodhan Chikitsa, Daivavyapashraya Chikitsa in Jwara.	1		2	0	0
4	**Cha. Chi.4.Raktapitta Chikitsitam** 1.Raktapitta Hetu, Samanya Samprapti, Lakshana, Sadhyasadhyata, Doshanusara Raktapitta Lakshana, Sadhyasadhyata. 2.Gati Bheden Sadhyasadhyata of Raktapitta, Raktapitta Chikitsa Sutra. 3.Gudagata Raktapitta Chikitsa, Nasagata	1		1	0	0

	Raktapitta Chikitsa. 4. Raktapitta Shamana Yoga, Vasa Ghrita, Shatavaryadi Ghrita.					
5	**Cha. Chi .5. Gulma Chikitsitam** 1. Gulma Hetu, Samanya Samprapti, Lakshana and Sadhyasadhyata 2.Gulma types, their Lakshana and Chikitsa 3.Gulma Chikitsa Yoga such as Tryushanadi Ghrita, Hingu-Saurvachaladya Ghrita, Pippalyadya Ghrita, Ksheerashatpala Ghrita, Mishraka Sneha etc.	1		1	0	0
6	**Cha.Chi. 6. Prameha Chikitsitam** 1.Prameha Hetu, Samanya Samprapti, Sankhya Samprapti, Poorvarupa, Lakshana and Sadhyasadhyata. 2.Prameha Chikitsa Sutra. 3.Different types of Kwatha Prayoga in Kaphaj Prameha, Pittaj Prameh. 4.Prameha Chikitsa Yoga Such as Phalatrikadi Kwath,Madhvasava, Peya Prayoga, etc.	1		1	0	0
7	**Cha. Chi.7.Kushtha Chikitsitam** 1.Kushtha Hetu, Samanya Samprapti, Sankhya Samprapti, Lakshana and Sadhyasadhyata 2.Kushtha Samanya Chikitsa Sutra 3.Kushtha Chikitsa Yoga such as Madhvasava, Kanakabindvarishta, Siddharthaka Yoga, Various types of Lepa, Tiktashatpala Ghrita, Mahatiktaka Ghrita, Mahakhadira Ghrita, etc. 4.Shwitra and Kilasa hetu, Lakshana and Chikitsa	1		1	0	0
8	**Cha.Chi 8.Rajayakshma Chikitsitam** 1.Rajayakshma Chatvari Aayatanani, Samanya Samprapti, Lakshana.	1		1	0	0

	2.Purvarupa of Rajyakshma. 3.Rajayakshma Trirupa, Shadrupa, Ekadasharupa 4. Rajayakshma Chikitsa Sutra 5. Rajayakshma Chikitsa Yoga such as Yavani Shadava, Sitopaladi,Talishadya yoga, Jivantyadi Ghrita etc. Jugupsa Chikitsa.					
9	**Cha. Chi.9.Unmada Chikitsitam** 1. Unmada Hetu, Samanya Samprapti, Samanya Lakshana. 2.Unmada Bhedha, Vataj, Pittaj, Kaphaj, Sannipataj, Agantuj Unmad Lakshana. 3.Unmada Chikitsa Sutra, Agantuja Unmada Hetu, Agantuja Unmada Chikitsa. 4.Vigata Unmada Lakshana, Unmada Chikitsa Yoga. 5. Kalyanaka Ghrita, Mahakalyanaka Ghrita, Mahapaishachika Ghrita, Lashunadya Ghrita, Purana Ghrita, Siddharthaka Yoga.	1		1	0	0
10	**Cha.Chi.10.Apasmara Chikitsitam** 1.Apasmar hetu, Samanya Samprapti, Samanya Lakshana. 2.Apsmar bheda,their lakshana, and Sadhyaasadhyata. 3 Apasmar Samanya Chikitsa Sutra 4.Apasmar - Chikitsa Yoga such as Panchagavya Ghrita, Mahapanchagavya Ghrita, Brahmi Ghruta etc. 5.Atattvabhinivesha hetu,Lakshana, Chikitsa	1		1	0	0
11	**Cha. Chi.11.Kshataksheena Chikitsitam** 1. Kshataksheena Hetu, Samprapti, Poorvarupa, Lakshana and Sadhyaasadhyata 2. Kshataksheena Chikitsa 3. Shaman yogas such as Lakshadi yoga, Eladi	1		1	0	0

	Gutika, Amruta prasha Gruta, Sarpi Guda,Nagabala Rasayana etc.					
12	**Cha. Chi. 12.Shwayathu Chikitsitam** 1. Shwayathu Bheda, Nidana, Samprapti, 2. Samanya Lakshana and Sadhyasadhyata 3. Vataja, Pittaja, Kaphaja Shotha Lakshana 4. Shwayathu Chikitsa according to Avastha and according to Dosha-Pradhanya 5. Chikitsa Yoga Gandiradyarishta, Ashtashatarishta, Punarnavadyarishta, Kamsaharitaki,Ksharagutika, 6. Eka Deshaja Shotha	1		1	0	0
13	**Cha. Chi.13.Udara Chikitsitam** Udara Roga Samanya Hetu, Purvarupa, Samprapti, Samanya Lakshana and Sadhyaasadhyata Ashtodara and their Hetu, Samprapti and Lakshana Samanya and Avasthika (according to Dosha predominance) Chikitsa of Udara Roga Shaman Yogas such as Takraprayoga, Kshiraprayoga, Narayana Churna, etc.	1		1	0	0
14	**Cha. Chi.14.Arsha Chikitsitam** 1.Types of Arsha, Adhisthan, Samsthan of Arshas, Purvarupa. 2.Nidan, Lakshan, Saadhyaasadhyata of Arshas based on dosha predominance. 3.Arsha Chikitsa, Ardra Arsha Chikitsa. 4.Lakshana and Chikitsa of Raktaj Arshas in association with dosha, Importance of Takra in Arsha. 5. Shamana Yoga, Takrarishta, Abhayarishta, Dantyarishta, Phalarishta, Kanakarishta, Kutajadi Rasakriya, Piccha Basti.	1		1	0	0
15	**Cha. Chi.15.Grahani dosha Chikitsitam** 1.Ajeerna: Hetu and Lakshana.	1		2	0	0

	2. Grahani: Purvarupa, Lakshana, Prakruta Karma, and Bheda with Vataja, Pittaja, Kaphaja, Sannipataja variants, including Hetu, Lakshana, and Chikitsa. 3.Takra Prayoga, Takrarishta Yoga, and the significance of Sneha Prayoga in Mandagni. 4. Agni: Factors affecting it, Atyagni Samprapti, Lakshana, and Chikitsa. 5. Shamana Yogas: Dasamuladya Ghrita, Chitrakadi Vati, Trayushanadya Ghrita, Panchamuladya Ghrita, Bhunimbadya Churna, Mudhukaasava, Pindaasava, Mulaasava, Madhvaarishta.					
16	**Cha. Chi.16.Panduroga Chikitsitam** 1.Panduroga Bheda, Hetu, Samprapti, Purvarupa, Samanya Lakshana. 2.Vataja, Pittaja, Kaphaja, Tridoshaja, Mridbhakshanajanya Panduroga Hetu, Lakshana, Sadhyasadhyata. 3. Panduroga Samanya Chikitsa, Doshanusara Chikitsa. 4. Kamala Bheda, Lakshana, Chikitsa, Halimaka Lakshana, Chikitsa. 5. Shaman Yogas, Navayasa Churna, Mandura Vataak, Yogaraj, Dadimadya Ghruta, Punarnava Mandura.	1		1	0	0
17	**Term 1 Non Lecture theory Activities** Activities to be conducted in the entire term 1.	1		0	34	0
18	**Cha Chi.17.Hikka Shwasa Chikitsitam** 1.Hikka Shwasa Hetu, Samanya Samprapti, Purvarupa. 2.Hikka types, Vishesha Lakshana, Sadhyasadhyata, Shwasa types, Vishesha Lakshana, Sadhyasadhyata.	2	30	1	0	0

	3. Hikka Shwasa Samanya Chikitsa, Dhumapaan, Nasya Prayoga. 4.Shaman Yogas, Shatyadi Churna, Muktadya Churna, Dashamuladya Ghrita. **5.**Manasheeladi Ghrita, Tejovatyadi Ghrita.					
19	**Cha. Chi.18.Kasa Chikitsitam** 1.Kasa bhedha, Purvarupa, Samprapti. 2.Vataj kasa, Pittaj Kasa, Kaphaj Kasa,Kshataj Kasa and Kshayaj Kasa , their hetu, Samprapti, Lakshana and Chikitsa. 3. Shaman yogas such as Kantakari Ghrita, pippalyadya Ghrita, Trayushanadya Ghrita, Agastya Haritaki, Guduchayadi Ghrita	2		1	0	0
20	**Cha. Chi.19.Atisara Chikitsitam** 1.Hetu, Samprapti, Lakshana, Chikitsa of Vata Atisara, Pitta Atisara, Kapha Atisara, Tridoshajatisara (Sannipatatisara), Agantuja Atisara, Amaj Atisara. 2. Agantu Atisara Samanya Chikitsa, Pramatya Prayoga in Madhyama Dosha of Atisara. 3. Sangrahi Aoushadhi Nishedha, Samanya Chikitsa in Aamatisara, Takra Prayoga, Mamsa Prayoga, Khada Yusha Prayoga in Atisara. 4. Guda Bhramsha Chikitsa, Piccha Basti Prayoga, Sannipataj Atisara Chikitsa. 5.Shamana Yogas, Changeri Ghruta, Chavya Ghruta, Dashamoola Ghruta, Dravyadi Ghruta.	2		1	0	0
21	**Cha. Chi.20.Chhardi Chikitsitam** 1.Chhardi Bheda, Purvarupa, 2.Chhardi Bhedanusarena Hetu, Samprapti and Lakshana, Sadhyasadhyata , and Chikitsa sutra. 3. Chhardi Samanya Chikitsa	2		1	0	0

	4. Jeerana Chhardi lakshana and Chikitsa				
22	**Cha. Chi.21.Visarpa Chikitsitam** 1.Visarpa Vyakhya, Bheda, Sapta Dravya Samgrah, Visarpa Hetu, Samprapti, Lakshana according to Dosha-Pradhanya, Chikitsa. 2.Sthananusara 3.Visarpa Bheda, Lakshana, Sadhyasadhyata, Chikitsa, Upadrava Vyakhya. Visarpa Samanya Chikitsa, Importance of Raktamokshana, Bahiparimarjana Chikitsa. 4.Importance of Pradeha, Pralepa Yogas in Visarpa. 5.Pathya and Apathya Ahara in Visarpa.	2	1	0	0
23	**Cha. Chi.22.Trishna Chikitsitam** 1.Trushnaroga Hetu, Samprapti,Purvarupa, Samanya Lakshana 2.Lakshana and chikitsa sutra of Vata-Pitta-Kapha-Aamaja-Kshyaja-Upasargaja Trushnaroga. 3. Indications for Sheetajalapaan and Ushna jala paan 3. Significance of Endra Jala, Trunapanchamula Sadhita Jala. Dhanyaambu	2	1	0	0
24	**Cha. Chi.23.Visha Chikitsitam** 1.Visha types, Visha guna, Gara visha and Dushi Visha. Lakshana, Chikitsa. 2.Enumerate Visha upakram. 3.Shankha visha lakshana and Chikitsa. 4. Shaman yogas Mritasanjivana Agad. Kshara Agad, Grihadhumadi yoga, Mahagandhahasti agad, Chandanadi yoga, Amruta ghruta	2	1	0	0
25	**Cha.Chi.24.Madatyaya Chikitsitam**	2	1	0	0

	1. Definition of Mada, Stages of Madatyaya 2.Types of Madatyaya and their Hetu, Lakshna and Samprapti, Chikitsa Sutra 3.Shat-trik 4. Dhwamsaka and vikshaya Lakshana and Chikitsa 5. Shamana Yogas, Astanga Lavana, Kshira Prayoga, etc					
26	**Cha.Chi.25.Dwivraniya Chikitsitam** 1.Enumerate Vrana bhedha, Vrana sthana, Gandha, Srava, Upadrava, dosha. 2.Sadhyaasadhyata and Chikitsa of vrana.	2		1	0	0
27	**Cha. Chi.26. Trimarmiya Chikitsitam** 1.Nidan, Lakshana and Chikitsa of Udavarta 2.Enumerate Mutrakrichra, Pratishyaya, Shiroroga, Arochaka. 3.Nidan, Bhedha, Lakshana and Chikitsa of Hridroga. 4. Shamana Yogas Sahacharataila, Mahanila taila, Dviruttara hingvada churna, Hinguvachadi Churna, Pasanabhedadi ghrita, Pushkarmuladi Kvatha. 5.Significance of Tridosha.	2		1	0	0
28	**Cha.Chi.27.Urusthambha Chikitsitam** 1. Hetu, Purvarupa,Lakshana of Urusthambha. 2. Chikitsa Siddhanta of Urusthambha 3. Substantiate contraindication of Panchakarma in Urusthambha Chikitsa 4. Shaman yogas of Ashtakatvara Taila, Sharngeshtadi Churna	2		1	0	0
29	**Cha.Chi.28.Vatavyadhi Chikitsitam** 1.Samanya Nidan , Purvarupa, Lakshana and Chikitsa sutra.	2		2	0	0

	2.Sthana bhedha Kupita Vayu Lakshanas and Chikitsa. 3.Chikitsa Sutra of Ardhita, Pakshaghata, Gridhrisi , Khalli. 4.Avaran, Lakshana and Chikitsa. 5.Shaman yogas of Vatavyadhi Baladitaila, Rasnataila, Nirgundi taila, Sahachara taila, Amrutadya taila .					
30	**Cha.Chi.29.Vatashonita Chikitsitam** 1.Nidan, Samprapti, Purvarupa, Bhedha , Lakshana, Sadhyaaasadhyata and Upadrava of Vatashonita. 2.Utthan and Gambhira Vatashonita Chikitsa Sutra. 3.Significance of Ksheerabasti prayoga in Vatarakta. 4.Shaman yogas of Vatarakta- sukumara taila, madhuk tailam, Pinda tailam, Shtapaka and Sahasrapaka Bala tail.	2		1	0	0
31	**Cha.Chi.30.Yonivyapad Chiktsitam** 1.Yonivyapad types, Lakshana, Chikitsa, Shukra Dosha, Hetu, Lakshana, Chikitsa. 2.Shuddha Shukra Lakshana, Klaibya Bheda, Lakshana, Sadhyasadhyata, Chikitsa. 3.Pradara Hetu, Samprapti, Lakshana, Chikitsa. 4. Chikitsa Pariksha Vishayas, Anuktavyadhi Chikitsa, Aoushadhi Sevana Kala. 5. Importance of Pathya.	2		1	0	0
32	**Cha. Ka.1Madanakalpam** 1.Definition of Vaman, Virechana, Mode of Action, Trividha Desha Lakshana. 2.Aushadhi Samgrah Kaala, Vidhi, Shreshthata of Madanphala among Vamaka Dravyas. 3.Madhu, Saindhava Prayoga in Vamak Yogas, Madanaphala Sangraha, Prayoga Vidhi.	2	10	1	0	0

	4. Yogas of Madanaphala, Madanphala Ghreya Yoga. 5. Madanaphala Paryaya.					
33	**Cha.Ka.2 to 6** **Cha.Ka.2. Jimutaka Kalpam ,** **Cha.Ka.3. Ikshvaku Kalpam,** **Cha.Ka.4. Dhamargava Kalpam** **Cha,Ka.5. Vatsaka Kalpam,** **Cha.Ka.6. Kritavedhana Kalpam** 1.Paryaya and Guna of Jivamutak , Ikshvaku, Dhamargava . Vatsaka and Kritavedhana Kalpam. 2.Yogya Roga and Rogi for Jivamutak , Ikshvaku, Dhamargava . Vatsaka and Kritavedhana Kalpam. 3.Enumerate yogas of Jimutaka , Ikshvaku, Dhamargava ,Vatsaka, and Kritavedhana Kalpam.	2		1	0	0
34	**Cha.Ka.7.Shyamatrivrutta Kalpam** 1.Paryaya , Guna,Bheda,indications 2.Samgraha and prayoga vidhi. 3.Enumerate the Shyamatrivrita Yogas 4.Kalyanaka Guda, Vyoshadi Gutika ingredients and Indications. 5.Rutuanusruta Trivrita Prayoga.	2		1	0	0
35	**Cha.Ka.8. to 11** **Cha.Ka.8. Chaturangula Kalpam,** **Cha.Ka.9. Tilvaka Kalpam,** **Cha.Ka.10. Sudha Kalpam,** **Cha.Ka.11. Saptalashankhini Kalpam.**	2		1	0	0

	1.Paryaya, Gunas, Indications, Samgrah and Prayoga Vidhi of Chaturangula, Tilvaka, Sudha, Saptalashankhini. 2. Yogas of Chaturangula Kalpam, Tilvaka kalpam, Sudha Kalpam, Saptalashankhini Kalpam.					
36	**Cha.Chi.12.Dantidravanti Kalpam** 1.Paryaya,guna, Samgraha and Prayoga Vidhi . 2.Enumerate the Yogas of Danti Dravanti kalpam. 3.Guidelines for nomeclature of formulations. 4.Significance of Dravya Samyoga. 5.Characterstics of Mrudu, Madhyama and Teekshna Shodhan dravys . 6.Doshashesha Chikitsa. 7.Magadha Mana Paribhasha. 8.Trividha Snehapaka lakshana and their Usage	2		1	0	0
37	**Term 2 Non Lecture theory Activities** Activities to be conducted in the entire term 2.	2		0	33	0
38	**Cha. Si.1.Kalpana Siddhi** 1.Guidelines for Snehana, Swedana, Benefits of Snehana Swedana, Utkleshakara Ahara Dravyas before Vaman and Virechana. 2.Sansarjana Krama Vidhi, Samyak Yoga, Ayoga, Atiyoga Lakshana of Vamana, Virechana, Asthapana Basti, Anuvasana Basti, Shirovirechana. 3.Concept of Karma, Kala, Yoga Basti, Panchakarma Parihar Kala, Vishaya. 4. Basti Apratyagaman Hetu, Chikitsa. 5. Importance of Matra in Panchakarma Chikitsa.	3	20	1	0	0
39	**Cha.Si.2.Panchakarmiya Siddhi** 1.Anupakramya for Chikitsa 2.Yogya and Ayogya Rogi for Panchakrama with their reasons.	3		1	0	0

40	**Cha.Si.3.Bastisutriyam Siddhi** 1.Factors to be considered before administration of Basti. 2.Improper admnistration of Basti and Chikitsa. 3.Effects of Niruha-basti on Tridosha. 4.Pathya to be followed after Basti Karma. 5.Doshanusara Basti Kalpana.	3	1	0	0
41	**Cha. Si.4.Snehavyapat Siddhi** 1.Snehabasti Vyapat, its hetu, Lakashana and Chikitsa. 2.Matrabasti-Indications, dose and benefits 3.Pathya to be followed after Anuvasan Basti. 4.Pratidina Anuvasaneeya Basti yogya Purusha. 5.Matrabasti indications and its Importance.	3	1	0	0
42	**Cha.Si. 5.Netrabastivyapat Siddhi** 1.Basti netra dosha and its harmful effects. 2.Basti putak dosha and its harmful effects. 3.Bast Praneta dosha and its complications.	3	1	0	0
43	**Cha.Si.6.Vamana Virechana Vyapat Siddhi** 1. Indication of Shodhana in Sadharana Rutu, Pre-requisite for Samyak Yoga of Shodhana. 2. Importance of Matravat Aoushadhi, Tarpana Prayoga in Vaman and Virechana. 3. Jeerna Aoushadhi Lakshana, Ajeerna Aushadhi Lakshana. 4. Vaman-Virechana Vyapad, Hetu, Lakshana, Chikitsa.	3	1	0	0
44	**Cha. Si. 7.Bastivyapat Siddhi**	3	1	0	0

	1.Aasthapana Basti Vyapad, its Hetu, Lakshana and Chikitsa. 2.Basti Dravyas used for Mrudu and Teekshna Basti. 3.Basti Prabhav					
45	**Cha.Si.8.Prasrita Yogiyam Siddhi** 1.Various Prasritika-basti-yoga and their indications. 2.Permutation and Combination of Atisar , its Upadrava and Chikitsa. 3.Atisara Samanya Chikitsa Siddhant and Use of Ghruta and Yavagu Kalpana.	3		1	0	0
46	**Cha.Si.9.Trimarmiya Siddhi** 1.Importance of Trimarma, Trividha Marma Abhighata Lakshana, Chikitsa. 2. Apatantrak, Apatanak Samprapti, Lakshana, Chikitsa. 3. Tandra Hetu, Samprapti, Chikitsa. 4. Enumeration of Basti Rogas, Uttara Basti Vidhan. 5. Enumeration of Shirorogas, Importance of Nasya Karma, Types, Indications.	3		1	0	0
47	**Cha. Si. 10.Basti Siddhi** 1.Shresthata of Basti Karma. 2.Enumeration of Basti as per Doshaanusra and Vyadhianusara (Doshapratyaneeka and Vyadhi Pratyaneeka)	3		1	0	0
48	**Cha.Si.11.Phalamatra Siddhi** Understand the concept of Sadatura with its Hetu and Chikitsa.	3		1	0	0
49	**Cha.Si.12.Uttara Basti Siddhi** 1. Rasadi Samsarjana Krama, Benefits, Prakruti	3		1	0	0

	Prapta Purusha Lakshana. 2. Asta Mahadoshakara Bhavas, Karan, Lakshana, Chikitsa. 3. Definition, Benefits, Indications of Yapana Basti, Enumeration of Yapana Basti Kalpana. 4. Atiyog of Yapana Basti Effects, Management. 5. Definition of Siddhisthana, Samhita Adhyayan Phala, Definition, Karya of Pratisamskarta, Significance of Charaka Samhita.					
50	**Term 3 Non Lecture theory Activities** Activities to be conducted in the entire term 3.	3		0	33	0
Total Marks			**100**	**50**	**100**	**0**

Table 3 : Learning objectives of Course

Paper 1 (Samhita Adhyayan - 3)										
A3 Course out come	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Cha.Chi.1.Rasayana Adhyaya (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Explain basic meaning of terms like Abheshaja, Vatatapika Rasayana, Kutipraveshika Rasayana, Aachara Rasayana, Pranakamiya, Yayavara.	CK	MK	KH	L&GD, BS	QZ ,VV-Viva,COM	F&S	I	-	LH
CO1	Enlist Bheshaja ParyayaClassify Bheshaja and Abheshaja (Cha.Chi.1/1/3-6)	CK	MK	K	L,BS,DIS	P-VIVA,T-CS	F&S	I	-	LH
CO1	Identify the examples of Abheshaja	CE	DK	KH	DIS,BS, TPW,L	QZ ,VV-Viva	F&S	I	-	LH
CO4	Describe the functions of Rasayana (Cha.Chi 1/1/7-8)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO4	Describe the functions of Vajikarana (Cha. Chi. 1/1/9-12)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO4	Differentieate between Rasayana and Vajikarana (Cha Chi.1/1/8-12)	CK	DK	KH	L&GD, BS	P-VIVA,DEB	F&S	I	-	LH
CO4	Discuss types of Rasayana - Kutipraveshika and Vatatapika (Cha.Chi. 1/1/16-23)	CC	DK	KH	L&GD, L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO4	Discuss Haritaki Prayoga in Rasayana Chikitsa (Cha.Chi 1/1/29-37)	CC	MK	K	L&GD, L&PPT	P-VIVA,T-CS	F&S	I	-	LH

CO4	Enlist Rasayana Yoga - Brahma Rasayana, Chyawanaprasha, Haritaki Yoga, Amalaka Rasayana (Cha.Chi. 1/1/41-79)	CK	DK	K	L&PPT	QZ ,T-CS,P-VIVA	F&S	I	-	LH
CO4	Define Gramya Aahara and Vihara and explain their Effects (Cha.Chi 1/2/3)	CC	DK	K	L&PPT ,DIS	T-CS,P-VIVA	F&S	I	-	LH
CO4	Describe Rasayana Yoga- Amalaka Rasayana, Nagabala Rasayana, Bhallataka Rasayana, (Cha .Chi 1/2/4-22)	CC	DK	K	TBL,L &PPT	PRN,T-CS	F&S	I	-	LH
CO4	Discuss Rasayana yoga - Amalakaayasa Brahma Rasayan, Kevala Amalaka Rasayana, ,Lauhadi Rasayana, Medhya Rasayana, Pippali Rasayana, Pippali Vardhamanm, Triphala Rasayana, Shilajatu Rasayana and Varjya during Shilajatu Prayoga.	CC	MK	K	GBL,L &PPT ,PER	T-CS,P-VIVA	F&S	I	-	LH
CO4	Discuss Kulathya Nishedha in Shilajatu Prayoga (Cha.Chi.1/3/62-64)	CC	DK	K	DIS	QZ ,P-VIVA	F&S	I	-	LH
CO4, CO8	Discuss Aachara Rasayana and its importance in current era. (Cha.Chi 1/4/30-35)	CAP	MK	KH	L&PPT ,BS,DIS ,CBL	CL-PR,DEB,P-VIVA,T-CS	F&S	I	-	LH
CO4, CO8	Discuss Aachara Rasayana and its importance in the modern era, along with the code of conduct for Bhishak.	CAP	MK	KH	BS,L&GD	P-VIVA,QZ	F&S	I	-	LH
Topic 2 Cha.Chi. 2.Vajikarana Adhyaya (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO4	Discuss Pradhana Vajikarana (Cha chi 2/1/3-15)	CC	MK	K	BS,DIS, L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO4	Justify the importance of Vajikarana in current era (Cha Chi 2/1/16-23)	CAP	MK	KH	BS,DIS, L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO4	Describe Various Vajikarana Yoga - Brumhani Gutika,	CK	NK	K	TPW,G	VV-Viva,T-	F&S	I	-	LH

	Vajikarana Ghrita, Vrushya Yoga.				BL	CS				
CO4	Enlist the attrubutes of Vrushya Dravya and explain Anukta Vajikarana Sangraha (Cha Chi 2/4/36-45)	CK	MK	K	L&PPT ,L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO4	Define Vrushya ,Shukra-Pravrutti ,PrashastaShukra Guna,. Cha Chi 2/4/ 36, 46-49, 50	CC	MK	K	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO4	Discuss the yogas explained in the Asiktaksheerika Vajikaran yogas of Vrushya Ghruta, Vrushya DadhiSara, Vrushya Shashtika Odan.	CK	NK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO1	Discuss the Yogas and Specific cow's milk for vajikaran, Shatavari Ghruta, and other factors influencing vitality.	CK	NK	K	SDL	T-OBT	F&S	I	-	LH
CO4	Summarize the chapter based on sutra (Cha chi 2/4/52-53)	CK	NK	K	SDL,L, L&PPT	P-VIVA	F&S	I	-	LH
Topic 3 Cha. Chi .3. Jwara Chikitsitam (LH :2 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Explain Jwara - Prakruti, Pravritti, Prabhava, Poorvarupa, Adhishthana, PratyatmaLakshana (Cha Chi 3/12-31)	CC	MK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Outline the classification of Jwara (Cha.Chi 3/32-35)	CAP	MK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Discuss Prakruta and Vaikruta Jwara (Cha.Chi 3/42-49)	CC	MK	KH	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO2	Outline the Samprapti of Doshakalabalabalabheden Jwara Prakara (Cha.Chi 3/53-74)	CAP	MK	KH	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Enlist the Lakshana of Dhatugata Jwara (Cha.Chi 3/75-83)	CK	DK	K	L&PPT ,TBL	P-VIVA,QZ	F&S	I	-	LH

						,T-CS				
CO2	Enlist the Lakshana of Dvandvaja and SannipatajaJwara (Cha.Chi. 3/84-110)	CK	DK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Enlist the Lakshana of Chaturvidha Agantuja Jwara (Cha.Chi 3/111-128)	CK	DK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Outline the Samanya Samprapti of Jwara (Cha.Chi. 3/129-132)	CC	MK	KH	DIS,L&PPT ,BS	P-VIVA,T-CS	F&S	I	-	LH
CO2	Enlist the Lakshana of Ama, Pachyamana and Nirama Jwara (Cha.Chi. 3/132-137)	CK	DK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO3	Explain Taruna Jwara Chikitsa (Cha. Chi. 3/132-137)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2, CO3	Determine the significance of Langhana in Taruna Jwara Chikitsa (Cha. Chi 3/139-141)	CAP	MK	KH	L&PPT ,L&GD	T-CS,P-CASE,P-VIVA	F&S	I	-	LH
CO3	Discuss Swedana, Kala, Yavagu Pana, Tiktaka Rasa in Taruna Jwara Chikitsa (Cha.Chi 3/142-162)	CAN	MK	KH	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO3	Enlist Jwaranashana Kashaya (Cha.Chi 3/197-218)	CK	MK	K	L&PPT ,TPW	P-VIVA,T-CS	F&S	I	-	LH
CO3, CO6	Describe Jeerna-Jwara Chikitsa (Cha.Chi. 3/291)	CC	MK	KH	L&PPT ,DIS,CBL	P-VIVA,CL-PR	F&S	I	-	LH
CO3, CO6	Explain Vishama-Jwara Chikitsa (Cha. Chi 3/292-309)	CC	MK	KH	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO3, CO6	Outline Dhatugata Jwara Chikitsa (Cha.Chi.3/310-316)	CK	MK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH

CO3, CO6	Describe Agantuja Jwara Chikitsa (Cha. Chi. 3/317-322)	CK	MK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO3, CO6	Explain Punaravartaka Jwara Chikitsa Sutra(Cha.Chi. 3/333-343)	CK	MK	K	DIS,L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO2	Enlist Jwara-Pramoksha Lakshana (Cha.Chi. 3/324-332)	CK	MK	K	SDL,L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO1	Summarize the chapter based on Sutra (Cha.Chi.3/333-337)	CK	NK	K	SDL	T-OBT	F&S	I	-	LH
Topic 4 Cha. Chi.4.Raktapitta Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Explain Hetu (causative factors), Vyakhya (definition) and Samanya Samprapi of Raktapitta (Cha.Chi.4/5-10)	CC	MK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO1, CO2	Explain types of Raktapitta according to predominance of Dosha (Cha. Chi. 4/11-13)	CC	MK	K	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO1, CO2	Explain Sadhyasadhyata of Raktapitta (Cha.Chi. 4/13-24)	CC	MK	KH	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO3	Justify Stambhana Nishedha in Raktapitta Chikitsa (Cha.Chi. 4/25-28)	CAN	MK	KH	BS,L	P-VIVA,T-CS	F&S	I	-	LH
CO1, CO3	Elaborate the Chikitsa Sootra of Raktapitta (Cha. Chi. 4/29-30)	CC	MK	KH	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO1, CO3	Explain Shodhana Chikitsa in Raktapitta (Cha.Chi. 4/54-61)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO3, CO6	Enlist various Shamana Kalpa in Raktapitta Chikitsa - Vasa Ghrita, Shatavaryadi Ghrita, etc.	CK	DK	K	TPW,L&GD	P-VIVA,COM	F&S	I	-	LH

CO3, CO6	Explain Mootramargagata, Purishamargagata and Nasagata Raktapitta Chikitsa (Cha.Chi 86 -101)	CC	DK	KH	CBL,L &PPT	T-CS,P-VIVA	F&S	I	-	LH
CO1	Summarize the chapter based on sutra (Cha. Chi. 4/178-180)	CK	NK	K	SDL	T-OBT	F&S	I	-	LH
Topic 5 Cha. Chi .5. Gulma Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2	Explain Hetu (causative factors) and Samanya Samprapi of Gulma (Cha.Chi.5/4-7)	CC	MK	KH	L&PPT ,L&GD, BS	T-CS,P-VIVA	F&S	I	-	LH
CO1, CO2	Describe the importance of Gulmasthana in samprapti (Cha.Chi. 5/8)	CC	MK	KH	DIS,BS, L&PPT	P-VIVA,T-CS,CL-PR	F&S	I	-	LH
CO1, CO2	Enlist Hetu and Lakshana of Raktaja Gulma (Cha.Chi. 5/18-19)	CK	DK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO2	Discuss Vataja - Pittaja - Kaphaja Gulma Chikitsa	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO3, CO6	Discuss Gulma - Chikitsa Yoga such as Tryushanadi Ghrita, Hingu-Saurvachaladya Ghrita, Pippalyadya Ghrita, Ksheerashatpala Ghrita, Mishraka Sneha.	CC	DK	KH	L&PPT ,CBL	P-VIVA,T-CS,CBA	F&S	I	-	LH
CO3	Discuss Raktaja Gulma Chikitsa (Cha. Chi.5/183-189)	CC	DK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO1	Summarize the chapter based on sutra (Cha.Chi. 4/178-180)	CK	NK	K	SDL	T-OBT	F&S	I	-	LH
CO3, CO6	Discuss Gulma - Chikitsa Yoga such as Tryushanadi Ghrita, Hingu-Saurvachaladya Ghrita, Pippalyadya Ghrita, Ksheerashatpala Ghrita, Mishraka Sneha	CC	DK	KH	L&PPT ,TBL	P-VIVA,T-CS	F&S	I	-	LH

Topic 6 Cha.Chi. 6. Prameha Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2	Explain causative factors and Samanya Samprapi,Sadhyasadhyata of Prameha in Prameha (Charaka Chikitsa 6/4-7)	CC	MK	KH	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO1, CO2	Enlist Dosha - Dushya Sangraha in Prameha (Cha.Chi 6/8)	CK	MK	K	L&PPT ,DIS,BS	P-VIVA,O-QZ,T-CS	F&S	I	-	LH
CO2	Enlist sub-types of Kaphaja, Pittaja and Vataja Prameha - Sankhya Samprapti of Prameha (Charaka Chikitsa 6/9-12)	CK	DK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO2	Describe Purvarupa of Prameha (Cha. Chi.6/13-14)	CC	MK	KH	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO1, CO3	Elaborate the Chikitsa Sootra of Prameha (Cha. Chi. 6/15-17)	CAP	MK	KH	L&GD, CBL	P-VIVA,T-CS	F&S	I	-	LH
CO2, CO3	Discuss two types of Pramehi with respect to Shodhana and Shamana Chikitsa	CAP	MK	KH	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO3, CO6	Enlist Shamana Kalpa in Prameha Chikitsa	CK	DK	K	CBL,L &PPT	P-VIVA,T-CS	F&S	I	-	LH
CO1, CO6	Justify the role Aahara Kalpana / Yava in Chikitsa of Prameha (Cha.Chi. 6/18-24)	PSY-SET	NK	KH	L&PPT ,CBL	T-CS,P-VIVA	F&S	I	-	LH
CO2, CO3	Elaborate Prameha - Samanya Chikitsa Siddhanta (Cha. Chi. 6/51-58)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2	Differentiate between Pittaja Prameha and Raktapitta (Cha.Chi. 6/54)	CAN	MK	KH	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Differentiate between Kaphaja and Vataja Prameha (Cha. Chi 6/55)	CAN	MK	KH	SDL,DIS	P-VIVA,CBA	F&S	I	-	LH

CO1, CO7	Discuss Prameha as Kulaja Vikara (Cha.Chi. 6/54)	CAP	DK	KH	BS,L&PPT ,DIS	QZ ,P-VIVA,T-CS	F&S	I	-	LH
CO1	Summarize the chapter based on sutra (Cha. Chi. 6/59-61)	CK	NK	K	SDL	T-OBT	F&S	I	-	LH
Topic 7 Cha. Chi.7.Kushtha Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Explain causative factors and Samanya Samprapti of Kushtha (Cha.Chi 7/4-10)	CC	MK	KH	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO1	Enlist and explain Kushthanam Saptako Dravya-Sangraha (Cha. Chi. 7/9-10)	CC	MK	KH	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO2	Enlist Purvarupa of Kushtha (Cha. Chi. 7/11-12)	CC	MK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO2	Enlist seven types of Mahakushtha (Cha. Chi.7/13-20)	CK	MK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO2	Enlist eleven types of Kshudrakushtha (Cha.Chi. 7/21-26)	CK	MK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Diffentiate between Mahakushtha and Kshudrakushtha	CAN	DK	KH	BS,L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2	Analyse Doshic predominace of seven types of Mahakushtha (Cha.Chi.7/27-29)	CAN	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2	Analyse Samanya Dosha Lakshana in Kushtha (Cha. Chi.7/34-36)	CAN	MK	KH	L&GD	P-VIVA,M-CHT,T-CS	F&S	I	-	LH
CO2	Explain Sadhyasadhyata of Kushtha (Cha.Chi.7/37-38)	CC	MK	K	L&GD	P-VIVA,T-CS	F&S	I	-	LH

CO2, CO3	Elaborate the Chikitsa Sootra of Kushtha (Cha.Chi. 7/39-42)	CAP	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2, CO3	Explain Shodhana Chikitsa in Kushtha (Cha. Chi. 7/43-49)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO6	Enlist Shamana Kalpa (Bahi-Parimarjana Chikitsa) in Kushtha Chikitsa (Cha. Chi. 7/84-96) - Lepa, Udgharshana.	CK	DK	K	L&GD, TPW	T-CS,P-VIVA,COM	F&S	I	-	LH
CO6	Describe Kushtha - Chikitsa Yoga - Madhvasava, Kanakabindvarishta, Siddharthaka Yoga, variousLepa, Tiktashatpala Ghrita, Mahatiktaka Ghrita, Mahakhadira Ghrita.	CC	DK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO2	Enlist Hetu and types of Kilasa (Cha. Chi. 7/173-177)	CK	MK	K	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO2, CO3	Descibe the Samanya Chikitsa of Kilasa (Cha.Chi. 7/162-172)	CK	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO1	Summarize the chapter based on sutra (Cha. Chi.7/178-180)	CC	NK	K	SDL	T-OBT	F&S	I	-	LH
Topic 8 Cha.Chi 8.Rajayakshma Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Explain Hetu (causative factors) and Samanya Samprapti of Rajyakshma (Cha. Chi 8/4-7)	CC	MK	KH	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO1, CO2	Enlist four aetiological factors (chaturvidha-ayatana) in samprapti of Rajayakshma (Cha. Chi.8/13)	CK	MK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO1, CO2	Explain Samprapti and Lakshana of Sahasika Yakshma (Cha.Chi. 8/14-19)	CC	DK	KH	CBL,L&GD,BS	P-VIVA,T-CS	F&S	I	-	LH
CO2	Explain Samprapti and Lakshana of Vega-Dharanajanya Yakshma	CC	DK	KH	BS,CBL	P-VIVA,T-	F&S	I	-	LH

	(Cha. Chi. 8/20-23)				,L&GD	CS				
CO2	Explain Samprapti and Lakshana of Kshayajanya Yakshma (Cha. Chi. 8/24-27)	CC	DK	KH	BS,L&GD,CBL	P-VIVA,T-CS	F&S	I	-	LH
CO2	Explain Samprapti and Lakshana of Vishamashanajanya Yakshma (Cha. Chi. 8/28-32)	CC	DK	KH	L&GD, BS,CBL	T-CS,P-VIVA	F&S	I	-	LH
CO1, CO2	Enlist Purvarupa of Rajayakshma (Cha. Chi. 8/33-37)	CK	MK	K	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO1	Discuss Samanya Samprapti of Rajayakshma (Cha.Chi. 8/38-42)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO1, CO2	Enlist Trirupa, Shadrupa, Ekadasharupa Rajayakshma (Cha. Chi 8/45-47, 52)	CK	MK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO3	Discuss Lakshanika Chikitsa in Rajayakshma	CC	DK	KH	TPW,L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO6	Discuss Shodhana Chikitsa in Rajayakshma (Cha. Chi. 8/87-88)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2, CO3, CO6	Appraise the role of Jugupsa Chikitsa in Rajayakshma (Cha.Chi.8/149-172)	PSY-SET	MK	KH	L&GD, BS	T-CS,P-VIVA	F&S	I	-	LH
CO2, CO3	Appraise the role of Bahi- Parimarjana Chikitsa in Rajayakshma (Cha.Chi.8/173-178)	PSY-SET	MK	KH	L&GD, BS	T-CS,P-VIVA	F&S	I	-	LH
CO2, CO3	Appraise the role of Manonukula Chikitsa in Rajayakshma (Cha.Chi.8/179- 189)	PSY-SET	MK	KH	BS,L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO1	Summarize the chapter based on Sutra - (Cha.Chi.8/190-191)	CC	NK	K	SDL	T-OBT	F&S	I	-	LH

Topic 9 Cha. Chi.9.Unmada Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Define Unmad, Explain Hetu (causative factors), types and Samanya Samprapti of Unmada (Cha. Chi. 9/3-5)	CC	MK	KH	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO1, CO2	Enlist Hetu (causative factors) and Vishesha Lakshana of Vataja-Pittaja-Kaphaja-Sannipataja Unmada (Cha. Chi. 9/8-15)	CK	MK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO1, CO2	Enlist Hetu (causative factors) and Samprapti, Sadhyasadhyata and Samanya Chikitsa of Agantuja Unmada (Cha.Chi. 9/16-23)	CK	DK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Discuss Samanya Chikitsa of Nija Unmada (Cha. Chi. 9/24-32)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO6	Enlist Unmada - Chikitsa Yoga such as Kalyanaka Ghrita, Mahakalyanaka Ghrita, Mahapaishachika Ghrita, Lashunadya Ghrita, etc.	CK	DK	K	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO2, CO3	Explain Paraspara-Dvandva Chikitsa in Unmada (Cha. Chi.9/85-86)	CC	MK	KH	BS,L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2, CO3	Discuss Samanya Chikitsa of Agantuja Unmada (Cha.Chi. 9/87-95)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2	Describe Vigata Unmada Lakshana (Cha.Chi.9/87-95)	CK	MK	K	L&PPT	P-VIVA,T-CS	F&S	I	-	LH
CO1	Summarize the chapter based on sutra (Cha. Chi. 9/98)	CK	NK	K	SDL	T-OBT	F&S	I	-	LH
Topic 10 Cha.Chi.10.Apasmara Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Dedine Apasmara (Cha. Chi.10/3)	CK	MK	K	L&PPT	P-VIVA,T-	F&S	I	-	LH

						CS				
CO1	Explain Hetu (causative factors) and Samanya Samprapti of Apasmar (Cha. Chi.10/4-8)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO2	Enlist Samanya Lakshana of Chaturvidha Apasmar (Cha. Chi. 10/8-13)	CK	MK	K	L&PPT	T-CS,P-VIVA	F&S	I	-	LH
CO2	Discuss Samanya Chikitsa of Apasmara (Cha.Chi.10/14-15)	CC	MK	KH	L&GD	P-VIVA,T-CS	F&S	I	-	LH
CO6	Enlist Apasmar - Chikitsa Yoga such as Panchagavya Ghrita, Mahapanchagavya Ghrita, etc.	CK	DK	K	L&PPT ,TPW	P-VIVA,CL-PR,T-CS	F&S	I	-	LH
CO1, CO2	Explain Agantuja Apasmara Chikitsa (Cha. Chi. 10/53)	CC	MK	KH	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO2	Discuss Hetu, Lakshana and Chikitsa of Atattvabhinivesha (Cha. Chi. 10/54-63)	CK	MK	K	L&GD	T-CS,P-VIVA	F&S	I	-	LH
CO1	Summarize the chapter based on sutra (Cha.Chi.10/66-68)	CK	NK	K	SDL	T-OBT	F&S	I	-	LH
Topic 11 Cha. Chi.11.Kshataksheena Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Analyze and interpret Kshataksheena's hetu, samprapti, purvarupa, lakshana.(Cha.Chi.11/4-14)	CC	MK	K	L,L&PPT	Log book,S-LAQ,T-CS,P-ID,VV-Viva	F&S	I	-	LH
CO1	Explain Chikitsa sutra of Kshataksheena	CC	MK	KH	L&PPT ,L,DIS, L&GD	INT,VV-Viva,T-CS,Log book	F&S	I	-	LH

CO1	Discuss the significance lakshadi yoga is to Kshataksheena management.(Cha Chi 11/15-17)	CC	DK	KH	L&GD, L_VC,L &PPT ,DIS,L	T-CS,T-OB T,VV-Viva, S-LAQ,Log book	F&S	I	-	LH
CO6	Discuss in detail about the ingredients and various indications mentioned for Eladi Gutika, Amruta prasha Ghruta, Sarpi Guda, Nagabala Rasayana.	CC	DK	K	L&PPT ,L&GD, SDL,PS M,DIS	CL-PR,Log book,VV-V iva,INT,CO M	F&S	I	-	LH
CO1	Summarise the chapter (Cha.Chi.11/195-196)	CC	NK	K	DIS,TB L,LS,R EC,ED U	VV-Viva,Log b ook,T-OBT,T-CS	F&S	I	-	LH
Topic 12 Cha. Chi. 12.Shwayathu Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Analyse and interpret nidan, Samprapti,Purvarupa,Lakshana (Cha.Chi.12/4-100	CC	MK	K	L&PPT ,L&GD, DIS,L	T-CS,VV-Viva,PRN, Log book	F&S	I	-	LH
CO1	Explain chikitsa sutra of Shotha (Cha.Chi.12/16-19)	CK	MK	K	L&GD, L,DIS,L &PPT	VV-Viva,C L-PR,T-CS	F&S	I	-	LH
CO1	Explain the Gudardraka prayoga and its importance,indications. (Cha.Chi.12/ 47-48)	CK	DK	K	L&GD, L,L&PP T ,DIS	T-CS,VV-Viva,Log book	F&S	I	-	LH
CO1	Explain the importance and indications of Kamsaharitaki prayoga. (Cha.Chi.12/ 50-52)	CK	DK	K	LS,TUT ,BS,PB L,CBL	VV-Viva,Log book,T-CS	F&S	I	-	LH

CO6	Discuss the different shamana yogas Gandiradyarishta, Ashtashatrishta, Punarvadyarishta, Kshara Gutika	CK	DK	KH	L&GD, L&PPT ,L_VC, DIS,L	QZ ,CL-PR ,T-CS,Log book,DEB	F&S	I	-	LH
CO3	Discuss in detail about the ingredients and various indications mentioned for Gudardraka prayaoga (Cha.Chi.12/47-48)	CC	DK	K	DIS,TUT,L,L&GD,L&PPT	Log book,T-CS,VV-Viva	F&S	I	-	LH
CO1	Summarise the chapter (Cha.Chi.12/103)	CK	NK	K	L&GD, L,BS	CL-PR,T-CS,Log book	F&S	I	-	LH
Topic 13 Cha. Chi.13.Udara Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Analyse and interpret hetu, Samprapti,purvarupa, rupa, sadhyasadhyata of udara roga . (Cha.Chi.13/ 9-58)	CC	MK	KH	DIS,L&GD,REC,L&PPT	P-VIVA	F&S	I	-	LH
CO1	Explain the samanya and avasthika chikitsa chikitsa of Udara (Cha.Chi.13/59-94, 177,184-188)	CC	MK	KH	L&PPT ,CBL,L&GD	P-VIVA,T-CS,T-OBT	F&S	I	-	LH
CO1, CO2	Analyse and interpret hetu,purvarupa, rupa, samprapti sadhyasadhyata of udara(cha. Chi.13/12-58)	CC	MK	KH	L&PPT ,TBL,BS,DIS,L	T-CS,Log book,CL-PR	F&S	I	-	LH
CO1	Explain the samanya and avasthika chikitsa chikitsa of Udara (Cha.Chi.13/59-94, 177,184-188)	CK	MK	K	L,L&GD,L&PPT ,DIS	VV-Viva,Log book,T-CS	F&S	I	-	LH

CO6	Explain the importance of Takra prayoga in udara 101-106	CK	DK	KH	L&GD, BS,L&P PT ,L,DIS	T-CS,Log book	F&S	I	-	LH
CO6	Explain the importacne and indications for Chikraka Ghruta, Narayana churna (Cha.Chi.13/116-117, 124-132)	CC	DK	KH	L,DIS,L &PPT , CBL,L &GD	T-CS,VV-Viva,Log book	F&S	I	-	LH
CO1	Summarise the chapter (Cha.Chi.13/195-196)	CK	NK	K	TBL,RE C,L&G D,L,DIS	Log book,T -CS,VV-Viva	F&S	I	-	LH
Topic 14 Cha. Chi.14.Arsha Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Exaplain Bhedha,Nidana Samprapti, and their Lakshana, Sadhyasadhyata(Cha.Chi.14/ 5-31)	CC	MK	KH	L&GD, L,IBL,B S,SY	T-CS,CL-P R,VV-Viva,Log book	F&S	I	-	LH
CO1	Explain the chikitsa sutra of Shushkarsha (Cha.Chi.14/ 33-34, 38-39, 119-120)	CC	MK	KH	L&GD, L,DIS,P BL,TBL	Log book,T -OBT,T-CS ,VV-Viva,C L-PR	F&S	I	-	LH
CO1	Explain chikitsa of Ardra Arsha (Cha.Chi.14/ 170-184, 243-248)	CK	MK	KH	L&PPT ,L,L&G D,DIS,T BL	VV-Viva,Log book,T-CS	F&S	I	-	LH
CO1	Explain importance of Agni in the management of Arsha	CC	MK	KH	IBL,DIS	CL-PR,T-	F&S	I	-	LH

	(Cha.Chi.14/244-248)				,BS,TBL,CBL	CS,Log book,T-OBT,VV-Viva				
CO1	Describe the importance of Takrarishta and Takra in Arsha chikitsa (Cha.Chi.14/ 72-88)	CC	DK	KH	TBL,DIS,L,L&GD,L&PPT	Log book,T-OBT,VV-Viva,T-CS	F&S	I	-	LH
CO3	Describe ingredients and indications mentioned for Abhayarishta , Dantyarishta (Cha.Chi.14 138-143, 144-147)	CC	DK	KH	L&GD,L&PPT,TBL,L,DIS	Log book,VV-Viva,T-CS	F&S	I	-	LH
CO1	Summarise the chapter (Cha.Chi.14/249-255)	CC	NK	KH	L,L&GD,L&PPT	Log book,T-OBT,VV-Viva,T-CS	F&S	I	-	LH
Topic 15 Cha. Chi.15.Grahani dosha Chikitsitam (LH :2 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Analyse and interpret Grahani roga Bhedha, their hetu,Lakshana, Purvarupa, and Sadhyasadhyata of Grahani roga (Cha.15/ 52-72)	CK	MK	KH	L&GD,CBL,TBL,DIS,BS	INT,VV-Viva,T-CS,CL-PR	F&S	I	-	LH
CO1	Explain the chikitsa sutra for vataja grahani (Cha.Chi.15/74-81)	CC	MK	KH	TBL,LS,DIS,L&GD,W	VV-Viva,T-CS,Log book,T-OBT	F&S	I	-	LH
CO1	Explain the chikitsa sutra for Pitta and Kaphaja grahani (Cha.Chi.15/122-145) 141-145	CC	MK	KH	L&PPT,TBL,SDL,DIS,	VV-Viva,CL-PR,Log book,T-	F&S	I	-	LH

					L&GD	OBT,T-CS				
CO1	Explain avasthiki chikitsa and importance of sneha prayoga in tridoshaja Granahi chikitsa (Cha.Chi.15/194-195, 198)	CC	MK	KH	L&GD, L,L&PPT	Log book,VV-Viva,T-CS	F&S	I	-	LH
CO1	Explain importance agni and Atyagni (Cha.Chi.15/ 211-234)	CC	MK	KH	L,L&PPT ,L&GD	T-OBT,Log book,T-CS, VV-Viva	F&S	I	-	LH
CO3	Describe ingredients and indications of Dashamuladya Gruta Chitrakadi Gutika, Takrarishta (Cha.Chi/15/82-86,96-97, 117-121,)	CC	DK	KH	L,L&PPT ,L&GD	WP,M-MOD,QZ , VV-Viva,CL-PR	F&S	I	-	LH
CO1	Summarise the chapter (Cha.Chi.15/244-249)	CC	NK	KH	L&GD, L,L&PPT	T-CS,Log book,VV-Viva	F&S	I	-	LH
CO2, CO3	Describe Ajeerna Hetu, Samanya lakshna and Chikitsa Cha.Chi.15/42-49,73-76)	CC	DK	K	L&PPT ,L	P-VIVA,T-CS	F&S	I	-	LH
CO3	Describe Importance of Agni (Cha.Chi.15/3-41)	CK	DK	K	L&GD, L,L&PPT	T-CS,P-VIVA	F&S	I	-	LH
Topic 16 Cha. Chi.16.Panduroga Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Explain Pandu roga bhedha, Nidan, Samprapti,Purvarupa, Lakshana, and Sadhyasaadhyata ofPanduroga (Cha.Chi16/ 3-38)	CC	MK	KH	L&PPT ,L,L&GD	PRN,T-CS,Log book,CL-PR,VV-Viva	F&S	I	-	LH

CO1	Explain samanya chiktsa of Pandu and kamala (Cha.Chi 16/ 39-43)	CC	MK	KH	L,L&GD,L&PPT	T-CS,Log book,VV-Viva	F&S	I	-	LH
CO1	Discuss Samshodhana chikitsa in Pandurog (Cha.Chi 16/ 55-69)	CC	DK	KH	L&GD, L&PPT,L	INT,T-CS, VV-Viva,Log book,PRN	F&S	I	-	LH
CO1	Explain chikitsa for Mrudbhakshanajanya pandu (Cha.Chi.16/ 116,117,121-123)	CC	DK	KH	L,L&GD,L&PPT	VV-Viva,Log book	F&S	I	-	LH
CO3	Describe Shaman yogas of Pandu -the ingredients and indications of Navayasa Loha churna, Mandura vataka, Punarnava mandura , yogaraja, Damadimadya Ghruta (Cha.Chi16/44-46, 70-71, 72-77, 80-86, 93-96)	CC	DK	KH	L&GD, L,L&PPT	T-CS,Log book,VV-Viva	F&S	I	-	LH
CO1	Summarise the chapter (Cha.Chi.16/138--139)	CC	NK	KH	L&GD, L,L&PPT	Log book,VV-Viva	F&S	I	-	LH
CO2	Explain Lakshanas of Vataj, Pittaj, Kaphaj, Tridoshaj, and Mrudabhakshanajany Panu roga lakshana Cha Chi.16/17-30)	CK	NK	KH	L&PPT,TBL	T-CS	F&S	I	-	LH
CO2	Explain chikitsa sutra for Kamala, Haleemak (Cha.Chi.16/124-136)	CK	DK	K	L,L&GD	T-CS	F&S	I	-	LH
Topic 17 Term 1 Non Lecture theory Activities (LH :0 NLHT: 34 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Apply Fundamental Principle of Samhita in diagnosis, interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.	CAP	MK	KH	FC,TBL,L&GD	Log book,INT,RK,VV-Viva	F	I	-	NLHT17.1

CO1, CO2	Appraise Sambhasha on different topics of Samhita.	AFT-VAL	MK	SH	D	P-VIVA	F&S	I	-	NLHT17.2
CO1	Conduct Cross sectional study of Samhita	CAP	MK	KH	TBL,L &GD	RK,INT	F	I	-	NLHT17.3
CO1	Compare and analyse Charaka Samhita and Sushruta Samhita	CC	DK	KH	L&PPT ,L&GD	Log book,COM	F	I	-	NLHT17.4
CO2, CO3, CO6	Perform Samhita based analysis of Diseases.	CAP	MK	KH	D-BED	CBA,RK,P-VIVA	F&S	I	-	NLHT17.5
CO7	Review and summarize Published Articles on different aspects, topics of Samhita.	CAP	MK	KH	L&GD, TBL	INT,RK	F	I	-	NLHT17.6
CO1, CO2	Illustrate the Concept mapping of Samprapti and Chikitsa	CAP	MK	K	D	P-VIVA	F&S	I	-	NLHT17.7
CO1	Analyse Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita	CC	MK	K	D	P-VIVA	F&S	I	-	NLHT17.8
CO7	Integrate Chikitsa concepts of Samhita with contemporary medical science	CAP	MK	KH	L&GD, TBL	INT,RK	F	I	-	NLHT17.9
CO1	Evaluate and describe Samhita with the help of Tantrayukti	CC	MK	KH	SDL	INT,RK,VV-Viva,Log book	F	I	-	NLHT17.10
CO1, CO2	Perform interview of senior Vaidya.	CAP	MK	KH	L&GD, TBL	INT,RK	F	I	-	NLHT17.11
CO1	Interpret and decode Samhitas with commentary.	CC	NK	KH	L&GD, TBL,DIS	PP-Practical,VV-Viva, T-CS,T-	F&S	I	-	NLHT17.12

						OBT				
CO1	Recite memorise and recall important Shloka	CC	MK	K	SDL	P-REC	F&S	I	-	NLHT17.13
CO1	Justify the position of the chapter in the Samhita and its importance	CC	MK	K	L&GD	P-VIVA	F&S	I	-	NLHT17.14

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 17.1	Fundamental Principle of Samhita used in diagnosis, interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.	**Aim:** To apply the fundamental principles of **Samhita** in **diagnosis, interpretation, treatment planning, formulation selection, dosage form, Kaala, and Anupana**, ensuring their practical relevance in clinical decision-making. **Steps:** 1. **Identify Key Siddhantas** (e.g., **Samanya-Vishesha, Karya-Karana, Guna Siddhanta**) and their role in diagnosis and treatment. 2. **Analyze the Application of Shad Upakramas** in disease management across **Chikitsa Sthana**. 3. **Evaluate Kalpa-Kalpana**, including **Sneha Kalpana, Panchavidha Kashaya Kalpana**, and their selection based on disease condition. 4. **Determine Aushadha Sevana Kala** for appropriate drug administration as described in **Chikitsa Sthana**. 5. **Examine Treatment Modalities** (**Daivavyapashraya, Yuktivyapashraya, Satvavajaya Chikitsa**) and their applicability. 6. **Correlate Siddhantas with Clinical Cases**, selecting the appropriate formulation, dosage, Kaala, and Anupana. 7. **Present Case Analysis** demonstrating the integration of these principles in real-world scenarios.

NLHT 17.2	Conducting Sambhasha on different topics of the Samhita	**Aim:** To conduct **Sambhasha** (scholarly discussion) on **complex topics from Charaka Samhita**, enabling critical analysis, textual understanding, and clinical application. **Steps for Conducting Sambhasha:** **Pre-Preparation:** 1. **Select the Topic** – Choose a relevant topic (e.g., **Tamake Tu Virechanam, Vamana in Hridroga, Avarana Vata**). 2. **Study Primary Texts** – Refer to **Charaka Samhita, Chakrapani Teeka**, and related commentaries. 3. **Review Secondary Literature** – Gather insights from **research papers, case studies, and clinical experiences**. 4. **Define Key Discussion Areas** – Prepare thought-provoking questions to guide the dialogue. 5. **Set Discussion Rules** – Structure the rounds, time limits, and participation format. **Conducting Sambhasha:** 6. **Invite Participants** – Open participation for **students, PG scholars, and faculty**. 7. **Introduce the Topic** – Provide a brief overview, contextual background, and clinical relevance. 8. **Facilitate Knowledge Sharing** – Encourage participants to discuss textual interpretations, evidence, and clinical perspectives. 9. **Explore Practical Applications** – Discuss the real-world implications and applicability of concepts. 10. **Summarize and Document Insights** – Conclude with key takeaways and document references from **texts and research**. **One Sambhasha in each Term** **Suggested topics:**

		First Term (1 hour) Diagnosis and management of Manas Jwara/ understanding Yogavahitva of Vata/ diagnosis and Management of Gulma/ understanding the Samprapti of Prameha/ Understanding Jaata Pramehi and Beeja Dosha etc.
NLHT 17.3	Cross sectional study of Samhita	**Cross-Sectional Study of Chikitsa, Kalpa, and Siddhi Sthana in Charaka Samhita** **Objective:** To analyze and correlate concepts across **Chikitsa, Kalpa, and Siddhi Sthana**, highlighting their interconnections in treatment, formulation, and procedural mastery. **Instructions:** 1. **Group Formation & Theme Allocation:** ◦ Divide students into three groups, each focusing on a core theme: ▪ **Disease Management (Chikitsa Sthana)** ▪ **Pharmacological Preparations (Kalpa Sthana)** ▪ **Panchakarma Procedures & Their Mastery (Siddhi Sthana)** 2. **Cross-Sectional Analysis:** ◦ Identify key topics that interlink across these Sthanas (e.g., **Vamana, Virechana, Basti, Raktamokshana, Jwara Chikitsa**). ◦ Compare how treatment principles in **Chikitsa Sthana** transition into specific formulations in **Kalpa Sthana** and their procedural refinements in **Siddhi Sthana**. 3. Steps for Conducting Literature Reviews 1. Define the topic: Clearly identify the specific topic or concept from Charaka Samhita 2. Study the primary text: Read the Charaka Samhita and its commentaries. 3. Collect information from secondary sources: Read the relevant published research articles, case reports, books, video lectures etc. 4. Organize the collected information: Categorize the sources into headings, such as: - classical interpretations, modern findings etc.

		5. Write the review: Introduction, Classical interpretations, findings of recent researches, clinical applications, discussion, areas require further explorations, conclusion, references. 4. **Comparative Presentation:** ◦ Groups will present findings using **charts, tables, or case studies** to demonstrate continuity and progression across Sthanas. 5. **Discussion & Conclusion:** ◦ Class discussion on the **structured knowledge flow** from disease management to formulations and procedural expertise. ◦ Reflection on how this organization enhances **clinical application**. **Assessment Criteria:** • Depth of cross-sectional analysis • Logical correlation between Sthanas • Clarity in presentation • Use of textual references **Suggested topics for conducting literature reviews** **First Term** The Role of Langhana Chikitsa in Disease Management: An Analysis/ Dharana of Adharaniya Vega: A Potent Cause of Disease/ Viruddha Ahara Janya Vyadhi: The Impact of Incompatible Food Combinations/ The Role of Ahara in Manas Vyadhi: Food and Mental Health etc.
NLHT 17.4	Comparative study of Charaka Samhita and Sushruta Samhita	**Aim:** To conduct a **comparative study** of **Charaka Samhita and Sushruta Samhita** using a **flipped classroom approach**, integrating self-study, group discussions, and concept mapping for deeper understanding.

Activity Steps:

1. Pre-Class Activity (Self-Study)

- Students will explore a **specific topic** from both **Charaka Samhita** and **Sushruta Samhita** before class.
- **Resources:** Selected chapters, commentaries, videos, research articles, and presentations.
- **Task:** Identify and note **similarities and differences** between the two texts.

2. In-Class Activity (Interactive Learning)

- **Group Discussion:** Students are divided into groups, each assigned a specific topic.
- Each group presents a **comparative analysis** of Charaka and Sushruta's perspectives.

3. Concept Mapping

- Students create **visual concept maps** to illustrate the differences and interconnections between the two Samhitas.

4. Post-Class Activity (Assessment & Reflection)

- **Reflective Report:** Students submit a structured report summarizing their comparative analysis.
- **Peer Feedback:** Teachers and students review and provide feedback on each other's findings.

Suggested Chapters:

First Term (4 hours)

Cha.Chi. 1 and Su.Chi.27-30

		Cha.Chi.2 and Su. Chi. 26 Cha.Chi. 3 and Su.Ut.39 Cha.Chi.9,10 and Su.Ut.61.62
NLHT 17.5	Samhita Based Analysis of Diseases	**Aim:** To apply **Ayurvedic diagnostic and treatment principles** through case analysis based on **Charaka Samhita**, enhancing clinical reasoning and practical understanding. **Activity Steps:** **1. Case Allocation** • Each student/group is assigned a **disease** described in **Charaka Samhita** for in-depth analysis. **2. Case Analysis** • Review the **patient case** and identify key aspects using **Nidana Panchaka**. • Analyze the **treatment rationale** based on Charaka Samhita's principles. **3. Documentation** • Record findings, diagnosis, and treatment approach in a **structured format** (activity book, record book, or journal). **4. Outcome Assessment** • Develop practical insights into **Ayurvedic disease management** through direct application of Samhita-based principles.

		Suggested Chapters for Cases: **First Term (4 hours)** Cha. Chi. 3 - Case of Jwara Cha. Chi. 6 - Case of Prameha Cha. Chi. 7 - Case of - Kushta Cha. Chi. 15 - Case of Grahani
NLHT 17.6	Review of Published Articles from Samhita	**Aim:** To develop **research and analytical skills** by reviewing published articles, summarizing key findings, and integrating insights with **Samhita principles**. **Activity Steps:** **1. Topic Selection** • Choose a **relevant and specific** topic related to Samhita studies. **2. Article Collection** • Identify **at least five** research articles from reputed **national or international journals**. • Ensure sources are **credible** and directly related to the selected topic. **3. Analysis & Interpretation** • Summarize **key insights** from each article. • Compare findings with **Ayurvedic classics** (e.g., **Charaka Samhita**). • Identify **trends, gaps, and areas for further exploration**. **4. Synthesis of Information**

		• Integrate findings into a **cohesive summary**. • Discuss **alignments and deviations** between **Ayurvedic principles and modern research**. **5. Documentation** • Record the **structured review** in the prescribed **journal book format**. • Maintain **academic writing standards**, ensuring clarity and coherence. **6. Presentation & Reflection** • Share insights through a **written report or presentation**. • Participate in **peer discussions** for feedback and refinement. **Two articles in each term** Suggested article's topics: **First Term (2 hours)** Rasayana, Prameha, Kushtha, Grahani. etc
NLHT 17.7	Concept mapping of Samprapti and Chikitsa	**Aim:** To develop a structured understanding of **Samprapti (pathogenesis)** and **Chikitsa (treatment)** through **concept mapping** based on **Samhita principles** for a given case or disease. **Steps for Concept Mapping** Students will create a **visual representation** to systematically illustrate **Samprapti and Chikitsa** for a selected disease, ensuring clarity in Ayurvedic pathogenesis and treatment approach. **A. Samprapti (Pathogenesis)**

		1. Define the **central theme** of the disease's Samprapti. 2. Identify the **Nidana (causative factors)**. 3. Establish the connection between **Dosha vitiation and causative factors**. 4. Map the key elements of **Samprapti**, including **Dushya, Agni, Srotas, Adhishthana, and Rogamarga**. 5. Connect **Purvarupa (prodromal symptoms)** with **Rupa (manifested symptoms)**. 6. If applicable, link **Upadrava (complications)**. **B. Chikitsa (Treatment)** 1. Define the **central concept** of treatment. 2. Determine the **type of Chikitsa** (e.g., **Shodhana, Shamana, Nidana Parivarjana**). 3. Specify **treatment modalities**, such as **Vamana, Virechana, Aushadha Yogas, and Pathya-Apathya**. 4. Correlate the **treatment plan with the Samprapti** components. 5. Illustrate **Samprapti Vighatana (pathogenesis reversal)**. 6. Highlight **preventive measures post-treatment**, such as **Rasayana therapy and Swasthavritta practices**. **Two concept mapping of cases/diseases in each term** **Suggested Topic:** **First Term (2 hours)** Case of Kushta, Madhumeha, Udara, Grahani etc.
NLHT 17.8	Comparative Analysis of Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita	**Aim:** To compare and analyze the Chikitsa Siddhanta (treatment principles) of Charaka Samhita and Sushruta Samhita for a given case, disease, or chapter. **Steps for Comparative Analysis** 1. Focus on Chikitsa Siddhanta (principles of treatment) in both texts.

		2. Study the key sections: such as - Samprapti of the disease, Chikitsa Sutras etc. 3. Identify key areas of Chikitsa: such as - Shodhana, Shamana, Nidana and Surgical methods etc. suggested for the management in both the texts. 4. Identify the key difference and reasons of specific management suggested 5. Compare treatment approaches 6. Write the conclusion. **Two case/disease/chapters in each term:** **Suggested Topics:** **First Term (2 hours)** Kushtha Chiktsa siddhanta of Charaka and Sushruta Samhita, Arsha Chikitsa of Charaka Samhita and Sushruta Samhita
NLHT 17.9	Integrative activities - Compare Chikitsa concepts of Samhita with contemporary medical science	**Aim:** To compare the *Chikitsa* concepts of *Charaka Samhita* with contemporary medical science, identifying similarities, differences, and integrative possibilities for better healthcare understanding. Comparing the Chikitsa concepts of Charaka Samhita with contemporary medical science involves identifying parallels, differences, and areas of integration between ancient Ayurvedic principles and contemporary medical practices. Steps to Compare Chikitsa Concepts of Charaka Samhita with contemporary Medicine for a given case/disease 1. Study the disease and principles of management from Charaka Samhita 2. Identify modern medical correlates 3. Compare the aetiopathogenesis, symptomatology of both 4. Analyse the treatment modalities 5. Make parallel understanding 6. Explore integrative potential 7. Identity the strength and limitations of both 8. Organize the findings 9. Draw conclusion **Each Term two cases/diseases** **Suggested Topics**

		First Term (2 hours) Beej Doshaja Pramehi and Type 1 diabetes/Juvenile Diabetes, Grahani and Irritable Bowel Syndrome (IBS), Jalodara and Ascites, Yakritodara and hepatomegaly, etc.
NLHT 17.10	Evaluation by Tantrayukti	Aim: Identification of Tantrayukti from a given Chapter/Sutra of Charaka Samhita **1.Chapter Allocation:** • A Sutras will be selected from specific chapter from Charaka Samhita will be assigned to students for analysis. **2.Identification of Tantrayukti:** • Students will carefully examine the text to identify various Tantrayuktis used in structuring the content. • They will analyze the Tantrayuktis and explain their significance in interpreting the chapter. **3.Comparison & Analysis:** • Compare the identified Tantrayuktis with their definitions and applications in Ayurveda literature. • Understand how they aid in conveying deeper meanings and logical structuring in classical texts. **4. Documentation:** • Findings will be systematically recorded in the activity book, record book, or journal,

		following a structured format. **Suggested Chapters and Sutras** **First Term (2 hours)** Ch.Chi.3/11-14 Ch.Chi.6/15-17, 49 Ch.Chi.7/9-10 Ch.Chi.13/176-177
NLHT 17.11	Interview of senior Ayurveda Vaidya	**Aim:** To gain insights from a renowned Ayurveda practitioner and document their experiences and perspectives. An Insightful Interview with renowned and Successful Ayurveda practitioner. **The Interview** Practitioner's Journey: How did they become involved in Ayurveda? Philosophy and Principles: Their perspective on Ayurveda and its core principles. Current Practices: Insights into their daily practice, treatments they offer, and their approach to patient care. Challenges: Discuss any challenges they face in their practice and how they overcome them. Future of Ayurveda: Their thoughts on the future of Ayurveda in modern healthcare. All these has to be Documented in Journals. **One interview in each term online / offline**
NLHT 17.12	Exploring Vyakhya	Aim: To deepen students' understanding of *Chakrapani Vyakhyan* through discussions, written interpretations, and structured documentation of *Charaka Samhita* verses. Students will deepen their understanding of Chakrapani Vyakhyan (commentary on Charaka Samhita) through classroom discussions and written interpretations. In each session, specific commentary verses will be analyzed, focusing on both the original text of Charaka Samhita and Chakrapani's interpretations. Students will document these in a structured format, enhancing their skills in interpreting classical Ayurvedic literature.

		Classroom Discussions: Attend designated sessions per term, discussing selected verses from Chakrapani's commentary. Focus on how Chakrapani explains key terms and verses. **Written Documentation** After each session, write interpretations in a structured format, including: Sutra from the original text from Charaka Samhita Chakrapani's interpretation Your reflections **Group Work:** Collaborate in groups to analyse verses and present interpretations in the classes Presentation & Discussion: Present written interpretations in class for feedback from peers and faculty. **Peer Review:** Exchange interpretations for constructive feedback. **Final Submission:** Compile all interpretations into a document, which is to be recorded in an activity book, record book, or Journal. **Suggested Sutras:** **First Term (5 hours)** Chakrapani Teeka about sequencing of the Chapters of Chiktsa-sthana. Ch. Chi. 3/31, 38, 161-162, 216-217 Ch.Chi.4/7-8 Ch.Chi.5/6-7 Ch.Chi.6/56-57 Ch.Chi.7/9-10, 33 Cha.Chi.8/28-32 Ch.Chi.9/5 Ch.Chi.10/3, 4-5 Cha Chi.13/9-11 Cha Chi 15/38-41

NLHT 17.13	Recite, Memorise and recall Shlokas	**Aim:** To practice Shloka recitation, memorization, recalling, and documentation with accuracy. Shloka Recitation Activity and Documenting in Journal. 1. Verse Recitation Students will participate in two dedicated recitation sessions per term. • Each session will focus on chanting selected verses from Charaka Samhita. 2. Documentation of Shlokas in Journal – At home. • Students will neatly document the shortlisted verses in their Shloka Book, which is part of the Record Book, Activity Book, or Journal. • Proper handwriting, accuracy, and presentation will be emphasized. 3. Peer and Faculty Feedback Students will receive feedback from peers and faculty during recitation sessions. Feedback will focus on: Accuracy: Correct recitation of the verses. Pronunciation: Proper articulation of Sanskrit sounds. **Sutras Suggested:** **First Term (6 hours)** Cha. Chi. 1/1/3-12, 15, 16, 62-74,1/2/16-19, 1/3/30-31, 1/3/36-40, 1/3/41-42, 1/3/ 62-63,1/4/30-35, 1/4/51 Cha. Chi. 2/4/36, 39, 43, 46-51 Cha. Chi. 3/28,29, 31,36,140-142, 160, 200-203, 285-286, 315,316, 340, 341 Cha.Chi.4/ 5-8, 9, 25, 55-56, 88, 91-92

		Cha. Chi. 5/ 6-7, 183-188 Cha. Chi. 6/ 4-8, 13-14, 15, 16, 56, 57 Cha. Chi 7/ 9-10, 11-12, 21-26, 39-42, 140-143 Cha Chi 8/13, 39-42, 45-46, 52, 111-113 Cha.Chi.9/ 6-8, 25-27, 96, 97 Cha Chi 10/3-5, 14-15, 25-27,57-60 Cha Chi 11/15, 21-22,91-92 Cha Chi 12/16-19, 50-52 Cha Chi. 13/59-61, 68-69, 72-73, 124-128 Cha. Chi. 14 138-143, 144-147 Cha. Chi. 15/3-4, 36-37, 51-54, 56-57,74, 75, 77-78, 122-124, 141-141, 201-202, 232-233
NLHT 17.14	Jastification of Cronological arrangement of Samhita	**Justification of the Chronological Arrangement of Adhyayas in Chikitsa, Kalpa, and Siddhi Sthana of Charaka Samhita** **Objective:** To analyze and justify the sequential arrangement of **Adhyayas** within **Chikitsa, Kalpa, and Siddhi Sthana**, highlighting their logical progression and clinical relevance. **Instructions:** 1. **Study & Group Allocation:** ◦ Students will be divided into three groups: ▪ **Chikitsa Sthana** – Disease management principles. ▪ **Kalpa Sthana** – Formulations for detoxification. ▪ **Siddhi Sthana** – Mastery of Panchakarma procedures. 2. **Discussion & Analysis:** ◦ Each group will examine: ▪ The purpose and flow of Adhyayas.

- The rationale for their sequence.
- Their clinical applicability.

3. **Comparative Justification:**

    - Groups will collaborate to establish the interconnection between Adhyayas across Sthanas, focusing on the transition from treatment to formulations and procedural expertise.

4. **Presentation & Reflection:**

    - Groups will present their findings with textual references.
    - Discussion on how the structured arrangement aids Ayurvedic practice.

Assessment Criteria:

- Depth of analysis
- Logical justification
- Clarity in presentation
- Use of references

Topic 18 Cha Chi.17.Hikka Shwasa Chikitsitam (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Explain Nidanadi Panchaks, Sadhyasadhyata of Hikka-Shwasa (Cha. Chi.17/10-69)	CC	MK	KH	L&GD, L,L&PPT	Log book,VV-Viva,T-CS,PRN	F&S	II	-	LH
CO1	Explain the Samanya Chikitsa of Hikka-Shwasa (Cha. Chi. 17/71-76)	CC	MK	KH	L&PPT ,L&GD, L	CL-PR,VV-Viva,INT,T-CS,Log book	F&S	II	-	LH

CO1	Analyze Management of Hikka-Shwasa based on Balabala of Rogi (Cha. Ch. 17/88-90)	CAN	MK	KH	L,L&GD,L&PPT	T-OBT,T-CS,Log book,INT,VV-Viva	F&S	II	-	LH
CO1	Explain Samshodhana chikitsa in Shwasa (Cha. Chi. 17/121-122)	CC	MK	KH	L,L&PPT,L&GD	CR-W,PRN,Log book,VV-Viva,T-CS	F&S	II	-	LH
CO1	Explain Doshaanusar Chikitsa for Hikka and Shwasa (Cha. Chi. 17/147-150)	CC	MK	KH	L,L&GD,L&PPT	T-CS,Log book,VV-Viva	F&S	II	-	LH
CO1	Explain different Shamana Yoga such as Shatyadi Churna, Muktadya Churna, Dashamuladya Ghrita, Manasheela, Tejovatyadi Ghrita in Hikka-Shwasa (Cha. Chi. 17/125-128,129-134, 141-144, 145-146)	CC	DK	KH	L,L&GD,L&PPT	VV-Viva,T-OBT,T-CS,Log book	F&S	II	-	LH
CO1	Summarise the chapter 138-139	CC	NK	KH	L&PPT,L&GD,L	VV-Viva,Log book,T-CS	F&S	II	-	LH
Topic 19 Cha. Chi.18.Kasa Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Explain Nidana Panchaka and Sadhyasadhyata of Kasa (Cha. Chi. 18/04-31)	CC	MK	KH	L,L&GD,L&PPT	T-OBT,T-CS,Log book,VV-Viva,PRN	F&S	II	-	LH
CO1	Explain the Chikitsa Sutra of Vataja, Pittaja, Kaphaja, Kshataja and Kshayaja Kasa. (Cha. Chi. 18/32-34, 83-86, 108-111,134, 149-157)	CC	MK	KH	L,L&GD,L&PPT	Log book,VV-Viva,T-OBT,T-CS	F&S	II	-	LH

CO1	Explain different Shamana Yoga mentioned in Kasa such as Kanthakari Ghrita, Pippalyadya Ghrita, Rasnadi Ghrita, Chitrakadi Leha, Agastya Haritaki (Cha. Chi. 18/35, 36-38, 43-46, 57,62)	CC	DK	KH	L&PPT ,L&GD, L	T-CS,VV-Viva,Log book	F&S	II	-	LH
CO1	Summarise the Chapter (Cha. Chi. 18/190-191)	CC	NK	KH	L&PPT ,L&GD, L	INT,VV-Viva,Log book	F&S	II	-	LH
Topic 20 Cha. Chi.19.Atisara Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Discuss Nidana Panchaka of Atisara and Sadhyasadhyata (Cha. Chi. 19/05-11)	CC	MK	KH	L&GD, L&PPT ,L	VV-Viva,Log book	F&S	II	-	LH
CO1, CO2	Explain Samanya Chikitsa Sutra for Nija and Agantuja Atisara (Cha. Chi. 19/10-13)	CC	MK	KH	L,L&GD,L&PPT	T-CS,Log book,VV-Viva	F&S	II	-	LH
CO1	Explain the Chikitsa Sutra for Aamatisara (Cha. Chi. 19/14-18)	CC	MK	KH	L&PPT ,L,L&GD	Log book,T-CS,VV-Viva	F&S	II	-	LH
CO1	Describe different Shamana Yoga mentioned in Atisara such as Changeri Ghrita, Pramathya (Cha. Chi. 19/20-22, 44)	CC	DK	KH	L&PPT ,L,L&GD	T-CS,Log book,VV-Viva	F&S	II	-	LH
CO1	Explain Shleshmatisara Chikitsa Cha. Chi. 19/102-103,104-120)	CC	DK	KH	L&PPT ,L&GD, L	Log book,T-OBT,T-CS ,VV-Viva	F&S	II	-	LH
CO1	Describe importance of Picchabasti Prayoga in Raktatisara (Cha.	CC	DK	KH	L,L&G	Log book,V	F&S	II	-	LH

	Chi. 19/93-95)				D,L&PPT	V-Viva,T-CS				
CO2	Explain Sannipataja Atisara Chikitsa Sutra (Cha. Chi. 19/122)	CC	MK	KH	L,L&GD,L&PPT	T-CS,VV-Viva,Log book,INT	F&S	II	-	LH
CO1	Summarise the chapter (Cha. Chi. 19/123)	CC	NK	KH	L&PPT,L&GD,L	T-CS,Log book,VV-Viva	F&S	II	-	LH
Topic 21 Cha. Chi.20.Chhardi Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Explain Nidana Panchaka and Sadhyasadhyata of Chhardi (Cha.Chi. 20/06-19)	CK	MK	K	DIS,L_VC	Log book,DEB,PRN,CL-PR,VV-Viva	F&S	II	-	LH
CO1	Explain the Samanya Chikitsa of Chhardi (Cha. Chi. 20/20-22)	CC	MK	KH	L&GD,BS,TUT,SDL,SY	VV-Viva,T-CS	F&S	II	-	LH
CO1	Explain the Vishesha Chikitsa Vataja, Pittaja, Kaphaja , Sannipataj, Dvishtarthaj Chhardi (Cha. Chi. 20/23, 26, 34,41)	CC	MK	KH	RP,L&PPT ,L&GD,TBL,CBL	M-CHT,Log book,M-MOD,CL-PR,T-CS	F&S	II	-	LH
CO1	Summarise the chapter (Cha. Chi. 20/48)	CK	NK	K	DIS,L,L&PPT , TBL,L&GD	CL-PR,VV-Viva,Log book	F&S	II	-	LH

Topic 22 Cha. Chi.21.Visarpa Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Explain Nidana, Samanya Samprapti, Purvarupa, Bheda of Visarpa (Cha. Chi. 21/11-39)	CC	MK	KH	BS,L&PPT ,L&GD,L	PUZ,M-POS,M-CHT,QZ	F&S	II	-	LH
CO1	Define and explain Upadrava (Cha. Chi. 21/40)	CK	MK	K	L&GD, L_VC,L&PPT	QZ	F&S	II	-	LH
CO2	Describe Sadhyasadhyata of Visarpa (Cha. Chi. 21/42)	CC	MK	KH	L,L&PPT ,L&GD,BS	O-QZ,QZ , PUZ,INT,CR-RED	F&S	II	-	LH
CO3	Discuss the Chikitsa Siddhanta as per Awastha of Visarpa (Cha. Chi. 44-49, 68-70,116-117,141-143)	CAP	MK	KH	L&PPT ,L&GD, CBL,PER,L	C-VC,INT, S-LAQ	F&S	II	-	LH
CO2	Enlist Bahiparimarjana Chikitsa in Visarpa (Cha. Chi. 21/100-106)	CK	DK	KH	L&PPT ,DA,L&GD,L,DIS	P-VIVA,T-OBT,P-EXAM	F&S	II	-	LH
CO1	Differentiate the Chikitsa Siddhanta of Kushtha & Visarpa	CAN	MK	KH	L_VC, ML,SDL,L&GD,EDU	T-CS, C-VC,CL-PR	F&S	II	-	LH
CO1	Summarise the chapter (Cha. Chi. 21/144-146)	CC	NK	KH	DIS,L&PPT	RK,SBA,COM,Log book,SA	F&S	II	-	LH

Topic 23 Cha. Chi.22.Trishna Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Analyse Nidana Panchaka of Trishna (Cha. Chi. 22/4-23)	CAN	MK	KH	BS,L&GD,L&PPT ,L	CL-PR,INT,P-POS	F&S	II	-	LH
CO3	Discuss the Samanya Chikitsa of Trishna (Ch. Chi. 22/25,26)	CAP	MK	KH	L&GD,CBL,L&PPT	P-PS,INT,DEB	F&S	II	-	LH
CO2	Interpret the vishesha chikitsa siddhant of Trishna (Cha. Chi. 22/40-56)	CE	MK	KH	L&GD,L,L&PPT ,CBL	T-CS,CL-PR,QZ ,PUZ	F&S	II	-	LH
CO6	Discuss the indications of Shita Jala, Ushna Jala, Alpa Jala Sevana in Trishna (Cha. Chi. 22/57-,62)	CK	DK	KH	L,TPW,L&GD,L&PPT ,PBL	P-VIVA,M-POS,P-SUR	F	II	-	LH
CO3	Discuss the Chikitsa Sutra of Kshayaja Trishna (Cha. Chi. 22/50)	CAP	DK	KH	L,L&GD,L&PPT ,RLE	INT,SP	F&S	II	-	LH
CO2	Analyse Sadhya Asadhyata of Diseases based on Upsargaja Trishna (Cha. Chi. 22/17-18)	CE	MK	KH	L,L_VC ,PrBL,L&PPT ,L&GD	T-CS,PRN	F&S	II	-	LH
CO1	Summarise the chapter (Cha. Chi. 22/63)	CK	NK	K	SDL	T-OBT,P-VIVA	F&S	II	-	LH
Topic 24 Cha. Chi.23.Visha Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO8	Discuss Visha Chikitsa (Cha.Chi. 23/35-37)	CK	NK	KH	TUT,SY ,D-M,L &PPT ,PL	PRN,QZ ,P UZ,P-VIVA	F	II	-	LH
CO1	Summarise the chapter (Cha. Chi. 23/254)	CC	NK	K	L&GD, L&PPT	T-OBT,INT	F&S	II	-	LH
Topic 25 Cha.Chi.24.Madatyaya Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2	Enlist criteria for assessing different stages of Mada (Cha. Chi. 24/41-51)	CAP	MK	KH	L&PPT ,ML,CB L,L&G D	P-VIVA,O-GAME,WP	F&S	II	-	LH
CO1	Explain the chikitsa sutra of Madatyaya (Cha. Chi. 24/107-110)	CC	MK	KH	L&GD, L&PPT ,DIS	CL-PR,INT ,PRN	F&S	II	-	LH
CO6	Discuss the concept of Tadarthakari Chikitsa in Madatyaya (Cha. Chi. 24/117)	CAP	DK	KH	BS,L&P PT ,PL	INT,P-VIV A,RK,T-CS	F&S	II	-	LH
CO6	Discuss in detail about the ingredients ,Guna, Karma, Anupana, Aushadha Sevana Kala of Ashtang Lavana(Cha. Chi. 24/177-178)	CK	DK	KH	L_VC,L &PPT ,LS	PUZ,INT,P-EXAM	F&S	II	-	LH
CO2	Discuss the importance Ksheera Prayoga in Madatyaya (Cha. Chi. 24/195)	CAP	MK	KH	PER,DI S,L&PP T	INT,P-VIVA,PRN	F&S	II	-	LH
CO1,	Explain Lakshana and Chikitsa of Dhwamsaka & Vikshaya (Cha.	CAN	DK	KH	PER,L&	PUZ,PRN,S	F&S	II	-	LH

CO3	Chi.24/199-205)				PPT	P				
CO1	Summarise the chapter (Cha. Chi. 24/207-211)	CC	NK	KH	L&GD, SDL,L &PPT	P-VIVA,T-OBT	F&S	II	-	LH
Topic 26 Cha.Chi.25.Dwivraniya Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Discuss the importance of Trividha Pariksha (Cha. Chi. 25/22-23)	CAP	NK	KH	L&GD, L&PPT	P-VIVA,PRN	F&S	II	-	LH
CO1	Discuss Shadvidha Shastrakarma (Cha. Chi. 25/55-60)	CC	NK	K	PBL,L&GD,L&PPT	P-VIVA	F&S	II	-	LH
CO1, CO7	Classify Pathya and Apathya Aahara as per different Vargas mentioned in Charaka Sutra Sthana	CC	NK	K	LS,PER,CBL,KL,SDL	M-POS,M-CHT,P-VIVA,CL-PR,T-OBT	F&S	II	-	LH
CO1	Summarise the Chapter (Cha.Chi. 25/120-121)	CK	NK	K	SDL,L_VC,ML,KL,L&GD	T-OBT,Log book,COM	F&S	II	-	LH
Topic 27 Cha. Chi.26. Trimarmiya Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO3	Discuss the Lakshana and Chikitsa of Udavrta (Cha. Chi. 26/5-31)	CC	MK	KH	CBL,L&PPT , L&GD, L	PUZ,PA,INT,SP	F&S	II	-	LH

CO1	Enlist the samkhya Samprapti of Mutrakricha, Hridroga, Pratishaya, Shiroroga, Mugharoga, Arochaka	CC	DK	K	L&GD, L&PPT	O-QZ,QZ	F&S	II	-	LH
CO1	Analyse Nidanapanchaka of Mutrakricha, Hridroga, Shiroroga,Arochaka (Cha. Chi. 26/32-76,77-100,104)	CAP	MK	KH	L&GD, L&PPT	VV-Viva,INT,M-CHT	F&S	II	-	LH
CO2	Explain Chikitsa Sutra of Hridroga (Cha. Chi. 26/101,102)	CK	MK	KH	BS,L&PPT ,L&GD	S-LAQ,PUZ,INT,CL-PR,QZ	F&S	II	-	LH
CO6	Enlist and discuss ingredients and properties of various Dravyas in Varga/ Mahakashaya from Samhita used in management of Mutravaha Sroto Dushti-Vikara	CAP	NK	KH	KL,LS, SDL,TPW	P-VIVA,RK,CHK,INT,VV-Viva	F&S	II	-	LH
CO6	Explain in detail about the ingredients and various indications mentioned for Hinguvarchadi Churna, Mahanila Taila,.Sahacharadi Taila, Mishraka Sneha	CAN	DK	SH	L&GD, SY	P-VIVA,DOAP,VV-Viva	F&S	II	-	LH
CO1	Summarise the chapter (Cha. Chi. 26/294)	CC	NK	KH	L&PPT ,L&GD	INT,Log book,RK	F&S	II	-	LH
Topic 28 Cha.Chi.27.Urusthambha Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Discuss the Nidana Panchaka of Urustambha (Cha. Chi. 27/08-19)	CC	MK	KH	CBL,L &PPT	PUZ,T-CS,CL-PR	F&S	II	-	LH
CO2	Explain Chikitsa Sutra of Urusthambha (Cha. Chi. 27/25, 60-61)	CK	MK	KH	ML,L&PPT ,BL,FC	RK,INT,Log book	F&S	II	-	LH
CO1, CO2	Justify contraindications of Panchakarma in Urustambha Chikitsa (Cha. Chi. 27/20-24)	CAP	MK	KH	CBL,L &PPT ,L&GD	INT,P-VIVA,S-LAQ	F&S	II	-	LH

CO6	Discuss ingredients and various indications of Ashtakatwara Taila, Shringeshtyadi Churna.	CK	DK	KH	L_VC,L&GD,TBL,L&PPT	DEB	F&S	II	-	LH
CO6	Evaluate role of Gurvadi Guna of Dravya used in the management of Urustambha	CAP	NK	KH	SDL,KL	PUZ,CBA	F&S	II	-	LH
CO1	Disscuss the Vihara advised in the management of Urustambha (Cha. Chi. 27/58-60)	CAP	NK	K	BS,DIS,L&GD	SP,RK,M-CHT,Log book	F	II	-	LH
CO1	Summerise the chapter	CC	NK	K	L&GD,L&PPT,L	COM,Log book,RK	F&S	II	-	LH
Topic 29 Cha.Chi.28.Vatavyadhi Chikitsitam (LH :2 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Describe Nidana, Samprapti, Purvaroopa, Samanya Lakshana of Vatavyadhi (Cha. Chi. 28/15-23)	CK	MK	K	L,L&PPT,L&GD	INT, C-VC,T-CS	F&S	II	-	LH
CO1	Discuss different Sthanagatavata Lakshana (Cha. Chi. 28/24-37)	CC	MK	KH	L&GD,BL,PL	INT,SP,P-EXAM	F&S	II	-	LH
CO1	Explain Samprapti and Lakshana of Ardita and Pakshaghata (Cha. Chi. 38-42, 53-55)	CAN	MK	KH	L&PPT,CBL,L&GD	SBA,CBA	F&S	II	-	LH
CO1, CO2	Elaborate Nirupasthambha Vatavyadhi Chikithsa (Cha. Chi. 28/75)	CAN	MK	KH	L&GD,FC,L,L&PPT	P-VIVA,T-CS,INT,OSCE,Mini-CEX	F&S	II	-	LH

CO2, CO3	Describe Chikitsa Sutra of Ardita (Cha. Chi. 28/99)	CC	MK	KH	L&PPT ,CBL,L &GD,L	P-VIVA,T-CS,P-EXAM,T-OBT	F&S	II	-	LH
CO2	Explain different Sthanagata Vata Chikitsa (Cha. Chi. 28/89-95)	CAP	MK	KH	DIS,BS, L,L&PPT	P-VIVA,PM, C-VC,DEB, P-EXAM	F&S	II	-	LH
CO2, CO3	Describe Lakshana and Chikitsa of Pakshaghata (Cha. Chi. 28/53,100)	CAP	MK	KH	CBL,L &GD,L, L&PPT	INT,OSCE, CWS ,SBA,CBA	F&S	II	-	LH
CO2, CO3	Differentiate Khalli and Gridhrasi (Cha. Chi. 28/56,57)	CC	MK	KH	L,PL,L &PPT	CBA,P-VIVA	F&S	II	-	LH
CO6	Discuss ingredients, Guna, Karma of Balataila (Cha. Chi. 28/148-166), Rasnataila (Cha. Chi. 28/165-167)	CC	MK	KH	FC,L&PPT ,L	INT,RK	F&S	II	-	LH
CO1, CO2	Analyze and classify the correlation of Vatavyadhi with Dhatu, Upadhatu, Srotas, and Rogamarga	CAP	DK	KH	SDL,BL ,FC,L& GD	PUZ,INT, M-CHT,O-QZ	F&S	II	-	LH
CO2	Discuss Chikitsa Siddhanta of Upasthambhita Vatavyadhi (Cha, Chi. 28/184,186,194,195,196,202,203,204,205,212,219,222,245,246,247)	CK	MK	KH	BS,PL, L&GD	PUZ,QZ ,O-QZ	F&S	II	-	LH
CO1	Summarise the chapter (Cha. Chi. 28/248-249)	CK	NK	K	SDL	RK,VV-Viva	F&S	II	-	LH
Topic 30 Cha.Chi.29.Vatashonita Chikitsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Describe Nidana, Samprapti, Purvaroopa, Lakshana, Bheda and	CAN	MK	KH	L,L&G	C-VC,T-	F&S	II	-	LH

	Sadhyasadhyata of Vatrakta (Cha. Chi. 29/5-34)				D,L&PPT	CS				
CO3	Differentiate Utthana, Gambhira and Ubhayashrita Vatarakta (Cha. Chi. 29/19-23)	CK	MK	KH	L,L&GD,L&PPT	QZ ,WP,PUZ,O-GAME,O-QZ	F&S	II	-	LH
CO2	Explain Utthana and Gambhira Vatashonita Chikitsa Sutra (Cha.Chi .29/41-48,158,160)	CAN	MK	KH	L,CBL,L&PPT,BS	INT,PA,CR-W	F&S	II	-	LH
CO2, CO3	Describe importance of Ksheera Basti Chikitsa in Vatarakta (Cha.Chi. 29/88)	CAP	MK	K	L&PPT,L&GD,L	INT,VV-Viva	F&S	II	-	LH
CO6	Discuss in detail about the ingredients, Guna, Karma of Pindataila (Cha.Chi. 29/123)	CAP	DK	K	L,L&PPT ,KL	VV-Viva,RK	F&S	II	-	LH
CO1	Summarise the chapter(Cha.Chi. 29/163-165)	CK	NK	K	L,L&PPT ,L&GD	T-OBT,QZ	F&S	II	-	LH
Topic 31 Cha.Chi.30.Yonivyapad Chiktsitam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Discuss Yonivyapad types, Lakshana and Chikitsa. Cha.Chi.30/9-36,41-42, 45)	CAP	MK	K	ML,L&GD,EDU	P-VIVA	F&S	II	-	LH
CO1	Discuss and explain the chikithsa pariksha vishayas (Cha.Chi.30/ 293-333)	CAP	DK	K	L,RP,L&PPT ,KL	M-POS,M-CHT,INT	F	II	-	LH
CO1	Explain the concept of anuktha vyadhis(Cha.Chi.30/291-292)	CC	DK	K	PL,L&	S-LAQ	F&S	II	-	LH

					GD,L& PPT ,L					
CO1, CO2	Explain Shukra Dosha, hetu,Lakshana, and Chikitsa. Cha. Chi.30/133-153)	CK	DK	K	L&GD	T-OBT	F&S	II	-	LH
CO1, CO2	Explain Klaibya bhedha, lakshana, Sadhyaasadhyata and Chikitsa, Cha.Chi.30/155-224)	CK	DK	KH	L&PPT ,L&GD	T-OBT,T-CS	F&S	II	-	LH
CO1, CO2, CO3	Explain Pradara hetu, Samprapti, Lakshana and Chikitsa. (Cha.Chi.30/205-224)	CK	DK	K	L&GD	T-CS,T-OBT	F&S	II	-	LH
CO1, CO2	Explain Aoushadhi Sevana Kala (ChaChi.30/294-312)	CK	DK	K	L&GD, L&PPT ,L	T-OBT,T-CS	F&S	II	-	LH
CO1, CO2, CO3	Explain The Importance of pathya Ahar (Cha.Chi.30/329-333)	CC	DK	K	L&GD, L&PPT	T-OBT	F&S	II	-	LH
CO1	Summarise chapter(Cha Chi 30/334-339)	CC	NK	K	L	P-VIVA	F&S	II	-	LH
Topic 32 Cha. Ka.1Madanakalpam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Define prayojana (objective) of kalpasthana and define Vaman and Virechana (Cha.Ka. 1/4)	CK	MK	K	L,L&PPT	P-EXAM,VV-Viva	F&S	II	-	LH
CO1	Describe the Mode of action of Vamana and Virechana Dravya and compare with charecteristics of Urdhvagami and Adhogami Dravya. (Cha.Ka 1/5-6)	CC	MK	K	L&PPT ,L,L&GD	P-POS,P-VIVA,VV-Viva,T-OBT	F&S	II	-	LH
CO1	Identify features of Trividha Desha in different geographical areas(Cha.Ka.1/8)	CAP	MK	KH	L&PPT ,L,L&G	T-OBT,VV-Viva,P-	F&S	II	-	LH

					D	VIVA,T-CS				
CO1	Discuss the Shreshthata of Madanphala among other Vamaka Dravyas (Cha.Ka. 1/13)	CC	MK	K	L,L&PPT	PRN,DEB, P-VIVA	F&S	II	-	LH
CO1, CO6	Evaluate procedure of Maadanaphala Sanskara for Vamana purpose Cha.Ka 1/13)	CC	MK	K	L&GD, L&PPT ,L	VV-Viva,P-VIVA,PP-Practical	F&S	II	-	LH
CO6	Explain Madanaphala Samgraha and Prayog Vidhi (Cha.Ka.1/13)	CC	MK	KH	L,L&GD,L&PPT	P-VIVA,T-OBT	F&S	II	-	LH
CO6	Enumerate Yogas of Madanaphala (Cha.Ka. 28-30)	CC	NK	K	L&PPT ,L	P-VIVA,T-OBT	F&S	II	-	LH
CO1	Enlist the Madanaphala Paryaya (Cha.Ka. 1/27)	CC	MK	K	REC,L, L&PPT	VV-Viva,T-OBT,P-VIVA	F&S	II	-	LH
CO1	Explain Adhyaya Sangraha (Cha.Ka.1/28-30)	CC	NK	K	L&PPT ,L	P-VIVA,T-OBT	F&S	II	-	LH
Topic 33 Cha.Ka.2 to 6 (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Describe Yogya Roga and Rogi for Jivamutak , Ikshvaku, Dhamargava . Vatsaka and Kritavedhana Kalpam Jimutaka, (Cha.Ka.2/4) (Cha.Ka.3/4) (Cha.Ka.4/4) (Cha.Ka.5/6)	CC	DK	K	L&GD	PRN	F&S	II	V-DG	LH
CO6	Explain Paryaya and Guna of Jivamutak , Ikshvaku, Dhamargava . Vatsaka and Kritavedhana Kalpam. (Cha.ka 2/3-4) (Cha.Ka.3/3-4) (Cha.Ka.4/3-4) (Cha.Ka.5/3-5) (Cha.	CC	DK	K	PL,PER	Log book,COM,VV-Viva	F&S	II	-	LH

	Ka. 6/3-4)									
CO1	Enumerate yogas of Jimutaka , Ikshvaku, Dhamargava ,Vatsaka, and Kritavedhana Kalpam. (Cha.Ka.2/ 14-15) Cha.Ka. 3/ (Cha.Ka.4/19-20), (Cha.Ka 5/12) (Cha.Ka.6/13-14)	CK	DK	K	L&GD, L	Log book,T-OBT	F&S	II	-	LH
Topic 34 Cha.Ka.7.Shyamatrivrutta Kalpam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2, CO6	Enlist the Paryaya, Guna, indication (Cha.Ka.7/3-7)	CC	MK	K	L,L&PPT	T-OBT,P-VIVA	F&S	II	-	LH
CO1, CO2	Describe Bhedha , Samgraha and Prayoga Vidhi (Cha.Ka.7/8-11)	CC	MK	K	L&PPT ,L	T-OBT,P-VIVA	F&S	II	-	LH
CO1, CO6	Explain Rutuanusruta Trivrita Prayoga (Cha.Ka.7/56-64).	CC	NK	K	L,L&PPT	T-OBT,P-VIVA	F&S	II	-	LH
CO1	Explain the Adhyaya Sangraha (Cha.Ka. 7/77-80)	CC	NK	K	L&PPT ,L	VV-Viva	F&S	II	-	LH
CO1, CO2	Explain Yogas ingredients and Indications of Kalyanaka Guda, Vyoshadi Gutika . (Cha.Ka.7/40-45) (Cha.Ka.7/46-49)	CC	DK	KH	DIS,L&GD	T-OBT,T-CS,P-REC	F&S	II	-	LH
Topic 35 Cha.Ka.8. to 11 (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Explain Samgrah and Prayoga vidhi of Chaturangula, Tilvaka , Sudha , Saptalashankhini. (Cha.Ka 8/6-7) (Cha.Ka9/4-5) (Cha.Ka10/.3-9) (Cha.Ka11/5)	CC	NK	D	FC	PRN,VV-Viva	F&S	II	-	LH

CO6	1. Explain Paryaya,Gunas ,Indications of Chaturangula, Tilvaka , Sudha , Saptalashankhini.. (Cha,Ka8/.3-5) (Cha.Ka.9/3) (Cha.Ka 10/3-9), (Cha.Ka.11/3-5)	CK	DK	K	PER	PP-Practical,VV-Viva, COM,PA	F&S	II	-	LH
CO1	Enumerate yogas of Chaturangula Kalpam, Tilvaka kalpam, Sudha Kalpam, Saptalashankhini kalpam. (Cha.Ka 8/17-18) (Cha.Ka.9/17-18) (Cha.Ka 10/21-22) (Cha.Ka 11/18-19)	CC	DK	K	L&GD	T-OBT	F&S	II	-	LH
Topic 36 Cha.Chi.12.Dantidravanti Kalpam (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Enlist the Dantidravanti Paryaya (Cha.Ka.12/3)	CC	MK	K	L&PPT,L	P-VIVA,T-OBT	F&S	II	-	LH
CO1, CO6	Explain the Samgraha and Prayoga Vidhi of Dantidravanti. (Cha.Ka.12/4)	CC	MK	K	L,L&PPT	T-OBT	F&S	II	-	LH
CO1	Enlist Dantidravanti Guna(Cha.Ka.12/6)	CC	MK	K	L,L&PPT	P-VIVA,T-OBT	F&S	II	-	LH
CO2, CO6	Explain the Dantidravanti Yoga	CC	NK	K	L&PPT,L	P-VIVA,T-OBT	F&S	II	-	LH
CO1	Explain Adhyaya Sangraha (Cha.Ka.12/36-40)	CC	NK	K	L,L&PPT	VV-Viva,P-VIVA	F&S	II	-	LH
CO1	Explain the Number of emetic and purgative formulations prepared out of fifteen important drugs. (Cha.Ka.12/41-42)	CC	NK	K	L,L&PPT	T-OBT,P-VIVA	F&S	II	-	LH
CO1	Describe the importance of Bhavana, Samyoga of Dravyas in formulating medicines(Cha. Ka 47-48).	CC	NK	K	L&PPT,L	T-OBT,P-VIVA	F&S	II	-	LH
CO1	Explain trividha yoga of Vaman -virechaka Aoushadhi of Tikshnatva, Madhyatva and Mrudu.(Cha. Ka. 12/51-52)	CC	NK	K	L,L&PPT	T-OBT,P-VIVA	F&S	II	-	LH

CO1	Explain indications of Tikshana, Madhya, Mrudu Bheshaja.	CC	NK	K	L,L&PPT	P-VIVA,T-OBT	F&S	II	-	LH
CO3	Explain Chikitsa in case Virechana Aushadha coming out from Urdhva , Things to do in case of Dosha Apravritti, Things to do when Ati Pravritti of Dosha.	CC	MK	K	L&PPT,L	T-OBT,P-VIVA	F&S	II	-	LH
CO1	Explain indications of Snigdha Virechana and Ruksha Virachana. (Cha.ka 12/83-85)	CC	NK	K	L,L&PPT	T-OBT,P-VIVA	F&S	II	-	LH
CO1	Explain Vidhipurvaka Samshodhana Prayoga (Cha.Ka 12/57)	CC	NK	K	L,L&PPT	P-VIVA,T-OBT	F&S	II	-	LH
CO1	Describe Dravya Pramana based on Koshtha. (Cha.Ka.12/86)	CC	NK	K	L&PPT,L	T-OBT,P-VIVA	F&S	II	-	LH
CO1	Enlist the classical measurements and its comparasion with International System of Unit.	CC	NK	K	L&PPT,L	T-OBT,P-VIVA	F&S	II	-	LH
CO1	Explain the Quantity to be taken of Sadyodhruta Dravya.(Cha. Ka.12/98-99)	CC	NK	K	L&PPT,L	P-VIVA,T-OBT	F&S	II	-	LH
CO1	Explain the Sneha Paka Paribhasha and their imporatnce, Utility. (Cha.Ka.12/102-103)	CC	NK	K	L,L&PPT	P-VIVA,T-OBT	F&S	II	-	LH
CO1	Explain Magadha maan Paribhasha and Importance (Cha.Ka.12/87-97)	CC	NK	K	L,L&PPT	T-OBT,P-VIVA	F&S	II	-	LH
CO1	Explain Kalpasthana Sangraha (Cha Ka. 12/ 106-107)	CC	NK	K	L,L&PPT	P-VIVA,T-OBT	F&S	II	-	LH
Topic 37 Term 2 Non Lecture theory Activities (LH :0 NLHT: 33 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Apply Fundamental Principle of Samhita in diagnosis,	CAP	MK	KH	TBL,L	Log book,I	F	II	-	NLHT37.1

	interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.				&GD,FC	NT,P-VIVA				
CO1, CO2	Appraise Sambhasha on different topics of Samhita.	AFT-VAL	MK	SH	D	P-VIVA	F&S	II	-	NLHT37.2
CO1	Conduct Cross sectional study of Samhita	CAP	MK	KH	L&GD	INT,P-VIVA	F	II	-	NLHT37.3
CO1	Compare and analyse Charaka Samhita and Sushruta Samhita	CC	DK	KH	L&PPT,L&GD	COM	F	II	-	NLHT37.4
CO2, CO3, CO6	Perform Samhita based analysis of Diseases.	CAP	MK	KH	D-BED	RK,CBA,VV-Viva	F&S	II	-	NLHT37.5
CO7	Review and summarize Published Articles on different aspects, topics of Samhita.	CAP	MK	KH	L&GD, TBL	RK,INT	F	II	-	NLHT37.6
CO1, CO2	Illustrate the Concept mapping of Samprapti and Chikitsa	CAP	MK	K	DIS	P-VIVA	F	II	-	NLHT37.7
CO1	Comparative Analysis of Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita	CC	MK	K	D	P-VIVA	F&S	II	-	NLHT37.8
CO7	Integrate Chikitsa concepts of Samhita with contemporary medical science	CAN	MK	KH	TBL,L&GD	RK,INT	F	II	-	NLHT37.9
CO1	Evaluate and describe Samhita with the help of Tantrayukti	CC	MK	KH	SDL	RK,Log book,VV-Viva,INT	F	II	-	NLHT37.10
CO1, CO2	Perform interview of senior Vaidya.	CAP	MK	KH	TBL,L&GD	INT,RK	F	II	-	NLHT37.11
CO1	Interpret and decode Samhitas with commentary.	CC	NK	KH	TBL,RE	CBA,RK,V	F&S	II	-	NLHT37.1

					C,L&GD	V-Viva				2
CO1	Recite memorise and recall important Shloka	CC	MK	K	SDL	P-REC	F&S	II	-	NLHT37.13

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 37.1	Fundamental Principle of Samhita used in diagnosis, interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.	Refer NLHT 17.1
NLHT 37.2	Conducting Sambhasha on different topics of the Samhita	Refer NLHT17.2 **Second Term Suggested Topics (1 hour)** Concept of Dosha Gati in Shakhashrita and Kosthashrita kamala/ Concept of Upadrava and its management/ Concept of Avarana and its management etc.
NLHT 37.3	Cross sectional study of Samhita	Refer NLHT 17.3 **Second Term** Irregular Sleep Patterns: A Significant Cause of Disease (Vyadhi)/ Asatmya Indriyartha Samyoga: A Key Etiological Factor in Disease/ Concept of Gata Vata and Avarana Vata: Differentiating Two Pathological States/ Bahirparimarjana Chikitsa in Vata-Rakta: External Therapies for Vata-Rakta Disorders etc.
NLHT 37.4	Comparative study of Charaka Samhita and Sushruta Samhita	Refer NLHT17.4 **Second Term (4 hours)** Cha.Chi. 16- Su Ut. 44 Cha. Chi.26 - Su Ut. 43 Cha. Chi. 17, Su. Ut..50, Su. Uttar 51

		Cha Chi. 18/ Su Ut. 52
NLHT 37.5	Samhita Based Analysis of Diseases	Refer NLHT 17.5 **Second Term (4 hours)** Cha. Chi. 16 - Case of Pandu Cha. Chi. 17 - Case of Shwas Cha. Chi. 18 - Case of Kasa Cha. Chi. 28 - Case of Gridhrasi/Sandhigata Vata/ Pakshaghata
NLHT 37.6	Review of Published Articles from Samhita	Refer NLHT 17.6 **Second Term (2 hours)** Pandu, Kamala, Tamakshwas, Kasa, Gridhrasi, Ardita, Pakshaghata. etc
NLHT 37.7	Concept mapping of Samprapti and Chikitsa	Refer NLHT 17.7 **Second term (2 hours)** Case of Pandu, Kasa, Shwasa, Gridhrasi, Ardita, Pakshaghata etc.
NLHT 37.8	Comparative Analysis of Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita	Refer NLHT 17.8 **Second Term (2 hours)** Ardita of Charaka Samhita and Sushruta Samhita, Udavarta Chikitsa of Charaka and Sushruta Samhita, Shwas Chikitsa of Charaka and Sushruta
NLHT 37.9	Integrative activities - Compare Chikitsa concepts of Samhita with contemporary medical science	Refer NLHT 17.9 **Second Term (2 hours)** Ardita and Bell’s palsy, Gridhrasi and Sciatica, Sandhivata and Osteoarthritis etc.
NLHT 37.10	Evaluation by Tantrayukti	Refer NLHT 17.10

		Second Term (2 hours) Cha. Chi. 17/ 88 70- 76, 92-93,148 Cha. Chi. 18/ 31, 32- 34 Chi. 20/ 5, 35, 41-44 Cha. Chi. 23/ 61-62
NLHT 37.11	Interview of senior Ayurveda Vaidya	Refer NLHT17.11
NLHT 37.12	Exploring Vyakhya	Refer NLHT 17.12 **Second Term (4 hours)** Cha. Chi. 17/147-150. Cha Chi.21/40 Cha. Chi 27/20-24 Cha. Chi. 28/72-74 Cha Chi 29/3-11
NLHT 37.13	Recite, Memorise and recall Shlokas	Refer NLHT 17.13 **Second Term (6 hours)** Cha.Chi.16/40, 93-96,116, 118, 130-131 Cha. Chi. 17/71-72, 88-90, 121-122 Cha. Chi. 18/32-34, 83, 108, 131-133, 149-150 Cha. Chi. 19/14-15,19 Cha. Chi. 20-22, 41 Cha. Chi. 21/49 ,142 Cha. Chi. 22/19, 57, 58 -59 Cha. Chi. 23/14-17, 24, 221-222 Cha. Chi.24/107-108 Cha. Chi. 25/26, 86

		Cha. Chi. 26/3, 4 Cha. Chi. 27/25-27, 47 Cha. Chi.28/3,19,75,76,99,101 Cha. Chi. 29/35,36,41,82, 83,88,123 Cha Chi. 30/ 8-38, 298, 302

Topic 38 Cha. Si.1.Kalpana Siddhi (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Describe the guidelines to be followed during Snehana, Swedana and Enlist the benefits of Snehana and Swedana (Ch.Si.1/6-8)	CC	MK	KH	L,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Describe the diet recommended prior to Vamana and Virechana (Ch.Si.1/8-9)	CK	MK	KH	L,L&GD,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Describe the ideal conditions for performing Vamana and Virechana (Ch.Si.1/9-10)	CK	MK	KH	L,L&GD,L&PPT	T-OBT,VV-Viva, C-VC ,PP-Practical	F&S	III	-	LH
CO1, CO3	Explain the importance of Samsarjana Krama and its benefits (Ch.Si.1/11-12)	CK	MK	KH	CBL,L&GD,L,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO5	Describe the Antiki, Maniki, Vaigiki and Laingiki Pariksha for assessment of Vamana and Virechana (13-14)	CC	MK	KH	L,CBL,L&GD,L&PPT	VV-Viva,T-OBT,CL-PR	F&S	III	-	LH
CO2, CO3, CO5	Explain the Samyak yoga, Ayoga and Atiyoga lakshana of Vamana (Ch.Si. 1/15-16)	CK	DK	K	L&GD,L&PPT,L	T-OBT,VV-Viva	F&S	III	-	LH

CO2, CO3, CO5	Describe the Samyak yoga, Ayoga and Atiyoga lakshana of Virechana (Ch.Si. 1/17-19)	CK	DK	K	L&PPT,L,L&GD	VV-Viva,CL-PR,T-OBT	F&S	III	-	LH
CO2, CO3, CO5	Explain the mode of action of Basti (Ch.Si.1/40-41)	CK	MK	K	L&GD,L,L&PPT	T-OBT,VV-Viva,M-POS,M-CHT	F&S	III	-	LH
CO1, CO2	Describe the importance of Basti (Ch.Si.1/38-39)	CK	MK	KH	L&PPT,CBL,L&GD,L	T-CS,VV-Viva	F&S	III	H-PK	LH
CO2, CO3, CO5	Describe the Niruha and Anuvasan Basti Samyak-yoga - Ayoga and Atiyoga Lakshana (Ch.Si. 1/ 40-46)	CC	MK	KH	L&PPT,L&GD,L	VV-Viva,T-OBT	F&S	III	-	LH
CO1, CO2	Enlist the Number of Karma, Kala and Yoga Basti (Ch.Si.1/47-48)	CC	MK	K	L&PPT,L&GD,L	T-OBT,VV-Viva	F&S	III	-	LH
CO2, CO3	Enlist the number of Anuvasana Basti in Vata, Pitta and Kapha Dosha Adhikya (Ch.Si.1/49)	CK	MK	K	L,L&GD,L&PPT	VV-Viva,T-OBT	F&S	III	-	LH
CO2, CO5	Describe the Shirovirechana Samyak yoga-Ayoga-Atiyoga (Ch.Si.1/51-52)	CC	MK	K	L&GD,L,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO2, CO3	Describe benefits of Panchakarma Chikitsa (Ch.Si.1/53)	CC	MK	KH	L&PPT,L&GD,L	T-OBT,VV-Viva	F&S	III	-	LH
CO2, CO3	Describe the Parihar Kala suggested for Panchakarma treatment (Ch.Si.1/54)	CK	MK	KH	L&PPT,L,L&G	T-OBT,VV-Viva	F&S	III	-	LH

					D					
CO2	Explain the factors to be avoided during Panchakarma (Ch.Si.1/54-55)	CK	NK	K	L&GD, L&PPT ,L	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Summarize the chapter as per Sutra (Ch. Si 1/60)	CK	NK	K	SDL	T-OBT,VV-Viva	F&S	III	-	LH
Topic 39 Cha.Si.2.Panchakarmiya Siddhi (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Enlist the ayogya purushas for Panchakarma (5-7)	CK	DK	KH	L&PPT ,L&GD, L	VV-Viva,T-OBT	F&S	III	-	LH
CO1	Describe indications and contraindications for all Panchakarma procedures Cha.Si (4-6)	CC	MK	K	L&PPT ,L,CBL	VV-Viva,T-OBT	F	III	-	LH
CO1, CO2	Identify Patients contraindicated and indicated for Various Panchakarma procedures,Vamana 8-10,Virechana 9-12,Asthapana Basti 14-16,Anuvasana Basti 17-19,Shirovirechana 20-22,Best season for all Panchakarma-s (23)	CC	DK	K	L,CBL, L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Summarize the Chapter Cha. Si 24	CC	NK	K	SDL	T-OBT,VV-Viva	F&S	III	-	LH
Topic 40 Cha.Si.3.Bastisutriyam Siddhi (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Describe the questions by Agnivesa regarding Basti (Cha.Si.3/3-5)	CK	MK	K	IBL	VV-Viva,T-OBT	F&S	III	-	LH
CO2	Describe the yogya and ayogya before administration of basti	CC	MK	K	L,DIS,L	M-CHT,M-	F&S	III	-	LH

	(Cha.Si.3/6)				&GD,L &PPT ,BL	POS,VV-Viva,T-OBT				
CO1	Describe the structure of Basti Netra & its features (Cha.Si.03/8-12)	CK	MK	K	D-M	T-OBT,VV-Viva,P-MOD	F&S	III	-	LH
CO1	Describe the Preparation and administration of basti formulation (Cha.Si.3/13-19)	CC	MK	KH	L&GD, L_VC,L &PPT ,D,L	VV-Viva,T-OBT	F&S	III	-	LH
CO5	Analyze the consequences of improper nozzle administration and its complications (Basti Netra Dosha) as per Cha. Si. 3/20-22	CC	DK	K	L,L&GD,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Justify the sequence of Niruha Basti formulation and the appropriate position for its administration as per Cha. Si. 23-26	CE	DK	K	L,L&GD,L&PPT	VV-Viva,T-OBT	F&S	III	-	LH
CO1, CO2	Describe the guidelines/regimen to be followed after the Niruha Basti administration (Cha.Si.3/27-29,33,34,70)	CC	NK	K	L&PPT ,L&GD, L	T-OBT,CL-PR,S-LAQ	F&S	III	-	LH
CO1, CO2	Discuss the Matra (dosage) of Basti administration based on Dosha dominance as per Cha. Si. 3/30-31.	CC	MK	KH	L&GD, L,L&PPT	VV-Viva,T-OBT	F&S	III	-	LH
CO1, CO2	Discuss the dosage of Niruha Basti, post-Basti dietary regimen, and essential equipment as per Cha. Si. 3/32-34.	CK	MK	K	L,L&PPT ,L&GD	VV-Viva,T-OBT	F&S	III	-	LH
Topic 41 Cha. Si.4.Snehavyapat Siddhi (LH :1 NLHT: 0 NLHP: 0)										

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2	Explain the various Anuvasana Basti formulations and their indications in different disorders as per Cha. Si. 4/4-22	CK	DK	K	L&PPT ,L	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Describe the benefits of Anuvasana Basti (Cha.Si.4 /22)	CK	DK	K	L,L&PPT ,L&GD	T-OBT,VV-Viva	F&S	III	-	LH
CO5	Explain and discuss the six Vyapat (complications) of Sneha Basti, including their causative factors, symptoms, and Chikitsa, as per Cha. Si. 4/25-41.	CC	MK	K	L&GD, L&PPT ,L	VV-Viva,T-OBT	F&S	III	-	LH
CO5	Describe the factors responsible for Vyapad of Sneha Basti (Cha.Si.4 /26)	CC	MK	K	L,L&GD,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO2	Discuss the guidelines to be followed post-Sneha Basti administration as per Cha. Si. 4/42-45.	CK	DK	KH	L&PPT ,L&GD, L	T-OBT,VV-Viva	F&S	III	-	LH
CO1, CO2	Describe the conditions indicated for daily administration of anuvasana basti (Cha.Si.4/46-47)	CK	MK	KH	L&PPT ,L,L&GD	T-OBT,VV-Viva	F&S	III	-	LH
CO5	Explain the concept of Ama and Pakwa Taila in Anuvasana Basti and its associated complications as per Cha. Si. 4/48-51.	CK	NK	K	L,L&PPT ,L&GD	T-OBT,VV-Viva	F&S	III	-	LH
CO1, CO2	Describe the indications and benefits of matra basti (Cha.Si.4/52-54)	CK	MK	K	L,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Summarize the Chapter based on verses (Cha.Si.4/1-55)	CC	NK	K	SDL	T-OBT,VV-Viva	F&S	III	-	LH

Topic 42 Cha.Si. 5.Netrabastivyapat Siddhi (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO5	Enumerate and discuss the number of Basti Netra Dosha, Basti Putaka Dosha, and Basti Data/Pranetru Dosha along with their complications as per Cha. Si. 5/3-8.	CC	MK	K	L,L&GD,L&PPT	VV-Viva,T-OBT	F&S	III	-	LH
CO5	Enumerate and discuss the complications arising from improper administration of Basti as per Cha. Si. 5/3, 9-18.	CC	MK	K	L,L&PPT,L&GD	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Explain and discuss the indications of Shodhana in Sadharana Ritu as per Cha. Si. 4-6.	CC	MK	K	SDL	T-OBT,VV-Viva	F&S	III	-	LH
CO1, CO2	Summerize of the Chapter based on Sutras (Cha.Si 5/1-18)	CC	MK	K	L&PPT,L,L&GD,SDL	T-OBT,VV-Viva	F&S	III	-	LH
Topic 43 Cha.Si.6.Vamana Virechana Vyapat Siddhi (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1, CO2	Explain and discuss on the Indication of Shodhana in Sadharana Rutu.	CC	MK	K	L,L&GD,L&PPT	CL-PR,T-OBT,VV-Viva	F&S	III	-	LH
CO1	Describe the Importance of Snehana before panchakarma (Cha.Si.6/ 7)	CC	MK	K	L&PPT,L&GD,L	S-LAQ,VV-Viva	F&S	III	-	LH
CO5	Describe the Vaman-Virechana Vyapad-ayoga atiyoga its upadrava and its chikitsa (Cha.Si. 6/29-93)	CC	MK	K	L&PPT,L	VV-Viva,S-LAQ	F&S	III	-	LH
CO1, CO2	Describe Samsarjana kala after Shodhana (Cha.Si.6/57)	CC	MK	K	L&GD,L,L&PP	VV-Viva,M-POS,T-OB	F&S	III	-	LH

					T	T,CL-PR,M-CHT				
CO1	Summarize of the Chapter based on sutras (Cha.Si 6/94)	CC	NK	K	SDL	T-OBT	F&S	III	-	LH
Topic 44 Cha. Si. 7.Bastivyapat Siddhi (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO5	Describe Aasthapana Basti Vyapat, including its causes, signs, symptoms, and management as per Cha. Si. 7/5-65.	CC	MK	K	L&GD, L&PPT ,L	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Summarize the Chapter based on sutra (Cha.Si.7/66)	CC	NK	K	DIS,L&GD	VV-Viva,T-OBT	F&S	III	-	LH
Topic 45 Cha.Si.8.Prasrita Yogiyam Siddhi (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Enumerate and discuss on the Types of Prasritika basti (Cha.Si 8/3-14)	CC	MK	K	L&PPT ,L&GD, L	VV-Viva,COM,T-OBT	F&S	III	-	LH
CO5	Describe the Treatment of various complications due to prasrutika basti (Cha.Si.8/14-19)	CC	MK	K	L&PPT ,L,L&GD	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Discuss the types of Pancha-Prasritika Basti and the treatment of various Upadrava arising from its administration as per Cha. Si. 8/43-45.	CK	MK	K	L,L&GD,L&PPT	VV-Viva,COM,T-OBT	F&S	III	-	LH
CO1	Summarize the Chapter (Cha Si.8/46)	CC	NK	K	DIS,SDL	VV-Viva,T-OBT	F&S	III	-	LH
Topic 46 Cha.Si.9.Trimarmiya Siddhi (LH :1 NLHT: 0 NLHP: 0)										

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Discuss Importance of Trimarma and Trividha Marma Abhighata Lakshana ,their Chikitsa (Cha.Si.09 /3-10)	CC	MK	K	L&GD, L,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO1, CO2	Describe the Trimarma related diseases, their sankhya lakshana and chikitsa (Cha.Si.09 /11-49, 70-87)	CK	MK	K	L,L&PPT ,L&GD	VV-Viva,T-OBT	F&S	III	-	LH
CO2	Describe the Uttara Basti Vidhi and indications (Cha.Si.09/50-69)	CK	MK	K	L_VC,L ,L&PPT ,L&GD	T-OBT,VV-Viva	F&S	III	H-PK	LH
CO1, CO2	Describe Nasyavidhi its types and indications (Cha.Si.09 /88-117)	CK	MK	K	L&GD, CBL,L, L&PPT ,DIS	VV-Viva,T-OBT	F&S	III	-	LH
CO1	Summarize of the Chapter based on sutra (Cha.Si.9/117-118)	CC	NK	K	SDL	T-OBT,VV-Viva	F&S	III	-	LH

Topic 47 Cha. Si. 10.Basti Siddhi (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Describe the Importance,superiority and types of Basti (Cha.Si.10/4-12)	CC	MK	K	L&GD, L	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Enlist the Composition of Basti (Cha.Si.10/14-16)Discuss the Types of Basti (Cha.Si.10/17-45)	CK	MK	K	L&GD, BL,L	VV-Viva,T-OBT,COM	F&S	III	-	LH
CO1	Summarize of the Chapter.	CC	NK	K	SDL	VV-Viva,T-OBT	F&S	III	-	LH

Topic 48 Cha.Si.11.Phalamatra Siddhi (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Describe the Therapeutic action of Basti (Cha.Si.1/15-18)	CK	MK	K	L&PPT ,L	VV-Viva,T-OBT	F&S	III	-	LH
CO1, CO2	Describe the Concept of Sadatura and its management (Cha.Si.11/27-36)	CK	MK	K	L,L&GD,L&PPT	VV-Viva,T-OBT	F&S	III	-	LH
CO1	Summerize the Chapter based on sutra (Cha Si11/37)	CC	NK	K	SDL	VV-Viva,T-OBT	F&S	III	-	LH

Topic 49 Cha.Si.12.Uttara Basti Siddhi (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2	Describe significance of Rasasamsarjana Krama (Cha. Si.12/3-9)	CC	MK	K	L&PPT ,L,L&GD	VV-Viva,T-CS	F&S	III	-	LH
CO1, CO2, CO5	Describe the Ashta Mahadoshakara Bhava, their effect on Arogya and its Chikitsa (Cha.Si.12/10-15)	CK	MK	K	L&PPT ,L&GD, L	VV-Viva,T-OBT	F&S	III	-	LH
CO1, CO2	Describe the importance Yapana Basti 12/(16/1), and yogya ayogya for yapana basti and its prayojana (Cha. Si.12/20-23),	CC	MK	K	L,L&GD,L&PPT	T-OBT,VV-Viva	F&S	III	-	LH
CO5	Describe the Upadrava of Yapana Basti and their Chikitsa. (Cha. Si. 12/29-32)	CC	MK	K	L,L&PPT ,L&GD	T-OBT,VV-Viva	F&S	III	-	LH
CO1	Summarize the Chapter (Cha .Si.12/52-54)	CC	NK	K	SDL	T-OBT	F&S	III	-	LH

Topic 50 Term 3 Non Lecture theory Activities (LH :0 NLHT: 33 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO1	Apply Fundamental Principle of Samhita in diagnosis, interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.	CAP	MK	KH	L&GD, TBL	RK,VV-Viva,INT	F	III	-	NLHT50.1
CO1, CO2	Appraise Sambhasha on different topics of Samhita.	AFT-VAL	MK	SH	D	P-VIVA	F&S	III	-	NLHT50.2
CO1	Conduct Cross sectional study of Samhita	CAP	MK	KH	TBL,L &GD	RK,INT	F	III	-	NLHT50.3
CO1	Compare and analyse Charaka Samhita and Sushruta Samhita	CC	DK	KH	L&PPT ,L&GD	Log book,COM	F	III	-	NLHT50.4
CO2, CO3, CO6	Perform Samhita based analysis of Diseases.	CAP	MK	KH	D-BED	RK,VV-Viva,CBA	F&S	III	-	NLHT50.5
CO7	Review and summarize Published Articles on different aspects, topics of Samhita.	CAP	MK	KH	TBL,L &GD	INT,RK	F	III	-	NLHT50.6
CO1, CO2	Illustrate the Concept mapping of Samprapti and Chikitsa	CAP	MK	K	D	P-VIVA	F	III	-	NLHT50.7
CO1	Comparative Analysis of Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita	CC	MK	K	D	P-VIVA	F&S	III	-	NLHT50.8
CO7	Integrate Chikitsa concepts of Samhita with contemporary medical science	CAP	MK	KH	TBL,L &GD	RK,INT	F	III	-	NLHT50.9
CO1	Evaluate and describe Samhita with the help of Tantrayukti	CC	MK	KH	SDL	VV-Viva,INT,RK	F	III	-	NLHT50.10

CO1, CO2	Perform interview of senior Vaidya.	CAP	MK	KH	TBL,L &GD	INT,RK	F	III	-	NLHT50.1 1
CO1	Interpret and decode Samhitas with commentary.	CC	NK	KH	L&GD, SDL,REC,TBL	RK,VV-Viva,CBA	F&S	III	-	NLHT50.1 2
CO1	Recite memorise and recall important Shloka	CC	MK	K	SDL	P-REC	F&S	III	-	NLHT50.1 3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 50.1	Fundamental Principle of Samhita used in diagnosis, interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.	Refer NLHT 17.1
NLHT 50.2	Conducting Sambhasha on different topics of the Samhita	Refer NLHT17.2 **Third Term Suggested Topics (1 hour)** Basti as Ardha Chikitsa/ Mode of action of Vamana Karma/Virachana Karma/ Basti Karma/ Nasya Karma etc.
NLHT 50.3	Cross sectional study of Samhita	Refer NLHT17.3 **Third Term** Limitations of Panchakarma: Understanding Its Scope and Constraints/ Mithya Upachara Janya Vyadhi: Diseases Caused by Improper Treatment/ Mode of Action of Basti Karma: A Comprehensive Therapeutic Mechanism/ Basti Karma as Sarva Chikitsa or Ardha Chikitsa: The Ultimate Therapeutic Tool/ Mechanism and Therapeutic Action of Nasya Karma: An In-Depth Analysis etc.
NLHT 50.4	Comparative study of Charaka Samhita and	Refer NLHT17.4

	Sushruta Samhita	**Third Term (4 hours)** Cha. Si.4, Su.Chi.37 Cha. Si. 5 and 7, Su. Chi. 35-36 Cha. Chi. 6, Su.Chi. 33-34 Cha Si.9/88-118 and Su. Chi. 40/20-57
NLHT 50.5	Samhita Based Analysis of Diseases	Refer NLHT 17.5 **Third Term (4 Hours)** Case of Vaman Karma, Virechan Karma, Niruha Basti Karma, Anuvasana Basti Karma, Nasya, Uttara Basti Karma etc.
NLHT 50.6	Review of Published Articles from Samhita	Refer NLHT 17.6 **Third Term (2 hours)** Madanaphala, Trivritta, Vamana Karma, Virechana Karma, Basti Karma, Nasya Karma etc.
NLHT 50.7	Concept mapping of Samprapti and Chikitsa	Refer NLHT 17.7 **Third Term (2 hours)** Vamana Karma in Shwasa, Nityavirechana in Udara, Basti Chikitsa in Vatarakta, Nasya Karma in Ardita
NLHT 50.8	Comparative Analysis of Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita	Refer NLHT 17.8 **Third Term (2 hours)** Chikitsa Siddhant of Sneha Basti Vyapada from Charaka Samhita and Sushruta Samhita, Chikitsa Siddhant of Niruha Basti Vyapada from Charaka Samhita and Sushruta Samhita
NLHT 50.9	Integrative activities - Compare Chikitsa concepts of Samhita with contemporary medical science	Refer NLHT 17.9 **Third Term (2 hours)**

		Concept of Basti Karma as per Ayurveda and Modern medicine, Concept of Nasya Karma as per Ayurveda and Modern medicine etc.
NLHT 50.10	Evaluation by Tantrayukti	Refer NLHT 17.10 **Third Term (2 hours)** Ch.Si.1/11-12 Cha. Si. 3/6-11, 26-30 Ch.Si.9/9-10 Ch. Si. 12/27-30
NLHT 50.11	Interview of senior Ayurveda Vaidya	Refer NLHT17.11
NLHT 50.12	Exploring Vyakhya	Refer NLHT 17.12 **Third Term (4 hours)** Cha. Si. 1/38-40 Cha. Si. 3/30-35, 69-71 Cha. Si.4/41-56 Cha. Si.7/7-29 Cha. Si 12/6-8, 41-44
NLHT 50.13	Recite, Memorise and recall Shlokas	Refer NLHT 17.13 **Third Term** Cha. Ka. 1/ 4, 27,29 Cha. Ka. 2/ 3, Cha. Ka. 3/3,4, Cha ka 4/3,4 Cha. Ka. 5/4, Cha ka 6/3-4 Cha. Ka.7/4-6 Cha. Ka. 8/3, cha ka 9/3, cha ka 11/3 Cha Ka 12/3, 48, 62, 81,82 Cha. Si. 1/ 7, 11, 12, 13-14, 15-19, 38-39, 41-43, 44-46

		Cha. Si. 4/25, 52-54 Cha. Si. 5/8 Cha. Si. 6/15-16, 29-30 Cha. Si. 7/5-6 Cha. Si 9/9-10, 88 Cha. Si. 10/ 4-5 Cha. Si. 11/ 27-28, 31 Cha. Si. 12/ 6-7, 9, 11-12, 21-22,33,36-37, 51

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Term	Activity details
17.1	CO1	1	Fundamental Principle of Samhita used in diagnosis, interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.
17.2	CO1,CO2	1	Conducting Sambhasha on different topics of the Samhita
17.3	CO1	1	Comparative study of Charaka Samhita and Sushruta Samhita
17.4	CO1	1	Cross sectional study of Samhita
17.5	CO2,CO3,CO6	1	Samhita Based Analysis of Diseases
17.6	CO7	1	Review of Published Articles from Samhita
17.7	CO1,CO2	1	Concept mapping of Samprapti and Chikitsa
17.8	CO1	1	Comparative Analysis of Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita
17.9	CO7	1	Integrative activities - Compare Chikitsa concepts of Samhita with contemporary medical science
17.10	CO1	1	Evaluation by Tantrayukti
17.11	CO1,CO2	1	Interview of senior Ayurveda Vaidya
17.12	CO1	1	Exploring Vyakhya
17.13	CO1	1	Recite, Memorise and recall Shlokas
17.14	CO1	1	Jastification of Cronological arrangement of Samhita
37.1	CO1	2	Fundamental Principle of Samhita used in diagnosis, interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.

37.2	CO1,CO2	2	Conducting Sambhasha on different topics of the Samhita
37.3	CO1	2	Cross sectional study of Samhita
37.4	CO1	2	Comparative study of Charaka Samhita and Sushruta Samhita
37.5	CO2,CO3,CO6	2	Samhita Based Analysis of Diseases
37.6	CO7	2	Review of Published Articles from Samhita
37.7	CO1,CO2	2	Concept mapping of Samprapti and Chikitsa
37.8	CO1	2	Comparative Analysis of Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita
37.9	CO7	2	Integrative activities - Compare Chikitsa concepts of Samhita with contemporary medical science
37.10	CO1	2	Evaluation by Tantrayukti
37.11	CO1,CO2	2	Interview of senior Ayurveda Vaidya
37.12	CO1	2	Exploring Vyakhya
37.13	CO1	2	Recite, Memorise and recall Shlokas
50.1	CO1	3	Fundamental Principle of Samhita used in diagnosis, interpretation, treatment planning, selection of formulations and appropriate dosage form, Kaala, Anupan etc.
50.2	CO1,CO2	3	Conducting Sambhasha on different topics of the Samhita
50.3	CO1	3	Cross sectional study of Samhita
50.4	CO1	3	Comparative study of Charaka Samhita and Sushruta Samhita
50.5	CO2,CO3,CO6	3	Samhita Based Analysis of Diseases
50.6	CO7	3	Review of Published Articles from Samhita

50.7	CO1,CO2	3	Concept mapping of Samprapti and Chikitsa
50.8	CO1	3	Comparative Analysis of Chikitsa Siddhanta of Charaka Samhita and Sushruta Samhita
50.9	CO7	3	Integrative activities - Compare Chikitsa concepts of Samhita with contemporary medical science
50.10	CO1	3	Evaluation by Tantrayukti
50.11	CO1,CO2	3	Interview of senior Ayurveda Vaidya
50.12	CO1	3	Exploring Vyakhya
50.13	CO1	3	Recite, Memorise and recall Shlokas

Destribution of NLHT Hours					
Sl. No.	**Topic**	**1st Term**	**2nd Term**	**3rd Term**	**Total**
1	Application of fundamental Principle of Samhita	6	6	6	18
2	Sambhasha	1	1	1	3
3	Cross sectional study of Samhita	1	1	1	3
4	Comparative study of Charaka Samhita and Sushruta Samhita	4	4	4	12
5	Samhita based analysis of Diseases	4	4	4	12
6	Review of Published Articles from Samhita	2	2	2	6
7	Concept mapping of Samprapti and Chikitsa	2	2	2	6
8	Comparative study of Chikitsa Siddhanta	2	2	2	6
9	Integrative study of Chikitsa concepts of Samhita	2	2	2	6
10	Evaluation by Tantrayukti	2	2	2	6
11	Interview of senior Ayurveda Vaidya	1	1	1	3
12	Chakrapani Vyakhya	4	4	4	12
13	Recitation and memorization of important Shloka	2	2	2	6
14	Justification of Adhyaya	1	0	0	1
					100

Table 5 : List of Practicals

Not Applicable

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (100)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-SA3	1	100	-	75	10 (Set-TC)	15	100	200

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	3 PA & First TT	3 PA & Second TT	3 PA	**UE****

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
**University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 15 Marks (D/15*15)	Term Test (Marks converted to 15) (15 Marks)	Sub Total _/30 Marks	Term Assessment (…./15)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks) (MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert total to 15 marks.							

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

Topics for Periodic Assessments

	Paper 1
PA 1	Topic 1-4 or Topic 17
PA 2	Topic 5-8 or Topic 17
PA 3	Topic 9-12 or Topic 17
Term Test 1	Entire Syllabus of Term 1
PA 4	Topic 18-22 or Topic 37
PA 5	Topic 23-26 or Topic 37
PA 6	Topic 27-32 or Topic 37
Term Test 2	Entire Syllabus of Term 2
PA 7	Topic 38-41 or Topic 50
PA 8	Topic 42-45 or Topic 50
PA 9	Topic 46-49 or Topic 50

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-SA3
PAPER-I
Time: 3 Hours Maximum Marks: 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

6 F : Distribution of theory examination

Paper 1 (Samhita Adhyayan - 3)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
1	**Cha.Chi.1.Rasayana Adhyaya**	40	Yes	Yes	Yes
2	**Cha.Chi. 2.Vajikarana Adhyaya**		Yes	Yes	No
3	**Cha. Chi .3. Jwara Chikitsitam**		Yes	Yes	Yes
4	**Cha. Chi.4.Raktapitta Chikitsitam**		Yes	Yes	No
5	**Cha. Chi .5. Gulma Chikitsitam**		Yes	Yes	No
6	**Cha.Chi. 6. Prameha Chikitsitam**		Yes	Yes	Yes
7	**Cha. Chi.7.Kushtha Chikitsitam**		Yes	Yes	Yes
8	**Cha.Chi 8.Rajayakshma Chikitsitam**		Yes	Yes	No
9	**Cha. Chi.9.Unmada Chikitsitam**		Yes	Yes	Yes
10	**Cha.Chi.10.Apasmara Chikitsitam**		Yes	Yes	Yes
11	**Cha. Chi.11.Kshataksheena Chikitsitam**		Yes	Yes	No
12	**Cha. Chi. 12.Shwayathu Chikitsitam**		Yes	Yes	No
13	**Cha. Chi.13.Udara Chikitsitam**		Yes	Yes	Yes
14	**Cha. Chi.14.Arsha Chikitsitam**		Yes	Yes	No
15	**Cha. Chi.15.Grahani dosha Chikitsitam**		Yes	Yes	Yes
16	**Cha. Chi.16.Panduroga Chikitsitam**		Yes	Yes	Yes
17	**Term 1 Non Lecture theory Activities**				
18	**Cha Chi.17.Hikka Shwasa Chikitsitam**	30	Yes	Yes	Yes
19	**Cha. Chi.18.Kasa Chikitsitam**		Yes	Yes	Yes
20	**Cha. Chi.19.Atisara Chikitsitam**		Yes	Yes	No
21	**Cha. Chi.20.Chhardi Chikitsitam**		Yes	Yes	No
22	**Cha. Chi.21.Visarpa Chikitsitam**		Yes	Yes	No
23	**Cha. Chi.22.Trishna Chikitsitam**		Yes	Yes	No
24	**Cha. Chi.23.Visha Chikitsitam**		Yes	Yes	No
25	**Cha.Chi.24.Madatyaya Chikitsitam**		Yes	Yes	No
26	**Cha.Chi.25.Dwivraniya Chikitsitam**		Yes	Yes	No
27	**Cha. Chi.26. Trimarmiya Chikitsitam**		Yes	Yes	No

28	**Cha.Chi.27.Urusthambha Chikitsitam**		Yes	Yes	No
29	**Cha.Chi.28.Vatavyadhi Chikitsitam**		Yes	Yes	Yes
30	**Cha.Chi.29.Vatashonita Chikitsitam**		Yes	Yes	Yes
31	**Cha.Chi.30.Yonivyapad Chiktsitam**		Yes	Yes	No
32	**Cha. Ka.1Madanakalpam**	10	Yes	Yes	No
33	**Cha.Ka.2 to 6**		Yes	Yes	No
34	**Cha.Ka.7.Shyamatrivrutta Kalpam**		Yes	Yes	No
35	**Cha.Ka.8. to 11**		Yes	No	No
36	**Cha.Chi.12.Dantidravanti Kalpam**		Yes	Yes	No
37	**Term 2 Non Lecture theory Activities**				
38	**Cha. Si.1.Kalpana Siddhi**	20	Yes	Yes	Yes
39	**Cha.Si.2.Panchakarmiya Siddhi**		Yes	Yes	No
40	**Cha.Si.3.Bastisutriyam Siddhi**		Yes	Yes	No
41	**Cha. Si.4.Snehavyapat Siddhi**		Yes	Yes	No
42	**Cha.Si. 5.Netrabastivyapat Siddhi**		Yes	Yes	Yes
43	**Cha.Si.6.Vamana Virechana Vyapat Siddhi**		Yes	Yes	Yes
44	**Cha. Si. 7.Bastivyapat Siddhi**		Yes	Yes	Yes
45	**Cha.Si.8.Prasrita Yogiyam Siddhi**		Yes	Yes	No
46	**Cha.Si.9.Trimarmiya Siddhi**		Yes	Yes	No
47	**Cha. Si. 10.Basti Siddhi**		Yes	Yes	No
48	**Cha.Si.11.Phalamatra Siddhi**		Yes	No	No
49	**Cha.Si.12.Uttara Basti Siddhi**		Yes	Yes	Yes
50	**Term 3 Non Lecture theory Activities**				
Total Marks		**100**			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 100-mark question paper shall contain:
   - 20 MCQs
   - 8 SAQs
   - 4 LAQs

7. MCQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 3.
   - Questions from the Nice to Know part of syllabus shall not exceed 2.

8. SAQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 1.
   - No questions shall be drawn from the Nice to Know part of syllabus.
   - SAQs shall assess understanding, application, and analysis, rather than simple recall.

9. LAQs:
   - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
   - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
   - Number of LAQs should not exceed one per topic unless maximum marks exceed 20 for the topic.

10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

S.No	Heads	Marks
1	Recitation of Shloka and Shloka Record Book	10
2	Non Lecture Activity Journal/ File	10
3	Assessment of Communication Skills	05
4	Clinical Case Taking	10
5	Viva-Voce	40
6	Internal Assessment	15
7	Electives Set TC	10
Total Marks		**100**

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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)

Research Methodology and Medical-statistics

(SUBJECT CODE : AyUG-RM)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

ncism

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BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026

NCISM

III Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-RM

Research Methodology and Medical-statistics

Summary

Total number of Teaching hours: 75			
Lecture (LH) - Theory		**25**	**25(LH)**
Paper I	25		
Non-Lecture (NLHT)		**50**	**50(NLH)**
Paper I	50		
Non-Lecture (NLHP)		**0**	
Paper I	0		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I	50	-	-	-	-
Sub-Total	50	-			
Total marks	50				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

Research is a crucial component of scientific progress, and its inclusion in the undergraduate Ayurveda curriculum strengthens the foundation of evidence-based practice. Ayurveda, as a traditional system of medicine, requires systematic validation through research to align with contemporary healthcare needs. Introducing research methodology at the undergraduate level enables students to critically evaluate classical texts, explore integrative medicine, and develop scientific reasoning. This knowledge helps in hypothesis formulation, data analysis, and meaningful interpretation, ultimately enhancing the credibility of Ayurveda in the global healthcare system.

With the advancement of new Teaching-Learning (TL) methods, such as problem-based learning (PBL), experiential learning, digital tools, and artificial intelligence, students can actively engage with research concepts. Methods like flipped classrooms, case-based discussions, and hands-on practicals allow a deeper understanding of study designs, statistical tools, and critical appraisal techniques. The application of these techniques ensures accuracy and reliability in Ayurvedic research. Furthermore, learning about intellectual property rights (IPR), ethical considerations, and research reporting guidelines prepares students to contribute to academic publications, innovation, and policy-making in Ayurveda.

In the third professional year, research training plays a transformative role by bridging theoretical knowledge with clinical application. At this stage, students are exposed to clinical trials, literary research, preclinical studies, and statistical analysis, enabling them to integrate research findings into patient care. This phase prepares students for advanced clinical decision-making, postgraduate studies, and scientific contributions. By fostering analytical thinking and innovation, research education ensures that Ayurveda remains a dynamic and evolving system of medicine, blending ancient wisdom with modern scientific advancements for holistic and evidence-based healthcare.

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Course Code and Name of Course

Course code	Name of Course
AyUG-RM	Research Methodology and Medical-statistics

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-RM At the end of the course AyUG-RM, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO 1	Explain and utilize research methods and statistical concepts.	PO1,PO2
CO 2	Distinguish, analyse and apply research types. Recognize their application in ayurveda.	PO2,PO9
CO 3	Explore and utilize various databases and guidelines.	PO2,PO8
CO 4	Distinguish, analyse and apply statistical tests. Recognize their application in ayurveda.	PO2,PO9
CO 5	Apply ethical aspect in conducting quality research.	PO6,PO9

Table 2 : Contents of Course

Paper 1 (RM-MS)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Introduction to Research** 1. Objectives 2. Need and Scope 3. Concept of Evidence-Based Medicine and Integrative Medicine	2	30	1	0	0
2	**Historical developments in research** 1. Describe historical development of Contemporary research. 2. Identify evidences of research in ayurveda classical literature.	2		0	1	0
3	**Research Types** 1. Primary and Secondary 2. Basic, Applied and Translational 3. Qualitative, Quantitative and Mixed 4. Observational and Interventional 5. Descriptive and Analytical	2		2	2	0
4	**Research Ethics** 1. Need and significance 2. Institutional Animal Ethics Committee (IAEC) and Institutional Human Ethics Committee (IHEC/IEC). 3. Publications ethics	2		1	1	0
5	**Research Designs and terminologies** 1. Case reports 2. Case Series 3. Cross sectional and longitudinal 4. Cohort studies 5. Case Control 6. Clinical trials (Randomised controlled trials) 7. Literary Research and reviews 8. Preclinical Methods (In-silico, In-vitro, In situ and In-vivo).	2		4	8	0

	9. Terminologies: Randomisation, matching, Blinding, and Bias.					
6	**Research process** 1. Selecting a research topic and research problem 2. Reviewing of literature. 3. Formulating research hypothesis and objectives 4. Planning the research (materials and methods) 5. Conducting the research (data collection, analysis and interpretation) 6. Drawing conclusions. 7. Reporting of Research (Scientific writing)	2		3	6	0
7	**Different Database, portals and Artificial Intelligence.** 1. Database like PubMed, SCOPUS etc. 2. Portals like AYUSH Research Portal, NAMASTE etc. 3. Artificial Intelligence.	2		1	3	0
8	**Different Guidelines to report research** Different guidelines like CARE, CONSORT, ARRIVE etc.	2		0	2	0
9	**Intellectual Property Right (IPR)/Patent/ TKDL** Importance Intellectual Property Right (IPR)/Patent/ TKDL	2		1	0	0
10	**Research Critiquing** Different steps involved in critiquing research works	2		1	2	0
11	**Introduction to Medical statistics** 1. Objectives 2. Types (Descriptive and Inferential) 3. Scope and Relevance pertaining to Ayurveda	2	20	1	1	0
12	**Data** 1. Concept of Data in Medical Statistics 2. Sources of Data.	2		1	2	0

	3. Types of Data: Quantitative and Qualitative (categorical), Discrete and continuous. 4. Types of Scales: ordinal, nominal, interval and ratio scale.				
13	**Basic statistical terms** 1. Population 2. Sample and sampling 3. Variable (Dependent and Intendent) 4. Attributes	2	1	1	0
14	**Collection and Presentation of Data** 1. Types of Data Collection (Primary and Secondary) 2. Types of Presentation of data (Textual, Tabular and Graphical)	2	2	4	0
15	**Measures of Central Tendency** 1. Arithmetic Mean 2. Median 3. Mode 4. Qualities of Good measure of central tendency	2	1	2	0
16	**Measures of Deviation/Dispersion/Variability** 1. Range 2. Quartile deviation 3. Mean deviation 4. Standard deviation 5. Variance and Co-efficient of Variation. 6. Standard error 7. Qualities of good measure of variability	2	1	4	0
17	**Probability** 1. Fundamental of Probability 2. Normal Distribution Curve and its properties	2	1	3	0
18	**Hypothesis and Test of Significance** Hypothesis and Test of Significance	2	1	3	0
19	**Parametric and non-parametric tests** Parametric and non-parametric tests	2	1	2	0

20	**Concept of Co-relation and Regression** **Explain Co-relation and Regression**	2		1	1	0
21	**Commonly used Statistically software** Commonly used Statistically software	2		0	2	0
Total Marks			**50**	**25**	**50**	**0**

Table 3 : Learning objectives of Course

Paper 1 (RM-MS)										
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Introduction to Research (LH :1 NLHT: 0 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 1	Define Research and Research objectivesDescribe Scope of research in ayurveda. Define Evidence based and Integrative medicine	CC	MK	KH	L&PPT	T-OBT,QZ ,PUZ	S	II	-	LH
Non Lecture Hour Theory										
S.No	**Name of Activity**	**Description of Theory Activity**								
Non Lecture Hour Practical										
S.No	**Name of Practical**	**Description of Practical Activity**								
Topic 2 Historical developments in research (LH :0 NLHT: 1 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 1,CO 5	Present historical development of Contemporary research.Identify evidences of research in ayurveda classical literature.	PSY-GUD	MK	KH	BS,L&GD,IBL ,TBL,DIS	M-CHT,QZ ,CL-PR,DEB	S	II	H-Samhita	NLHT2.1
Non Lecture Hour Theory										
S.No	**Name of Activity**	**Description of Theory Activity**								

NLHT 2.1	Historical developments in research	Students (5-10) are divided into groups (5-10) They are given task to collect evidences on milestones of researches conducted like Nazi camp, Thalidomide story, syphilis story and also collect evidences of research process in ayurveda classical texts. Later each group is given 5 minutes to present the collected literature and how the different issues were addressed in research methodology.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 3 Research Types (LH :2 NLHT: 2 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 2	Explain Primary and Secondary research and differentiate between them	CC	MK	KH	L&GD	T-OBT	S	II	-	LH
CO 1,CO 2	Explain Basic, Applied and Translational Research and differentiate among them.	CC	MK	K	L&PPT	T-OBT	S	II	-	LH
CO 1,CO 2	Define Qualitative, Quantitative and Mixed Research and differentiate among them	CC	MK	K	L&PPT	T-OBT	S	II	-	LH
CO 1,CO 2	Define Observational and Interventional studies and differentiate between them	CC	MK	K	L&GD	T-OBT	S	II	-	LH
CO 1,CO 2	Describe Descriptive and Analytical studies and differentiate between them	CC	MK	K	L&PPT	T-OBT	S	II	-	LH

CO 1,CO 2	Describe and differentiate between primary, secondary, descriptive and Analytical research studies.Explain and Differentiate between Basic, Applied and Translational Research	PSY-GUD	MK	KH	CBL,BS,PBL	PRN,S-LAQ	S	II	-	NLHT3.1
CO 1,CO 2	Illustrate and differentiate between Qualitative, Quantitative and Mixed ResearchDefine Observational and Interventional studies and differentiate between them	PSY-GUD	MK	KH	CBL,BS,PBL,DIS,PER	S-LAQ,CL-PR,PRN	S	II	-	NLHT3.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 3.1	Different Research types Part I	**Requirements:** A set of cards or case studies with short descriptions of various research studies (some primary, some secondary, some descriptive, some analytical, basic, applied, and translational research.) are archived and used for NHL. **1 hour Activity:** 1. Divide students into small groups. 2. Distribute the cards/cases randomly. 3. Ask each group to classify the research study given to them which may be either primary, secondary, descriptive, analytical, basic, applied and translational research. 4. After categorizing, the groups explain their reasoning behind the classification. 5. Then later teacher facilitates a discussion to clarify any misunderstandings and to reinforce key concepts
NLHT 3.2	Research Types Part II	**Requirements:** A set of case studies with short description or synopsis which have Qualitative, Quantitate, observational and interventional studies are archived and used as study material. **1 hour Activity:** 1. Divide students into small groups. 2. Distribute the cards/cases randomly.

		3. Ask each group to classify the research study given to them which may be either Qualitative, Quantitate, observational and interventional studies. 4. After categorizing, the groups explain their reasoning behind the classification. 5. Then later teacher facilitates a discussion to clarify any misunderstandings and to reinforce key concepts

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 4 Research Ethics (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 5	Explain the need and significance of ethics in research.	AFT-VAL	MK	KH	L&GD, DIS	INT,CBA	S	II	-	LH
CO 5	Explain the role of IHEC/IEC and IAEC in research	AFT-VAL	DK	K	FC,BS, L&PPT	T-OBT,T-CS	S	II	-	LH
CO 5	Appraise the role and significance of ethics in publication	AFT-RES	MK	KH	BS,L& GD,DIS	T-CS,DEB, CL-PR	S	II	-	LH
CO 5	Explain the need and significance of ethics in research along with structure of Institutional Human and Animal ethical committee.	AFT-VAL	DK	KH	TBL,RP ,DIS,PB L,PSM	PRN,P-MOD,SBA	S	II	-	NLHT4.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 4.1	Ethics Committe Functioning	**1 hour Activity:** 1. Present a real or hypothetical case study involving ethical dilemmas in animal or human research.

		2. The scenario should focus on a situation where ethical approval is needed (e.g., using animals for a new study or involving human participants). 3. Divide participants into small groups (10 each group) and ask them to discuss the ethical challenges, the role of IAEC/IHEC in addressing these issues, and how they would resolve the situation. 4. Each group discusses and decides whether the research should be approved, ensuring the ethical principles (such as respect for autonomy, beneficence, non-maleficence, and justice) are considered.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 5 Research Designs and terminologies (LH :4 NLHT: 8 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 2	Describe Case Reports	CC	MK	KH	L&PPT	T-CS	S	II	-	LH
CO 1,CO 2	Explain Case series	CC	DK	K	L&PPT	T-CS,PA	S	II	-	LH
CO 1,CO 2	Describe Cross sectional study	CC	MK	K	L&PPT ,DIS	T-CS,QZ	S	II	-	LH
CO 1,CO 2	Explain COHORT study	CC	DK	K	DIS,BL, L&PPT	T-OBT,QZ	S	II	-	LH

CO 1,CO 2	Describe Case Control study	CC	DK	K	BS,L&P PT ,DIS	T-CS,PA	S	II	-	LH
CO 1,CO 2	Describe Randomized Controlled Trial	CC	MK	KH	DIS,PL, BS,L&P PT	T-CS,PA,S-LAQ	S	II	-	LH
CO 1,CO 2	Define and identify various steps of Literary research Narrative review, systematic review and meta-analysis and identify the difference among them	CC	NK	K	TBL,DIS,BS,L &PPT	PA,QZ ,CL-PR,T-CS	S	II	-	LH
CO 1,CO 2	Explain Various pre-clinical methods and their utility	CC	NK	K	D-M,BL ,L_VC, BS	QZ ,P-MOD,PA	S	II	-	LH
CO 1,CO 2	Define various terms related to research designs	CC	MK	KH	L&PPT ,DIS	PA,PUZ,QZ ,T-CS	S	II	-	LH
CO 1,CO 2	Illustrate Literature review under peer learning.	CAP	MK	KH	TBL,BS ,PL,DIS	PA,T-CS,COM	S	II	-	NLHT5.1
CO 1,CO 2	Present differences between case report and case series.Describe and differentiate between cross sectional, longitudinal, cohort and case control studies.	PSY-GUD	MK	KH	TBL,PER,PBL, BL	S-LAQ,PRN,CL-PR	S	II	-	NLHT5.2
CO 1,CO 2	Describe Randomized clinical trial and terminologies related to it (Randomization, matching, blinding and bias)	PSY-GUD	MK	KH	PBL,TBL,BL,BS,PL	COM,CL-PR,PRN,PA, P-MOD	S	II	-	NLHT5.3
CO 1,CO	Describe preclinical research methods (In-silico, In-vitro, In situ and In-vivo).	PSY-GUD	DK	K	D-M,PER,PL,F	P-MOD,PA ,PRN	S	II	-	NLHT5.4

2					V						

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 5.1	Literary research	One hour peer learning for Literary research and review with different examples related to concepts of ayurveda.
NLHT 5.2	Research designs	**2-hour Group activity.** Preparation: Prepare a set of cards or slips with scenarios of different medical research questions (e.g., "Does smoking increase the risk of lung cancer?" or "What is the prevalence of hypertension in a population of 40-year-olds?"). Instructions: Divide the students into four-five small groups. Assign each group one study type (cross-sectional, longitudinal, cohort, or case-control). Each group will be given a set of research scenarios (with some overlapping between study types). Their task is to categorize each scenario into the correct study type based on the description. After 20 minutes, ask each group to present their study type and rationale for categorizing the research scenarios. **Debrief**: Clarify the key points for each study design, emphasizing differences such as the study direction (retrospective vs. prospective), timeframes, and data types (exposure vs. outcome). Discuss how the study design choice influences the type of questions they can answer (e.g., prevalence, incidence, risk factors).
NLHT 5.3	Randomized clinical trial and terminologies related to it	**2-hour group activity on Randomized control studies**. **Preparation**: Create a list of clinical questions (e.g., effectiveness of a new drug, surgical technique, or lifestyle intervention) that could be investigated via RCT. Divide students into small groups (4-5 students per group). Each group is assigned a clinical question and tasked with designing an RCT to answer it. **Steps**:

		• **Identify the Research Question**: What hypothesis are they testing? (e.g., "Does a new drug reduce blood pressure more effectively than the standard treatment?") • **Define the Population**: Who is the target population (e.g., adults with hypertension)? • **Randomization Strategy**: How will they randomize participants? Will it be simple randomization, block randomization, or stratified randomization? • **Intervention and Control Groups**: What will be in the intervention group (e.g., new drug) and the control group (e.g., standard treatment or placebo)? • **Blinding**: Will the study be single-blind, double-blind, or open-label? How will they ensure blinding to reduce bias? • **Outcome Measures**: What primary and secondary outcomes will they measure (e.g., blood pressure reduction, adverse effects)? • **Sample Size and Power**: How will they estimate sample size to ensure the study has adequate power? • **Ethical Considerations**: How will they handle patient consent, potential harms, and ethical concerns? • After **20 minutes** of discussion, each group presents their RCT design to the class (5 minutes per group). **Debrief**: Discuss strengths and weaknesses of the different designs, and facilitate a conversation about randomization, blinding, and potential biases.
NLHT 5.4	Preclinical methods in research	**3-hour field visit to orient on Preclinical methods in research**. Visit to Research laboratory or academic research institute with preclinical research facilities. After visiting all stations in research facility, bring the students together for a discussion led by a researcher or facilitator. Review each preclinical method and how they complement each other in research. Open the floor to questions about the different methods, their applications, challenges, and ethical considerations. Discuss any real-world case studies where these methods have led to breakthroughs in drug development or disease understanding. Ask students to reflect on which method they found most interesting or challenging and why

Non Lecture Hour Practical										
S.No	**Name of Practical**	**Description of Practical Activity**								
Topic 6 Research process (LH :3 NLHT: 6 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 1,CO 2,CO 3	Describe the process for Selection of topic	CC	MK	KH	L&PPT ,BS,DIS	T-CS,PA	S	II	-	LH
CO 3	Access and explain the Literature search in medical database	PSY-MEC	MK	KH	FC,L& GD,BL	T-CS,CL-PR,PA	S	II	-	LH
CO 1,CO 2	Formulate the Hypothesis and Objectives	CC	MK	KH	DIS,BS, L&GD	PA,T-CS	S	II	-	LH
CO 1,CO 2	Select the appropriate materials and methodologies required in research process.	PSY-GUD	MK	KH	FC,L& GD,BL	QZ ,PA,S-LAQ,T-CS	S	II	-	LH
CO 2,CO 4	Explain collection, analysis and Interpretation of data.	CC	MK	K	BS,L& GD,DIS	T-CS,S-LAQ,QZ	S	II	-	LH
CO 2,CO 5	Justiy Research conclusions	CC	MK	K	FC,BL, L&GD	PA,T-CS	S	II	-	LH
CO 1,CO 2,CO	Discuss steps of Reporting of Research (IMRAD)	CAP	MK	KH	L&GD, DIS,BS	PA,CL-PR, S-LAQ,T-CS,QZ	S	II	-	LH

5										
CO 1,CO 2,CO 5	Identify the research topic, research problem and appraise review of literature.Formulate research hypothesis and objectives.	PSY-GUD	DK	SH	PBL,L&GD,PER,BS,DIS	CBA,CL-PR,S-LAQ,T-CS	S	II	-	NLHT6.1
CO 1,CO 2	Select the appropriate materials and methods for research study.	PSY-GUD	MK	SH	PBL,TBL,DIS,FC,L&GD	T-CS,PA,QZ , CL-PR,S-LAQ	S	II	-	NLHT6.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 6.1	Research process: Research question and Hypothesis	**Research topic, problem and hypothesis formulation (3-hour activity**) 1. Divide the students into four-five small groups. 2. Each group will brainstorm possible **research topics** in a medical field of their choice (Vatavyadhi, Madhumeha, Pandu, Bhadirya, srotas etc.) 3. Guide the students to ensure their chosen topic is relevant, specific, and manageable for undergraduate research. 4. Ask each group to define a research problem based on the topic they selected. 5. Example: If the topic is "prameha", the research problem might be, "What are the present day nidan ahara and vihara in causing prameha in urban areas?" 6. Give each group a sample abstract or a portion of a research paper (this can be a real article or a fictional example) or 7. Alternatively, ask the students to find a research article relevant to their topic using online databases. 8. Ask students to Identify key findings, methods, and conclusions from the literature. Assess the gaps or limitations in the existing research. Discuss how this literature review informs their own research problem.

		9. Guide the students to frame the research question and hypothesis for respective condition chosen by them from the above activity.
NLHT 6.2	Research process: Materials and Methodology	**Planning and conducting the research (3-hour activity)** Start with a brief discussion of the importance of selecting appropriate materials and methods in research. **Materials**: Refers to the tools, instruments, or resources required for the study (e.g., surveys, medical equipment, software). **Methods**: Refers to the overall approach to collecting and analysing data (e.g., qualitative vs. quantitative methods, observational studies, experimental designs). **Group Formation**: Divide students into groups of 4–6. **Research Topic and materials**: Each group selects or is assigned a general research topic (e.g., hypertension in children, antibiotic resistance in hospital settings, mental health in medical students) and Formulating a Research Problem. Depending on their chosen topic and problem ask the groups to decide on the materials they will need 1. Surveys and Questionnaires: Tools for collecting self-reported data. 2. Medical Equipment: Devices like blood pressure cuffs, thermometers, glucose meters. 3. Software: Statistical tools (SPSS, R, Excel) or qualitative analysis software (NVivo). 4. Data Sources: Databases, medical records, or patient registries. 5. Ethical Considerations: Ensure that the materials selected are ethically sound (e.g., consent forms, patient confidentiality). **Research design:** Ask each group to decide on the data collection methods that best suit their research problem. Guide the groups to choose between quantitative or qualitative methods based on their research problem and objectives. Study Population: Have the groups identify their target population and sampling method. Discuss factors like sample size, inclusion/exclusion criteria, and sampling bias. Data Analysis Approach: Ask the groups to select the statistical or qualitative analysis techniques they

		will use to interpret their data.

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 7 Different Database, portals and Artificial Intelligence. (LH :1 NLHT: 3 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 3	Illustrate use of different Research portals, database (DHARA, AYUSH Research Portal, PubMed, SCOPUS, UGC-CARE, Web of Science, etc) and explore Artificial Intelligence in research.	CC	MK	KH	L_VC,DIS	PA,S-LAQ,QZ	S	II	-	LH
CO 3	Demonstrate use of Research portals, database (DHARA, AYUSH Research Portal, PubMed, SCOPUS, UGC-CARE, Web of Science, etc) and Artificial intelligence in ayurveda	PSY-GUD	DK	KH	TBL,FC,L&GD,BS,W	QZ ,DOAP,PA,CL-PR	S	II	-	NLHT7.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 7.1	Demonstrate use of Research portals, database and Artificial intelligence in ayurveda	**Demonstration of Databases and Research Portals (2 hours)** • **PubMed**: Introduction to searching for medical literature, using MeSH (Medical Subject Headings) terms, and filters. • **Cochrane Library**: Discuss systematic reviews, meta-analyses, and evidence-based medicine. • **Google Scholar**: Overview of how to search academic articles and set up alerts for ongoing research. • **ClinicalTrials.gov**: Discuss how to access information about ongoing clinical trials and their results. **Demonstration of AI for Diagnostics (1 hour)**

		• **Show how AI** is being used to detect diseases from medical imaging or patient data (e.g., AI-assisted dermatology tools for skin cancer detection). • **Chatbots and Virtual Assistants**: Introduce AI-powered chatbots (e.g., **Babylon Health**, **Your.MD**) that provide preliminary diagnoses or health advice. Divide the students into small groups (3-4 students per group). Assign each group a research topic (e.g., "Antibiotic resistance in hospitals", "AI in diagnosing cancer", "Mental health in medical students"). Prepare a brief presentation (5-10 minutes) on what they found, the usefulness of the resources, and any challenges they encountered.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 8 Different Guidelines to report research (LH :0 NLHT: 2 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 3	Differentiate various guidelines to report researchs like CARE, PRISMA, ARRIVE, CONSORT, STROBE.	CC	DK	KH	L_VC	CHK,QZ ,CL-PR,PA	S	II	-	LH
CO 3	Recommend specific guidlines for various research studies	PSY-GUD	DK	KH	BL,L_VC,FC,TBL,LS	S-LAQ,P-ID,CL-PR,PRN,CHK	S	II	-	NLHT8.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 8.1	Different Guidelines to report research	Introduce the different reporting guidelines, focusing on their purposes and key components (e.g.,

		CONSORT for clinical trials, STROBE for observational studies, PRISMA for systematic reviews, CARE for case reports). **Divide students into small groups (10-15 students per group).** 1. Assign each group a specific research study (either real or hypothetical) and provide them with the corresponding guideline checklist (e.g., CONSORT for clinical trial studies). 2. Ask the groups to review the study using the reporting guideline checklist, identifying elements of the research that are missing or not clearly reported. 3. Groups should note their findings on a whiteboard or in a shared document. 4. After the review, each group presents their findings, focusing on the areas where the study complied with the reporting guidelines and where it fell short. 5. Ask students to reflect on the activity and share any insights they gained about the importance of adhering to research reporting guidelines.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 9 Intellectual Property Right (IPR)/Patent/ TKDL (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 3,CO 5	Explain importance and different aspects of Intellectual property Rights/Patents and TKDL	AFT-VAL	NK	KH	BS,L&GD,DIS,PBL	PRN,CL-PR,PA,QZ	S	II	-	LH

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 10 Research Critiquing (LH :1 NLHT: 2 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 5	Explain Research critiquing and identify various steps involved in critiquing	CC	DK	K	L&PPT	CL-PR,T-CS,QZ	S	II	-	LH
CO 5	Illustrate Research critiquing and identify various steps involved in critiquing	PSY-GUD	DK	KH	FC,TBL,L&GD,BL,CBL	CL-PR,QZ,PRN	S	II	-	NLHT10.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 10.1	Research Critiquing	Select 3-4 research papers related to the topic at hand. Ensure these papers have a variety of strengths and weaknesses for discussion. Create critique sheets that participants can fill out for each study. Include questions like: What is the main research question or hypothesis, what are the key findings, what are the strengths of the study, what are the weaknesses or limitations of the study, how could the study be improved? Then divide participants into groups (ideally 10-15 people per group). If the group is large, you can have multiple sets of critique sheets and rotate the groups. Assign each group one research paper to start with. They'll spend 20-30 minutes reading the paper and completing the critique sheet. After 30 minutes, have each group rotate to the next research paper. They should review the critique sheet filled out by the previous group, read the paper again (or parts of it), and add any additional comments, thoughts, or suggestions. Repeat the process until each group has reviewed all the papers (1 hour). Final Reflection (30 minutes): Once the above activity is complete, come together as a whole group to discuss insights and the overall critiques. What were common strengths and weaknesses across the studies? How can these insights be applied to future research?

Non Lecture Hour Practical										
S.No	**Name of Practical**	**Description of Practical Activity**								
Topic 11 Introduction to Medical statistics (LH :1 NLHT: 1 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 1	Define Statistics	CK	MK	K	DIS,L&PPT	Log book	S	II	-	LH
CO 1	Explain Objectives of Medical Statistics	CAP	MK	K	L&GD,L&PPT	Log book	S	II	-	LH
CO 1,CO 4	Differentiate between Descriptive and Inferential Statistics	CAP	MK	K	L&GD,PBL,TBL	Log book	S	II	-	LH
CO 1,CO 4	Explain Scope and Relevance of Medical Statistics in Ayurveda	CC	MK	K	L&GD,BS,L&PPT,TBL	Log book	S	II	-	LH
CO 1,CO 4	Differentiate between Descriptive and Inferential Statistics	CAP	MK	KH	FC,L&PPT	Log book	S	II	-	NLHT11.1
CO 1	Explain Evidence Based Medicine	CK	DK	K	FC,IBL,L&PPT	PRN,INT	S	II	-	LH
CO 1	Describe Integrative Medicine	CK	DK	K	FC,DIS,L&PPT	PRN	S	II	-	LH
Non Lecture Hour Theory										
S.No	**Name of Activity**	**Description of Theory Activity**								

NLHT 11.1	Differentiating descriptive and inferential statistics	Demonstration by teacher: Using a simple data set the teacher demonstrates and clarifies the concepts of descriptive and inferential statistics. Hands-on training: The students are grouped into three or four or more, with a maximum of 20 students in each group. Then, they are asked to collect basic information regarding each student in their respective groups, like name, native place, height, and weight, and record the details in writing. The teacher helps the students to summarize the data using descriptive statistics and infer from the collected information. The students are to present their findings in the class. Conclusion and summarization: The teacher then discusses the key aspects and provides inputs for further application of the concepts.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 12 Data (LH :1 NLHT: 2 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1	Define Data	CK	MK	K	PBL,DIS,L&PPT	Log book	S	II	-	LH
CO 1,CO 4	Describe and classify different types of Data [Quantitative, Qualitative (categorical), Discrete and Continuous	CAP	MK	K	TBL,L&PPT,DIS,FC	Log book	S	II	-	LH
CO 1,CO 4	Define and classify different types of Scales: Ordinal, Nominal, Interval, Ratio	CAP	MK	K	PBL,L&PPT,DIS,IBL	Log book	S	II	-	LH
CO 1,CO	Demonstrate types and sets of Data	PSY-GUD	MK	SH	L&PPT,PBL,T	Log book	S	II	-	NLHT12.1

4					BL,DIS					

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 12.1	Data types and scales	Demonstration by teacher: Using a simple data set, the teacher demonstrates various data types and scales. Hands-on training: The students are grouped into three or four groups, with a maximum of 20 students in each group. The teacher then presents a data set that contains different types of data. The students are then allowed to discuss and determine the correct data types and scales for the given data. The activity is repeated with two, three, or more data sets. Conclusion and summarization: The teacher then discusses the key aspects of data classification and measuring scales.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 13 Basic statistical terms (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1	Define Population with examples	CC	MK	K	L&PPT ,BS	Log book	S	II	-	LH
CO 1,CO 4	Define Sample and basic understanding of Sampling and sampling methods. Differentiate between Population and sample	CAP	MK	K	DIS,L& PPT ,T BL,PBL	Log book	S	II	-	LH
CO 1,CO 4	Define Variable and differentiate various types of variables	CAP	MK	K	TBL,IB L,L&PP T	Log book	S	II	-	LH
CO	Define Attributes and differentiate various types of attributes	CAP	MK	K	TBL,L	Log book	S	II	-	LH

1,CO 4					&PPT ,PBL					
CO 1,CO 4	Demonstrate Basic Statistical terms.	PSY-GUD	MK	SH	L&PPT ,D,TBL, DIS,PBL	Log book	S	II	-	NLHT13.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 13.1	Statistical terms	Demonstration by teacher: Using scientific articles the teacher identifies the population, sample, variables and attributes appearing in the study. Hands-on training: The students are grouped into three or four groups, with a maximum of 20 students in each group. The teacher gives two or three scientific articles to each group. The students in the groups discuss, identify, and record the population, sample, variables, and attributes appearing in each article and present the findings in class. Conclusion and summarization: The teacher then concludes and summarizes key aspects and provides additional inputs for improvisation.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 14 Collection and Presentation of Data (LH :2 NLHT: 4 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 4	Differentiate types of Data [Primary, Secondary] and understand basic data collection methods.	CAP	MK	K	TBL,PSM,FC,PBL	Log book	S	II	-	LH
CO	Demonstrate different types of Presentation of data (Textual,	PSY-	MK	SH	L&PPT	Log book	S	II	-	LH

1,CO 4	Tabular and Graphical)	MEC			,PSM,TBL,PBL,D					
CO 1,CO 4	Demonstrate Collection and Presentation of Data.	PSY-MEC	MK	SH	L&PPT,PBL,TBL,D	Log book	S	II	-	NLHT14.1
CO 1,CO 4	Demonstrate Collection and Presentation of Data.	PSY-MEC	MK	SH	PBL,D,TBL,PSM,L&PPT	Log book	S	II	-	NLHT14.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 14.1	Data collection	Demonstration by teacher: The teacher elaborates on practical aspects of data collection methods using various patient scenarios. Hands-on training: The students are grouped into three or four groups, with a maximum of 20 students in each group. Each group collects basic demographic, anthropometric, and clinical data of a minimum of 20 patients using specific data collection methods and records the data with the teacher's help within the allocated time. Conclusion and summarization: The teacher then concludes and summarizes the key aspects of data collection and their applicability in different scenarios.
NLHT 14.2	Data presentation	Demonstration by teacher: The teacher demonstrates various methods of data presentation, highlighting the key components. Hands-on training: The student groups summarize the data collected from activity 4.1 into tables and then to appropriate graphs. Each group then present the data to the class. Conclusion and summarization: The teacher then concludes and summarizes the key aspects of data presentation and important aspects to be considered while presenting the data.

Non Lecture Hour Practical											
S.No	**Name of Practical**	**Description of Practical Activity**									
Topic 15 Measures of Central Tendency (LH :1 NLHT: 2 NLHP: 0)											
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**	
CO 1,CO 4	Define Measures of Central Tendency and Arithmetic Mean.	CC	MK	KH	TBL,L &PPT , PBL,FC ,PSM	Log book	S	II	-	LH	
CO 1,CO 4	Define Mean	CC	MK	KH	DIS,PB L,L&PP T	Log book	S	II	-	LH	
CO 1,CO 4	Define Median	CC	MK	KH	L&PPT ,PSM,P BL	Log book	S	II	-	LH	
CO 1,CO 4	Define Mode	CC	MK	KH	L&PPT ,PBL,PS M	Log book	S	II	-	LH	
CO 1,CO 4	Explain the Qualities of Good measure of tendency	CC	MK	KH	L&GD, L&PPT ,TBL	Log book	S	II	-	LH	
CO 1,CO 4	Calculate Measures of Central Tendency.	PSY-GUD	MK	SH	L&PPT ,DIS,PS M,TBL, PBL	Log book	S	II	-	NLHT15.1	
Non Lecture Hour Theory											

S.No	Name of Activity	Description of Theory Activity
NLHT 15.1	Calculating measures of central tendency	Demonstration by teacher: Using specific data sets the teacher demonstrates how to calculate mean, median and mode from the given data. Hands-on training: The students are given three or four data sets to calculate different measures of central tendency from the data. Conclusion and summarization: The teacher discusses the importance and applicability of various measures of central tendency and describes a good measure of central tendency.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 16 Measures of Deviation/Dispersion/Variability (LH :1 NLHT: 4 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 4	Define Measures of Deviation/ Dispersion / Variability and Range.	CC	MK	KH	TBL,L &PPT , PSM,DI S,PBL	Log book	S	II	-	LH
CO 1,CO 4	Define Quartile deviation.	CC	MK	KH	L&PPT ,DIS,TB L,PBL, PSM	Log book	S	II	-	LH
CO 1,CO 4	Define Mean deviation.	CC	MK	KH	DIS,PB L,TBL, PSM,L &PPT	Log book	S	II	-	LH
CO 1,CO	Define Standard deviation.	CC	MK	KH	PBL,DI S,L&PP	Log book	S	II	-	LH

4					T ,TBL, PSM					
CO 1,CO 4	Define Variance and Co-efficient of Variation.	CC	MK	KH	TBL,L &PPT , DIS,PB L	Log book	S	II	-	LH
CO 1,CO 4	Define Standard Error	CC	NK	KH	PBL,L& PPT ,PS M,TBL	Log book	S	II	-	LH
CO 1,CO 4	Explain the Qualities of Good measure of variability	CC	MK	KH	TBL,L &PPT , PSM,PB L,DIS	Log book	S	II	-	LH
CO 1,CO 4	Calculate Measures of Deviation / Dispersion / Variability.	PSY-GUD	MK	SH	D,TBL, L&PPT ,BS,PB L	Log book	S	II	-	NLHT16.1
CO 1,CO 4	Calculate Measures of Deviation / Dispersion / Variability.	PSY-GUD	MK	SH	L&PPT ,D,PSM, PBL,TB L	Log book	S	II	-	NLHT16.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 16.1	Calculating measures of central tendency - 01	Demonstration by teacher: Using specific data sets the teacher demonstrates how to calculate range, mean deviation and standard deviation from the given data. Hands-on training: The students are given three or four data sets to calculate the Range, Mean Deviation, and standard deviation from the data. Conclusion and summarization: The teacher discusses

		the data sets and explains the difference between range, mean deviation, and standard deviation.
NLHT 16.2	Calculating measures of central tendency - 02	Demonstration by teacher: Using the same data sets from activity 6.1 the teacher demonstrates how to calculate variance and coefficient variation from the given data. Hands-on training: The students are then given three or four data sets to calculate variance and coefficient variation from the data. Conclusion and summarization: The teacher discusses the data sets and explains variance and coefficient of variation and their applicability. Further, the teacher elaborates on good measures of dispersion.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 17 Probability (LH :1 NLHT: 3 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1	Explain Probability	CC	MK	K	D-M,PL ,L&PPT ,IBL	Log book	S	II	-	LH
CO 1,CO 4	Define Normal Distribution Curve and understand its variations	CC	MK	KH	PL,L&P PT ,DIS ,BS,ML	Log book	S	II	-	LH
CO 1,CO 4	Calculate Probability and Normal Distribution.	PSY-GUD	MK	SH	DIS,D,L &PPT ,I BL,PBL	Log book	S	II	-	NLHT17.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 17.1	Normal distribution and probability	Demonstration by teacher: The teacher demonstrates the normal distribution curve and its variations,

		like skewness and kurtosis, using different data. The teacher also demonstrates probability based on the normal distribution. Hands on training: The students are given tabulated data to develop normal distribution curves. Then, they conduct probability predictions from the curve. Conclusion and summarization: The teacher discusses the findings and clarifies doubts.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 18 Hypothesis and Test of Significance (LH :1 NLHT: 3 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 4	Explain Hypothesis	CC	MK	K	L&PPT ,DIS	Log book	S	II	-	LH
CO 1,CO 4	Explain Test of significance	CC	MK	KH	BS,DIS, L&GD	Log book	S	II	-	LH
CO 1,CO 4	Discuss Hypothesis and Test of Significance.	CAP	MK	SH	L&PPT ,PSM,TBL,PBL ,D	Log book	S	II	-	NLHT18.1
CO 1,CO 4	Discuss Hypothesis and Test of Significance.	CAP	MK	SH	D,L&PPT ,TBL, DIS	Log book	S	II	-	NLHT18.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 18.1	Hypothesis	Demonstration by teacher: The teacher demonstrates systematic development of a hypothesis from a research problem. Hands-on training: The students are grouped into three or four groups, with a maximum of 20 students in each group. Each group develop hypotheses from three or four given research problems. Then, they present the hypotheses in class. Conclusion and summarization: The teacher discusses various hypotheses developed by the groups and summarizes the critical aspects.
NLHT 18.2	Testing of significance	Demonstration by teacher: The teacher demonstrates the steps involved in testing a hypothesis using data from different scientific articles. Hands-on training: The students' groups are then given three or four articles to identify and record the steps of hypothesis testing in them. Then, they will present the data in class. Conclusion and summarization: The teacher concludes with significant points regarding the testing of the hypothesis.

Non Lecture Hour Practical

S.No	**Name of Practical**	**Description of Practical Activity**

Topic 19 Parametric and non-parametric tests (LH :1 NLHT: 2 NLHP: 0)

A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO 1,CO 4	Explain and differentiate Parametric and Non-parametric tests with examples	CC	MK	KH	L&GD, L&PPT ,BS	Log book	S	II	-	LH
CO 1,CO 4	Discuss Parametric and Non-parametric tests	CAP	MK	KH	D,PBL, L&PPT ,DIS	Log book	S	II	-	NLHT19.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 19.1	Understanding Parametric and Non-parametric tests	Demonstration by teacher: The teacher demonstrates the difference between parametric and nonparametric tests and introduces various parametric and nonparametric tests. Hands-on training: The teacher provides three or four scientific articles to the students in groups. The students discuss and understand the application of parametric or nonparametric tests, and they record their findings. Conclusion and summarization: The teacher concludes with major points regarding the applicability of parametric and nonparametric tests.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 20 Concept of Co-relation and Regression (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 4	Explain Correlation and Regression	CC	MK	KH	L&PPT ,D,PBL	Log book	S	II	-	LH
CO 1,CO 4	Correlation and regression	CC	DK	KH	TBL,L &PPT ,D	Log book	S	II	-	NLHT20.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 20.1	Undersanding correlation and regression	Demonstration by teacher: The teacher demonstrates various features of correlation and regression using data from scientific literature. Hands-on training: Students are given three data sets that utilize correlation and regression, and they understand various scenarios for their application.

		Conclusion and summarization: The teacher concludes with major points regarding correlation and regression and their applicability.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 21 Commonly used Statistically software (LH :0 NLHT: 2 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO 1,CO 4	Demonstrate different Software used for Statistical Analysis	CC	NK	KH	D,DIS,TUT,L&PPT	Log book	S	II	-	NLHT21.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 21.1	Statistical software	Demonstration by teacher: The teacher introduces various statistical software and its features and demonstrates any of them by performing some simple statistical tests. Hands-on training: Students are allowed to review various statistical software, understand its features, and prepare a note. Conclusion and summarization: The teacher concludes with major points regarding statistical software and their applicability.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
2.1	CO 1,CO 5	Historical developments in research
3.1	CO 1,CO 2	Different Research types Part I
3.2	CO 1,CO 2	Research Types Part II
4.1	CO 5	Ethics Committe Functioning
5.1	CO 1,CO 2	Literary research
5.2	CO 1,CO 2	Research designs
5.3	CO 1,CO 2	Randomized clinical trial and terminologies related to it
5.4	CO 1,CO 2	Preclinical methods in research
6.1	CO 1,CO 2,CO 5	Research process: Research question and Hypothesis
6.2	CO 1,CO 2	Research process: Materials and Methodology
7.1	CO 3	Demonstrate use of Research portals, database and Artificial intelligence in ayurveda
8.1	CO 3	Different Guidelines to report research
10.1	CO 5	Research Critiquing
11.1	CO 1,CO 4	Differentiating descriptive and inferential statistics
12.1	CO 1,CO 4	Data types and scales
13.1	CO 1,CO 4	Statistical terms
14.1	CO 1,CO 4	Data presentation

14.2	CO 1,CO 4	Data collection
15.1	CO 1,CO 4	Calculating measures of central tendency
16.1	CO 1,CO 4	Calculating measures of central tendency - 01
16.2	CO 1,CO 4	Calculating measures of central tendency - 02
17.1	CO 1,CO 4	Normal distribution and probability
18.1	CO 1,CO 4	Hypothesis
18.2	CO 1,CO 4	Testing of significance
19.1	CO 1,CO 4	Understanding Parametric and Non-parametric tests
20.1	CO 1,CO 4	Undersanding correlation and regression
21.1	CO 1,CO 4	Statistical software

Table 5 : List of Practicals

Not Applicable

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (-)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-RM	1	50	-	-	-	-	-	50

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	NA	NA	NA	**UE****

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
****University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

Not applicable

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-RM
PAPER-I
Time: 1.5 Hours Maximum Marks: 50
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	10	1	10
Q 2	SHORT ANSWER QUESTIONS (SAQ)	4	5	20
Q 3	LONG ANSWER QUESTIONS (LAQ)	2	10	20
				50

6 F : Distribution of theory examination

Paper 1 (RM-MS)					
Sr. No	**A List of Topics**	**B Marks**	**MCQ**	**SAQ**	**LAQ**
1	**Introduction to Research**	30	No	Yes	No
2	**Historical developments in research**		No	Yes	No
3	**Research Types**		Yes	Yes	Yes
4	**Research Ethics**		Yes	Yes	No
5	**Research Designs and terminologies**		Yes	No	Yes
6	**Research process**		Yes	No	Yes
7	**Different Database, portals and Artificial Intelligence.**		Yes	Yes	No
8	**Different Guidelines to report research**		Yes	Yes	No
9	**Intellectual Property Right (IPR)/Patent/ TKDL**		Yes	No	No
10	**Research Critiquing**		Yes	No	No
11	**Introduction to Medical statistics**	20	Yes	No	No
12	**Data**		Yes	No	No
13	**Basic statistical terms**		Yes	No	No
14	**Collection and Presentation of Data**		Yes	Yes	Yes
15	**Measures of Central Tendency**		No	No	Yes
16	**Measures of Deviation/Dispersion/Variability**		No	No	Yes
17	**Probability**		No	Yes	No
18	**Hypothesis and Test of Significance**		Yes	No	No
19	**Parametric and non-parametric tests**		Yes	Yes	No
20	**Concept of Co-relation and Regression**		Yes	No	No
21	**Commonly used Statistically software**		Yes	No	No
Total Marks		**50**			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 50-mark question paper of AyUG-RM shall contain:
   - 10 MCQs (5 Research Methodology + 5 Statistics)
   - 4 SAQs (3 Research Methodology + 1 Statistics)
   - 2 LAQs (1 Research Methodology + 1 Statistics)
7. MCQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 2 for AyUG-RM.
   - Questions from the Nice to Know part of syllabus shall not exceed 1 for AyUG-RM.
8. SAQs:
   - Majority shall be drawn from the Must to Know part of the syllabus.
   - Questions from the Desirable to Know part of syllabus shall not exceed 1.
   - No questions shall be drawn from the Nice to Know part of syllabus.
   - SAQs shall assess understanding, application, and analysis, rather than simple recall.
9. LAQs:
   - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
   - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

Not Applicable

References Books/ Resources

S.No	Resources
1	Gupta S P. Statictical methods. 46 th. Sultan Chand and sons; 2021
2	Itrat M, Khan TN, Radhika K. Research methodology and biostatistics. 2023.
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8	Aslam M, Singh S. Research methodology & biostatistics in pharmacology. 1st ed. New Delhi: Academa Publishers; 2006.
9	Naseema C, Jibin VK. Research methodology in education and application of statistics. Delhi: Shipra Publications; 2011.
10	Chawla D, Sondhi N. Research methodology: concepts and cases. New Delhi: Vikas Publishing House; 2011.
11	Kothari CR. Research Methodology: Methods and Techniques. 2nd ed. Daryaganj: New Age International; 2004. 1 p.
12	Reporting guidelines | EQUATOR Network
13	AYUSH RESEARCH PORTAL
14	Official website of Intellectual Property India

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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)

Atyaikachikitsa
(Emergency Medicine)

(SUBJECT CODE : AyUG-EM)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

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।। आयुषे सर्वलोकानाम् ।।

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NEW DELHI-110026

NCISM

III Professional Ayurvedacharya (BAMS)

Subject Code : AyUG-EM

Atyaikachikitsa

(Emergency Medicine)

Summary

Total number of Teaching hours: 40			
Lecture (LH) - Theory		**0**	**0(LH)**
Paper I	0		
Non-Lecture (NLHT)		**12**	**40(NLH)**
Paper I	12		
Non-Lecture (NLHP)		**28**	
Paper I	28		

Examination (Papers & Mark Distribution)					
Item	**Theory Component Marks**	**Practical Component Marks**			
		Practical	**Viva**	**Elective**	**IA**
Paper I		0	0	-	0
Sub-Total	0				
Total marks	0				

Important Note :- The User Manual III BAMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to **syllabus24ayu@ncismindia.org**

PREFACE

Emergency treatment is a crucial aspect of every medical science, including Ayurveda. The Ashtanga Hridaya describes Ayurveda as being capable of saving lives by "cutting the noose of death," emphasizing its potential in managing life-threatening conditions. The Brihat Trayee—the foundational triad of Ayurvedic texts—provides comprehensive details on various emergency conditions such as Teevra Udakakshaya (severe dehydration), Shiro Marmabhighata (head injury), Hridroga (cardiac emergencies), and Sanyasa (coma), among others.

Despite the significant advancements in modern emergency medicine, limitations still exist in certain areas and patient populations. This underscores the necessity of exploring, mastering, and applying Ayurvedic principles in emergency care. Many Vaidyas have documented encouraging results in Ayurvedic emergency treatment, demonstrating its effectiveness in various critical conditions.

To ensure competency in handling emergencies, structured and rigorous training is essential. It is imperative that every Ayurveda graduate possesses foundational knowledge and practical training in the primary management of emergencies using Ayurvedic principles, alongside an understanding of relevant contemporary medical approaches.

This syllabus is designed with the objective of equipping students with the skills required for the effective integration of Ayurvedic emergency treatment. Through a balanced approach incorporating theoretical learning, hands-on practicals, and clinical exposure, students will be empowered to address emergency conditions with confidence and expertise.

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Course Code and Name of Course

Course code	Name of Course
AyUG-EM	Atyaikachikitsa

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-EM At the end of the course AyUG-EM, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Apply the principles and practices of Kayachikitsa to effectively manage various adult ailments, aligning with the Trisutra framework.	PO1
CO2	Integrate the application of multidisciplinary sciences, tools and techniques for a biopsychosocial approach towards diagnosis, prognosis & management of diseases including anukta roga to restore dhatusamya.	PO2,PO3,PO5
CO3	Construct treatment plans/protocols applying yukti in accordance with the Chikitsa sutra including pathya apathya with appropriate documentation adhering to legal, safety and regulatory standards.	PO1,PO3,PO4,PO5
CO4	Demonstrate the application of Rasayana and Vajikarana as prophylactic, therapeutic, restorative and palliative medicine.	PO1,PO4,PO5
CO5	Perform various skills (Karma kaushalya) in dealing with atyayika avastha including first aid and primary management	PO2,PO4,PO5
CO6	Demonstrate self directedness in pursuit of new advancements in the field of biomedical research and government health care policies.	PO7,PO9
CO7	Demonstrate agility, virtuous, ethical behaviour, compassion and communicate effectively with patients, relatives, and stakeholders about the prognosis and treatment including informed consent.	PO6,PO8,PO9

Table 2 : Contents of Course

Paper 1 (Atyayika Chikitsa)						
Sr. No	**A2 List of Topics**	**B2 Term**	**C2 Marks**	**D2 Lecture hours**	**E2 Non-Lecture hours Theory**	**E2 Non-Lecture hours Practical**
1	**Concept of Atyaya, and Atyayika Chikitsa** Definition and Ayurvedic perspective of Atyaya and Atyayika Vyadhi Clinical significance and types of Atyayika conditions Arishta Lakshana (Signs of impending death)	1	0	0	1	0
2	**Important factors related to Atyayika conditions** Role of Prana, Agni, Oja, Indriya, Bala, and Marma in Atyayika Avastha Significance of Trimarma (Shira, Hridaya, Basti) in emergencies Pathophysiology of these factors in life-threatening conditions	1		0	2	0
3	**Teevra Jwara Vega (Hyperpyrexia)** Classification: Swatantra Jwara and Paratantra Jwara Clinical examination and differentiation of fever in emergency conditions Ayurvedic and modern management, including Abhyantar Aushadhi, Basti, Dhoopana, Swedana, and Lepa	1		0	0	2
4	**Raktapitta- Teevra Raktasrava (Acute Hemorrhage)** Types of Raktapitta: Swatantra and Paratantra Raktapitta Clinical assessment of hemorrhagic conditions like	1		0	0	2

	Nasagata Raktapitta (Epistaxis) and Gudagata Raktapitta (Rectal bleeding) Management using Ayurvedic interventions (Bandha, Peedana, Parisheka, Lepa) and conventional emergency care					
5	**Teevra Udarashoola- {Acute abdomen, Acute abdominal pain)** Ayurvedic and modern approaches for acute abdominal pain assessment Key conditions: Renal colic, biliary colic, gastritis, pancreatitis, peritonitis, appendicitis Management using Basti, Nabhi Poorana, Agnikarma, Viddha, cupping, and Lepa	1		0	2	2
6	**Mutraghata- Mutrakricchra {including Anuria/Oliguria, retention of urine)** Types and causes of Mutraghata and Mutrakricchra Clinical differentiation of anuria, oliguria, and urinary retention Ayurvedic treatment modalities (Dhara, Parisheka, Lepa, Nabhi Poorana) and modern approaches	2		0	0	2
7	**Hridroga Atyayika Avastha (Management of Acute cardiac emergency conditions (including Acute coronary syndrome, Myocardial infarction, LVF, Arrhythmia)** Pathophysiology of Svatantra and Paratantra Hridroga in emergency conditions Recognition of acute coronary syndrome, myocardial infarction (MI), left ventricular failure (LVF), and arrhythmias Management using Ayurvedic drugs (Trailokyachintamani, Hemagarbha Pottali, Suvarna Sootashekhara), Hridbasti, Basti, and Lepa	2		0	0	3
8	**Stabdhata (Shock), Teevra Asahatva (Anaphylaxis) and Acute Hypersensitivity reaction)**	2		0	0	2

	Clinical presentation and classification of shock and hypersensitivity reactions Ayurvedic and conventional approaches for emergency stabilization					
9	**Murcha (Syncope) (SP98)** Causes and classification of Murcha (Syncope) based on Ayurveda and modern medicine Assessment of Atyayika Avastha in Murcha and emergency interventions	2		0	0	1
10	**Akshepaka, Apasmara Vega (Convulsions, Status epilepticus)** Differentiation of Akshepaka and Apasmara based on clinical presentation Role of Ayurveda in emergency seizure management Ayurvedic treatments: Pradhamana Nasya, Lepa, Vacha, Brahmi, etc.	2		0	0	1
11	**Prameha Upadrava (Diabetic ketoacidosis (DKA) and Hyperosmolar hyperglycemic state (HHS)), Raktasharkaralpata(Hypoglycaemia), Atyuchcha Raktasharkara (Hyperglycemia)** Recognition and clinical differentiation of Diabetic Ketoacidosis (DKA), Hyperosmolar Hyperglycemic State (HHS), Hypoglycemia, and Hyperglycemia Ayurvedic and conventional approaches for managing critical diabetes complications	2		0	1	1
12	**Teevra Shwasa Vega (Acute respiratory failure, Status asthmaticus, acute respiratory distress syndrome (ARDS), Chocking** Status asthmaticus, acute respiratory distress syndrome (ARDS), and choking Ayurvedic management including Bahya Snehana, Swedana, Dhooma, Nasya, Basti, Agnikarma, and Viddha	2		0	1	2
13	**Teevra Hikka (SM74)**	2		0	0	2

	Causes and complications of prolonged Hikka Ayurvedic interventions: Suvarna Sootashekhara, Suvarna Sameerapannaga, Nasya, Basti, Dhooma, Nabhipurana, Bahya Snehana, and Swedana, etc.					
14	**Teevra Chardhi and Sarakta Chardi** Causes of excessive vomiting and hematemesis Ayurvedic treatment including Shankha Bhasma, Mayurpicchamashi, Shubhra Bhasma, Jahar Mohara, and Viddha, etc.	2		0	0	2
15	**Teevra Atisara and Sarakta Atisara** Nirama Atisara (Severe diarrhea) and Raktatisara (Dysentery with blood loss) Management using Ayurvedic formulations like Shankhodara Rasa, Karpoora Rasa, Kanakasundar Rasa, and procedures like Viddha, Agnikarma, and Dhara, etc.	3		0	0	2
16	**Teevra Udakakshaya (including severe dehydration and electrolyte imbalance)** Ayurvedic and modern understanding of Udakakshaya Clinical assessment and emergency management, including fluid replacement therapy	3		0	1	1
17	**Teevra Pakshaghata Vega (including Acute Cerebrovascular accident (stroke) & Hyperventilation (panic attack)** Clinical evaluation and differentiation of Pakshaghata (Cerebrovascular accident—Stroke) Management using Ayurvedic drugs (Trailokyachintamani, Suvarna Sootashekhara, Siddha Makaradhvaja, Yogendra Rasa, Brihat Vatachintamani, etc), Nasya, Dhara, Parisheka, Agnikarma, and Viddha	3		0	0	2
18	**Adverse Drug Reaction and its management** Identification of adverse drug reactions in Ayurveda and modern medicine	3		0	1	0

	Ayurvedic principles for preventing and managing ADRs					
19	**Sanyasa (patients on the verge of death and comatose patients), Ayurvedic and conventional life saving medicines** Ayurvedic classification and stages of Sanyasa (Coma) Management approaches including Ayurvedic and modern lifesaving interventions Ayurvedic drugs: Hemagarbha Pottali, Trailokyachintamani, Suvarna Sootashekhara, Siddha Makaradhvaja, Mahalakshmivilasa, Sahasraputi Abhraka, Suvarna Sindoora, Yogendra Rasa, Brihat Vatachintamani, Jayamangal Rasa, Mallasindoora, Heeraka, etc. Conventional emergency drugs: Atropine, adrenaline, levipil, epsoline, dopamine, dobutamine, streptokinase, dextrose, calcium gluconate, cardarone, midazolam, mannitol, effcorlin, lignocaine, lasix, adenosine, magnesium sulfate, etc.	3		0	3	1
Total Marks			**0**	**0**	**12**	**28**

Table 3 : Learning objectives of Course

Paper 1 (Atyayika Chikitsa)										
A3 Course outcome	**B3 Learning Objective (At the end of the session, the students should be able to)**	**C3 Domain/sub**	**D3 MK / DK / NK**	**E3 Level**	**F3 T-L method**	**G3 Assessment**	**H3 Assessment Type**	**I3 Term**	**K3 Integration**	**L3 Type**
Topic 1 Concept of Atyaya, and Atyayika Chikitsa (LH :0 NLHT: 1 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO5	Explain the Ayurvedic concept of Atyaya and Atyayika Chikitsa.	CC	MK	KH	FC,PER,L_VC,L&PPT	CL-PR,P-VIVA	F	I	-	NLHT1.1
Non Lecture Hour Theory										
S.No	**Name of Activity**	**Description of Theory Activity**								
NLHT 1.1	Concept of Atyaya and Atyayika Chikitsa.	The teacher will explain the Ayurvedic concept of Atyaya and Atyayika Chikitsa by lecture with PPT or lecture with video clips. The students who have come prepared will discuss the aspects of Atyaya and Atyayika Chikitsa, while the teacher intervenes to suggest wherever improvement is needed.								
Non Lecture Hour Practical										
S.No	**Name of Practical**	**Description of Practical Activity**								
Topic 2 Important factors related to Atyayika conditions (LH :0 NLHT: 2 NLHP: 0)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO5	Explain the role of important factors like Prana, Agni etc. associated with Atyayika conditions.	CAN	MK	KH	L_VC,FC,L&PPT ,DIS	VV-Viva,CL-PR,PRN	F	I	-	NLHT2.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
NLHT 2.1	Important factors related to Atyayika conditions like Prana, Agni, Oja, Marma, Indriya, Bala.	The teacher will explain important factors related to Atyayika conditions like Prana, Agni, Oja, Marma - especially Trimarma, Indriya, Bala, etc. with a PPT lecture or lecture with video clips. The students who have come prepared with basic information will discuss it in the classroom. While the teacher gives inputs for necessary improvement. Students will try to analyze the role of these factors in various patients.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

Topic 3 Teevra Jwara Vega (Hyperpyrexia) (LH :0 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Implement management of Teevra Jwara (hyperpyrexia)	PSY-GUD	MK	SH	SIM,CBL,D-BED,PBL	P-MOD,P-PS, C-VC,OSCE	F	I	-	NLHP3.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 3.1	Management of Teevra Jwara (hyperpyrexia)	Students will take history and perform clinical examinations under the guidance of a teacher. Through case-based learning, simulation, or bedside examination, they will attempt to comprehend the diagnosis as either Swatantra or Paratantra Jwara and the particular Avastha. They will make an effort to choose the drug and other Ayurvedic management techniques while also getting a basic understanding of traditional therapeutic approaches.

		The students will observe and assist the teacher in management including Abhyantar Aushadhi, Basti, Dhoopana, Swedana, Lepa, etc.

Topic 4 Raktapitta- Teevra Raktasrava (Acute Hemorrhage) (LH :0 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Apply management of Teevra Raktasrava (acute haemorrhage)	PSY-GUD	MK	SH	CBL,SIM,D-M, D-BED, PBL	C-VC,OSCE,SP,P-MOD,P-EN	F	I	H-SH	NLHP4.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 4.1	Management of Teevra Raktasrava (acute haemorrhage)	Students will examine the patient's bedside or on simulation or based on the case. They will try to understand the diagnosis in the form of Swatantra or Paratantra Raktapitta or other diseases and the exact Avastha, including the understanding based on conventional medicine. They will try to prepare a prescription including Abhyantar Aushadhi and other treatment modalities. They will observe and assist the teacher in the treatment including Abhyantar Aushadhi and other treatments like Bandha, Peedana, Parisheka, Lepa, etc. along with conventional management methods.

Topic 5 Teevra Udarashoola- {Acute abdomen, Acute abdominal pain) (LH :0 NLHT: 2 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Perform differential diagnosis and apply the treatment for Teevra Udarashoola (acute pain in the abdomen)	CAN	MK	SH	PBL,CBL,D,L_	P-MOD, C-VC,P-VIV	F	I	H-SH	NLHT5.1

					VC,L&PPT	A,OSCE,SP				
CO2, CO5	Perform differential diagnosis and apply treatment for Teevra Udarashoola (acute pain in the abdomen)	PSY-GUD	MK	SH	D-BED, CBL,SIM,D-M,PBL	P-CASE,SP,P-MOD,P-EN,OSCE	F	I	-	NLHP5.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 5.1	Differential diagnosis of Teevra Udarashoola (acute pain in the abdomen)	Through a lecture using PPT or videos, simulation, or case studies, the teacher will describe how to distinguish and evaluate Teevra Udarashoola (acute abdominal pain) as per Ayurveda and provide a brief overview of conventional medicine. Through simulation, case-based research, or bedside examination, the students will attempt to diagnose by themselves.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 5.1	Management of Teevra Udarashoola (acute pain in the abdomen)	Students will attempt to precisely identify the diagnosis and particular Avastha based on bedside examination or simulation or video case or case-based learning. They will try to prepare a prescription including Abhyantar Aushadhi and other treatment modalities as per Ayurveda and a brief understanding of conventional medicine. They will observe and assist the teacher in the treatment including Abhyantar Aushadhi and other management methods like Basti, Nabhi Poorana, Agnikarma, Viddha, cupping, Lepa etc.

Topic 6 Mutraghata- Mutrakricchra {including Anuria/Oliguria, retention of urine) (LH :0 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Apply the treatment of Mutraghata and Mutrakricchra (including anuria, oliguria, and retention of urine)	PSY-GUD	MK	SH	PBL,D-M,D-BED,SIM, CBL	C-VC,P-VIVA,SP,P-MOD,OSCE	F	II	H-SH	NLHP6.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 6.1	Management of Mutraghata and Mutrakricchra (including anuria, oliguria, and urine retention)	Students will examine the patient's bedside or study by simulation or case-based learning or video case. They will try to understand the diagnosis and specific Avastha as per Ayurveda and with a brief understanding of conventional medicine. They will try to decide on the Abhyantar Aushadhi and other treatment modalities. They will observe and assist the teacher in Abhyantar Chikitsa and other management methods like Dhara, Parisheka, Lepa, Nabhi Poorana, etc. as per Ayurveda and considering conventional methods on actual patients or models.

Topic 7 Hridroga Atyayika Avastha (Management of Acute cardiac emergency conditions (including Acute coronary syndrome, Myocardial infarction, LVF, Arrhythmia) (LH :0 NLHT: 0 NLHP: 3)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Apply the primary management of Hridroga Atyayika Avastha (acute cardiac emergencies)	PSY-GUD	MK	SH	D-BED, FC,SIM ,PBL,CBL	P-PS,SP,PM, C-VC,OSCE	F	II	-	NLHP7.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 7.1	Primary management of Hridroga Atyayika Avastha (acute cardiac emergencies)	Students will take a quick history of the patient and perform a clinical examination at the bedside, or based on simulation or case-based learning. They will try to differentiate and diagnose the exact condition as per Ayurveda with a supportive understanding of conventional medicine. With discussion, they will try to understand the condition, under the teacher's guidance. They will try to prepare a prescription including Abhyantar Chikitsa and other treatment modalities. They will observe and assist the teacher in the management with Abhyantar Chikitsa like Trailokyachintamani, Hemagarbha Pottali, Suvarna Sootashekhara, Siddha Makaradhvaja etc., and also in Hridbasti, Basti, Lepa etc.

Topic 8 Stabdhata (Shock), Teevra Asahatva (Anaphylaxis) and Acute Hypersensitivity reaction) (LH :0 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Demonstrate preparedness to manage Stabdhata (shock), Teevra Asahatva (anaphylaxis and acute hypersensitivity reaction)	PSY-GUD	MK	KH	PBL,L_VC,D-M,CBL, FC	P-CASE,P-MOD,SP, C-VC,P-PS	F	II	-	NLHP8.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**

NLHP 8.1	Management of Stabdhata (shock) and Teevra Asahatva (Anaphylaxis and acute hypersensitivity reaction)	The teacher will demonstrate the case of Stabdhata (shock) and Teevra Asahatva (anaphylaxis and acute hypersensitivity reaction) bedside or through simulation or case videos. The teacher will explain the possible Ayurvedic management and the management by conventional medicine. Students will take a quick history of the patients or will observe through simulations, case videos, etc. They will try to understand the specific conditions and try to write the management with assessment and guidance from the teacher. They will observe and assist the teacher in actual management.

Topic 9 Murcha (Syncope) (SP98) (LH :0 NLHT: 0 NLHP: 1)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Illustrate the difference and management of Atyayika Avastha of Murcha (syncope)	PSY-GUD	MK	KH	RP,L_VC,SIM, D-BED, PBL	C-VC,SP,P-EN,P-MOD,P-PS	F	II	-	NLHP9.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 9.1	Management of Atyayika Avastha of Murcha (syncope)	The students will take a brief history and examine the patient's bedside or through simulation or video cases. They will try to differentiate and identify the Atyayika Avastha of Murcha. They will try to decide the line of treatment under the guidance of the teacher. They will observe and assist the teacher in the management.

Topic 10 Akshepaka, Apasmara Vega (Convulsions, Status epilepticus) (LH :0 NLHT: 0 NLHP: 1)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO5	Demonstrate preparedness to apply the management for Akshepaka (convulsions and Teevra Apasmara (status epilepticus)	PSY-GUD	MK	SH	SIM,RP,D-M,D-BED,CBL	P-MOD,P-EN,SP, C-VC	F	II	-	NLHP10.1

Non Lecture Hour Theory		
S.No	**Name of Activity**	**Description of Theory Activity**

Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 10.1	Management of Akshepaka (convulsions) and Teevra Apasmara (status epilepticus)	The teacher will explain on bedside case or by simulation or video cases On specific conditions, the students will examine, assess, and try to decide the line of treatment as per Ayurveda, with knowledge of conventional medicine. Role plays can be used to understand the actual activities required during the management.

Topic 11 Prameha Upadrava (Diabetic ketoacidosis (DKA) and Hyperosmolar hyperglycemic state (HHS)), Raktasharkaralpata(Hypoglycaemia), Atyuchcha Raktasharkara (Hyperglycemia) (LH :0 NLHT: 1 NLHP: 1)										
A3	**B3**	**C3**	**D3**	**E3**	**F3**	**G3**	**H3**	**I3**	**K3**	**L3**
CO2, CO5	Show preparedness to manage Prameha Upadrava (important diabetic complications)	CC	MK	KH	FC,DIS,PBL,PER,L&PPT	PRN,VV-Viva	F	II	-	NLHT11.1
CO2, CO5	Apply the primary management for Prameha Upadrava (important diabetic complications)	PSY-GUD	MK	SH	CBL,SIM,PBL,	P-MOD,SP,OSCE,P-	F	II	-	NLHP11.1

					D-BED	PS,P-CASE				

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 11.1	Primary management of Prameha Upadrava (important diabetic complications)	Students divided into small groups will be assigned specific topics related to Prameha Upadrava (including diabetic ketoacidosis, hyperosmolar hyperglycemic state, hypoglycemia, and hyperglycemia) which result in Atyayika Avastha. Students will study and come prepared and present their topics, followed by a discussion under the guidance and supervision of the teacher. They will understand the possible Ayurvedic management along with the conventional management.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 11.1	Primary management of Prameha Upadrava (important diabetic complications)	Students will take a brief history and examine the patient's bedside or with the help of simulation or through case-based learning. Under teacher guidance, they will prepare the plan for possible Ayurvedic management or the conventional management of Prameha Upadrava (including diabetic ketoacidosis, hyperosmolar hyperglycemic status, hypoglycemia, or hyperglycemia). They will observe and assist in the actual management done by the teacher.

Topic 12 Teevra Shwasa Vega (Acute respiratory failure, Status asthmaticus, acute respiratory distress syndrome (ARDS), Chocking (LH :0 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe Teevra Shvasa Vega (including acute respiratory failure, status asthmaticus, acute respiratory distress syndrome, and choking)	CC	MK	KH	FC,L_VC,PER, CBL,L &PPT	CL-PR,VV-Viva,T-CS	F	II	-	NLHT12.1

CO2, CO5	Apply management of Teevra Shvasa (including acute respiratory failure, status asthmaticus, acute respiratory distress syndrome, and choking)	PSY-GUD	MK	SH	D-M,SIM,CBL,PBL,D-BED	C-VC,SP,P-MOD,PM,OSCE	F	II	-	NLHP12.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 12.1	Teevra Shvasa Vega	The teacher will explain the emergencies related to Teevra Shvasa Vega by lecture with PPT or video clips. The teacher will assign topics related to Teevra Shvasa Vega to the students. They will present their topics followed by understanding specific conditions based on specific cases.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 12.1	Primary management of Teevra Shvasa Vega	The students will take a brief history and examine the patient's bedside or assess by simulation or based on a case. They will try to prepare the Ayurvedic method of management with knowledge about conventional management. They will understand and perform the Heimlich maneuver for choking on the model or by simulation. They will observe and assist the teacher in actual management with Abhyantar Chikitsa with medicines like Hemagarbha Pottali, Trailokyachintamani, Mallasindoora, Siddha Makaradhvaja, etc. given in Muhurmuhu Kala, applied on gums in case of unconscious patients. And also in procedures like Bahya Snehana, Swedana, Dhooma, Nasya, Basti Agnikarma and Viddha, etc.

Topic 13 Teevra Hikka (SM74) (LH :0 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3

CO2, CO5	Apply management of Teevra Hikka.	PSY-GUD	MK	SH	CBL,PBL,D-BED,SIM	C-VC,P-PS,P-MOD,OSCE,SP	F	II	-	NLHP13.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 13.1	Management of Teevra Hikka	The students will take a brief history and examine the patient's bedside or assess through simulation or based on case. Under the teacher's guidance, they will try to prepare the management plan. They will observe and assist the teacher in the management including Abhyantar Aushadhi like Suvarna Sootashekhara, Suvarna Sameerapannaga, etc, given in Muhurmuhu Kala, and other procedures like Nasya, Basti, Dhooma, Nabhipurana, Bahya Snehana, Swedana, etc.

Topic 14 Teevra Chardhi and Sarakta Chardi (LH :0 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Apply primary management of Teevra Chardi and Sarakta Chardi	PSY-SET	MK	SH	D-BED, CBL,PBL,SIM	P-MOD, C-VC,OSCE, SP	F	II	H-SH	NLHP14.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

NLHP 14.1	Management of Teevra Chardi and Sarakta Chardi	The students will take a brief history and examine the patient's bedside or assess through simulation or video or based on the case. Under the guidance of the teacher, they will try to plan management as per Ayurveda with the necessary understanding of conventional medicine. They will assess whether the patients can be treated medically or if they need to be referred for surgical management. They will observe and assist the teacher in the actual management including internal medicines like Shankha Bhasma, Mayurpicchamashi, Shubhra Bhasma, Jahar Mohara, etc., and other modalities like Viddha, Agnikarma, etc.

Topic 15 Teevra Atisara and Sarakta Atisara (LH :0 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Apply management of Teevra Atisara and Sarakta Atisara	PSY-SET	MK	SH	PBL,PSM,SIM, CBL,D-BED	PM,P-VIVA, C-VC,SP,OSCE	F	III	H-SH	NLHP15.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 15.1	Management of Teevra Atisara and Sarakta Atisara	The students will assess the patient with Svatantra and Paratantra Atisara and its specific Atyayika condition based on actual examination or by simulation or case-based learning They will try to decide on the Ayurvedic treatment plan with essential knowledge of conventional medicine. They will also understand whether the patients can be treated medically or if they need to be referred for surgical management.

		They will observe and assist the teacher in actual treatment including Abhyantar Aushadhi like Shankhodara Rsa, Karpoora Rasa, Kanakasundar Rasa, Sarvangasundar Rasa, Shankha Bhasma, etc., and other treatment modalities like Viddha, Agnikarma, Dhara, etc.

Topic 16 Teevra Udakakshaya (including severe dehydration and electrolyte imbalance) (LH :0 NLHT: 1 NLHP: 1)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Demonstrate preparedness for management of Teevra Udakakshaya (including severe dehydration and electrolyte imbalance)	PSY-GUD	MK	KH	L&PPT,D-M,L_VC,FC,D	CL-PR, C-VC,T-CS,PRN,VV-Viva	F	III	-	NLHT16.1
CO2, CO5	Demonstrate primary management of Teevra Udakakshaya (including severe dehydration and electrolyte imbalance)	PSY-GUD	MK	SH	KL,SIM,CBL,PBL,D-M	P-MOD,OSCE,P-PS,PM,SP	F	III	-	NLHP16.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 16.1	Understanding Teevra Udakakshaya (including severe dehydration and electrolyte imbalance)	The teacher will explain Teevra Udakakshaya with a lecture with PPT or video, and demonstrate on the model. The teacher will explain about assessment of Udakakshaya and Teevra Udakakshaya which can be Atyayika Avastha. The students will discuss and understand various aspects in the classroom.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 16.1	Primary management of Teevra Udakakshaya (including severe dehydration and electrolyte	Students will examine the patient's bedside or assess through simulation or videos or based on the case. They will try to plan management as per Ayurveda and also conventional medicine.

	imbalance)	They will practically perform the procedures like intravenous fluid administration on models. They will observe and assist the teacher in actual management procedures.

Topic 17 Teevra Pakshaghata Vega (including Acute Cerebrovascular accident (stroke) & Hyperventilation (panic attack) (LH :0 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Demonstrate primary management of Teevra Pakshaghata Vega (acute cerebrovascular accident, stroke).	PSY-GUD	MK	SH	SIM,D-M,D-BED,PBL, CBL	C-VC,PM, P-EN,OSCE,SP	F	III	H-SH	NLHP17.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 17.1	Primary management of Teevra Pakshaghata Vega (acute cerebrovascular accident, stroke)	The students will take a brief history and examine the patient's bedside, or assess by simulation or videos or based on the case. They will try to decide on the management plan as per Ayurveda with essential knowledge of conventional medicine, based on Samprapti. They will learn to perform procedures on models or in the skill lab. They will observe and assist the teacher in the management like Abhyantar Aushadhi like Trailokyachintamani, Suvarna Sootashekhara, Siddha Makaradhvaja, Yogendra Rasa, Brihat Vatachintamani, etc. (applied on gums in unconscious patients), and procedures like Basti, Nasya, Dhara, Parisheka, Bahya Snehana, Swedana, Agnikarma, Viddha, etc.

Topic 18 Adverse Drug Reaction and its management (LH :0 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe preparedness for the management of adverse drug reactions.	CC	MK	KH	SIM,L&GD,L&PPT ,L_VC,FC	CL-PR,OSCE,P-PS,SP,P-VIVA	F	III	-	NLHT18.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 18.1	Management of adverse drug reactions.	Teachers will explain conventional adverse drug reactions and the Ayurvedic approach to them, with a lecture with PPT or videos. Students will be assigned specific topics related to this and they will study and discuss in the classroom.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

Topic 19 Sanyasa (patients on the verge of death and comatose patients), Ayurvedic and conventional life saving medicines (LH :0 NLHT: 3 NLHP: 1)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Understand the treatment of Sanyasa (patients on the verge of death and comatose patients) and about Ayurvedic and conventional life-saving drugs.	CC	MK	KH	FC,L&PPT ,DIS,L_VC	PRN,VV-Viva	F	III	-	NLHT19.1
CO2, CO5	Apply the treatment of Sanyasa (patients on the verge of death and comatose patients)	PSY-SET	MK	SH	PSM,D-BED,PBL,CBL, SIM	SP,OSCE,P-PS, C-VC,PM	F	III	-	NLHP19.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 19.1	The treatment of Sanyasa (patients on the verge of death and comatose patients) and Ayurvedic and conventional life-saving drugs.	The teacher will explain the treatment of Sanyasa (patients on the verge of death and comatose patients) with a lecture with PPT or videos. The teacher will explain the mode of action and use of Ayurvedic life-saving drugs like Hemagarbha Pottali, Trailokyachintamani, Suvarna Sootashekhara, Siddha Makaradhvaja, Mahalakshmivilasa, Sahasraputi Abhraka, Suvarna Sindoora, Yogendra Rasa, Brihat Vatachintamani, Jayamangal Rasa, Mallasindoora, Heeraka, etc. The teacher will explain the mode of action and uses of conventional life-saving drugs like Inj. atropine, adrenaline, levipil, epsoline, dopamine, dobutamine, streptokinase, dextrose, calcium gluconate, cardarone, midazolam, mannitol, efcorlin, lignocaine, lasix, adenosine, magnesium sulfate, etc.
Non Lecture Hour Practical		
S.No	**Name of Practical**	**Description of Practical Activity**
NLHP 19.1	Treatment of Sanyasa (patients on the verge of death and comatose patients)	The students will take a quick history and examine the patient's bedside, or assess on simulation or based on cases. They will try to decide the management methods under the guidance of the teacher. They will observe and assist the teacher in treatment including Abhyantar Aushadhi life-saving drugs like Hemagarbha Pottali, Trailokyachintamani, Suvarna Sootashekhara Pottali, etc. administered Muhurmuhu, applied on gums in case of unconscious patients, and also other methods like Pradhamana Nasya, Lepa, Udgharshana, etc.

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
1.1	CO5	Concept of Atyaya and Atyayika Chikitsa.
2.1	CO5	Important factors related to Atyayika conditions like Prana, Agni, Oja, Marma, Indriya, Bala.
5.1	CO2,CO5	Differential diagnosis of Teevra Udarashoola (acute pain in the abdomen)
11.1	CO2,CO5	Primary management of Prameha Upadrava (important diabetic complications)
12.1	CO2,CO5	Teevra Shvasa Vega
16.1	CO2,CO5	Understanding Teevra Udakakshaya (including severe dehydration and electrolyte imbalance)
18.1	CO2,CO5	Management of adverse drug reactions.
19.1	CO2,CO5	The treatment of Sanyasa (patients on the verge of death and comatose patients) and Ayurvedic and conventional life-saving drugs.

Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Practical No*	CO No	Practical Activity details
3.1	CO2,CO5	Management of Teevra Jwara (hyperpyrexia)
4.1	CO2,CO5	Management of Teevra Raktasrava (acute haemorrhage)
5.1	CO2,CO5	Management of Teevra Udarashoola (acute pain in the abdomen)
6.1	CO2,CO5	Management of Mutraghata and Mutrakricchra (including anuria, oliguria, and urine retention)
7.1	CO2,CO5	Primary management of Hridroga Atyayika Avastha (acute cardiac emergencies)
8.1	CO2,CO5	Management of Stabdhata (shock) and Teevra Asahatva (Anaphylaxis and acute hypersensitivity reaction)
9.1	CO2,CO5	Management of Atyayika Avastha of Murcha (syncope)
10.1	CO2,CO5	Management of Akshepaka (convulsions) and Teevra Apasmara (status epilepticus)
11.1	CO2,CO5	Primary management of Prameha Upadrava (important diabetic complications)
12.1	CO2,CO5	Primary management of Teevra Shvasa Vega
13.1	CO2,CO5	Management of Teevra Hikka
14.1	CO2,CO5	Management of Teevra Chardi and Sarakta Chardi
15.1	CO2,CO5	Management of Teevra Atisara and Sarakta Atisara
16.1	CO2,CO5	Primary management of Teevra Udakakshaya (including severe dehydration and electrolyte imbalance)
17.1	CO2,CO5	Primary management of Teevra Pakshaghata Vega (acute cerebrovascular accident, stroke)
19.1	CO2,CO5	Treatment of Sanyasa (patients on the verge of death and comatose patients)

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (0)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-EM	0	0	0	0	-	0	0	0

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	NA	NA	NA	**NA**

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
******University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

Not applicable

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS
AyUG-AC
PAPER-I
Time: 0 Hours Maximum Marks: 0
INSTRUCTIONS: All questions compulsory

		Number of Questions	**Marks per question**	**Total Marks**
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	0	0	0
Q 2	SHORT ANSWER QUESTIONS (SAQ)	0	0	0
Q 3	LONG ANSWER QUESTIONS (LAQ)	0	0	0
				0

6 F : Distribution of theory examination

Not Applicable

6 G : Instructions for UG Paper Setting & Blue print

Not Applicable

6 H : Distribution of Practical Exam

Not Applicable

References Books/ Resources

S.No	Resources
1	Dr. Bramhadatta Sharma. Atyayik Vyadhi Nidana Chikitsa. Chaukhamba Sanskrit Pratishthan. Delhi. 2015.
2	Peter Cameron, George Jelinek, Anne-Maree Kelly, Lindsay Murray, Anthony F. T. Brown Textbook of Adult Emergency Medicine. Elsevier; 5th edition.2019
3	S.N.Chugh, Ashima Chugh. Emergency medicine for students and practitioners. ?CBS, Fifth edition, 2019.
4	Dixit U. Emergency medicine in Ayurveda. In: Deole Y.S., Basisht G., eds. Charak Samhita New Edition. 1st ed. Jamnagar, Ind: CSRTSDC; 2020. https://www.carakasamhitaonline.com/mediawiki-1.32.1/index.php?title=Emergency_medicine_in_Ayurveda&oldid=44712. Accessed February 4, 2025.

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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		

CHAPTER - XIV
VALUATION

Double valuation:
a) As per Pondicherry University norms.
Re-valuation:
a) The revaluation of answer script not permitted.
Re-totaling:
a) The re-totaling of answer script is permitted.
Number of script to be evaluated:
a) As per exam wing rules**.**
Grace marks
a) A maximum of **5 grace marks** to be given for theory paper only to a candidate when he fails in only one subject in each professional exams.

CHAPTER - XV
MIGRATION

14 Migration of student during the study.-(1) The students may be allowed to take the migration to continue their study to another college after passing the First Professional examination, but failed student's
transfer and mid-term migration shall not be allowed.
(2) For migration, the students shall have to obtain the mutual consent of both colleges and universities and
it shall be against the vacant seat.
15 Compulsory Rotatory Internship.- (a) (i)The duration of Compulsory Rotatory Internship including Internship Orientation Programme shall be one year and ordinarily commence on **first working day of April for regular batch students and first working day of October for supplementary batch students.**
(ii)The student shall be eligible to join the Compulsory Internship programme after passing all the subjects from First to Third (Final) Professional examination including nine electives and after getting Provisional Degree Certificate from respective universities and Provisional Registration Certificates from respective State Board or Council for Compulsory Rotatory Internship.
(d) Stipend: During internship, to the interns belonging to Central Government, State Government and Union territory institution, the stipend shall be paid at par with other medical systems under respective government and there shall not be any discrepancy between medical systems. (e) Migration during Internship.- (i) Migration of internship shall be with the consent of both the colleges and university; in the case where migration is between the colleges of two different universities.
[ᴍᴍᴍ III—ᴍᴍᴍ ᴍ 4] ᴍᴍᴍᴍ ᴍᴍ ᴍᴍᴍᴍᴍᴍᴍ : ᴍᴍᴍᴍᴍᴍᴍ 49
(ii) If migration is only between colleges of the same university, the consent of both the colleges shall be required.
(iii) Migration shall be accepted by the university on the production of the character certificate issued by the institute or college and the application forwarded by the college and university with a 'No Objection Certificate' as the case may be.
(f) Orientation Programme.- (i) The interns shall mandatorily attend an orientation programme regarding internship and it shall be the responsibility of the teaching institution to conduct the orientation before the commencement of the internship.
(ii) The orientation shall be conducted with an intention to make the intern to acquire the requisite knowledge about the Rules and Regulations of the Medical Practice and Profession, Medical Ethics, Medico-Legal Aspects, Medical Records, Medical Insurance, Medical Certification, Communication

Skills, Conduct and Etiquette, National and State Health Care Programme. (iii) The orientation workshop shall be organised at the beginning of internship and a e-logbook shall be maintained by each intern, in which the intern shall enter date-wise details of activities undertaken by him during orientation.
(iv) The period of orientation shall be seven days.
(v) The manual for conducting the orientation as prescribed from time to time by the National Commission for Indian System of Medicine shall be followed.
(e) Activities during Internship.- (i) The daily working hours of intern shall be not less than eight hours; the
intern shall maintain a e-logbook containing all the activities undertaken by intern during internship.
(ii) Normally one-year internship shall be as under-
(A) Option I.-Divided into clinical training of six months in the Ayurveda hospital attached to the college and six months in Primary Health Centre or Community Health Centre or Rural Hospital or District Hospital or Civil Hospital or any Government Hospital of Modern
Medicine or Ayurveda Medicine or NABH (National Accreditation Board for Hospitals) accredited private hospital of Ayurveda. Only OPD based clinics having NABH accreditation shall not be eligible for internship.
(B) Option II**.**- All twelve months in Ayurveda hospital attached to the college.
(iii) The clinical training of six or twelve months, as case may be, in the Ayurveda hospital attached to the college or in non-teaching hospitals laid down by the National Commission for Indian System of Medicine
shall be conducted as per the following table, namely:-

Table-16

(Distribution of Internship duration at Ayurveda Teaching Hospital, attached to the college) Sl. No.

Departments Option I Option II

1
Kayachikitsa OPD including Manas Roga, Rasyan and Vajikarana, Swasthavritta and Yoga,AtyayikChkitisa, related specialties and respective IPD
1.5 months 3 months 2
ShalyaOPD including OT, related specialtiesand respective IPD
1 month 2 months
3
Shalakya OPD, related specialties including OT, Kriayakalpa and respective IPD
3 weeks 1.5 months
4
StrirogevamPrasutiOPD related specialties including OT and respective IPD
3 weeks 1.5 months
5
Kaumarbhritya OPD related specialties including NICU, pediatric Panchakarma and respective IPD
0.5 month 1 month

6
Panchakarma OPD related specialties, Panchakarma therapy rooms and respective IPD
1 month 2 months
7
Visha Chikitsa OPD any other specialties, respective IPD, screening OPD, Pathya unit etc. (as per choice of internee)
0.5 month 1 month 8
Primary Health Centre or Community Health Centre or Rural Hospital or District Hospital or Civil Hospital etc.
6 months -

(iv) (a) The interns shall be posted in any of the following centers where, National Health Programme are being implemented and these postings shall be to get oriented and acquaint the knowledge of implementation of National Health Programme in regard to,-
(A) Primary Health Centre;
(B) community Health Centre or Civil Hospital or District Hospital;
(C) any recognised or approved hospital of Modern Medicine;

(D) any recognised or approved Ayurvedic Hospital or Dispensary;
(E) in a clinical unit of Central Council for Research in Ayurvedic Sciences;
(b) all the above institutes mentioned in clauses (A) to (E) shall have to be recognised by the concerned University or Government designated authority for taking such a training.
(v) The intern shall undertake the following activities in respective department in the hospital attached to the college, namely:-
(A) **Kayachikitsa.-** The intern shall be practically trained to acquaint with and to make him competent to deal with following, namely:-
(i) all routine works such as case taking, investigations, diagnosis and management of common diseases by Ayurvedic medicine;
(ii) routine clinical pathological work such as hemoglobin estimation, complete haemogram, urine analysis, microscopic examination of blood parasites, sputum examination, stool examination, Mutra evam Mala pariksha by Ayurvedic method, interpretation of laboratory data and clinical findings and arriving at a diagnosis and all pathological and radiological investigational useful for monitoring the deterioration of different disease conditions; (iii) training in routine ward procedures and supervision of patients in respect of their diet, habits and verification of medicine schedule. (B) **Panchakarma.-** The intern shall be practically trained to acquaint with and to make him competent to deal with following, namely:- (i) Panchakarma &Upakarma procedures and techniques regarding Purva Karma, Pradhan Karma and Pashchat Karma; (ii) management of procedural complications, counselling of patients for procedures, maintenance of therapy rooms etc. (C) **Shalya Tantra.-** The intern shall be practically trained to acquaint with and to make him competent to deal with following, namely:- (i) clinical examination, Diagnosis and Management of common surgical disorders according to Ayurvedic principles; (ii) management of certain surgical emergencies such as fractures and dislocations, acute abdomen; (iii) practical training of aseptic and antiseptics techniques, sterilisation;
(iv) intern shall be involved in pre-operative and post-operative managements; (v) practical use of local anesthetic techniques and use of anesthetic drugs; [ᴍᴍᴍ III—ᴍᴍᴍ ᴍ 4] ᴍᴍᴍᴍ ᴍᴍ ᴍᴍᴍᴍᴍᴍᴍ : ᴍᴍᴍᴍᴍᴍᴍ 51 (vi) radiological procedures, clinical interpretation of X-ray, Intra Venous Pyelogram, Barium
meal, Sonography and Electro Cardio Gram; (vii) surgical procedures and routine ward techniques such as- (a) suturing of fresh injuries; (b) dressing of wounds, burns, ulcers and similar ailments;
(c) incision and drainage of abscesses; (d) excision of cysts; (e) venesection; (f) application of Ksharasutra in ano-rectal diseases; and
(g) rakthamokshana, Agnikarma, Ksharakarma (D) **ShalakyaTantra.-** The intern shall be practically trained to acquaint with and to make him competent to deal with following, namely:- (i) diagnosis and management of common surgical disorders according to Ayurvedic principles; (ii) intern shall be involved in Pre-operative and Post-operative managements;
(iii) surgical procedures in Ear, Nose, Throat, Dental problems, Ophthalmic problems; (iv) examinations of Eye, Ear, Nose, Throat and Refractive Error with the supportive instruments in Out-Patient Department; and (v) all kriyakalpas, Nasya, Raktamokshan, Karnapuran, Shirodhara, Putpak, Kawal, Gandush at Out-Patient and In patient Department level. (E) **Prasuti Tantra & Stree Roga.-** The intern shall be practically trained to acquaint with and to make him competent to deal with following, namely:- (i) antenatal and post-natal problems and their remedies, antenatal and post-natal care; (ii) management of normal and abnormal labours; and (iii) minor and major obstetric surgical procedures including Yoni Purna, Yoni Pichu, Uttarbasti etc. (iv) all routine works such as case taking, investigations, diagnosis and management of common striroga by Ayurvedic medicine; (v) screening of common carcinomatous conditions in women.
(F) **Kaumarbhritya:** The intern shall be practically trained to acquaint with and to make him competent to deal with following, namely:- (i) Care of new born along with immunization programme including Svarnaprashana: (ii) Important pediatric problems and their Ayurvedic management; (iii) panchakarma in children. (G) **Swasthavritta and Yoga.-** The intern shall be practically trained to acquaint with and to make him competent to deal with following, namely:- (i) programme of prevention and control of locally prevalent endemic diseases including nutritional disorders, immunisation, management of infectious diseases, etc.; (ii) family welfare planning programme; (iii)

aahar and Vihar Parikalpana including dinacharya, sadvritta (Life style and diet counseling daily seasonal routines); and
(iv) practice of Ashtang Yoga. 52 THE GAZETTE OF INDIA : EXTRAORDINARY [PART III—SEC.4]
(H) **Atyayikchkitisa (Emergency or Casualty Management).-** The intern shall be practically trained to acquaint with and to make him competent to deal with all emergency conditions and participate actively in casualty section of the hospital in identification of casualty and trauma cases and their first aid treatment and also procedure for referring such cases to the identified hospitals. (vi) Theintern shall complete online programme on public health as laid down by the National Commission for Indian System of Medicine (NCISM), in addition to their regular duties.
(vii) The internship training in Primary Health Centre or Community Center or Rural Hospital or District Hospital or Civil Hospital or any Government Hospital of modern medicine or Ayurvedic Hospital or Dispensary.- During the six months internship training in Primary Health Centre or Rural Hospital or Community Health Centre or District Hospital or any recognised or approved hospital of Modern Medicine
or Ayurvedic Hospital or Dispensary, the interns shall- (A) get acquainted with routine of the Primary Health Centre and maintenance of their records; (B) get acquainted with the diseases more prevalent in rural and remote areas and their management;
(C) involve in teaching of health care methods to rural population and also various immunization programme; (D) get acquainted with the routine working of the medical or non-medical staff of Primary Health Centre and be always in contact with the staff in this period;
(E) get familiarised with the work of maintaining the relevant register like daily patient register, family planning register, surgical register, etc. and take active participation in different Government health schemes or programme; (F) participate actively in different National Health Programme implemented by the State
Government. (viii) **Electronic Logbook.-** (a) It shall be compulsory for an intern to maintain the record of procedures done/assisted/observed by him on day-to-day basis in a specified e-logbook and the intern shall maintain a record of work, which is to be verified and certified by the Medical Officer or Head of the Unit or Department under whom he works. (b) Failure to produce e-logbook, complete in all respects duly certified by the concerned authority to the Dean/Principal/Director at the end of Internship Training Programme, may result in cancellation of his performance in any or all disciplines of Internship Training Programme.
(c) The institution shall retain soft copy of the completed and certified e-logbook and is to be made available for verification. (ix) **Evaluation of Internship.-** (A) The evaluation system shall assess the skills of a candidate while performing the minimum number of procedures as enlisted with an objective that successful learning of these procedures will enable the candidates to conduct the same in his actual practice. (B) The evaluation shall be carried out by respective Head of Department at the end of each posting and the reports shall be submitted to Head of the institute in Form-1 under ***Annexure-i*** (C) On completion of one year of compulsory rotatory internship including online course on Public Health, the Head of the Institute evaluate all the assessment reports in the prescribed Form-1 under ***Annexure-i,*** provided by various Head of the Department at the end of respective posting and if found satisfactory, the intern shall be issued Internship Completion Certificate in Form-2 under ***Annexure-ii*** within seven working days.
(D) If a candidate's performance is declared as unsatisfactory upon obtaining below fifteen marks as per Form-2 under ***Annexure-ii*** or less than fifty per cent. of marks, in an assessment in any of the departments he shall be required to repeat the posting in the respective department for a period of thirty per cent. of the total number of days, laid down for that department in Internship Training and posting. (E) Candidate shall have the right to register his grievance in any aspects of conduct of evaluation and award of marks, separately to the concerned Head of the Department and Head of the Institution, [ꣿꣿꣿ III—ꣿꣿꣿ ꣿ 4] ꣿꣿꣿꣿ ꣿꣿ ꣿꣿꣿꣿꣿꣿꣿꣿ : ꣿꣿꣿꣿꣿꣿꣿ 53 within three days from the date of completion of his evaluation, and on receipt of such grievance, the Head of the Institution in consultation with the Head of the concerned department shall redress and dispose of the grievance in an amicable manner within seven working days.
(x) Leave for interns.- (A) During compulsory rotatory internship of one year, twelve leaves are permitted and any kind of absence beyond twelve days shall be extended accordingly.

(B) Intern cannot take more than six days including prefix or suffix of any kind of holidays leave at a time.
(xi) Completion of internship: If any delay in the commencement of internship or abnormal break during internship due to unavoidable conditions, in such cases internship period shall be completed within maximum period of three years from the date of passing the qualifying examination of Third (Final) Professional B.A.M.S including First and Second Professional subjects and nine electives, specified as eligibility for internship: Provided that in such cases, the student shall get prior permission from the head of the institution in written with all supporting documents and it shall be the responsibility of the head of the institution to scrutiny the documents, and assess the genuine nature of the request before issuing permission letter and while joining internship, the student shall submit the request letter along with supporting documents, and all necessary documents as mentioned in the sub-regulation (a) and undergo the internship orientation programme as mentioned in the sub-regulation .