

# **PONDICHERY UNIVERSITY**

**B.A.M.S. CURRICULUM**  
(Bachelor of Ayurvedic Medicine and Surgery)

**2017-18 Onwards**

**IN ACCORDANCE WITH**

**CENTRAL COUNCIL OF INDIAN MEDICINE**  
**NEW DELHI**

**CENTRAL COUNCIL OF INDIAN MEDICINE**  
(MINIMUM STANDARDS OF EDUCATION IN INDIAN MEDICINE)  
(Amendment)REGULATIONS, 7<sup>th</sup> November, 2016.

Submitted by

**RAJIV GANDHI AYURVEDA MEDICAL COLLEGE**

(A Puducherry government institute)

**CHALAKKARA – NEW MAHE**

**U.T.OF PUDUCHERRY**

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CHAPTER - I  
**AIMS AND OBJECTIVES**

The Bachelor of Ayurveda education shall aim at producing graduates, having profound knowledge of Ashtanga Ayurveda supplemented with knowledge of scientific advances in modern medicine along with extensive practical training so as to become efficient physicians and surgeons fully competent to serve the health care services.

**Degree to be awarded:**

The candidate shall be awarded *Ayurvedacharya* (**Bachelor of Ayurvedic Medicine and Surgery- B.A.M.S.**) degree after passing all the examinations and completion of the prescribed course of study extending over the prescribed period and the compulsory rotatory internship extending over twelve months.

**Medium of instruction:**

The medium of instruction for the course shall be Sanskrit or English.

CHAPTER - II  
ADMISSION QUALIFICATIONS

**Qualifying Examination**

The eligibility to seek admission in Bachelor of Ayurveda education is as under-

12<sup>th</sup> standard with science or any other equivalent examination recognised by concerned State Governments and Education Boards with at least 50% (fifty percent) aggregate marks in the subjects of Physics, Chemistry and Biology.

For reserved category or special category like physically handicapped students in 10+2, they shall be given relaxation in marks for admission in Bachelor of Ayurvedic Medicine and Surgery as per rules for time being in force.

For foreign students any other equivalent qualification to be approved by the concerned authority may be allowed.

**Age:**

The candidate should have completed 17 years on or before 31<sup>st</sup> day of December of the year of admission.

CHAPTER - III  
**DURATION OF COURSE**

The duration of the course shall be **5 ½ years** (*five years and six months*) comprising-

<b>Sl.No.</b>	<b>Profession</b>	<b>Duration</b>
<b>1.</b>	First Profession	Twelve (12) months
<b>2.</b>	Second Profession	Twelve (12) months
<b>3.</b>	Third Profession	Twelve (12) months
<b>4.</b>	Final Profession	Eighteen (18) months
<b>5.</b>	Compulsory Rotatory Internship	Twelve (12) months

## CHAPTER - IV

### EXAMINATION, ATTENDANCE AND RESULTS

#### **The First Profession**

The first professional session shall ordinarily start in July and the first professional examination shall be at the end of one academic year of first professional session;

The first professional examination shall be held in the following subjects, namely-

1. **Padarth Vigyan evam Ayurved Itihas**
2. **Sanskrit**
3. **Kriya Sharir** (*Physiology*)
4. **Rachana Sharir** (*Anatomy*) **and**
5. **Maulik Siddhant evam Ashtanga Hridaya** (Sutra Sthan)

**NOTE:** The failed student of first Professional shall be allowed to appear in second professional examination, but the student shall not be allowed to appear in third professional examination unless the student passes all the subjects of first professional examination and maximum four chances shall be given to pass first professional examination within a period of maximum three years.

# **PADARTHA VIGYAN EVUM AYURVEDA ITIHAS**

**(Philosophy and History of Ayurveda)**



## **PADARTHA VIGYAN EVUM AYURVEDA ITIHAS**

**(Philosophy and History of Ayurveda)**

**Theory- Two papers– 200 marks (100 each paper)**

**Total teaching hours: 100 hours**

<b>PAPER-I</b>	<b>Padartha Vigyanam</b>	<b>100marks</b>
<b>PART A</b>		<b>50 marks</b>

### **Ayurveda Nirupana**

Lakshana of Ayu, composition of Ayu, Lakshana of Ayurveda, Lakshana and classification of Siddhanta, Introduction to basic principles of Ayurveda and their significance.

### **Ayurveda Darshana Nirupana**

Philosophical background of fundamentals of Ayurveda, Etymological derivation of the word “Darshana”. Classification and general introduction to schools of Indian Philosophy with an emphasis on: Nyaya, Vaisheshika, Sankhya and Yoga, Ayurveda as unique and independent school of thought (philosophical individuality of Ayurveda), Padartha: Lakshana, enumeration and classification, Bhava and Abhava padartha, Padartha according to Charaka (Karana-Padartha).

### **Dravya Vigyaniam**

#### **Dravya:**

Lakshana, classification and enumeration.

#### **Panchabhuta:**

Various theories regarding the creation (theories of Taittiriyanishad, Nyaya-Vaisheshika, Sankhya-Yoga, Sankaracharya, Charaka and Susruta), Lakshana and qualities of each Bhoota.

**Kaala:**

Etymological derivation, Lakshana and division / units, significance in Ayurveda.

**Dik:**

Lakshana and division, significance in Ayurveda.

**Atma:**

Lakshana, classification, seat, Gunas, Linga according to Charaka, the method / process of knowledge formation (*atmanah jnasya pravrittih*).

**Purusha:**

As mentioned in Ayurveda - Ativahikapurusha/ Sukshmasharira/ Rashipurusha/ Chikitsapurusha/ Karmapurusha/ Shaddhatvatmakapurusha.

**Manas:**

Lakshana, synonyms, qualities, objects, functions, dual nature of mind (*ubhayaatmakatvam*), as a substratum of diseases, penta-elemental nature (*panchabhutatmakatvam*). Role of Panchamahabhuta and Triguna in Dehaprakriti and Manasaprakriti respectively. Tamas as the tenth Dravya, Practical study/application in Ayurveda.

**PART B****50 marks****4. Gunavigyaniam**

Etymological derivation, classification and enumeration according to Nyaya Vaisheshika and Charaka, Artha, Gurvadiguna, Paradiguna, Adhyatmaguna. Lakshana and classification of all the 41 gunas, Practical / clinical application in Ayurveda.

## **5. Karma Vigyaniam**

Lakshana, classification in Nyaya, Description according to Ayurveda, Practical study/ application in Ayurveda.

### **Samanya Vigyaniam**

Lakshana, classification, Practical study/ application with reference to Dravya, Guna and Karma.

### **Vishesha Vigyaniam**

Lakshana, classification, Practical study/ application with reference to Dravya, Guna and Karma. Significance of the statement “*Pravrittirubhayasya tu*”.

### **Samavaya Vigyaniam**

Lakshana, Practical study /clinical application in Ayurveda.

### **Abhava Vigyaniam**

Lakshana, classification, Clinical significances in Ayurveda.

## **PAPER II**

### **Padartha Vigyan and Ayurveda Itihas**

**100 marks**

## **PART A -**

### **Pramana/ Pariksha- Vigyaniam**

**75 marks**

### **Pariksha**

Definition, significance, necessity and use of *Pariksha*, Definition of *Prama*, *Prameya*, *Pramata*, *Pramana*, Significance and importance of *Pramana*, Enumeration of *Pramana* according to different schools of philosophy, Four types of methods for examination in *Ayurveda* (*Chaturvidha-Parikshavidhi*), *Pramana* in *Ayurveda*, Subsudation of different *Pramanas* under three *Pramanas*, Practical application of methods of examination (*Parikshavidhi*) in treatment (*Chikitsa*).

### **Aptopdesha Pariksha/ Pramana**

Lakshana of Aptopadesha, Lakshana of Apta. Lakshana of Shabda, and its types. Shabdavritti-Abhidha, Lakshana, Vyanjana and Tatparyakhya. Shaktigrahahetu. Vaakya Characteristics, Vaakyarthagyanahetu- Aakanksha, Yogyata, Sannidhi.

### **Pratyaksha Pariksha/ Pramana**

Lakshana of Pratyaksha, types of Pratyaksha- Nirvikalpaka, Savikalpaka with description, description of Laukika and Alaukika types and their further classification. Indriya-prapyakaritvam, six types of Sannikarsha. Indriyanam lakshanam, classification and enumeration of Indriya. Description of Panchapanchaka, Penta-elemental nature of Indriya by Panchamahabhuta (*Panchabhautikatwa* of Indriya) and similarity in sources (*Tulyayonitva*) of Indriya. Trayodasha Karana, dominance of Antahkaran. Hindrances in direct perception (*pratyaksha-anupalabdihikaran*), enhancement of direct perception (Pratyaksha) by various instruments/ equipments, necessity of other Pramanas in addition to Pratyaksha. Practical study/ application of Pratyaksha in physiological, diagnostic, therapeutics and research grounds.

### **Anumanapariksha/Pramana**

Lakshana of Anumana. Introduction of Anumiti, Paramarsha, Vyapti, Hetu, Sadhya, Paksha, Drishtanta. Types of Anumana mentioned by Charaka and Nyayadarshana. Characteristic and types of Vyapti. Lakshana and types of Hetu, description of Ahetu and Hetwabhasa. Characteristic and significance of Tarka. Practical study/ application of Anumanapramana in physiological, diagnostic, therapeutics and research.

### **Yuktipariksha/ Pramana**

Lakshana and discussion. Importance in Ayurveda. Practical study and utility in therapeutics and research.

## **Upamana Pramana**

Lakshana, Application in therapeutics and research.

## **Karya- Karana Siddhanta (Cause and Effect Theory)**

Lakshana of Karya and Karana. Types of Karan, Significance of Karya and Karana in Ayurveda, Different opinions regarding the manifestation of Karya from Karana: Satkaryavada, Asatkaryavada, Parinamavada, Arambhavada, Paramanuvada, Vivartavada, Kshanabhangurvada, Swabhavavada, Pilupaka, Pitharpaka, Anekantavada, Swabhavoparamavada.

## **PART B -**

**25 marks**

### **Ayurved Itihas**

Etymological derivation (Vyutpatti), syntactical derivation (Nirukti) and definition of the word Itihas, necessity of knowledge of history, its significance and utility, means and method of history, historical person (Vyakti), subject (Vishaya), time period (Kaal), happening (Ghatana) and their impact on Ayurveda.

### **Introduction to the authors of classical texts during Samhitakaal and their contribution**

Atreya, Dhanwantari, Kashyapa, Agnivesha, Sushruta, Bhela, Harita, Charaka, Dridhabala, Vagbhata, Nagarjuna, Jivaka.

### **Introduction to the commentators of classical Samhitas**

Bhattaraharicchandra, Jejjata, Chakrapani, Dalhana, Nishchalakara, Vijayarakshita, Gayadas, Arunadutta, Hemadri, Gangadhara, Yogindranath Sen, Haranachandra, Indu.

### **Introduction to the authors of compendiums (Granthasamgrahaakaala)**

Bhavmishra, Sharngadhara, Vrinda, Madhavakara, Shodhala, Govinda Das (Author of Bhaishajyaratnawali), Basavraja.

## **Introduction to the authors of Modern era**

Gana Nath Sen, Yamini Bhushan Rai, Shankar Dajishastri Pade, Swami Lakshmiram, Yadavji Tikramji, Dr. P. M. Mehta, Ghanekar, Damodar Sharma Gaur, Priyavrat Sharma.

## **Globalization of Ayurveda**

Expansion of Ayurveda in Misra (Egypt), Sri Lanka, Nepal other nations.

Developmental activities in Ayurveda in the post-independence period, development in educational trends, Establishment of different committees, their recommendations.

Introduction to and activities of the following Organizations :- Department of AYUSH, Central Council of Indian Medicine, Central Council for Research in Ayurvedic Sciences, Ayurvedic Pharmacopeia commission, National Medicinal Plants Board, Traditional Knowledge Digital Library (TKDL)

## **Introduction to the following National Institutions :**

- a) National Institute of Ayurved, Jaipur.
- b) IPGT&RA, Gujrat Ayurved University, Jamnagar.
- c) Faculty of Ayurved, BHU, Varanasi.
- d) Rashtriya Ayurveda Vidyapeetha, New Delhi.
- e) Drug and Cosmetic Act.

Introduction to national & international popular journals of Ayurveda, Introduction to activities of WHO in the promotion of Ayurved.

## **Reference Books:**

### **A. Padarthavigyan**

<b>Sl.No.</b>	<b>Name of the Book</b>	<b>Name of the Author</b>
1.	Padarthavigyan	Acharya Ramraksha Pathak
2.	Ayurvediya Padartha Vigyana	Vaidya Ranjit Rai Desai

3.	Ayurved Darshana	Acharya Rajkumar Jain
4.	Padartha Vigyana	Kashikar
5.	Padartha Vigyana	Balwant Shastri
6.	Sankhyatantwa Kaumadi	GajananS hastri
7.	Psycho Pathology in Indian Medicine	Dr. S.P. Gupta
8.	Charak Evum Sushrut ke Darshanik Vishay ka Adhyayan	Prof. Jyotirmitra Acharya
9.	Ayurvediya Padartha Vigyana	Dr. Ayodhya Prasad Achal
10.	Padartha Vigyana	Dr. Vidyadhar Shukla
11.	Padartha Vigyana	Dr. Ravidutta Tripathi
12.	Ayurvediya Padartha Vigyana	Vaidya Ramkrishna Sharma Dhand
13.	Ayurvediya Padartha Vigyan Parichaya	Vaidya Banwarilal Gaur
14.	Ayurvediya Padartha Darshan	Pandit Shivhare
15.	Scientific Exposition of Ayurveda	Dr. Sudhir Kumar
16.	Relevant portions of Charakasamhita, Sushrutasamhita.	

### B) History of Ayurveda:-

Sl.No.	Name of the Book	Name of the Author
1.	Upodghata of Kashyapasamhita Paragraph of acceptance of Indian medicine	Rajguru Hem Raj Sharma
2.	Upodghata of Rasa Yogasagar	Vaidy Hariprapanna Sharma
3.	Ayurveda Ka Itihas	KaviraSuram Chand
4.	Ayurveda Sutra	Rajvaidya Ram Prasad Sharma
5.	History of Indian Medicine (1-3 part)	Dr. GirindrNath Mukhopadhyaya
6.	A Short history of Aryan Medical Science	Bhagwat Singh
7.	History of Indian Medicine	J. Jolly
8.	Hindu Medicine	Zimer
9.	Classical Doctrine of Indian Medicine	Filiyosa

10.	Indian Medicine in the classical age	AcharyaPriyavrata Sharma
11.	Indian Medicine (Osteology)	Dr. Harnley
12.	Ancient Indian Medicine	Dr. P. Kutumbia
13.	Madhava Nidan and its Chief Commentaries (Chapters highlighting history)	Dr. G.J. Mulenbelt
14.	Ayurveda Ka BrihatItihasa	Vaidya Atridev Vidyalankara
15.	Ayurveda Ka VaigyanikaItihasa	Acharya Priyavrata Sharma
16.	Ayurveda Ka PramanikaItihasa	Prof. Bhagwat Ram Gupta
17.	History of Medicine in India	Acharya Priyavrata Sharma
18.	Vedomein Ayurveda	Vaidya Ram GopalS hasstri
19.	Vedomein Ayurveda	Dr. Kapil Dev Dwivedi
20.	Science and Philosophy of Indian Medicine	Dr. K.N. Udupa
21.	History of Indian Medicine from Pre-Mauryan to Kushana Period	Dr. Jyotirmitra
22.	An Appraisal of Ayurvedic Material in Buddhist literature	Dr. Jyotirmitra
23.	Mahayana Granthon mein nihita Ayurvediya Samagri	Dr. RavindraNathTripathi
24.	Jain Ayurveda Sahitya Ka Itihasa	Dr. Rajendra Prakash Bhatnagar
25.	Ayurveda- Prabhashaka Jainacharya	Acharya Raj Kumar Jain
26.	CharakaChintana	Acharya Priyavrata Sharma
27.	Vagbhata Vivechana	Acharya Priyavrata Sharma
28.	Atharvaveda and Ayurveda	Dr. Karambelkara
29.	Ayurvedic Medicine Past and Present	Pt. Shiv Sharma
30.	Ancient Scientist	Dr. O.P. Jaggi
31.	Luminaries of Indian Medicine	Dr. K.R. Shrikanta Murthy
32.	Ayurveda Ke Itihasa Ka Parichaya	Dr. RaviduttaTripathi
33.	Ayurveda Ke Pranacharya	Ratnakara Shastri
34.	Ayurveda Itihasa Parichaya	Prof. Banwari Lal Gaur



# SANSKRIT

## SANSKRIT

Theory- One paper– 100 marks

Total teaching hours: 200 hours

### PART A

50 marks

### संस्कृतव्याकरणाध्ययनम्

1. संज्ञाप्रकरणम्
2. विभक्त्यर्थाः
3. सन्धिप्रकरणम् सन्धिच्छेदः सन्धिकरणम्
4. षड्लिङ्गप्रकरणम् शब्दरूपाण्येव
5. धातुप्रकरणम् धातुरूपाण्येव (भवादीगणीयधातूनां पंचलकारेषु रूपाणि लट्लोट्लड्लृट्विधिर्लिङ्)
6. वाच्यप्रयोगः (कर्त्तरिकर्मणिभाववाच्यप्रयोगाः)
7. समासप्रकरणम्
8. प्रत्ययाः (णिच् क्त क्तवतु शतृ शानच् तुमुन् तव्यत् तृच् क्त्वा ल्यप् ल्युट् अनीयर् मतुप् इनि तन् इतच् अण् इञ् इक् त्व ता षन् इमनिच् तः त्र दा धा तरप् तमप् टाप् डाप्)
9. अनुवादः
  - A) From English / Hindi / regional language to Sanskrit
  - B) From Sanskrit to English / Hindi / regional language
  - C) Identification and correction of grammatical errors in the given sentences

The sentences for translation should be selected from the under mentioned

### REFERENCE BOOKS-

Sl.No.	Name of the Book	Name of the Author
1.	Laghusiddhanta Kaumudi- Acharya Varadaraja	Shri Dhananand Shastry
2.	Brihatrayee- (CharakaSamhita, SushrutaSamhita, Ashtanga Hridayam)	

3.	Anuvada Chandrika-Chakradhara Hansa Nautiyal	
4.	Sanskruta Ayurved Sudha-	Dr. Banwari Lal Gaur
5.	Rachananuvada Kaumudi-	Dr. Kapildev Dwivedi
6.	Bhasha Sopanam	Rashtreeya Samskruta Samsthanam, New Delhi

**PART B**

**50 Marks**

**भाषाध्ययनम्**

आयुर्वेदार्षग्रन्थाध्ययनम् - Stepwise method of study of Ayurveda Arsha Grantha (Sushruta Samhita Shareera Sthana, chapter- 4) 25 marks

वैद्यकीयसुभाषितसाहित्यम् (अध्यायाः 1-10) 15 marks

पञ्चतन्त्रम् - अपरीक्षितकारकम् (क्षपणककथातः मूर्खपण्डितकथापर्यन्तं पञ्चकथाः) 10 marks

**Reference Books-**

Sl.No.	Name of Books	Name of the Author
1.	Sushruta Samhita, Shareera Sthanam, Ch.- 4	
2.	Prabhashanam Work Book, Su.sam.chap.4,	Published by Ayurveda Academy® Bangalore; Email ayuacademy@gmail.com
3.	Vaidyakeeya Subhashita Sahityam	Dr. Bhaskara Govinda Ghanekar
4.	Panchatantra (Apareekshitakarakam)	Pt. Vishnu Sharma

# **KRIYA SHARIR**

**(PHYSIOLOGY)**

## **KRIYA SHARIR (PHYSIOLOGY)**

**Theory-Two Papers-200 Marks (100 marks each)**

**Teaching hours-200 hours (Theory), 200 hours (practicals)**

**PAPER-I** **100 marks**

**PART A** **50 marks**

### **Conceptual study of fundamental principles of Ayurvediya Kriya Sharir**

Panchamahabhuta, Tridosha, Triguna, Loka-Purusha Samya, Samanya-Vishesha. Description of basics of Srotas.

Definition and synonyms of the term Sharir, definition and synonyms of term Kriya, description of Sharir Dosha and Manasa Dosha. Mutual relationship between Triguna-Tridosha & Panchmahabhuta. Difference between Shaarir and Sharir. Description of the components of Purusha and classification of Purusha, role of Shatdhatupurusha in Kriya Sharira and Chikitsa.

### **Dosha**

General description of Tridosha. Inter relationship between Ritu-Dosha-Rasa-Guna. Biological rhythms of Tridosha on the basis of day-night-age-season and food intake. Role of Dosha in the formation of Prakriti of an individual and in maintaining of health. Prakrita and Vaikrita Dosha.

### **Vata Dosha:**

Vyutpatti (derivation), Nirukti (etymology) of the term Vata, general locations, general properties and general functions of Vata, five types of Vata (Prana, Udana, Samana, Vyana, Apana) with their specific locations, specific properties, and specific functions. Respiratory Physiology in Ayurveda, Physiology of speech in Ayurveda.

## **Pitta Dosha**

Vyutpatti, Nirukti of the term Pitta, general locations, general properties and general functions of Pitta, five types of Pitta (Pachaka, Ranjaka, Alochaka, Bhrajaka, Sadhaka) with their specific locations, specific properties, and specific functions. Similarities and differences between Agni and Pitta.

## **Kapha Dosha**

Vyutpatti, Nirukti of the term Kapha, general locations, general properties and general functions of Kapha, five types of Kapha (Bodhaka, Avalambaka, Kledaka, Tarpaka, Śleshaka) with their specific locations, specific properties, and specific functions.

Etiological factors responsible for Dosha Vriddhi, Dosha Kshaya and their manifestations.

## **Concept of Kriyakala.**

## **Prakriti**

### **Deha- Prakriti**

Vyutpatti, Nirukti, various definitions and synonyms for the term “Prakriti”. Intra-uterine and extra-uterine factors influencing Deha-Prakriti, classification and characteristic features of each kind of Deha-Prakriti.

### **Manasa- Prakriti**

Introduction and types of Manasa- Prakriti.

## **Ahara**

Definition, classification and significance of Ahara, Ahara-vidhi-vidhana, Ashta Aharavidhi Viseshayatana, Ahara Parinamkar Bhava.

Aharapaka (Process of digestion): Description of Annavaha Srotas and their Mula. Role of

Grahani & Pittadhara Kala.

Description of Avasthapaka (Madhura, Amla and Katu). Description of Nishthapaka (Vipaka) and its classification. Separation of Sara and Kitta. Absorption of Sara. Genesis of Vata-Pitta-Kapha during Aharapaka process. Definition of the term Koshtha. Classification of Koshtha and the characteristics of each type of Koshtha.

### **Agni**

Definition and importance, synonyms, classification, location, properties and functions of Agni and functions of Jatharagni, Bhutagni, and Dhatvagni.

### **PART- B**

### **Modern Physiology**

**50 marks**

Definition and mechanisms of maintenance of homeostasis. Cell physiology. Membrane physiology. Transportation of various substances across cell membrane. Resting membrane potential and action potential.

### **Physiology of respiratory system:**

functional anatomy of respiratory system. Definition of ventilation, mechanism of respiration, exchange and transport of gases, neural and chemical control of respiration, artificial respiration, asphyxia, hypoxia. Introduction to Pulmonary Function Tests.

### **Physiology of Nervous System:**

General introduction to nervous system, neurons, mechanism of propagation of nerve impulse, physiology of CNS, PNS, ANS; physiology of sensory and motor nervous system, Functions of different parts of brain and physiology of special senses, intelligence, memory, learning and motivation. Physiology of sleep and dreams, EEG. Physiology of speech and articulation. Physiology of temperature regulation.

Functional anatomy of gastro-intestinal tract, mechanism of secretion and composition of different digestive juices. Functions of salivary glands, stomach, liver, pancreas, small

intestine and large intestine in the process of digestion and absorption. Movements of the gut (deglutition, peristalsis, defecation) and their control. Enteric nervous system.

Acid-base balance, water and electrolyte balance. Study of basic components of food. Digestion and metabolism of proteins, fats and carbohydrates.

Vitamins & Minerals- sources, daily requirement, functions, manifestations of hypo and hypervitaminosis.

## **PAPER-II**

**100 Marks**

### **PART A**

**50 Marks**

#### **Dhatu:**

Etymology, derivation, definition, general introduction of term Dhatu, different theories related to Dhatuposhana (Dhatuposhana Nyaya)

#### **Rasa Dhatu:**

Etymology, derivation, location, properties, functions and Praman of Rasa-dhatu. Physiology of Rasavaha Srotas, Formation of Rasa Dhatu from Aahara Rasa, circulation of Rasa (Rasa-Samvahana), role of Vyana Vayu and Samana Vayu in Rasa Samvahana. Description of functioning of Hridaya. Ashtavidha Sara (8 types of Sara), characteristics of Tvakasara Purusha, conceptual study of mutual interdependence (Aashraya-Aashrayi Bhaava) and its relation to Rasa and Kapha. Manifestations of kshaya and Vriddhi of Rasa.

#### **Rakta Dhatu:**

Etymology, derivation, synonyms, location, properties, functions and Praman of Rakta Dhatu. Panchabhautikatva of Rakta Dhatu, physiology of Raktavaha Srotas, formation of Raktadhatu, Ranjana of Rasa by Ranjaka Pitta, features of Shuddha Rakta, specific functions of Rakta, characteristics of Raktasara Purusha, manifestations of Kshaya and Vriddhi of Raktadhatu, mutual interdependence of Rakta and Pitta.



**Mamsa Dhatu :**

Etymology, derivation, synonyms, location, properties and functions of Mamsa Dhatu, physiology of Mamsavaha Srotasa, formation of Mamsa Dhatu, characteristics of Mamsasara Purusha, manifestations of Kshaya and Vriddhi of Mamsa Dhatu .Concept of Peshi.

**Meda Dhatu :**

Etymology, derivation, location, properties, functions and Praman of Meda Dhatu, physiology of Medovaha Srotas, formation of Medo Dhatu, characteristics of Medasara Purusha and manifestations of Kshaya and Vriddhi of Meda.

**Asthi Dhatu:**

Etymology, derivation, synonyms, location, properties, functions of Asthi Dhatu. Number of Asthi. Physiology of Asthivaha Srotas and formation of Asthi Dhatu, characteristics of Asthisara Purusha, mutual interdependence of Vata and Asthi Dhatu, manifestations of Kshaya and Vriddhi of Asthi Dhatu.

**Majja Dhatu :**

Etymology derivation types, location, properties, functions and pramana of Majja Dhatu, physiology of Majjavaha Srotas, formation of Majja Dhatu, characteristics of Majja Sara Purusha, relation of Kapha, Pitta, Rakta and Majja, manifestations of Kshaya and Vriddhi of Majja Dhatu.

**Shukra Dhatu:**

Etymology, derivation, location, properties, functions and Praman of Shukra Dhatu, physiology of Shukraravaha Srotas and formation of Shukra Dhatu. Features of Shuddha Shukra, characteristics of Shukra-Sara Purusha, manifestations of Kshaya and Vriddhi of Shukra Dhatu.

Concept of **Ashraya-Ashrayi** bhava i.e. inter-relationship among Dosha, Dhatu Mala and Srotas.

**Ojas:**

Etymological derivation, definition, formation, location, properties, Praman, classification and functions of Ojas. Description of Vyadhikshamatva. Bala Vriddhikara Bhava. Classification of Bala. Etiological factors and manifestations of Ojavisramsas, Vyapat and Kshaya.

**Upadhatu:**

General introduction, etymological derivation and definition of the term Upadhatu. Formation, nourishment, properties, location and functions of each Upadhatu.

**Stanya:**

Characteristic features and methods of assessing Shuddha and Dushita Stanya, manifestations of Vriddhi and Kshaya of Stanya.

**Artava**

Characteristic features of Shuddha and Dushita Artava. Differences between Raja and Artava, physiology of Artavavaha Srotas.

**Tvak**

classification, thickness of each layer and functions.

**Mala**

Etymological derivation and definition of the term Mala. Aharamala: Enumeration and description of the process of formation of Aharamala.

**Purisha**

Etymological derivation, definition, formation, properties, quantity and functions of Purisha. Physiology of Purishavaha Srotas, manifestations of Vriddhi and Kshaya of Purisha.

## **Mutra**

Etymological derivation, definition, formation, properties, quantity and functions of Mutra. Physiology of Mutravaha Srotas, physiology of urine formation in Ayurveda, manifestations of Vriddhi and Kshaya of Mutra.

## **Sveda**

Etymological derivation, definition, formation and functions of Sveda. Manifestations of Vriddhi and Kshaya of Sveda. Description of Svedvaha Srotas

## **Dhatumala**

Brief description of each type of Dhatumala.

## **Panchagyanendriya**

Physiological description of Panchagyaanendriya and physiology of perception of Shabda, Sparsha, Rupa, Rasa and Gandha. Physiological description of Karmendriya.

## **Manas**

Etymological derivation, definition, synonyms, location, properties, functions and objects of Manas. Physiology of Manovaha Srotas.

## **Atma**

Etymological derivation, definition, properties of Atma. Difference between Paramatma and Jivatma; Characteristic features of existence of Atma in living body.

## **Nidra**

Nidrotpatti, types of Nidra, physiological and clinical significance of Nidra; Svapnotpatti and types of Svapna.

**Modern Physiology**

**Haemopoetic system**

composition, functions of blood and blood cells, Haemopoiesis (stages and development of RBCs, and WBCs and platelets), composition and functions of bone marrow, structure, types and functions of haemoglobin, mechanism of blood clotting, anticoagulants, physiological basis of blood groups, plasma proteins, introduction to anaemia and jaundice.

**Immunity**

classification of immunity: Innate, acquired and artificial. Different mechanisms involved in immunity: Humoral (B-cell mediated) and T-Cell mediated immunity. Hypersensitivity.

**Muscle physiology**

Comparison of physiology of skeletal muscles, cardiac muscles and smooth muscles. Physiology of muscle contraction.

**Physiology of cardio-vascular system**

Functional anatomy of cardiovascular system. Cardiac cycle. Heart sounds. Regulation of cardiac output and venous return. Physiological basis of ECG. Heart-rate and its regulation. Arterial pulse. Systemic arterial blood pressure and its control.

Adipose tissue, lipoproteins like VLDL, LDL and HDL triglycerides.

Functions of skin, sweat glands and sebaceous glands.

Physiology of male and female reproductive systems. Description of ovulation, spermatogenesis, oogenesis, menstrual cycle.

## **Physiology of Excretion**

functional anatomy of urinary tract, functions of kidney. Mechanism of formation of urine, control of micturition. Formation of faeces and mechanism of defecation.

## **Endocrine glands**

General introduction to endocrine system, classification and characteristics of hormones, physiology of all endocrine glands, their functions and their effects.

## **PRACTICAL**

**100 marks**

**Teaching hours-200**

### **Ayurvedic practical**

1. Assessment of Prakriti
2. Assessment of Dosha (Features of Vriddhi- Kshaya )
3. Assessment of Dhatu (Features of Vriddhi- Kshaya)
4. Assessment of Agni
5. Assessment of Koshta
6. Assessment of Sara
7. Nadi pariksha

### **Modern physiology practical**

Introduction to laboratory instruments- Simple & Compound Microscope, Scalp vein set, bulbs for blood collection, Sahli's Haemometer, Haemocytometer, pipettes, Urinometer, Albuminometer, Stethoscope, B.P. Apparatus, Harpenden's caliper, Clinical Hammer, Tuning Fork, Stop Watch, Thermometer, Centrifuge machine, ECG Machine

### **Collection of blood sample**

prick, vene-puncture method, use of anticoagulants

## **Preparation of blood smear and staining**

## **Estimation of Hemoglobin**

## **Microscopic examination of blood**

- a. Total RBC count
- b. Total WBC count
- c. Differential leucocyte count

## **Packed cell volume (PCV) demonstration**

## **ESR demonstration**

## **Bleeding time, Clotting time**

## **Blood grouping and Rh typing**

## **Examination of Cardio-Vascular system**

- a) Pulse examination
- b) Arterial blood pressure measurement
- c) Examination of heart sounds
- d) ECG demonstration

## **Examination of Respiratory system**

- a) Respiratory rate
- b) Breath sounds
- c) Spirometry

## **Examination of Nervous System- Sensory & Motor.**

## **Urine examination**

- Physical examination,
- chemical examination.
- Test for normal constituents of urine.
- Detection of specific gravity and reaction of urine.

### Distribution of Practical marks

1.	Laboratory Practical	- 20 marks
2.	Human Experiment	- 15 marks
3.	Spotting	- 15 marks
4.	Prakriti Saradi pariksha	- 20 marks
5.	Practical Record	- 10 marks
6.	Viva- voce	- 20 marks
	<b>Total</b>	<b>100 marks</b>

### REFERENCE BOOKS:-

Sl.No.	Name of the Book	Name of the Author
1.	Ayurvediya Kriyasharir	Ranjit Rai Desai
2.	Kayachikitsa Parichaya	C. Dwarkanath
3.	Prakrit Agni Vigyan	C. Dwarkanath
4.	Sharir Kriya Vigyan	Shiv Charan Dhyani
5.	Abhinava Sharir Kriya Vigyana -	Acharya Priyavrata Sharma
6.	Dosha Dhatu Mala Vigyana -	Shankar Gangadhar Vaidya
7.	Prakrita Dosha Vigyana -	Acharya Niranjana Dev
8.	Tridosha Vigyana -	Shri Upendranath Das
9.	Sharira Tatva Darshana -	Hirlekar Shastri
10.	Prakrita Agni Vigyana -	Niranjana Dev
11.	Deha Dhatvagni Vigyana -	Vd. Pt. Haridatt Shastri
12.	Sharir Kriya Vigyana (Part 1-2) -	Acharya Purnchandra Jain
13.	Sharir Kriya Vigyana -	Shri Moreshwar Dutt. Vd.

14.	Sharira Kriya Vijnana (Part 1-2)	Nandini Dhargalkar
15.	Dosha Dhatu Mala Vigyana -	Basant Kumar Shrimal
16.	Abhinava Sharir Kriya Vigyana -	Dr. Shiv Kumar Gaur
17.	Pragyogik Kriya Sharir -	Acharya P.C. Jain
18.	Kaya Chikitsa Parichaya -	Dr. C. Dwarkanath
19.	Concept of Agni -	Vd. Bhagwan Das
20.	Purush Vichaya -	Acharya V.J. Thakar
21.	Kriya Sharir -	Prof. Yogesh Chandra Mishra
22.	Sharir Kriya Vigyana	Prof. Jayaram Yadav & Dr. Sunil Verma.
23.	Basic Principles of Kriya-Sharir (A treatise on Ayurvedic Physiology )	Dr. Srikant Kumar Panda
24.	Sharir Kriya – Part I & Part II –	Dr. Ranade, Dr. Deshpande & Dr. Chobhe
25.	Human Physiology in Ayurveda -	Dr Kishor Patwardhan
26.	Sharirkriya Vignyan Practical Hand Book–	Dr.Ranade, Dr.Chobhe, Dr. Deshpande
27.	Sharir Kriya Part 1 –	Dr.R.R.Deshapande, Dr.Wavhal
28.	Sharir Kriya Part 2 –	Dr. R.R.Deshapande, Dr.Wavhal
29.	Ayurveda Kriya Sharira-	Yogesh Chandra Mishra
30.	Textbook of Physiology -	Gyton & Hall
31.	A Textbook of Human Physiology –	A.K.Jain
32.	Essentials of Medical Physiology -	Sembulingam, K.
33.	Concise Medical Physiology	Chaudhari, Sujit K.
34.	Principals of Anatomy & Physiology	Tortora & Grabowski
35.	Textbook of Medical Physiology-	Indu Khurana



# **RACHANA SHARIR**

## **(ANATOMY)**

## **RACHANA SHARIR**

**(ANATOMY)**

**Theory-Two Papers-200 Marks (100 marks each)**

**Teaching hours-300 hours (theory), 200 hours (practicals)**

**PAPER-I**

**100marks**

**PART A**

**50 marks**

### **Shariopkramaniya Shaarira**

Sharira and shaarira vyakhya (definitions of sharira and shaarira), shadangatvam (six regions of the body), anga pratyanga vibhaga (sub divisions). Mrita sharir samshodhan. Shaarira shastra vibhaga, shaarira gyan prayojana . Constitution of purusha according to dhatubheda, panchabhautikatvam, trigunatmakatvam, tridoshamayatvam, karma purusha, and doshadhatumala-mulakatvam.

### **Paribhasha Shaarira**

Kurcha, kandara, jala, asthisanghat, seemanta, seevani, rajju, snayu and lasika.

### **Garbha Shaarira**

Garbha definitions, explanation of shukra, artava, garbhadhana. Role of tridosha and panchmahabhuta in the fetal development. Beeja, beejabhaga and beejabhagavayava, linga vinischaya, masanumasika garbha vridhhi-krama, garbhottpadakbhava, garbhavridhikara bhava, garbha poshana, apara nirmana , nabhinadi nirmana. Aanga pratyanga utpatti.

### **Pramana Shaarira:**

Anguli pramana.

## **Asthi Shaarira**

Asthi vyakhya, number, types, asthi swaroompa, vasa, meda and majja.

## **Sandhi Shaarira**

Sandhi vyakhya, numbers, types of asthi sandhi.

## **Sira, Dhamani, Srotas Shaarira**

- a) Definition, types and number of sira and dhamani.
- b) Description of Hridaya.
- c) Sroto shaarira: Definition, types of srotas and srotomula.

## **Peshi Shaarira**

- a) Peshi vyakhya, structure, types, number and importance.
- b) Description of Peshi.

## **Koshtha Evam Ashaya Shaarira**

- a) Definition of koshta and number of koshtanga.
- b) Types and description of ashaya.

## **Kalaa Shaarira**

Kalaa: definition and types.

## **Uttamangiya Shaarira**

Shatchakra, ida, pingala and sushumna nadi - brief description.

## **Marma Shaarira**

Marma: definition, number, location, classification, clinical importance with viddha lakshana.  
Explanation of trimarmas. Detail description of marmas.

## **Indriya Shaarira**

Definition of indriya, indriya artha and indriya adhisthan, their number and importance. Description of gyanendria, karmendriya and ubhayendriya (manas).

## **PART-B**

**50 marks**

Definition and branches of anatomy. Preservation methods of the cadaver.

## **Anatomical Terminologies**

Anatomical position, Planes, and explanation of anatomical terms related to skin, fasciae, bones, joints and their movements, muscles, ligaments, tendons, blood vessels, nerves,.

## **Embryology**

Definitions and branches of embryology. Embryo and fetus. Sperm and ovum, fertilization. Cleavage. Germ layers formation and their derivatives. Laws of heredity, Sex determination and differentiation, Month-wise development of embryo. Foetal circulation, placenta formation, Umbilical cord formation.

## **Osteology**

Bone: Definition, classification, structure and types. Description of bones with clinical anatomy.

## **Arthrology**

Joints: Definition, structure types and movements. Description of joints of extremities, vertebral joints and temporomandibular joint with their clinical anatomy.

## **Cardiovascular system**

- a. Definition, types and structure of arteries and veins.
- b. Description of heart and blood vessels with their course and branches.
- c. Pericardium with applied aspect.

## **Lymphatic system**

Definition, types and structure of lymph vessels, lymph glands with their clinical aspect.

## **Myology**

- a) Structure and types of muscles.
- b) Description of muscles; their origin, insertion, actions, nerve supply and clinical anatomy.

## **PAPER-II**

**100marks**

### **PART A**

**50 marks**

- a) Bronchial tree and lungs with their clinical aspects.
- b) Respiratory tract: nasal cavity, pharynx, larynx, trachea, bronchial tree.
- c) Pleura with its clinical aspects.
- d) Diaphragm.

## **Digestive system**

- a. Organs of digestive tract (alimentary tract) with their clinical aspects.
- b. Digestive glands: liver, spleen and pancreas.
- c. Description of peritoneum with its clinical aspects.

## **Urinary System**

Urinary tract: kidney, ureter, urinary bladder and urethra with their clinical aspects.

## **Reproductive system**

### **Male Reproductive system**

Reproductive organs, tract and glands (prostate and seminal vesicles) with their clinical aspects.

## **Female reproductive system**

- a. Reproductive organs, tract and glands with their clinical aspects.

## **Endocrinology**

Definition, classification & description of endocrine glands (pituitary, thyroid, parathyroid, thymus and suprarenal glands) with clinical aspects.

## **PART B**

**50 marks**

## **Nervous System**

Nervous system: definition, classification and its importance. Description of brain and spinal cord. Description of peripheral nervous system: cranial and spinal nerves, nerve plexuses, and autonomic nervous system, formation and circulation of cerebrospinal fluid and blood supply of brain and spinal cord.

## **Sensory organs**

Description of structures of eye, ear, nose, tongue and skin with their clinical aspects.

## **Surface and radiological anatomy**

- a) Study of radio-imaging of limbs, abdomen, pelvis and vertebral column with its clinical application.
- b) Surface anatomy of thoracic and abdominal viscera.

## **PRACTICAL**

**100 marks**

**Teaching hours: 200**

## **Content of practical**

1. Practical study of bones
2. Practical study of organs

3. Practical study of surface and radiological anatomy.
4. Shava vichhedana – detailed dissection of the whole body.
5. Practical study of location of marma
6. Demonstration of histology slides (10 slides)

### **Distribution of marks**

1. Spotting –	20 marks
2. Dissected organs and histology slides	20 marks
3. Bones, joints, marma -	20 marks
4. Surface & radiological anatomy	10 marks
5. Practical records	10 marks
6. Viva-Voce -	20 marks
<b>Total</b>	<b>100 marks</b>

### **Reference Books :-**

<b>S. No.</b>	<b>Name of Book</b>	<b>Author</b>
1.	Brihat Shariram Vaidyaratna-	P.S. Varrier
2.	Abhinava Shariram-	Acharya Damodar Sharma Gaur
3.	Manava Sharir (Revised Edition)-	Prof. Dinkar Govind Thatte
4.	Manava Bhruna Vigyana -	Prof. Dinkar Govind Thatte
5.	Manava Anga Rekhankan Vikrian -	Prof. Dinkar Govind Thatte
6.	Sharir Rachana Vigyan (English)-	Vaidya P.G. Athawale
7	Manual of Practical Anatomy Cunnigham Practical Manual Vol-1-3	
8	Clinical Anatomy in Ayurveda	Prof. D.G. Thatte & Prof. Suresh
9	Sharir Rachna Vigyan (English)-	Prof. D.G. Thatte
10	Ayurvedic Human Anatomy -	Prof. Dr. Giridhar M. Kanthi
11	Regional Anatomy -	B. D. Chaurasia
12	Rachana Sharir Vigyana - elevant	Dr. Mahendra Sing

	chapters of Brihtrayee and Laghuthrayee	
13	Gray's Anatomy	
14	Text Book of Human Anatomy-	Inderbir Singh
15.	Clinical Anatomy-	Richard S Snell
16.	Fundamentals of Human Anatomoy-	Dr. Chakraborty
17.	Human Osteology -	Poddar



**MAULIKA SIDDHANTA**  
**EVUM ASHTANGA HRIDAYA**

**(Basic Principles and Ashtang Hridaya-**

**An ancient text of Ayurveda)**

## MAULIKA SIDDHANTA EVUM ASHTANGA HRIDAYA

(Basic Principles and Ashtang Hridaya- An ancient text of Ayurveda)

Theory- One Paper– 100 marks

Teaching Hours -150 hours

Practicals – 50 Marks

### Part A

60 marks

- a) Ashtang Hridaya Sutrasthana Adhyaya 1 to 15

### Part B

40 marks

- a) Ashtang Hridaya Sutrasthana Adhyaya 16 to 30  
b) Description of Ashta Prakriti  
c) Shastra Lakshan (Tantra), Tantraguna, Tantradosha, Tachitalya, Arthasraya, Kalpana

**Ashtangahridaya Viva and Practical will be conducted for 50 marks. The distributions of Marks are as follows**

- a) Daily Records/Compilation – 10 Marks  
b) Written test and Shloka recitation – 20 Marks  
c) Viva voce / Oral examination – 20 Marks

### Reference Books:

Sl.No.	Name of the Book	Name of the Author
1	Astang Hridaya	Hindi commentary by Lalchanda Vaidya
2	Astang Hridaya	Hindi commentary by Vd. B.L. Gaur
3	Astang Hridaya	English commentary by Dr. T. Sreekumar
4	Astang Hridaya	English commentary by Dr. Vishwavasu Gaur
5	Astang Hridaya	Sanskrit commentary by Hemadri
6	Astang Hridaya	Sanskrit commentary by Arunadatta

# **SECOND PROFESSION**

## **Second Profession**

The second professional session shall start every year in the month of July following completion of first professional examination and the second professional examination shall be ordinarily held and completed by the end of month of May or June every year after completion of one year of second professional session;

The second professional examination shall be held in the following subjects, namely-

1. **Dravyaguna Vigyan** (*Pharmacology and Materia Medica*)
2. **Rasashastra evam Bhaishajya Kalpana** (*Pharmaceutical Science*)
3. **Roga Nidan evam Vikriti Vigyan** (*Diagnostic Procedure and Pathology*)
4. **Charak Samhita-Purvardh** (*An Ancient Ayurvedic Text, Part-I*)

**NOTE:** The failed student of second professional who have passed all the subjects of first professional examination shall be allowed to appear in third professional examination, but the student shall not be allowed to appear in final professional examination unless the student passes all the subjects of second professional examination and maximum four chances shall be given to pass second professional examination within a period of maximum three years.

# **DRAVYAGUNA VIJNAN**

**(PHARMACOLOGY & MATERIA MEDICA)**

## **DRAVYAGUNA VIJNAN**

### **(PHARMACOLOGY & MATERIA MEDICA)**

**Lectures: 200 Hrs.**

**Practicals: 200 Hrs.**

**Total Marks -400**

**Theory Two Papers– 100 Marks Each**

**Practical/Viva voce – 200 Marks**

**Paper I 100 Marks**

**Part A 50 Marks**

#### **Dravyaguna Shastra Paribhasa**

Lakshana of Sapta Padartha of Dravyaguna Vijnana viz Dravya- Rasa-Guna- Virya- Vipaka Prabhava and Karma.

#### **Dravya:**

Etymological derivation, definition, panchbhoutikatwa, Classification of Dravya according to Samhitas and Nighantus Taxonomical classification.

#### **Guna:**

Etymological derivation, definition and Classification of Guna. Detailed knowledge of Gurvadi Guna & Paradi gunas.

#### **Rasa:**

Etymological derivation, definition, Meaning of “Rasa” in various contexts. Shad Rasas (Madhura, Amla, Lavana, Katu, Tikta, and Kashaya), Panchabhautik constitution of Rasas, Nirvrittivisheshakrama (manifestation in general and particular), Ritu and shad rasa Rasanurasayoh bheda (Difference between rasa and anurasa), Lakshana (characteristics),Guna

and Karma of shad Rasas, Kopana and Shamana of Dosha and dushya by Shad rasas. Effects of excess usage of Rasa. Rasopalabdhi, Rasaskandha.

### **Vipaka:**

Etymological derivation and definition, difference between Avasthapaka and Vipaka, Types of Vipaka, (Dvididha-Trividha,Panchavidha) Guna and karma of Vipaka. Grades of Vipaka (taratamya), Vipakopalabdhi hetu (Factors to determineVipaka).

### **Veerya:**

Etymological derivation, definition and Swarupa of Virya, Number of Virya. (Dwividha & Ashtavidha), Panchabhauthikatva Virya karmani (Effects of Virya), General principles in determination of virya along with exceptions.

### **Prabhava:**

Definition, Effects of Prabhava. Interrelation of Rasa-Guna-Virya-Vipaka-Prabhava with respect to their strength (balabal nirupana). Samanapratyayarabdha and Vichitrapratyayarabdha dravyas.

### **Karma:**

Lakshana, swaropa and bheda of karma (Definition, nature and types of action).

Explanation of the following Karmas with examples:

1.	Deepana	2.	Pachana	3.	Samshodhana	4.	Samshamana
5.	Anulomana	6.	Sransana	7.	Bhedana	8.	Rechana
9.	Chhedana	10.	Lekhana	11.	Grahi	12.	Sthambhana
13.	Madakari	14.	Pramathi	15.	Abhishyandi	16.	Vyavayi
17.	Vikashi	18.	Rasayana	19.	Vajeekarana	20.	Jeevaneeya
21.	Balya	22.	Brimhana	23.	Langhana	24.	Medhya

Brief information on Karmas of dashemani gana of Charak Samhita.

**Mishraka Gana:**

**Audbhida Gana**

(Vegetable origin) Brihatpanchamoola, Laghupanchamoola, Vallipanchamoola, Kankapanchamoola, Trinapanchamoola, Madhyamapanchamoola, Jeevaneeya panchamoola, Panchapallava, Panchavalakala, Triphala, Trikatu, Trimada, Chaturusana, Panchakola, Shadusana, Chaturbeeja, Jeevaniya gana, Ashtavarga, Trijataka, Chaturajataka, Katuchaturjataka Panchatikta, Amlapanchaka, Chaturbhadra, Trikarshika, Swalpatriphala, Madhuratriphala, Mahavisha, Upavisha, Agrya aushadh varga- Knowledge of Agrayaushadha Varga with example.

**Jangama Gana (Animal origin)-**

Ksheerashtaka, Mutrashtaka, Pitta panchaka.

**Parthiva Gana (Mineral origin) –**

Lavana Panchaka, Kshara dvaya, Kshara Ashtaka.

**Basis of nomenclature:**

Basis of nomenclature of dravya, Basis and Derivation of synonyms.

Bheeshaja Pariksha vidhi (as described in Charaka samhita vimana sthana 8), Dravya Sangrahana (collection of dravya)- Ecology- Classification of desha (geographical area) and bhumi (soil), swarupa of sangrahaniya dravya of (Nature and quality of drug to be collected). Sangrahana vidhi (Method of collection) -Vegetable and Animal origin drugs according to part used. Period of collection according to virya, samrakshana vidhi (preservation of collected dravyas), bheeshajagara (Storehouse), study on different prayojyanga (useful plant parts).



**PART – B**

**50 MARKS**

**Section – 1**

**20 MARKS**

Concept of dravya shodhan (purification of dravya).

Brief knowledge of Apamishran (adulterants)

Concept of Abhava pratinidhi dravya (substitutes)

Prashasta bhesaja (ideal drug), plant extracts. Concept of viruddha Dravya (incompatibility of the dravya).

Introduction to Nighantu Vigyan, Dhanwantari Nighantu, Bhavaprakashanighantu, Rajanighantu.

Brief knowledge of cultivation, conservation of medicinal plants and information about endangered species.

**Section – II**

**30 MARKS**

Introduction, Definition & scope of Pharmacology and Principles of general Pharmacology. Brief Knowledge about pharmacology of the following - Anaesthetics, CNS depressants, Sedatives, Hypnotics, Tranquilisers, Antipyretics, Analgesics, Antiepileptics, Antihypertensive, Antianginal, Antiplatelet, Hypolipidaemic, Haemopoetic, Coagulants, Bronchodilators, Aerosols/ Inhalants, Expectorants, Digestants, Carminatives, Antacids, Antiulcer, Laxatives, Antidiarrhoeals, Antiemetic, Hepatoprotective, Diuretic, Antidiuretic, Lithotriptic, Antiinflammatory, Hormonal therapy, Antiobesity, Antidiabetic, Antithyroid, Oxytocic. Galactagogues, Contraceptives, Styptics, Antihistamines, Antimicrobial, Antibiotics, Antimalarial, Amoebicidal, Antifilarial, Anthelmentic, Antifungal, Vitamins, Minerals, Water imbalance and IV fluids, Vaccines, antivenom, antirabbies serum, Local anti septics, drugs in ophthalmic practice, Anti cancer drugs and immunomodulators.

**Detailed Knowledge of Following Dravya –**

Detailed knowledge of following drugs with respect to Basonym of drug, Main Synonyms, Regional Name, Botanical Name, Family, Classification of Dravya (Gana) as described in Charak and Sushrut, External morphology, Useful parts, Important phytoconstituents, Rasa panchaka, Action on Dosha, Dhatu, Mala, Prayogarha vyadhi (therapeutic indications), Amayikaprayoga and Matra (Therapeutic administration and Dose), Vishishta yoga (names of important formulations), Vishakta Lakshan (adverse effects), Chikitsopachara (remedial measures) and Shodhana (as required)

[Alphabetical order and Botanical names to all the drugs are to be added]

Agaru	Guggulu	Pashanabheda
Agnimantha	Haridradvaya	Patala
Agnimantha	Haritaki	Pippali-Pippalimula
Ahiphena	Hingu	Prishniparni
Amalaki	Jambu	Punarnava
Apamarga	Jatamansi	Pushkarmoola
Aragvadha	Jatiphal	Rasna
Aragvadha	Jeerakadvaya	Rasona
Ardraka-Sunti	Jyotishmati	Rohitaka
Arjuna	Kalamegha	Saireyaka
Arjuna	Kampillaka	Sarivadvaya
Arkadvaya	Kanchanara	Sarpagandha
Ashvagandha	Kantakari	Shalaparni
Asoka	Kapikacchu	Shallaki
Ativisha	Karkatakshringi	Shalmali
Bakuchi	Karpura	Shankhapushpi

Baladvayam.	Katuki	Shatavari
Bhallataka	Khadira	Shigru
Bharangi	Kiratatikta	Shirisha
Bhrungaraj	Kumari	Shyonaka
Bibhitaka	Kumkum Kesara	Talisa Patra
Bijak/ Vijaysar	Kupilu	Tila
Bilva	Kushta	Trivrut
Brahmi	Kutaja	Tulasi
Bruhati	Lavanga	Tvak
Chandanadvaya,	Lodhra	Ushira
Chitraka	Madanaphala	Vacha
Dadima	Mandukaparni.	Varahi
Devadaru	Manjishtha	Varahi
Dhataki	Maricha	Varuna
Durva	Musta	Vasa
Eladvayam	Nagakeshara	Vatsanabha
Eranda	Nimba	Vidanga
Gambhari	Nirgundi	Vidari
Gokshura	Palasha	Yastimadhu
Guduchi	Parpata	Yavani

**PART B**

**30 MARKS**

Brief Knowledge of following dravyas with Respect to Sanskrit Name, Botanical Name, Family, Habit (Samanya Swarupa), Parts Used and Indications.

Agastya	Jati	Palandu
Ajamoda	Jayapala	Parasika Yavani
Akarkarabh	Jeevanti	Parijata
Amlavetasa	Kadali,	Parisha
Amra	Kadamba	Parnabija

Amragandhiharidra	Kaidarya	Parnayavani
Ankola	Kakamachi	Parpataka
Aparajita	Kamala	Parushaka
Ashvagol	Kankola	Patalagarudi
Ashvattha	Karanja	Patha
Asthishrunkhala	Karavellaka	Patola
Atasi	Karavira	Patranga
Avartaki	Karira	Pilu
Avartani	Karpasa	Plaksha
Babbula	Kasamarda	Prasarani
Badara	Kasha	Priyala
Bakula	Kasni	Priyangu
Bhumyamalki	Kataka	Puga
Bijapoor	Katphala	Putiha
Bola	Kebuka	Putranjivaka
Chakramarda	Kharjura	Rajika/Sarshapa
Champaka	Kitmari	Rohitaka
Chandrashura	Kokilaksha	Saptachakra
Changeri	Koshataki	Saptaparna
Chavya	Kulatha	Saral
Chirbilva	Kumuda	Sarja
Chopachini	Kusha	Shala
Danti	Kusmanda	Shara
Darbha	Lajjalu	Sharapunkha
Dattura	Langali	Shatahwa
Dhanvayasa	Latakaranja	Shati
Dhanyaka	Latakasturi	Snuhi
Draksha	Madayantika	Sringataka
Dronapushpi	Mahanimba	Svarnakshiri
Gandhaprasarini	Mandukaparni	Tagara .

Garjara	Markandika	Tailaparni
Gojihva,	Masha	Talmuli
Gorakshaganja	Mashaparni	Taruni
Gunja	Matulunga	Tavakshira
hinsapa	Mayaphala	Teja Patra
Hinstra	Meshashrungi	Tuvaraka
Hribera	Methika	Udumbara
Hrutpatri	Mudgaparni	urana
Ikshu	Mulaka	Vamsha
Indravaruni	Murva	Vata
Ingudi	Nagabala	Vatada
Irimeda	Nala	Vrudhadaru
Ishvaku	Narikela	Vrukshamla
Isvari	Nili	
Japa	Padmaka	

**Introduction, Guna, Karma and Uses of following Jantava Dravya (Drugs of Animal Origin)**

- a) Kasturi
- b) Goroohana
- c) Mrigasringa

**Introductory Knowledge of Following Annapana Varga:**

- a) Jala Varga
- b) Dugdha Varga
- c) Madhu Varga
- d) Taila Varga
- e) Sukadhanya Varga
- f) Shamidhanya Varga
- g) Phala Varga

- h) Shaka Varga
- i) Mamsa Varga
- j) Aharayogi

## **PRACTICALS**

Study of Macroscopic, Microscopic characters and Demonstration of organoleptic characteristics and grahya-agrahyatva of following plants and their useful parts.

- a. Kanda (stem) - Guduchi or Ashtishrinkhala
- b. Patra (leaves) - Vasa or Kumari
- c. Pushpa (flower and Parts of flower)- Dhataki or Japa
- d. Phala (fruit) – Maricha or Madanaphala or Vidanga
- e. Beeja (seeds) – Eranda or Kapikacchhu
- f. Twak (bark) – Kutaja or Arjuna or Ashwattha
- g. Moola(Root)- Punarnava or Chitraka
- h. Niriyasa (exudate) – Guggulu or Mocharasa
- i. Jangama dravya - Madhu or Ghrita.

Records of Herbarium sheets of 50 medicinal plants Compulsory study tour other state/s for field knowledge and procurement of plant species.

## **PRACTICAL MARKS DIVISION**

1	Herbarium	20 Marks
2	Practical record	20 Marks
3	Drug identification- spotting –Raw/crude drugs	30 marks
4	Plant identification spotting –fresh	30 marks
5	Practical	40 marks
6.	Viva-Voce	60 Marks
<b>Total</b>		<b>200 marks</b>

## Reference Books

Sl.No.	Name of the Book	Name of the Author
1.	Abhinav Buti Darpan (Vol.1-2)	Vd. Roop Lal Vaishya
2.	Aushadna Vigyna Shastra	Acharya Pt. Vishvanatha Dwidevi
3.	Ayurvediya Aushadnkarma vigyana	Acharya V.J. Thakur
4.	Bedi Vanaspati Kosha	Prof. Ramesh Bedi
5.	Bhaishajyaguna Vigyana	Dr. Alakharayan Singh
6.	Bhav Prakash Nigantu (English)	Shreekanthamurti
7.	Bhav Prakash Nighantu	With Vd. Krishna Chandra Chunekar commentary
8.	Bhrinad dravyagunadarsha	Mahendra Kumar Shastri
9.	Classical Uses of Medicinal Plants	Acharya Priyavrata Sharma
10.	Controversial Medicinal Plants	Vd. G. Bapa Lal
11.	Dalhana Ka Dravyaguna Shastra Ke Kshetra Me Yogadana	Vd. Shiv Kumar Vyas
12.	Dravyaguna Kosha	Acharya Priyavrata Sharma
13.	Dravyaguna Sutram	Acharya Priyavrata Sharma
14.	Dravyaguna Vigyana	Dr. Gyanendra Pandey
15.	Dravyaguna Vigyana(Vol. 1-2)	Acharya Yadavji Tikram Ji
16.	Dravyaguna Vijyana	Dr. V.M. Gogate
17.	Dravyaguna Vigyana (Vol. 1-5)	Acharya Priyavrata Sharma
18.	Dravyaguna Shastrum	Vaidya G.A. Phadake
19.	Dravyaguna Vijyana	Dr. A.P. Deshpande
20.	Dravyagunavijnana basic Principles	Prof.D.S.Lucas
21.	Forgotten Healers (Indian Medicinal Plants)	Dr. Prakash Pranjape
22.	Glossry of Vegetable Drugs in Bhritrayis	Thakur Balwant Singh & Vd. Krishna Chandra Chunekar
23.	Introduction to Dravyaguna	Acharya Priyavrata Sharma

24.	Kriyatamka Aushadi Parichaya	Acharya Pt. Vishvanath Dwidevi
25.	Materia Medica	Acharya Ghosh
26.	Nighantu Adarsh (Vol. 1-2)	Vd. Bapa Lal
27.	Pharmacological basis of Medical Practice	Goodman & Gillman
28.	Pharmacology and Pharmacotherapeutics	Satoskar Bhandarkar & Ainapure
29.	Prayogatamaka Dravyaguna Vigyana	Dr. Maya Ram Uniyal
30.	Priya nighantu	Acharya Priyavrata Sharma
31.	Raspanchaka/Dravyaguna Siddhanta	Prof. Shivcharan Dhyani
32.	System of Plant Nomenclature in Ayurveda	Dr. Gyanendra Panday
33.	Text Book of Pharmacognosy	Trees & Valis
34.	Textbook of Dravyaguna	Dr.K.Nishteswar
35.	Unani Dravyaguna Vigyana	Hakim Daljeet Singh
36.	Useful parts of Charaka, Sushrut and Vagbhata.	
37.	Uttarakand Ki Vanaspatiya	Dr. Gyanendra Pandey
38.	Vanoaushadi Darshika	Thakur Balwant Singh
39.	Vanoaushadi Nidarshika	Dr. Ram Sushil Singh
40.	Vedic Vanaspatiyan	Dr. Dinesh Chandra Sharma



**RASASHASTRA**  
**EVAM BHAISHAJYAKALPANA**

## **RASASHASTRA EVAM BHAISHAJYAKALPANA**

**Theory -Two Papers**

**Total Marks- 200**

**Teaching hours-200**

**Practical :-**

**Total Marks-200**

**Teaching hours-200**

### **RASASHASTRA**

**PAPER - 1**

**100 Marks**

**PART A**

**50 Marks**

#### **History of Rasashastra**

Definition and etymology of Rasa, History of Rasashastra, Importance of Rasaushadhi, Concept of Rasa-Rasayana, Concept of Raseshwar Darshana. Concept of Rasashala and Rasamandap.

#### **Brief Description and Application of Technical terminologies (Paribhasha)**

Avapa, Nirvapa, Dhalana, Bhavana, Jarana, Murchana, Shodhana, Marana, Amrutikarana, Lohitikarana, Mruta Loha, Satwa Patana, Druti, Apunarbhava, Niruttha, Rekhapurna, Varitara.

#### **Dravya Varga**

Amlavarga, Panchamrittika, Panchagavya, Panchamrita, Ksharashtaka, Dravakagana, Mitra panchaka, Rakta varga, Lavanapanchaka.

### **Brief description of Yantras and their application**

Ulukhala Yantra, Khalwa Yantra, Kachhapa Yantra, Damaru Yantra - Vidhyadhara Yantra-Urdhwapatan, Addhapatan & Tiryakpatana Yantra, Jaranartha Tulayantra, Dolayantra, Patalayantra, Palika Yantra, Baluka Yantra, Bhudhara Yantra, Sthali Yantra, Swedana Yantra.

### **Brief description & application of Musha (Crucible)**

Samanya Musha, Gostani musha, Vajra Musha, Maha musha, Yoga musha, Vrintaka Musha, Malla / Pakwa musha. Different types of crucibles e.g. Silica crucible, platinum crucible. Mudra and Sandhi Bandhana.

### **Brief description & applications of Chullika**

Satwapatana Koshthi, Patala Kosthi, Gara Koshthi, Angarakoshthi and knowledge of various heating appliances viz. Gas stove, Hot plate, Heating mantle, Induction Stove, Hot Air Oven.

### **Concept, definition and types of Puta**

Suryaputa, Chandraputa, Gomayaputa, Lawakaputa, Kukkutaputa, Kapotaputa, Varahaputa, Gajaputa, Mahaputa, Kumbhaputa, Valukaputa, Bhudharaputa, Applications of Electric muffle furnace and fuel (diesel) dependent furnace. Brief introduction to thermocouple and pyrometer.

### **Knowledge of Parada**

Synonyms, Occurrence, natural and artificial sources of Parada, Hingulottha parada, Types of Parada, Parada Dosha: Naisargika, Yougika, Aupadhika (Kanchuka). Grahya-Agrahya Parada, Parada gati, Parada bandha, Shodhana of Parada. Parada sanskara and brief description of Ashtasamskara.

Concept of Murchhana and Jarana of Parada, Preparation of Kajjali, Classification of Rasaushadhi: Khalvi rasa e.g. Tribhuvana Keerti Rasa, Parpati Rasa- Rasa Parpati, Kupipakva Rasa- Rasa sindur, Pottali rasa - Hemagarbha pottali. Rasa sevana vidhi and pathya and apathya.

## **Brief introduction of quality control , standardization and GMP of Rasaoushadhies**

### **Part B**

**50 Marks**

#### **Minerological identification**

Occurrence, Synonyms, Minerological identification, Sources, Types, Grahya and Agrahyata, Shodhana, Marana and other processing techniques. Properties, dose, anupan and therapeutic uses, pathya – apathya and ashuddha, apakwa and avidhee sevanjanya dosha and its management, important formulations of the following:

#### **Maharasa**

Abhraka (Biotite Mica), Vaikrantha, Makshika (Chalco-pyrite), Vimala (Iron Pyrite), Shilajatu, Sasyaka (Peacock ore), Chapala and Rasaka (Sphalerite).

#### **Uparasa**

Gandhaka (Sulfur), Gairika (Red Ochre), Kasisa (Green Vitriol), Kankshi (Alum), Haratala (Orpiment), Manahshila (Realgar), Anjana and Kankustha.

#### **Sadharana Rasa**

Kampillaka, Gauri pashana (Arsenic oxide), Navasagara (Ammonium chloride), Kaparda (Cowry), Agnijara, Giri Sindura (Red oxide of Hg), Hingula (Red Cinnabar) and Mriddara shringa (Litharge).

#### **Dhatu**

Swarna (Gold), Rajata (Silver), Tamra (Copper), Loha (Iron), Vanga (Tin), Naga (Lead), Yashada (Zinc), Kamsya (Bronze), Pittala (Brass), Vartaloha. Dhatu -graha sambandha.

#### **Ratna**

Manikya (Ruby), Mukta (Pearl), Pravala (Coral), Tarkshya (Emerald), Pushparaga (Topaz),

Vajra (Diamond), Nilam (Sapphire), Gomeda (Zircon or Cinnamome stone), Vaidurya (Cats eye). Ratnapariksha, Ratnadosha, Ratna-graha sambandha.

### **Uparatna**

Vaikranta (Tourmaline), Suryakanta (Sun stone), Chandrakanta (Moon stone), Rajavarta (Lapis lazuli), Perojaka (Turquoise), Sphatikamani (Quartz), Trinakanta, Palanka, Putika, Rudhir.

### **Sudha varga**

Sudha (Lime stone ), Kaparda (Cowries), Shukti (Oyster Shell) , Shankh (Conch Shell), Mriga shringa (Stag horn), Khatika, Godanti (Gypsum) and Samudraphena (Cattle Fish bone), Kukkutanda twak (Hen's Egg Shell).

### **Sikata varga**

Sikata (Silica), Dugdhapashana (Talc), Nagapashana / Jaharmohara (Serpentine), Badarshama (silicate of lime ), Vyomashma (Sangeyashab - Jade), Kousheyashma (Asbestos) and Akika (Agate).

### **Kshara varga**

Sarja kshara (Sodium bicarbonate), Yava kshara, Tankana kshara (Borax), Surya Kshara (Potassium Nitrate).

### **Miscellaneous**

Mandura, Bola, Dam-ul Akhawayan (Raktabandhini), Kasturi, Bhoonag, Mayurpiccha, Sarjarasa, Madhoochishta.

### **Visha and Upavisha**

Introduction, collection and storage, classification, synonyms, shodhana, antidote, therapeutic and toxic doses, anupan, therapeutic uses, and formulations of following Visha and Upavisha-

Vatsanabha, Kuchala, Jayapala, Dhattura, Bhanga, Bhallataka, Gunja, Arka, Snuhi. Langali, Karaveera, Ahiphena and Chitrakmool.

**Aushadhi Yoga Gyanam- ingredients, manufacturing process, and bhashajprayogvidhi**

Arogya Vardhini Gutika, Kasturibhairava Rasa, Kumara Kalyana Rasa, Garbhapala Rasa, Chandraprabha Vati, Chandramrita Rasa, Pratapalankeshwara Rasa, Pravalapanchamrita Rasa, Anandbhairava Rasa, Yogendra Rasa, Laxmivilas Rasa, Vasantakusumakara, Vasantamalati Rasa, Brihat Vata Chintamani Rasa, Shankha vati, Shwaskuthara Rasa, Hinguleswara Rasa, Hemagarbhapottali, Hridyarnava Rasa, Swarnavanga, Makaradhwaja, Putapakwavaisham Jwarantaka Loha, Vatvidhvamsan Rasa, Kamadugha Rasa, Laghusutshekhar Rasa, Navayasa Loha, Saptamrita Loha, Tamra Parpati, Panchamrita Parpati, Sveta Parpati.

**Introduction** to pharamcovigilance and its status in India, with reference to Ayurvedic drugs.

**Practical**

**100 Marks**

**Minimum Twenty five practicals to be performed**

**Rasa [Parada]**

- a. Samanya Shodhana of Parada
- b. Kajjali
- c. Mugdha rasa

**Maharasa varga**

- a. Shodhana of Abhraka
- b. Dhanyabhraka nirmana
- c. Shodhana of Makshika
- d. Shodhana of Shilajatu
- e. Shodhana of Sasyaka.

### **Uparasa varga**

- a. Shodhana of Gandhaka
- b. Shodhana of Gairika
- c. Shodhana of Kasisa
- d. Shodhana of Kankshi
- e. Shodhana of Haratala
- f. Rasa manikya nirman
- g. Shodana of Manashila

### **Sadharana rasa varga**

- a. Shodhana of Hingula
- b. Sodhana of Navasadar
- c. Shodhana of Kapardika

### **Sadharana rasa varga**

- a. Shodhana of Hingula
- b. Sodhana of Navasadar
- c. Shodhana of Kapardika

### **Sudha Varga**

- a. Shodhana of Shankha
- b. Shodhana of Shukti
- c. Shodhana of Pravala mula
- d. Shodhana of Godanti

### **Dhatu varga**

- a. Samanya Shodhana of Lauha
- b. Shodhana of Mandura
- c. Samanya Shodhana of Tamra

- d. Shodhana of Naga
- e. Shodhana of Vanga
- f. Shodhana of Yashada

### **Kshara Varga**

- a. Shodhana of Tankana

### **Parpati**

- b. Preparation of Rasaparpati, Bola Parpati and Swetaparpati

### **Visha varga**

- a. Shodhana of Vatsanabha,
- b. Shodhana of Bhallataka,
- c. Shodhana of Kupilu,
- d. Shodhana of Dhatura beeja
- e. Shodhana of Jayapala,
- f. Shodhana of Gunja,
- g. Shodhana of Chitrakamoola

## **PRACTICAL FOR DEMONSTRATION / GROUP PRACTICALS**

Hingulad rasakrishti (Hingulottha Parada).

### **Bhasma: 4 (One from each group)**

- a. Abhraka bhasma, Swarna Makshika bhasma, Tamra bhasma
- b. Vanga bhasma, Naga bhasma, Yashada bhasma
- c. Mandura bhasma, Kasisa bhasma
- d. Shankha bhasma, Kapardika bhasma, Godanti bhasma.



### **Pishti**

- a. Pravala pishti,
- b. Jaharmohara / Akika pishti,
- c. Trina kantha mani pishti,
- d. Mukta pishti.

### **Druti**

- a. Gandhaka druti.

### **Formulations 4 (one from each group)**

- a. Rasasindura, Swarna vanga, Sameer pannaga rasa
- b. Saptamruta lauha, Punarnava mandura, Navayasa lauha
- c. Agnitundi vati, Tribhuvana kirti rasa, Sootshekhara rasa, Laghusutashekhara Rasa
- d. Arogyavardhini vati, Laghumalinivasanta rasa, Hinguleshwar rasa, Anandbhairav rasa, Rajapravartini vati

## **BHAISHAJYAKALPANA**

**Paper II**

**100 Marks**

**Part A**

**50 Marks**

### **kramika vikasa of Bhaishajyakalpana**

History and Chronological (kramika vikasa) development of Bhaishajyakalpana. Concept of Aushadha and Bhesaja.

### **Fundamental principles of Bhaishajya Kalpana.**

Study of Ancient and Contemporary systems of 'Maana' (Units of measurement), Shushka - ardra -drava- dravya grahan niyam (Rules of measures of dry, fresh, liquid drugs); Grahyagrahyatva, Nava Puran dravya grahan niyam.

Guidelines and Methods of collection, storage, preservation of Aushadhi dravya. Concept of Saviryatavadhi (shelf life) and stability in ancient and contemporary science.

### **Bhesajprayogavidhi**

Aushadha Matra, Anupana and sahapan and Aushadh sevan kaala. (Posology).

### **Panchavidha kashaya kalpana and Other kalpana :**

Kashaya Yoni, Swarasa, Kalka, Kwatha, Hima and Phanta, Pramathya, Aushadha siddha paniya, Tandulodaka, Laksha rasa, Mantha, Panaka, Arka, Churna, Rasakriya, Ghana, Phanita, Avaleha, Prasha, Gudapaka, Sharkara, Syrups, Ksheerapaka, Satva, Guggulu kalpana, Vati, Guti, Pinda, Modaka, Varti Preparation of Tablets, pills, capsule and Suppositories. Masi kalpana, Lavana kalpana, Kshara kalpana and Kshara sutra.

### **Introduction and general knowledge of useful instruments/ Equipments**

Disintegrator, Mixer, Grinder, End Runner, Edge Runner, Sieve-Shaker, Granulator,

Tableting machine, Pill making machines, coating and polishing pan, capsule filling machine, sieves and mesh.

### **Sneha kalpana**

Sneha yoni, Types of Sneha, Sneha murchana vidhi, Sneha paka vidhi, patra paka, types and their use. Sneha siddhi lakshana, dose, Preparation and uses of Triphala Ghrita, Bramhighrita, Narayana taila, Anutaila.

### **Sandhana Kalpana and its types**

Madya Kalpana, Asava, Arishta, Sura (Prasanna - Kadambari - Medaka - Jagala - Bakkasa), Maireya, Surasava, Shukta, Kanjika, Sauvira, Tushodaka, Sidhu kalpana their methods of preparation, siddhi lakshana, properties, uses, doses. Takrarishta, Draksharishta, Ashokarishta, Dashamoolarishta, Kumaryasava, Chandanasava.

### **Kritanna and Aushadhisiddha anna Kalpana**

Definition of Kritanna, Concept of Pathya and Apathya, Yavagu –types of yavagu, Manda, Peya, Vilepi, Anna, Bhakta, Odan, Yush -types, Krishara, Mansa rasa, Vesavara, Khad Kamblika, Raga, Shadava, Dadhi and Takra Varga – Takra, Udasvita, Katvar, Mathita, Chhachika.

## **PART B**

**50 Marks**

### **Bahyopacharartha kalpana (External Applications)-Lepa**

Types of Lepa, methods of preparation and mode of application. Udvartan and Avachurnan, Method of preparation of Siktha Taila, Malahara – Sarjarasa Malahara, Gandhak Malahara, Upanaha, Atasi upanaha, Shatadhouta and Sahastradhouta Ghrita. Brief introduction of semi solid dosage forms- Ointments, Creams, Emulsions, Gels, Lotions.

**Principles and precautions for preparation of formulations for following:**

**Netraupacharartha kalpana (Ophthalmic preparations)**

Seka, Drava, Pindi, Anjana - Ashchyotana - Tarpana - Putapaka and Vidalaka, Methods of preparation of eye drops, eye ointments.

**Nasyopachararth Kalpana –**

Classification of Nasya, Navana, Avapidana, Pradhama, Marsha and Pratimarsha nasya.

**Dhumapanarth kalpana –**

Classification of dhumpaana, Method of preparation of dhumvarti and its therapeutic uses. Dhupan: Vranadhupan, arshodhupan.

**Mukhaprayogarth kalpana**

Gandoosha - Kavala - Pratisaran, Tooth paste, Tooth powders and Mouth wash.

**Basti kalpana-**

Classification, method of preparation of Niruha and Anuvasana, Basti Therapeutic properties and uses of Basti.

**Brief knowledge of Standardization of Ayurvedic formulations- Kashtraushadhi.**

**Brief introduction of Drug and Cosmetics Act 1940 and Rules 1945.**

Concept of Aushadhi Nirmanshala with respect to Good Manufacturing Practices (GMP) in accordance to Schedule T.

**Following practicals to be performed- (Minimum one from each category)**

Method of preparation, therapeutic uses, dose and anupana of the following

**Swarasa-**

- a. Ardraka swarasa,
- b. Tulasi swarasa,
- c. Kumari Swarasa,
- d. Vasa putapaka swarasa

**Kalka**

- a. Nimba kalka
- b. Rasona kalka

**Kwatha**

- a. Punarnavasthaka kwatha
- b. Rasna Saphthaka kwatha
- c. Kulattha kwath.

**Hima**

- a. Dhanyaka hima
- b. Sarivadi hima .

**Phanta**

- a. Panchakola phanta
- b. Yastimadhu Phanta.

## **Pramathya**

- a. Mustadi pramathya

## **Mantha**

- d. Kharjuradi mantha

## **Paniya**

- a. Aushadh siddha paniya
- b. Shadanga paniya

## **Laksha Rasa.**

## **Arka**

- a. Yavani arka,
- b. Gulab arka,
- c. Misreya arka

## **Panaka**

- a. Chinchā panaka
- b. Chandan panaka.

## **Sharkara**

- a. Banapsha sharkara
- b. Nimbu sarkara.

## **Churna**

- a. Sitopaladi Churna
- b. Hinguwashtaka Churna.

### **Gutika**

- a. Chitrakadi Gutika
- b. Sanjivani Vati.

### **Guggulu**

- a. Triphala Guggulu
- b. Kaishora Guggulu.

### **Avaleha**

- a. Chyavanaprashavaleha,
- b. Vasavaleha,
- c. Vyaghri Haritaki avaleha
- d. Manibadra avaleha.

### **Rasa kriya**

- a. Darvi Rasakriya
- b. Guduchi Ghana
- c. Kutaja Ghana.

### **Khanda**

- a. Haridra khanda,
- b. Narikela khanda,
- c. Sowbhagya shunti paka

### **Satva**

- a. Amruta satva,

## **Varti**

- a. Phala varti
- b. Chandrodaya varthi

## **Lavana**

- a. Arka lavana
- b. Narikela lavana

## **Masi**

- a. Triphala masi
- b. Mayurpiccha Masi

## **Ksheerapaka**

- a. Arjuna ksheerapaka
- b. Rasona ksheerapaka
- c. Shunthi Ksheerpaka

## **Kshara**

- a. Apamarga kshara
- b. Snuhi kshara
- c. Ksharasutra

## **Manda, Peya, Vilepi, Yavagu, Krishra, Vesavara**

## **Yusha**

- a. Mudga yusha
- b. Saptamushtika yusha
- c. Kulattha yusha



### **Aristha**

- a. Kutajarishta
- b. Takrarishta

### **Asava**

- a. Kumaryasava
- b. Kanakasava

### **Sukta kalpana**

- a. Kanji

### **Udaka**

- a. Tandulodaka

### **Upanaha**

- a. Atasi Upanaha

### **Siktha Taila Nirmaan**

### **Malahara-**

- a. Sarjarasa malahara
- b. Gandaka malahara
- c. Cream
- d. Emulsion
- e. Sneha

## **Kalpna**

### **Sneha Murchhana –**

- a. Ghrita Murchana,
- b. Taila Moorchhana

### **Ghrita kalpana:**

- a. Jatyadi ghrita,
- b. Triphala ghrita,
- c. ksheerashatphala ghrita-

### **Taila kalpana**

- a. Panchaguna taila
- b. Arka taila
- c. Bala taila
- d. Jatyadi taila

### **Taila patana-**

- a. Bhallataka taila patana
- b. Jayapala taila patana

## **Shodhana**

- a. Guggulu
- b. Hingu.

**Visit of minimum three GMP approved Ayurvedic manufacturing units.**

**Distribution of Practical Marks:****Total 200 Marks****Rasashastra 100 Marks**

1.	Record Book	10 Marks
2.	Experiment	30 Marks
3.	Spotting	20 Marks
4.	Viva-voce	40 Marks

**Bhaishajyakalpana 100 Marks**

1.	Record Book	10 Marks
2.	Experiment	30 Marks
3.	Spotting	20 Marks
4.	Viva-voce	40 Marks

**Reference Books**

Sl.No.	Name of the Book	Name of the Author
1.	Adyatan Rasa Shastra	R.K. Goyal
2.	Abhinav Rasa Shastra	Vaidya Somadev Sharma
3.	Asava Arishta Vigyanam	Dr. Pakshdhar Jha
4.	Ayurvediya Rasa Shastra (Sachitra)	Chandrabhusan Jha
5.	Ayurvediya Rasa Shastra	Badrinarayan Pandey
6.	Rasa Bhaishajya Paribhasa	Sureshananda Thapaliyal
7.	Ayurvediya Rasa Shastra	Prof. Siddhi Nandan Mishra
8.	Ayurved Prakash	Vaidya Gujrat Mishra
9.	Drugs and Cosmetic Act - 1940	
10.	Paka Darpana	Dr. Indradev Tripathi
11.	The Paka-darpana of King Nala	Dr. Madhulika critical study
12.	Parada Vigyaniam	Vasudev M. Dwivedi
13.	Pratyaksha Aushadh Nirmanam	Acharya VishwanathDwivdei

14.	Bhaishjyakalpana Vigyanam	Dr. Agnihotri
15.	Rasa Tarangini	Sadanand Sharma
16.	Rasa Darpan	Prof. Bhajan Das Swami
17.	Rasa Bindu	Dr. Sanjay Sharma
20.	Rasa Bhaishajya Kalpana Vigyan Vaidya	Santosh Kumar Khandal
21.	Rasa Mitra	Dr. Tryambak Nath Sharma
22.	Rasa Ratna Samuchchaya (Hindi)	Dattatreya Ananta Kulkarni.
23.	Rasaratna samuchchaya-	Ambikadatta shastri
24.	Rasaratna samuchchaya -	Damodar Joshi
25.	Rasa Shastra Prayogiki Srivastava,	Yadav and Prof. Ramesh Saxena
26.	Rasamritam	Vaidya Yadavji Tirkramji Acharya
25.	Rasayan Sara	Vaidya Shyam Sunderacharya Vaishya
26.	Rasendra Sampradaya	Vaidya Hajari Lal Sukul
27.	Rasendra Sara Sangraha	Vaidya Gopal Krishna
29.	Vaidyak Paribhasha Pradeep (Hindi Translation)	Dr. Indradev Tripathi
30.	Sharangadhara Samhita	Dr. Radhakrishna Parashar
31.	Bhaishajya Kalpana Vigyana	Gananath Vishwanath Dwivedi
32.	Bhaishajya Kalpana Vijnanam	Dr. K Ramachandra Reddy
33.	Rasa Shastra (English)	Prof. Damodar Joshi
34.	Rasa Ratna Samuchchaya (English)	Prof. Damodar Joshi
35.	Rasendra Chintamani (Hindi)	Prof. Siddhinandan Mishra
36.	Ayurvedic formulary of India	
38.	Ayurvedic Pharmacopiea of India , CCRAS	
39.	Bhaishjya Kalpana Vigyan	Siddhi Nandan Mishra
40.	Textbook of Rasashasra	Dr. K Ramachandra Reddy.
41.	Ashadhayoga Vigyanam	Dr. K. Ramachandra reddy
42.	Vaidyaka Paribhasha Pradipa	Dr. K.Ramachndra Reddy & Dr.P. Suresh

43.	Relevant parts of Brihatrayee	
44.	Text book of Bhaishjya Kalpana	Dr Shobha G Hiremath
45.	Text Book of Rasa Shastra	Dr P H C Murthy
46.	Rasa Chandashu	Prof S S Savirkar (CCRAS Publication)
47 .	Bhaishjya Ratnawali	Prof S N Mishra
48	Yoga Ratnakar	

# **ROGA NIDANA**

**(Pathology & Microbiology)**

**ROGA NIDANA**  
**(Pathology & Microbiology)**

**Theory Two Papers – 100 Marks Each**

**Practical/Viva voce – 100 Marks**

**PAPER -1**

**100 Marks**

**Part A**

**50 Marks**

**Dosha Dushyadi Vigyana**

- a) Definition and importance of Roganidana.
- b) Samanya Nidana and Samanya Lakshana of Dosha Vriddhi, Kshaya and Prakopa.
- c) Dosha Dhatu Ashraya Ashrayi Bhava.
- d) Dhatu Kshaya Vriddhi Lakshana.
- e) Mala Kshaya Vriddhi Lakshana.
- f) Hetu, Bheda and Lakshana of Agni Dushti.
- g) Definitions and Samanya Lakshana of Ama.
- h) Sama and nirama Dosha, Dushya Lakshana.
- i) Dosha Paka and Dhatu Paka Lakshana.
- j) Concept, classification, diagnosis and general complications of Avarana.
- k) Doshagati and Rogmarga.
- l) Detailed study of Srotomoola and Srotodushti Samanya and Vishishta Hetu Lakshana of all Srotas. Differences between Sroto Dushti and Kha Vaigunya.

**VyadhiVigyana**

- a) Definition, synonyms and classification of Vyadhi & Vyadhi Ghatak.
- b) Criteria for nomenclature of Diseases in Ayurveda (Vyadhinamakarana).
- c) Bija, Bija Bhaga and Bija Bhaga Avayava Dushti.
- d) Basic knowledge of Hereditary, Congenital, Acquired, Multifactorial, Traumatic and Environmental disorders.
- e) Introduction to ICD Classification of Diseases of WHO and DSM classification.

- f) Samanyaja and NanatmajaVikara. NidanarthakaraVyadhi, Hetu Sankara, Lingasankara, Vyadhisankara, Vyadhi Awastha.
- g) Dhatu, Updhatu, Mala and Indriya Pradoshaj Vikara.
- h) Concept of AshtaMahagada .
- i) Introduction to Ashta Nindita.
- j) Definition and classification of Vyadhikshamatva.
- k) Ojas – types of Ojo Dushti- Visrimsa- Vyapad & Kshaya & It's Diseases.

### **Basic Pathology**

- a) Introduction to pathology and its sub-divisions.
- b) Introduction to Cell Injury and Cellular adaptations.
- c) Definition and brief description of inflammation – Healing/repair.
- d) Definition and brief description of edema – shock – hemorrhage, Thrombosis, embolism, Ischemia and Infarction.
- e) Types of Immunity – different types of immune responses in the body – Basic knowledge of auto immune diseases, Acquired immune deficiency disease and hypersensitivity.
- f) Nomenclature and classification of tumors - difference between benign and malignant tumors.
- g) Introduction to Nutritional disorders – disorders of macro and micro nutrients.
- h) Introduction to infections.
- i) Introduction and classification of microorganisms such as virus- bacteria-fungus.

### **Part B**

**50 Marks**

### **Nidana Panchaka Vigyana**

- a) Difference between Roga and Rogi Pariksha.
- b) Importance of Nidan Panchaka.
- c) Hetu - Definition, Synonyms and Classification.
- d) Purva Rupa – Definition, Synonyms, Samanya and Vishishta Purvarupa.
- e) Rupa - Definition, Synonyms, Samanya and Pratyatma Lakshana. Difference between



Vyadhi and Lakshana.

- f) Upashaya / Anupashaya– Definition, Types and its importance in diagnosis.
- g) Samprapti – Definition, Synonyms and Type and Samprapti Ghataka.
- h) Shat Kriyakaala. Relationship between Nidana Panchaka and Shat Kriyakaala.
- i) Upadrava and Udarka.
- j) ArishtaVigyan – Definition, Types and its importance.
- k) Sadhyasadhyatwa – Types, their parameters and importance.
- l) General diagnostic principles of AnuktaVyadhi (Ch. Vi. 4).

### **Pariksha Vigyana**

- a) Importance and knowledge of Aptopadeshadi & Darshanadi Trividha, Chaturvidha, and Shadvidha Pariksha.
- b) Importance and Knowledge of Ashtasthana Pariksha.
- c) Importance and Knowledge of Karanadi Dashavidha Parikshya Bhava.
- d) Importance and Knowledge of Dashavidha Pariksha.
- e) Basic knowledge of ECG, USG, X Ray,CT Scan,MRI.

### **Paper II**

**100 Marks**

### **PART – A**

**50 Marks**

Systematic study of Nidana Panchaka of following diseases (Including Upadrava, Arishta and Sadhyasadhyata).

### **Diseases of Rasavaha Srotas**

- a) Jwara(Jwarabheda-Ama, Pachyamana and Nirama Jwara,Agantukajwara, Punaravartaka Jwara,Vishama Jwara, Dhatugata Jwara, Charakokta Sannipata Jwara.
- b) General mechanism of Fever, Introduction to the Aetiopathogenesis of Malaria,Typhoid, Dengue fever, Influenza and Chikungunya.
- c) Pandu, Amavata, Hridroga, Shotha.
- d) Introduction to Anaemia & its Classification, Rheumatic fever, Rheumatoid

- e) Arthritis, Hypertension, Angina, Ischaemic Heart Disease, Myocardial Infarction and CCF.

### **Diseases of Raktavaha Srotas**

- a) Kamala - Raktapitta - Vatarakta – Kroshtuksheersha - Shitapitta – Maha Kushtha  
Visarpa – Shwitra and Introduction to Kshudra Kushtha.
- b) Introduction to Hepatomegaly, Splenomegaly, Leukaemia, Thalessemia, Sickle cell  
Anaemia.
- c) Introduction to Urticaria, Psoriasis, Eczema, Pemphigus.

### **Diseases of Mamsavaha Srotas**

- a. Galganda
- b. Introduction to Thyroid disorders

### **Diseases of Medovaha Srotas**

- a) Sthoulya - Karshya – Prameha.
- b) Introduction to Obesity and Diabetes Mellitus.

### **Diseases of Asthi – Majjavaha Srotas**

- a) Vatavyadhi - Akshepaka - Apatanaka - Ardita - Pakshaghata – Gridhrasi – Vishwachi,  
Avabahuka, - Manyasthambha ,Katigraha,Pangutwa
- b) Sandhigataavata, Asthi-Majjagata vata.
- c) Introduction to Osteo- Arthritis, Osteoporosis.
- d) Introduction to Parkinson's disease, Stroke, Lumbago- Sciatica syndrome, Bell's  
Palsy, Cervical- Lumber & Ankylosing Spondylitis.

### **Diseases of Shukravaha Srotas**

- a) Introduction to Klaibya and Vandhyatva.
- b) Introduction to male and female infertility.

**Diseases of Pranavaha Srotas**

Kasa - Shwasa - Hikka – Urahkshata – Shosha – Rajayakshma.

Introduction to the aetiopathogenesis of Pneumonia, Pleural effusion, Bronchitis, Bronchiectasis, Bronchial Asthma.

**Diseases of Annavaha- PureeshavahaSrotas**

- a) Agnimandya - Ajirna - Aruchi- Chhardi - Amlapitta- Shoola – Parinama Shoola AnnadravaShoola- Atisara – Pravahika - Grahani –Gulma- Udara Roga.
- b) Introduction to Anaha, Adhmana, Atopa, Visuchika Alasaka, Vilambika.
- c) Introduction to Peptic Ulcer, Irritable Bowel Syndrome (IBS) Diarrhoea, Dysentery, Constipation, Inflammatory Bowel Diseases.

**Diseases of Udakavaha Srotas**

- a) Introduction to Trishna, Daha.
- b) Introduction to water and electrolyte imbalance disorders.

**Diseases of Mutravaha Srotas**

- a) Mutrakrichha – Mutraghata.
- b) Introduction to Urinary Tract Infection, Nephropathies.

**Diseases of Swedavaha Srotas**

- a) Introduction to Khalitya, Palitya.

**Diseases of Manovaha Srotas**

- a) Apasmara, Unmada, Atatwabhinivesha-Vishada, Anidra, Mada, Murchha, Sanyasa.
- b) Introduction to Epilepsy, Depression, Anxiety neurosis.

### **Upasargajanya Vyadhi (Communicable diseases)**

- a) Romantika – Masurika – Upadamsha – Phiranga.
- b) Introduction to Measels, Chickenpox, Leprosy, Tuberculosis and AIDS.

### **Krimi Vigyana**

- a) Definition, classification of Krimi and features of Krimiroga
- b) Snayuka, Shleepada.
- c) Introduction of Filariasis and classification of common parasites.

### **PRACTICAL**

**(100 Marks)**

#### **Fundamental Principles of Laboratory Tests**

- a) Introduction to laboratory, Sterilization, glass wares, solutions reagents and safety procedures, Disposal of biomedical wastes.

#### **Haematology**

- a) Haemoglobin estimation.
- b) Blood cells counting - WBC, RBC, platelets.
- c) Hematocrit /Packed cell volume (PCV).
- d) Erythrocyte indices - MCV, MCH, MCHC.
- e) Peripheral blood smear, staining technique and differential leucocyte count.
- f) Peripheral blood film examination in Anemia, Leukemia, Malaria, Filaria (Demonstration).
- g) ESR.
- h) Screening test for bleeding disorders- bleeding time (BT), Clotting time (CT), Demonstration of Prothrombin time (PT).
- i) Blood grouping - ABO system, Rh typing (Rhesus system).

### **Urine Examination**

- a) Ayurveda anusara mutrapariksha.
- b) Physical Examination - Volume, Reaction (Ph) & Specific Gravity.
- c) Chemical Examination for - Proteins, Glucose, Phosphate, Ketone, Bile salts, Bile pigment.
- d) Dipstick examination
- e) Demonstration of Microscopic Examination.

### **Stool Examination**

- a) Ayurveda anusara purishapariksha.
- b) Physical examination, Sama-Nirama Pariksha.
- c) Microscopic examination of ova & cyst (Demonstration)
- d) Occult Blood Test.

### **Demonstration of Sputum Examination**

- a) Ayurveda anusara sthivanapariksha.
- b) Physical, Chemical and Microscopic Examination of the sputum.
- c) Sample collection and Demonstration of AFB.

### **Demonstration of Semen examination**

- a) Ayurveda anusara Retaspariksha.
- b) Semen examination.

### **Biochemical Examination – (Demonstration)**

- a) Blood Glucose, Serum Bilirubin, Blood Urea, Lipid Profile, Serum Creatinine, Serum Uric acid etc.

### **Demonstration of different staining techniques in microbiology.**

### **Demonstration of Sero-immunological Investigations: RA and Widal.**

### **Laboratory record –**

- a) Maintenance of laboratory record book.

### **Bed side Practical (Clinical Methods)**

- a) Introduction and demonstration of clinical methods (General and Systemic Examination).
- b) Practical demonstration of examination of Roga based on Pancha Nidana.
- c) Demonstration of instruments used for clinical examination.
- d) Practical records of clinical examination of at least 20 long cases in I.P.D including Atur-bala-pramana pareeksha.
- e) Practical records of clinical examination of at least 20 short Cases based on Ashta vidha pariksha in O.P.D.
- f) Demonstration of ECG, USG and Radio imaging techniques.

### **Distribution of Marks for final Practical Examination**

Daily Record -	10 Marks
Identification of Instruments -	10 Marks
Laboratory Experiments -	20 Marks
Short Case -	10 Marks
Long Case -	20 Marks
Viva - Voce -	30 Marks
<b>Total</b>	<b>100 Marks</b>

### **Reference Books**

<b>Sl.No.</b>	<b>Name of the Book</b>	<b>Name of the Author</b>
1.	Madhava Nidana (Commentary) Part 1 – 2	Madhukosha Pt. Yadunandan Upadhyay

2.	Doshakaranatwa Mimamsa -	Acharya P.V. Sharma
3.	Nadi Darshan -	Vd. Tara Shankar Mishra
4.	Nadi Vigyana Vidyotini Hindi Tika	
5.	Nadi Vigyan-	Shri Satya Dev Vashisht
6.	Nadi Vigyan-	Gangadhar Tika
7.	Rogi Pariksha vidhi Acharya-	Priyavrata Sharma
8.	Ayurvediya Roga Vargikaran-	Vd. Ramanath Dwivedi & Vd. Gurdip Singh.
9.	Ayurvediya Nidan Evum Chikitsa Ke Siddhanta -	Prof. Ram Harsh Singh.
10.	Relevant portions of Charak Samhita, Sushrut Samhita and Vagbhata.	
11.	Text Book of Pathology-	William Boyds.
12.	Text Book of Pathology-	Harsh Mohan.
13.	Text Book of Pathology-	Dey and Dey.
14.	Text Book of Parasitology -	Ramnik Sood.
15.	Clinical Pathology and Bacteriology-	S.P. Gupta.
16.	Clinical methods in Ayurveda-	K. R . S. Murthy.
17.	Parameswarappa's Ayurvediya Vikriti Vigyan and Roga Vikriti Vigyan-	Dr. P.S. Byadgi.
18.	Oxford Handbook of Clinical Examination Oxford Handbooks and Practical Skills.	
19.	Advanced Clinical Evaluation System for Practical Assessment of Clinical Examination Skills.	
20.	Symptoms & Signs in Clinical Medicine - Chamberlains.	
21.	Clinical Methods-	Hutchison's.
22.	Bedside Clinics in Medicine Part- I & II-	Kundu.
23.	Common Medical Symptoms-	Mehta.
24.	Advances in Pathology & Lab Med-	Weimstean, Galem, Anderson, Cortan, Wick, Zumwelt.

25.	Clinical Laboratory medicine Edited by	Kenneth D Mc. Chately.
26.	General Pathology-	Walter & Israel Churchill Living stone.
27.	A Comprehensive Dictionary of Pathology-	Chris Newann.
28.	Practical Pathology-	Dr. K. Uma Chaturvedi.
29.	Clinical examination-	Douglas/Macleod's.
30.	Pathology Practical book for Undergraduates-	Harsh Mohan.
31.	Medical Laboratory Technology -	R. Sood.
32.	Clinical Diagnosis and Management	Todd, Sanford and Davidson Laboratory methods
33.	Clinical Hematology In Medical Practice-.	Degruchy's
34.	Robbins Basic Pathology	Kumar, Abbas, Fausto at al.

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# **CHARAKASAMHITA -PURVARDHA**

**(Sutrasthana, Nidanasthana, Vimanasthana, Sharirasthana and Indriyasthana)**

## CHARAKASAMHITA -PURVARDHA

(Sutrasthana, Nidanasthana, Vimanasthana, Sharirasthana and Indriyasthana)

Theory- One Paper– 100 Marks, Lectures – 200 Hours

Practicals – 50 Marks

### Part A

- 1.Sutrasthana -40 Marks
- 2.Indriyasthana -10 Marks

### Part B

- 1.Nidanasthana -15 Marks
- 2.Vimanasthana -20 Marks
- 3.Sharirasthana -15 Marks

**Charaka Samhita (Poorvardha) Viva and Practical will be conducted for 50 Marks.**

**The distributions of Marks are as follows**

- a) Daily Records/Compilation – 10 Marks
- b) Written test and Shloka recitation – 20 Marks
- c) Viva voce / Oral examination – 20 Marks

### Reference Books

Sl.No.	Name of the Book	Name of the Author
1	Charakasamhita –Ayurveda Dipika commentary by Chakrapani	
2	Charakasamhita (Hindi Commentary)	Vaidya Jayadev Vidyalankar or Vd. Atridev Vidyalankar or Prof. Gorakha Nath Chaturvedi & Kashinath Shastri or Dr. Brahmanand Tripathy or Dr. Ravi Dutta Tripathy
3	Charakasamhita (English Commentary)	Dr. Ram Karan Sharma & Vd. Bhagwan Dash or Acharya Priyavrata Sharma
4	Charakasamhita-Ayurveda Dipika Commentary-Hindi Translation	Dr. B L Gaur, published by Rashtriya Ayurved Vidyapeeth

# **THIRD PROFESSION**

### **Third Profession**

The third professional session shall start every year in the month of July following completion of second professional examination and the third professional examination shall be ordinarily held and completed by the end of the month of May or June every year after completion of one year of third professional session;

The third professional examination shall be held in the following subjects, namely:-

- 1. Agad Tantra, Vyavahar Ayurveda evam Vidhi Vaidyaka**  
*(Toxicology and Medical Jurisprudence)*
- 2. Swasthavritta and Yoga** *(Preventive and Social Medicine and Yoga)*
- 3. Prasuti evam Striroga** *(Obstetrics & Gynaecology)*
- 4. Bala Roga/Koumarabhritya** *(Paediatrics)*
- 5. Charak Samhita-Uttarardh** *(An Ancient Ayurvedic Text, Part-II)*

**NOTE:** The failed student of third professional who have passed all the subjects of first and second professional examinations shall be allowed to appear in final professional examination and maximum four chances shall be given to pass third professional examination within a period of maximum three years.

**AGADATANTRA, VYAVAHAR-AYURVED EVUM VIDHIVAIIDYAK**

(TOXICOLOGY, FORENSIC MEDICINE AND MEDICAL JURISPRUDENCE)

# **AGADATANTRA, VYAVAHAR-AYURVED EVUM VIDHIVAIDYAK**

(TOXICOLOGY, FORENSIC MEDICINE AND MEDICAL JURISPRUDENCE)

**Theory One Paper – 100 Marks**

**Practical/Viva voce -50 Marks**

**Theory -200 hrs**

**Practical - 100 hrs**

## **PART- A**

**50 Marks**

### **Derivation, definition of Visha and Agadatantra**

Scope of Agadatantra. Visha Utpatti, Visha Prabhava, Visha Pranaharana Kriya, Visha Guna, Visha Gati, Visha Vega Visha Sankata, Shanka Visha.

Definition of toxicology, Definition of poison, suicidal and homicidal poisons, classification of poisons, their action and route of administration, absorption, excretion, metabolism, diagnosis and general principles of treatment, duties of a medical practitioner in case of suspected poisoning.

### **Origin and Classification of Visha**

Its sources, Difference between Visha, Madya and Oja guna, Visha Upadrava and Visha Mukta Lakshana.

Tests for detection of Visha, and Modern Toxicological Techniques of detection of poisons Visha Data Lakshana, Visha Peeta Lakshana, Signs and symptoms of Visha afflicted organs and personal effects. (Poisoning with Anjana, Lepa paduka, Abharana etc.

### **Introduction to Environmental Toxicology**

Samuhika Vishaprayoga- effect of chemical and nuclear warfare.

Vishopakrama described by Charak, General principles of Management of poisoning.

Manifestation of poisoning due to poisons of plant origin their fatal Dose, fatal period, management of poisoning, post mortem appearance and its medico legal importance. Visha and Upavisha- Arka, Snuhi, Langali, Karaveera, Gunja, Ahiphena, Dhattura, Bhallataka, Vatsanabha, Kupeelu, Jayapala, Bhanga & Tobacco, Parthenium hysteriphorus, Chitraka, Eranda, Digitalis and Cerebra Odallam.

### **Garavisha, Dooshivisha, Viruddhahara**

Food adulteration and poisoning–classification, diagnosis, management and contemporary significance.

### **Jangama Visha**

Detailed study of Sarpa, Keeta, Loota, Vrishchika, Mooshika, Alarka – Visha; Lakshana, Bheda, Chikitsa and their Sadhyasadyata (contemporary and classical views).

Introduction to poisoning due to Acids, Alkalis, metals, Non-metals, Asphyxiants and others, their Fatal Dose, Fatal period, Manifestation, management, medico legal importance and postmortem appearance of poisoning due to:

- a. Acid and Alkalis– Sulphuric acid, Hydrochloric acid, Nitric acid, Hydrocyanic acid, Oxalic acid, Carbolic acid, Formic acid, alkalis in general.
- b. Asphyxiants – Carbon monoxide, Carbon dioxide, Hydrogen sulphide
- c. Nonmetallic poisons – Phosphorous, Iodine
- d. Metallic poisoning – Arsenic, Mercury, Lead, Copper, Zinc, Tin.
- e. Others - Petroleum – Kerosene Organo phosphorus compounds -Aluminum phosphate, Organo Chlorinated Compounds, Household poisons.

Madya and Madatyaya. Alcohol poisoning (Ethanol and Methanol).

*Introduction to Narcotic drugs and Psychotropic substances Act 1985.*

**Marks****Vyavahara Ayurveda and Vidhivaidyaka**

Definition of Vyavahara Ayurveda (Forensic medicine) and Vidhivaidyaka (Medical jurisprudence), concise history of Vyavahara Ayurveda (Forensic medicine) and Vidhivaidyaka (Medical jurisprudence). Introduction to Indian Penal Code, Indian Evidence Act and Criminal Procedure Code.

**Legal Procedures**

Inquest, Evidence, Witness, Courts and their powers.

- a. Personal identity and its Medico legal aspects, forensic odontology, Introduction to Forensic Serology and DNA profiling.
- b. Death and its Medico Legal Aspects, Medico Legal autopsy and *exhumation*.
- c. Injuries and thermal injuries, their medico Legal aspects, general introduction of weapons.
- d. Dowry deaths (Domestic Violence), their Medico Legal importance and laws in relation to it.
- e. Asphyxial deaths and its Medico Legal importance.
- f. Medico Legal importance of Pregnancy, Delivery; Impotence & Sterility, Abortion, Infanticide, battered baby. Virginity, Artificial Insemination, Legitimacy.
- g. Sexual offences, and their Medico Legal aspects. Sexual perversions.
- h. Introduction to Forensic psychiatry.
- i. Introduction to forensic laboratory.
- j. Ethics as in classical Texts. Types of Vaidya, Pranabhisara and Rogabhisara Vaidya, Qualities of Vaidya, Responsibilities of Vaidya, Chaturvidha Vaidyavrutti, Duties of Vaidya to his patient, Vaidya Sadvrittam, Apujya Vaidya, Code of conduct.
- k. Laws in relation to Medical practitioners: Indian Medicine Central Council Act.



## **Maintenance of Medical record.**

Physician's responsibility in criminal matters, Professional negligence, Civil negligence, Criminal negligence, Medico Legal aspects of Acquired Immune Deficiency Syndrome, Rights of an unborn child, Medical Termination of Pregnancy Act Transplantation of human organs Bill 1994, Pre Natal Diagnostic Testing Act, Malingering of feigned diseases, International Code of Medical Ethics for Doctors. Clinical establishment Act. Consumer Protection Act 1986.

## **PRACTICAL**

### **Practical Training**

- a) Post Mortem examination
- b) Evidence in the court
- c) Demonstrations in the Forensic & Toxicology museum (Toxic & Anti toxic substances, medico legal specimens & Charts)
- d) Clinical postings
- e) Library Hours for compilation

### **Distribution of Practical Marks**

Post Mortem examination and Court posting – Case Record	10 Marks
Practical/Clinical Record Book	10 Marks
Identification (spotting)	10 Marks
Viva – voce	20 Marks
Total	50 Marks

### **Reference Books**

Topics related to Agada Tantra from Charak Samhita, Sushrut Samhita, Ashtanga Hridaya, Ashtanga Samgraha, Kasyapa Samhitha, Yogaratnakara, Bhavaprakasha and Madhava Nidana.

<b>Sl.No.</b>	<b>Name of the Books</b>	<b>Name of the Author</b>
1.	Vidhivaidyaka (Vyavahar Ayurveda Vijnan)	Dr.Charuchandra Pathak
2.	Medical Jurisprudence and Toxicology	Modi
3.	Basavarajeeyam	Edited by Vd.Govardhan
4.	Agada Tantra	Sh. Ramanath Dwivedi
5.	Text book of Agada Tantra	Edited by Dr Huparikar, Dr.Joglekar
6.	Agadatantra ki Pathyapustaka	Edited By Dr Huparikar,
7.	Agad Tantra	Dr.Joglekar
8.	Agad Tantra	Dr. Shekher Namboodri
9.	Vishachikitsa (Ayurveda Toxicology English Translation)	Vaidya Balakrishnan Nair, Kerala
10.	Medical Ethics and Medical Laws in India	Dr. H.S. Mehta
11.	Toxicology Ayurvedic Perspective	VPSV Ayurveda college Kottakkal
12.	Kautilya Arthashastra (English)	Prof. Kangle
13.	Kautilya Arthashastra (Hindi)	Dr. Raghunath Singh
14.	Vyavahar Ayurveda	Dr.Ayodhya Prasad Achal
15.	Vyavahar Ayurveda Vigyanam	Dr.Indramohan Jha (Sachchan)
16.	Textbook of Forensic Medicine and Toxicology	Dr. V.V.Pillay
17.	Forensic Medicine	Dr. B. Umadathan
18.	Relevant Acts	Govt. of India
19.	Relevant topics from Manu Smriti	

# **SWASTHAVRITTA**

**(Preventive and Social Medicine and Yoga)**

# **SWASTHAVRITTA**

**(Preventive and Social Medicine and Yoga)**

**Theory- Two papers - 100 marks each**

**Practical / Viva voce -100 marks**

**Lectures –200 Hrs**

**Practicals and demonstration – 100 Hrs**

## **PAPER-I**

### **PART A**

### **VAIYAKTIKA SWASTHAVRITTA**

**50 marks**

#### **Introduction**

- a) Definition of swastha & swasthya and swasthavritta. Arogya lakshana, swasthavritta prayojanam, WHO definition of health.
- b) Dimensions of health-Physical,Mental,Social.
- c) Concept of wellbeing- objective, subjective, standard of living, quality of life.

#### **Dinacharya**

- a) Definition of Dinacharya
- b) Aims and importance of dinachary
- c) Brahma Muhurta evam Utthana
- d) Usha Jalapana
- e) Sharirachinta
- f) Malatyaga
- g) Mukha prakshalan
- h) Dantadhavana and preparation of Ayurvedic tooth powder and paste
- i) Jihvanirlekhavidhi
- j) Anjana

- k) Pratimarsha Nasya
- l) Gandusha and Kavala
- m) Tambulasevana
- n) Dhoomapana
- o) Abhyanga
- p) Udvardana
- q) Utsadana
- r) Vyayama
- s) Chankramana
- t) Snana
- u) Anulepana
- v) Vastra dharana
- w) Danda dharana
- x) Padatra dharana
- y) Chatra dharana
- z) Ushnisha dharana
- aa) Ratnabharana dharana
- bb) Madhyahna charya
- cc) Cosmetic effect of Dinacharya procedures

### **Rathricharya**

- a) Sandhya charya
- b) Rathri bhojana vidhi
- c) Shayanavidhi according to Bhavamishra
- d) Importance of ritucharya
- e) Ritu presentation as per different acharyas
- f) Adana kala & visarga kala
- g) Sanchaya-Prakopa-Prashamana of Dosha according to ritu
- h) Doshashodhana in Ritu Charya
- i) Relation of Agni bala and Ritu
- j) Pathya and Apathya Ahara and Vihara in different ritus

- I. Ritusandhi
- II. Yamadamsthra
- III. Rituharitaki
- IV. Rituviparyaya

### **Sadvritta**

- a) Description of Sadvritta and Achara Rasayana their role in Prevention and control of diseases.

### **Trayopastambha**

Ahara Nirukti, Swarupa, Pramukhatva, Ahara dravya Vargikaranam, Aharavidhividhana, Dwadashashana pravicharana, Ashtaharvidhivisheshayatanani, Pathyahara, Apathyahara, Samashana, Adhyashana, Vishamashana, Ahara dushparinama & tajjanya vyadhaya, Santarpanajanya evam Apatarpanajanya vyadhi, Viruddhahara and its effects, Shadrasabhojanasya mahatwam.

Dietetic standards, Proximate principles of Food, Nutritional requirements, Sources and deficiency diseases of Protein, Carbohydrate, Fat, Vitamins and Minerals. Concept of balanced diet in Ayurveda, Nitya sevaneeya dravya, Balanced diet for different sections of people in the society, Social aspects of nutrition.

Aharavarga - Dhanya varga(Cereals and millets), Shaka and Harita varga (Leafy and Non leafy vegetables), Kanda varga (roots and tubers), Phala varga (Fruits), Taila varga(Fats and Oils), Ikshu varga & Madhya varga(Alcoholic Beverages), Dugdha varga (Milk and Milk products), Masala and vyanjana dravyas (Spices & Condiments), Kritanna varga(Prepared Food), Mamsa varga (Meat types).

### **Food hygiene**

- a) Milk hygiene-Milk composition, Source of infection (for Milk), Milk borne diseases, Clean and Safe milk, Pasteurization of milk.
- b) Meat hygiene-Meat inspection, Slaughter house, Freshness of fish and egg. Fruits

and Vegetables hygiene

- c) Sanitation of eating places, Preservation of food, Food handlers, Food borne diseases, Food fortification, and Food adulteration, Food toxicants, Properties of Vegetarian and Non- vegetarian diet, Effects of spices and condiments
- d) Consumption of Alcohol and its effects on personal and social health. Effects of pathya-apathya in life style disorders-Diabetes, Hypertension, Obesity and Coronary heart Disease.

### **Nidra**

Nirukti and Utpatti, Types , Nidra – Swasthya sambandha, Properties of Yukta Nidra, Effects of Ratri Jagarana, Diwaswapna, Anidra, Atinidra, Ahara and Vihara causing disturbed sleep , Ahara and Vihara Causing sound sleep. Duration of sleep according to age, Sleep in healthy and diseased persons.

### **Brahmacharya–**

Brahmacharya and Abrahmacharya, Importance of Bharmacharya and Abrahmacharya, Vyavaya sambandhi niyama, Effects of Ativyavaya. Methods of Virya Raksha, Surataspriha(Libido) through Vajikarana, Viryanasa phala.

### **Roganutpadaniya-**

Concept of Vega- Adharaniya Vega and Dharaneeya Vega, Diseases due to vegadharana and their chikitsa, sharir shodhan.

### **Rasayana for Swastha-**

- a) Nirukti, paribhasha(definition ), classification and examples

### **Ashta nindita purusha Menstrual hygiene**

**YOGA****Introduction**

Yoga shabda utpatti, definitions, Different schools of Yoga – Rajayoga, Hathayoga, Mantrayoga, Layayoga, Jnanayoga, Karmayoga, Bhaktiyoga.

**Yoga prayojana**

Ayurveda yoga sambandha, swasthya rakshane yogasya mahatvam Yogabhyasa pratibhandhaka & siddhikara bhavas as per Hathayoga. Mitahara and Pathyapathyani during Yogabhyasa.

**Panchakosha Theory****Astanga yoga**

Yama, Niyama,

**Asana and its importance****Standing Postures**

a) Ardhakatichakrasana, Padahastanasana, Ardhakachakrasana, Trikonasana.

**Sitting postures,**

a) Swasthika, Gomukhasana, Padmasana, Vajrasana, Bhadrasana, Shashankasana, Ushtrasana, Pashchimottanasana, Suptavajrasana, ardhmatsyendrasana, Siddhasana.

**Supine Postures**

a) Pavanamuktasana, Sarvangasana, Matsyasana, Halasana, Chakrasana, Shavasana, Setubandhasana.



## **Prone postures**

- a) Bhujangasana, Shalabhasana, Dhanurasana, Makarasana. Suryanamaskara – procedure and benefits.

## **Pranayama**

- a) Benefits of pranayama, time of practice, avara-pravara-madhyama lakshana, yukta-ayukta lakshana
- b) Nadishudhi Pranayama .
- c) Kumbhakabheda – suryabhedana, ujjayi, sheetali, Sitkari, Bhastrika, Bhramari Murcha, Plavini.
- d) Nadishudhilakshana

## **Shatkarma**

- a) Dhauti, Basti, Neti, Trataka, Nauli, Kapalabhati

## **Bandhas and Mudras**

- a) Shad chakras, Ida-pingala-sushumna nadis.

## **Pratyahara, Dharana, Dhyana, Samadhi**

## **Description of Yoga in Ayurveda**

- a) Moksha and Muktatma lakshana and upaya, Naishthiki chikitsa, Satyabuddhi, Tatvasmriti, Ashta Aishwarya, Ashta siddhis.

## **NISARGOPACHARA (Prakritika chikitsa)**

Definition, history, aims and objectives Theories as per Western school of Naturopathy  
Indian school – Panchabhutopasana

Relation of Ayurveda and Naturopathy Importance of Naturopathy in present era.

**Jalachikitsa (hydrotherapy)**

- a) Hot water treatment, Cold water treatment, foot and arm bath, Spinal bath, hip bath, abdominal wet pack, Steam bath, enema and whirl pool bath.

**Mrittika chikitsa (Mud therapy)**

- a) Types of soil, doctrine of mud selection, mud bath.

**Suryakirana sevana (sun bath - heliotherapy) Mardana (Massage) –**

- a) Different methods and effects.

**Diet types**

- a) Soothing, Eliminative, Constructive, Positive and negative diet, Acidic and alkaline diet

**Upavasa chikitsa (Fasting therapy) –**

- a) Importance, types, therapeutic effects of fasting.

**Visrama chikitsa upayoga**

**PAPER II**

**SAMAJIKA SWASTHAVRITTA**

**100 Marks**

**Part A**

**50 marks**

**Janapadodhwamsa**

- a) Causes, Manifestations and control measures, importance of Panchakarma and Rasayana.

**Vayu (Air)**

- a) Vayu guna according to sushruta samhita, Properties of Vayu as per different directions, Vayu shudhi prakara – Ayurvedic aspect.

- b) Composition of air.
- c) Air of occupied room- Thermal discomfort and comfort zone, indices of thermal comfort. Air pollution – health and social aspects, Prevention and control of air pollution ,Global warming.
- d) Ventilation and its types.
- e) Mountain air & High altitude – Health problems

**Jala (Ayurvedic and modern aspects)**

- a) Importance of water , safe and wholesome water, water requirements, properties, types and sources of water,water pollution and health hazards, Methods of water purification. Hardness of Water.
- b) Examination,Tests and analysis of water.
- c) Rain water harvesting and water recycling

**Bhumi and nivasa sthana(Land and housing)**

- a) Types of soil,soil & health, Land pollution, Bhumi shodhana, Nivasa yogya bhoomi, Social goals of housing, Housing standards, Mahanasa (Kitchen) standards, Rural housing, Housing and health, Overcrowding.

**Prakasha(lightning)**

- a) Requirement of good lighting,natural lighting, artificial lighting, biological effects of lighting.

**Dhwani pradooshana (Noise pollution)**

- a) Noise, Sources, effects,& control

**Vikirana (Radiation)-**

- a) Sources, effects and control

### **Apadravya Nirmulana (Disposal of solid waste)**

- a) Different types of solid waste
- b) Storage and collection of refuse
- c) Methods of disposal of solid waste (Rural & urban)
- d) Bio-medical waste management

### **Malanishkasana Vyavastha (Excreta Disposal)**

- a) Methods for Unsewered area and Sewered area Latrines for camps, fairs and festivals

### **Disposal of dead body –**

- a) Burial, Burning, Electric cremation.

### **Meteorology (Ritu evam Vatavarana jnanam)**

- a) Definition of weather and climate, factors influencing weather and climate.

### **Disaster management**

- a) Definition, natural and man-made disasters, epidemiologic surveillance and disease control.

### **Occupational Health**

- a) Occupational Hazards, Occupational Diseases, Prevention of Occupational Diseases, Health & precautionary measures, ESI Act, Indian factories Act.
- b) Offensive Trades- Effects on health and precautionary measures .

### **School health services**

- a) Health problems of school children, aspects of school health service, duties of school medical officers, Maintenance of healthy environment

## **Epidemiology**

Concept of Epidemiology, Dynamics of disease transmission, concept of diseases, concept of causation, Epidemiological triad, natural history of disease, concept of control, concept of prevention, Risks factor, modes of intervention, incidence and prevalence. Susceptible host, host defenses, Immunizing Agents, Disease prevention and control, investigation of epidemic.

### **Disinfection – definition, types.**

### **Ayurvedic concept of Vyadhikshamatva and sankramaka rogas.**

### **Epidemiology of communicable Diseases**

Chicken Pox, Measles, Diphtheria, Pertussis, Mumps, Tuberculosis, SARS, Influenza, Pneumonia, Cholera, Polio, Viral Hepatitis , Typhoid, Leptospirosis, Dengue Fever, Chikungunia, Malaria, Filariasis , Leprosy, Rabies , Tetanus, Emerging and re-emerging diseases

### **Kuprasangaja vyadhi (STDs)**

- a) AIDS, Syphilis, Gonorrhoea, Chancroid

### **Non-communicable disease epidemiology**

- a) Diabetes, Obesity, Hypertension, Coronary Heart Diseases, Rheumatic Heart Disease, Cancer

### **Chikitsalaya Bhavana (Hospital Building)**

## **Part B**

**50marks**

### **Prathamika swasthya samrakshana (Primary Health Care)**

- a) Definition, principle, elements, levels of health care.
- b) Structure at village, sub centre, PHC, CHC, Rural hospital levels.

- c) Health insurance, Private agencies, Voluntary health agencies, NGOs and AYUSH sector. Role of Ayurveda in Primary Health Care.

### **Parivara kalyana Yojana (Family welfare Programmes)**

- a) Demography, demographic cycle, life expectancy.
- b) Family planning, methods of family planning.

### **Matru sishu kalyana Yojana – MCH programme**

- a) Ante natal, intra natal, post natal, neo natal care. Child health problems and indicators of MCH care.

### **Preventive geriatrics-**

- a) Problems of elderly, prevention and control measures.

### **World Health Organisation**

- a) Objectives structure and functions.

### **International health agencies**

- a) United Nations agencies, Health work of bilateral agencies.

### **Alma Ata declaration National Health Policy**

### **Health statistics**

- a) Definition, Sources, uses Data collection, Classification, Presentation. Vital statistics- Morbidity rates, Mortality rates, Fertility rates.
- b) Health survey

### **Swasthya prashasana (Health Administration)**

- a) Health administration at Central including AYUSH, state, district, village levels.

## **National health programmes**

Tuberculosis(RNTCP), Leprosy(NLEP), AIDS (NACP), Blindness (NPCB), Polio(PPI),Diabetes (NDCP), Cancer (NCCP) , Guinea worm, Vector born disease control programme, NRHM, all the upcoming national health programmes, RCH programme, Universal Immunization Programme.

## **National Nutritional Programmes**

- a) IDD, Vitamin A prophylaxis, Mid day meal, anemia control programmes.

## **PRACTICALS**

### **Demonstration of Dinacharya procedures-**

- a) Anjana, nasya, kavala, gandoosha dhoomapana, abhyanga, udvartana.
- b) Parichaya of aharadravya, immunization agents, disinfectants and family planning devices
- c) Practical demonstrations of Asanas mentioned in the syllabus
- d) Pranayama (Suryabhedana, Ujjayi, Shitali, Sitkari, Bhastrika, Bhramari and Nadishuddhi) and Shad karmas(Jala dhauti, Jalaneti, Sutraneti, Trataka, Kapalabhati).
- e) Preparing and delivering of a health educational talk on health related issues. A short compilation on any topic on environmental health.

### **Educational Visits**

- a) Observe the functioning of the Milk Dairy,Water purification unit, Sewage treatment unit,MCH/Family welfare centre,Leprosy hospital and industrial unit.
- b) Visit to Primary Health Centre for knowledge of actual implementation of National health programmes including knowledge of rural health.
- c) Visit of rural Ayurvedic dispensary.
- d) Visit to naturopathy centre to observe naturopathic treatment modalities.

### Health survey-

- a) Minimum 5 families of rural and urban areas.
- b) There should be 3 case sheets for Yoga Naturopathy & pathya apathya together and 3 case sheets for communicable diseases.
- c) Proformas for Case sheets/practical records/survey/Dinacharya projects etc should be prepared by the respective universities.

### Practical and Viva Voce examination

Marks distribution		100 Marks
1.	Vaiyaktika Swasthavritta	20 Marks
2.	Samajik swasthavritta	20 Marks
3.	Demonstration of Yoga	10 Marks
4.	Naturopathy	10 Marks
5.	Journal and compilation work	10 Marks
6.	Viva voce	30 Marks

### Reference Books:

Sl.No.	Name of the Book	Name of the Author
1.	Relevant portions of Charaka, Sushruta, Vagbhata, Sarngadhara, Bhavaprakasha, Yogaratnakara, Madhavanidana, Bheelasamhita.	
2.	Swasthavritta Samucchaya	Pandit Rajeshwar dutt Shastri
3.	Swasthya Vigyan	Dr. Bhaskar Govind Ghanekar
4.	Swasthya Vigyan	Dr. Mukund swarup Varma
5.	Swasthavritta	Vaidya Sakad
6.	Swasthavritta	Dr. Ranade and Dr. Firke
7.	Ayurveda Hitopadesh	Vaidya Ranjit Rai Desai
8.	Yoga and Ayurved	Acharya Rajkumar Jain
9.	Swasthavritta vigyan	Dr. Ramharsha Singh



10.	Swasthavrittam -	Dr.Brahmanand Tripathi
11.	Swasthavrittam	Dr. Shivkumar Gaud
12.	Ayurvediya Swasthavritta	Vaidya Jalukar Shastri
13.	Patanjala yogasutra	Patanjali Maharshi
14.	Hathayogapradipika	Swatmaram Yogendra
15.	Gheranda samhita	Gherand Muni
16.	Yoga Paddhati	Bharatiya Prakritik Chikitsa Parishad
17.	Yogik Chikitsa	Shri. Kedar Nath Gupta
18.	Sachitra Yogasan darshika	Dr. Indramohan Jha
19.	Yoga deepika	Shri. B.K.S. Iyengar
20.	Light on Yoga	Shri. B.K.S. Iyengar
21.	Light on Pranayama	Shri. B.K.S. Iyengar
22.	Yoga and yoga chikitsa	Dr. Ramharsha Singh
23.	Foundations of Contemporary Yoga	Dr. Ramharsha Singh
24.	Yoga Sidhant evam Sadhana	Harikrishna Shastri datar
25.	Prakritik chikitsa Vidhi	Sharan Prasad
26.	Prakritik chikitsa vigyan	Verma
27.	Preventive and Social Medicine	J. Park
28.	Preventive and Social Medicine	Baride and kulkarni
29.	Janasankhya Shiksha Sidhanta Evam upadesya	Dr. Nirmal Sahani
30.	Health Administration in India	S.C.Seel
31.	Health and family welfare	T.L.Devaraj
32.	Positive Health	L.P. Gupta
33.	Biogenic Secrets of food in Ayurveda	L.P.Gupta
34.	Smriti granthon mein nihit Swasthaprakara samagri	Dr. Smt. Nigam Sharma
35.	Dr. Reddy's comprehensive guide to Swasthavritta	Dr.P.sudhakar Reddy

36.	Nutritive value of Indian foods	ICMR
37.	Yoga and Nisargopachar	Vd. Prama Joshi
38.	Prachin Vangmay mein prakritic chikitsa - swami Anant Bharati, CCRYN	
39.	Swasthavritta	Vd Yashwant Patil and Vd. Vhawal
40.	Food and nutrition	Swaminathan
41.	Organology and sensology in yoga	Prashant S Iyengar
42.	Yoga-A game for Women	Geeta S Iyengar
43.	Yoga-A game for Women(hindi translation)- Madhu Pandey	

**PRASUTI TANTRA & STRIROGA**  
**(Gynaecology and Obstetrics)**

## **PRASUTI TANTRA & STRIROGA**

**(Gynaecology and Obstetrics)**

**Marks 200 (100marks each paper)**

**Practical-100 marks**

**Theory -200 Hrs**

**Practical-100 Hrs**

**PAPER-1 PRASUTI TANTRA 100 marks**

**PART-A 50 marks**

### **INTRODUCTION TO SUBJECT**

#### **STRI SHARIRAVIJNAN**

- a) Etymological origin of the word Stri. Artava vaha and Stanyavaha strotamsi. Tryavarta yoni Stri Vishishta,Peshi Marmani.
- b) Anatomy of female reproductive system.(External and internal genital organs) Soft & Bony Pelvis and its obstetrical importance.
- c) DESIRABLE (non detail)
- d) Vayobhedena Stri sangnya

#### **RAJO VIGYANA**

- a) Description of Raja, Artava and Prathama Rajo Darshana, Rajasvala Charya. Ritumati Lakshana, Ritumaticharya, Ritukala
- b) Menarche, Menstrual cycle and their regulation by endocrine glands,
- c) Ovulation –Importance in conception
- d) DESIRABLE (non detail)
- e) Concept of Stri Sukra

## **GARBHA VIGYANA**

Garbhasya paribhasha, Garbhadhanavidhi, Garbhavakranti, Garbha Sambhava samagri, Garbhakara bhava, Panchabhautikatwa of Garbha, Masanumasika Vridhi of Garbha, Garbha Poshana, Garbhasayasthe Garbhasthiti Foetal attitude, lie, position, presentation Apra, GarbhaNabhinadi, Jarayu, Ulba Formation, Development, Function of Placenta, Umbilical cord, Amniotic fluid Foetal membranes -Abnormalities of Placenta

- a) DESIRABLE (non detail)
- b) Garbhalingotpatti, Garbhasya Avayavotpatti, Garbha Varnotpatti, Garbha Vikriti

## **GARBHINI VIGYANA**

- a) Lakshana of Sadhyograhita Garbha, Lakshana of Vyakta Garbha, Pumsavana vidhi  
Diagnosis of Pregnancy
- b) Garbhini vyavastha: Garbhini Paricharya, Garbha Upaghatakara Bhava, Dauhrida  
Ante Natal care-Examination, Investigation and Management
- c) Garbha Vyapada: Nidana, Samprapthy and Chikitsa Garbhasrava and Garbhapata-  
Garbha shosha-Upavishtaka, Nagodara, Upashushka, Leena garbha,
- d) Antarmrita garbha, Raktagulma, Bahugarbhatha
- e) Abortions, Rh-incompatability-
- f) Causes, clinical features, complications and management.
- g) Gestational trophoblastic neoplasias, Ectopic pregnancy, IUGR, Intrauterine foetal  
death, Multiple pregnancy

## **GARBHINI VYAPAD**

- a) Hrillasa, Chardi, Aruchi,Atisara, Vibandha, Arsa, Udavarta, Sotha, Parikarthika,  
Vaivarnya, Kandu, Kikkisa, Pandu, and Kamala, makkala
- b) Common ailments of Pregnancy-High Risk Pregnancy, Emesis gravid arum,  
Gestational Anemia, Gestational Hypertension, Gestational Diabetes, Toxemias of  
Pregnancy, Jaundice, AIDS,
- c) Ante Partum Hemorrhage causes, clinical features complications and Management

## **PART B**

**100 marks**

### **PRASAVA VIGYANA**

- a) Prasava Paribhasha, Prasavahetu, Prasavkaala, Sutikagaranirmana, Sangrahaniya Dravyani, Sutikagara pravesavidhi.
- b) Prasavavastha; Prajayani/ Upasthita Prasava/ Asannaprasava lakshana, Aavi. Prasavaparicharya, Jatamatraparicharya
- c) Normal Labour:-Definition of Labour, Physiology & Mechanism of Labour, Monitoring of Labour and management, Pictogram, Episiotomy, care and resuscitation of newborn.

### **RASAVA VYAPAD**

- a) Garbhasanga, Yonisamvarana, Aparasanga, Mudagarbha-defenition, Nidana, Types & Management
- b) Induction and augmentation of labour, Cervical dystocia, Cephalopelvic disproportion, Prolonged labour, Preterm labour, Post term labour, foetal distress, Assisted Labour, Caesarian
- c) Retention of Placenta, PPH - causes, clinical features and management, Genital tract Injuries during labour

### **DESIRABLE (non detail)**

- a) Uterine Inversion, Amniotic Fluid Embolism, Garbhasthithi parivarthan (Version), Forceps Delivery, Ventouse Delivery.

### **SUTIKA VIGYANA**

- a) Sutika Paribhasha, Sutika Kaal, Sutika paricharya. Changes during sootika avastha (Sareerika & Manasika). Normal and abnormal Puerperium and its Management
- b) Sutika Roga – Number of Sutika Roga, Sutika Jwara, Shotha and Makkala.
- c) Stanyavijnan- Sthanyadushti, Sthanyakshaya, Sthanyavidhi -their causes, clinical features and treatment

- d) Emergency care in obstetrics

**DESIRABLE (non detail)**

- a) Stana stanya –Pareeksha,Stanya sampat.

**PAPER-II**

**STRI ROGA**

**100 Marks**

**PART-A**

**50 Marks**

**ARTAVA VYAPAD**

- a) Artava-kshaya vridhi, Ashtartavadushti lakshana chikitsa Asrigdara lakshana samprapti Chikitsa.
- b) Menstrual disorders-Amenorrhoea, hypomenorrhoea, Oligomenorrhoea, Dysmenorrhoea, Abnormal uterine Bleeding

**YONI VYAPAD**

- a) Sankhya, Nidana, Lakshana, Upadrava evam Chikitsa
- b) Endometriosis, Fibroid uterus, Genital Prolapses, Retroverted Uterus, Pelvic infections, Cervical erosion, Pelvic Inflammatory Diseases

**VANDHYATWA**

- a) Prakar, Nidana, Chikitsa of Infertility – Causes, Types, Investigations and Management.
- b) Yoni Kanda, Yoni Arsa, Granthi, Arbud,
- c) Pelvic Infections including Sexually Transmitted Infections, HIV,AIDS, Preventive measures.
- d) Menopause-changes during menopause ,menopause syndrome, management.

**Desirable (non detail)**

- a) Congenital malformations of female genital tract.

- b) Sukra vijnan –kshaya ,vridhi,dushti hetu lakshana and chikitsa
- c) Benign and Malignant tumours of Genital Tract

**PART-B**

**50 Marks**

**STANA ROGA**

- a) Stanakeela- nidana lakshana chikitsa, Stanagranthi, Stanavidradhi, Stanashoph Mastitis, Breast abscess, Galactocele -Etiopathology, clinicalfeatures, diagnosis, prognosis and complications
- b) Sthanik Chikitsa - Snehana, Swedana, Uttarabasti, Pichu, Varti, Lepana, Dhupana, Dhavana, Dahana, Ksharakarma -. Practical knowledge of all these procedures along with indications, complications and management.

**Shastra Karma**

- a) Surgical procedures their Indications, Contraindications of cauterization of cervix, cervical dilatation and curettage, female surgical sterilization
- b) Knowledge of indication and procedure of PAP smear. Endometrial biopsy and interpretation of the reports
- c) Stri roga Sambandhita Pramukha Aushadhyai, Prasuti & Stri Roga Chikitsa Upayogi Yantra Shastra Parichaya and Vyadhivinishchaya Upaya (Investigative and Diagnostic Aids)
- d) Garbhanirodhaka Upaya.
- e) Parivar Niyojana, Reproductive and Child Health Care, AIDS/HIV control Programme, MCH, PNMT Act, MTP Act, and importance of current National Programme
- f) Knowledge of important Commonly used Ayurvedic and Allopathic drugs used in Prasutitantra and Streeroga. Pharmacotherapeutics of allopathic drugs in obstetrics and Gynaecology
- g) Record keeping,ethical and medicolegal issues in Streeroga and prasutitantra

**DESIRABLE (non detail)**



- a) Laproscopy, hysteroscopy, hysterosalpingography, USG, X-RAY, Colposcopy, Cervical Biopsy. Granthi evum Granthi nirharan samanyajnan(Myomectomy, hysterectomy)

### **CLINICAL TRAINING-OBSTETRIC SKILLS**

To perform independently

- b) History taking and examination of antenatal and gynaecological cases
- c) Diagnosis of Pregnancy, assessing of gestational period, to diagnose onset of labour
- d) To monitor labour progress, able to plot Partogram
- e) Observation of 10 labour
- f) To diagnose abnormalities of labour and decide about the referral of the patient
- g) Able to provide first aid for obstetric emergencies
- h) Recognition of post partum complications
- i) Counselling and promoting of breast feeding
- j) Record 5 antenatal cases, 5 intrapartum, 5 post partum cases

To observe/assist- D&C, D&E, Caesarean section, Repair operations, Resuscitation of new born.

### **GYNAECOLOGICAL SKILLS**

To perform independently

- a) History taking and examination of gynaecological cases
- b) Recording 10 gynaecological cases, 5 gynaecological procedures
- c) Taking vaginal smear, high vaginal swab
- d) Practical knowledge of sthanika chikitsa
- e) Observation and practical knowledge of minor gynaecological procedures
- f) Observation of Surgical procedures
- g) Identification, uses., Demonstration of surgical instruments
- h) Observation of Method of sterilization, MTP, Surgical procedures Hysterectomy, Oophorectomy

## DISTRIBUTION OF PRACTICAL MARKS

1. Case taking-2cases –one Gynec,one obstetric-	30 marks
2. Instruments, Drugs, & Models-	20 marks
3. General Viva-	40 marks
4. Record -2-(one Prasuti, one streerog)-	10 marks
<b>Total</b>	<b>100 marks</b>

## REFERENCE BOOKS:

Sl.No.	Name of the Book	Name of the Author
1	Related matter from all the Samhitas with commentaries	
2	Prasuti tantra evum stree roga	Prof Tewari P V
3	Concepts of gynecology	Dr Nirmala G Joshi.
4	Prasuti Tantra	Prof. M. Dwivedi
5	Stree roga vigyan	Dr VNK Usha
6	Navya prasuti Vigyan	Dr Pooja Bharadwaja
7	Text book of gynaecology-	Berek and Novak.
8	Text book of obstetrics-	Williums
9	Text book of obstetrics-	D C Dutta
10	Text book of gynaecology -	D C Dutta
11	Gabbe's normal and problem pregnancies.	
12	Human embryology	Saddler
13	Jeffcoat's principles of gynaecology	
14	Te linde's gynaecological surgery.	

# **BALA ROGA/KAUMARABHRITYA**

**(Ayurvedic Pediatrics)**

## **Kaumarbhritya (Ayurvedic Pediatrics)**

**Theory One Paper – 100 Marks**

**Practical Viva Voce - 50 Marks**

**PAPER – 1**

**100 Marks**

**PART – A**

**50 Marks**

### **Kaumarbhritya Parichaya Evum Balaka Paricharya (Introduction to Ayurvedic Pediatrics and Child Care)**

General introduction and scope of Kaumarbhritya (Ayurvedic Pediatrics), Definitions and terminologies used in Kaumarbhritya.

Scientific contribution of Kashyapa Samhita in Kaumarbhritya.

Vayobheda (Classification of age): Garbha, Bala, Kumara; Kshirada, Kshirannada & Annada etc. and modern classification of childhood period.

Prana Pratyagamanam (Neonatal Resuscitation): Methodology; complications and their management (Ayurvedic and modern view). Assessment of gestational age.

Navajata Shishu Paricharya (Neonatal Care): Care of the Jatmatra (Newly born child) and the Sadyojata, Care of the Samaya-purvajata Shishu (Preterm), Purnakalika Shishu (Full term), and Samaya-Paschatjata Shishu (Post term neonate), Nabhinala Chhedana (Cutting of umbilical cord), Complications of improper cutting of umbilical cord and its treatment, Rakshoghna Karma (Protective measures- Ayurvedic and modern view).

Navajata Shishu Parikshana (Examination of newborn): Ayu-Parikshana, Modern approach to Neonatal Examination

Navajat Shishu Poshana (infant feeding): Specific feeding schedule as per Ayurvedic texts and modern concept; Stanya-Sampat (Properties of normal breast milk) Stanyotpatti (Physiology of lactation), Stanya Sangathana (Composition of breast milk), Stanya

Parikshana (Examination of breast milk), Stanya-Piyusha (Colostrum); Stanya-Pana-Vidhi (Techniques of breast feeding), Stanyakshaya-Stanyanasha (Inadequate production and absence of breast milk), Dhatri (wet nurse)- Stanyabhava dugdh Vyavastha (alternative feeding in the absence of breast milk), Various other milk feeding methods.

Stanyadosha (Vitiation of Breast milk), Stanya Shodhana (Purification of breast milk), Stanya Janana and Vardhanopakrama (Methods to enhance breast milk formation).

Garbha Vridhi Vikasa Krama: Samanya Parichaya (brief monthwise development of fetus), Milestones of development during infancy and childhood including concepts of various Samskaras.

Poshana (Nutrition): Normal requirements of nutrients and common food sources.

Dantotpatti evum Danta Raksha Vidhi (Dentition and dental care): Danta-sampat (Characteristics of healthy teeth), Danta Nisheka evum Dantodbheda (Eruption of teeth), Dantodbhedjanya Vikara (Dentition disorders).

Vyadhikshamatva: General concepts of Bala (Immunity) and methods of Bala Vriddhi.

Prashan & Lehana: Indications, contra-indications, different drugs used in lehana

Knowledge of National Programs related to Child Health Care: Reproductive and Child Health (RCH) Program, Community Child Health Programs, Nutritional Programs, National Immunization Program and other programs incorporated by Govt. of India from time to time

**PART - B**

**50 Marks**

### **Samanya Chikitsa Siddhanta and Balaroga**

**(General Principles of Treatment and Management of Pediatric Disorders)**

#### **Bala Pariksha**

a) Vidhi Evam Shishu Vedana Parigyan (Examination of sick child and Diagnostic

methods-Ayurvedic and modern). Samanya Chikitsa Siddhanta (General principles of treatment in children).

- b) General Aushadhl Matra Nirdharana - for Ayurvedic and modern drugs preparations (drug doses according to age, weight and drug contents)
- c) Specific therapeutic panchakarma procedures in children with special emphases on snehan, swedan and basti.

**Prasava Kaleena Abhighata (Birth injuries):**

- a) Shwasavrodha (Asphyxia neonatorum), Ulvaka, Upashirshaka (Caput Succidanum and Cephalohaematoma), Facial Paralysis, Erb's Paralysis, Bhagna (fractures).

**Brief description of Sahajavyadhi (Congenital disorders):**

- a) Sahaja Hridaya Vikara

**Congenital Cardiac Disorders**

- a) Jalashirshaka (Hydrocephalus), Khandaoushtha (cleft lip), Khanda-Talu (cleft palate) Sanniruddha Guda (Anal stricture / imperforated anus), Pada Vikriti (Talipes equanovarus and valgus), Spina bifida, Meningocele, Meningomyelocele.

**Brief knowledge of genetic disorders**

- a) Down syndrome, Turner Syndrome, Muscular dystrophy, Sickle-Cell Anemia, Thalassaemia, Sahaja Madhumeha (Juvenile diabetes).

**Prasavottara Vyadhi (Neonatal disorders):**

- a) Navajata Kamala (Neonatal Jaundice), Navajata Netrabhishyanda (Neonatal conjunctivitis), Nabhiroga (Umbilical disorders), Navajatshishu-raktavishmayata (Neonatal Septicemia)

**Dushta Stanyapanajanya Vyadhi (Disorders due to Vitiated Milk):**

- a) Lactose intolerance, Kshiralasaka, Kukunaka, Ahiputana (Napkin Rashes)

**Kuposhanajanya Vyadhi (Nutritional disorders):**

- a) Karshya, Phakka, Balashosha and Parigarbhika (Protein Energy Malnutrition), Vitamin and Micro-nutrient deficiency disorders, Hyper-vitaminosis, failure to thrive.

**Aupasargika Vyadhi (Infectious Diseases):**

- a) Karnamula Shotha (Mumps), Romantika (Measles), Rubella, Masurika (Chicken Pox), Rohini (Diphtheria), Kukkura -Kasa (Whooping Cough), Dhanurvata (Tetanus), Krimiroga (Worm Infestations), Antrika Jwara (Typhoid), Mastisakavarnashotha (Meningitis), AIDS, Dengue, Malaria, Rajayakshma (Tuberculosis), Jivanujanya Yakrit Shotha (Hepatitis)

**Srotas Vikara:**

**Pranavaha Srotas:**

- a) Pratishyaya (common cold), Kasa (Cough), Shwasa (Respiratory distress syndrome), Tamaka Shwasa (Bronchial Asthma), Utpuliika, Swasanaka Jwara (Pneumonia/Pneumonitis, Bronchiolitis), Gala shotha (Pharyngitis, Laryngitis), Talukantaka (Tonsillitis)

**Annavaaha Srotas:**

- a) Ajirna (Indigestion), Atisara (Diarrhoea), Chhardi (Vomiting), Vibandha (Constipation), Mukhapaka (Stomatitis), Gudapaka (Proctitis), Parikartika (Anal fissure), Udarshula (Infantile Colic), Pravahika (Dysentry), Gudabhransa (Rectal Prolapse). Ama and its disorders like Ama vata jwara (Rheumatic fever).

**Rasavaaha Srotas:**

- a) Jwara (Fever), Pandu (Anemia), Mridbhakshanajanya Pandu (Anemia associated with clay eating/Pica).

**Raktavaha Srotas:**

- a) Kamala (Jaundice), Raktapitta (Haemorrhagic disorders), Yakritodara (Hepatomegaly).and Pieehodara (Spleenomegaly)

**Mamsa Medovaha Srotas:**

- a) Apachi (Lymphadenitis), Galaganda (Goitre), Gandamala (Cervical Lymphadenopathy).

**Mutravaha Srotas:**

- a) Shopha in Vrikka (Glomerulonephritis and Nephrotic syndrome)

**Any Bala Vikara (Miscellaneous Pediatric Disorders)**

- a) Apasmara (Epilepsy), Akshepa (Convulsions), Nirudhaprakasha (Phimosis), Cerebral palsy.
- b) Behavioral Disorders of Children, their management and counseling: Breath holding spell, Shayyamutra (Bed wetting), Pica, Unmada, Autism, ADHD (Attention Deficit and Hyperactive Disorders), Jadatwa (Mental retardation).
- c) Pran raksha vidhi (Life saving measures in children): Principles of management of Shock and Anaphylaxis, Poisoning, Foreign body in respiratory tract, Status epilepticus, Hemorrhage, Acute Renal Failure, Febrile Convulsion, Status Asthmaticus, Fluid and Electrolyte Management.
- d) Balagraha: General description, classification, clinical features and management.

**PRACTICAL****Content of Practical / demonstration****Clinical training of above mentioned disorders of children.****Exposure to -**



- Navajata Shishu Paricharya (Care of the newborn)
- Pranapratyagamana Vidhi (Resuscitation procedure of new born)
- Vaccination
- Panchakarma Vidhi (Panchakarma procedures) especially Snehan, Swedana, Basti.

#### **Knowledge of various equipments**

- Knowledge of various equipments such as phototherapy unit, overhead radiant warmer, resuscitation equipments, Panchakarma equipments and their application

#### **Knowledge of IV fluid administration, blood sampling**

#### **Anthropometry measurements and their interpretation**

#### **Various Ayurvedic & modern Procedures and investigations in pediatric practice**

#### **Distribution of Marks**

Clinical work: Pediatric and neonatal case records [1.0 case sheets of each]	10 Marks
Patient Examination	20 Marks
Spotting	05 Marks
Viva – voce	15 Marks
<b>Total</b>	<b>50 Marks</b>

#### **Reference Books**

<b>Sl.No.</b>	<b>Name of the Book</b>	<b>Name of the Author</b>
1.	Kashyapa Samhita Hindi translation	Satyapal Vidhyalankara
2.	Kashyapa Samhita English translation	Prof. Premvati Tiwari
3.	Principles & practice of Pediatrics in Ayurveda:	Dr. CHS Shastry
4.	Child Health Care in Ayurveda:	Prof. Abhimanyu Kumar

5.	Ayurvedic Concepts of human Embryology:	Prof. Abhimanyu Kumar
6.	Kaumarbhritya	Prof. D.N. Mishra
7.	Kaumarbhritya Ke Antargata Balgraho Ka Kramika Evam Vaigyanika Adhyana	Prof. Chanchal Sharma
8.	Notes on Kaumarbhritya	Dr. Dinesh K S
9.	Pran - Pratyagannanann	Dr. B.M. Singh
10.	Ayurveda Dwara Matra Evam Shishu Paricharya	Dr. KS Patel, V.K.Kori & Raigopal
11.	Kaumarbhritya related references from Charaka Samhita, Sushruta Samhita Vagbhata etc.	
12.	Clinical Methods in Paediatrics	Meharban Singh
13.	Pediatrics Emergencies	Meharban Singh
14.	Essential Pediatrics	O,P. Ghai
15.	Text Book of Pediatrics Nelson Care of New Born	Meharban Singh
16.	Panchakarma in Pediatrics	Dr. Yogita Srivas

# **CHARAK SAMHITA- UTTARARDHA**

**(Uttarardha: Chikitsa – Kalpa - Siddhi Sthana)**

## **CHARAK SAMHITA- UTTARARDHA**

**(Uttarardha: Chikitsa – Kalpa - Siddhi Sthana)**

**Theory- One Paper – 100 Marks**

**Practicals - 50 Marks**

The marks of theory examination are distributed as follows:

- |                   |          |
|-------------------|----------|
| 1.Chikitsa sthana | 60 Marks |
| 2.Kalpa sthana    | 15 Marks |
| 3.Siddhi sthana   | 25 Marks |

**Charaka Samhita (Poorvardha) Viva and Practical will be conducted for 50 Marks.  
The distributions of Marks are as follows**

- d) Daily Records/Compilation – 10 Marks
- e) Written test and Shloka recitation – 20 Marks
- f) Viva voce / Oral examination – 20 Marks

### **Reference Books**

1. Charak Samhita -Chakrapani Tika (Sanskrit Commentary)
2. Charak Samhita (Hindi Commentary) Vd. Jayadev Vidyalkar or Vd. Atridev Vidyalkar or Prof. Gorakh Nath Chaturvedi & Kashinath Shastri or Dr. Brahmanand Tripathy or Dr. Ravidutta Tripathy
3. Charak Samhita (English Commentary): Dr. Ram Karan Sharma & Vd. Bhagwan Dash or Acharya Priyavrata Sharma.

# **FINAL PROFESSION**

## **Final Profession**

The final professional session shall be of one year and six months duration and shall start every year in the month of July following completion of third professional examination and the final professional examination shall be ordinarily held and completed by the end of month of October or November every year after completion of one year and six months of final professional session.

The final professional examination shall comprise of the following subjects, namely-

1. **Shalya Tantra** (*General Surgery*)
2. **Shalaky Tantra** (*Diseases of Head and Neck including Ophthalmology, Ear, Nose, Throat and Dentistry*)
3. **Kayachikitsa** (*Internal Medicine-including Manas Roga, Rasayana and Vajikarana*)
4. **Panchakarma**
5. **Research Methodology and Medical Statistics**

*NOTE 1: Research Methodology shall remain in the department of Samhita Siddhant but for the purpose of teaching, Bio-statistician shall be required as part time to teach Research Methodology;*

*NOTE 2: The student failed in any of the four professional examinations in four chances shall not be allowed to continue his or her studies:*

*NOTE 3: Provided that, in case of serious personal illness of a student and in any unavoidable circumstances, the Vice-Chancellor of the concerned University may provide one more chance in any one of four professional examinations; To become eligible for joining the compulsory internship programme, all four professional examinations shall be passed within a period of maximum nine years including all chances as mentioned above.*

# **KAYACHIKITSA**

**(Internal Medicine including Manasa Roga, Rasayana & Vajikarana)**

## **KAYACHIKITSA**

**(Internal Medicine including Manasa Roga, Rasayana & Vajikarana)**

**Theory Two Papers – 100 Marks Each**

**Practical/Viva voce – 100 Marks**

**Paper I 100 Marks**

**Part - A 50 Marks**

### **Introduction on Kayachikitsa**

Derivation of the terms 'Kaya', 'Chikitsa' and their definitions and synonyms. Definition of 'Kayachikitsa, Definition of 'Bheshaja'. Types and detailed description of Bheshaja and Chikitsa, Knowledge about Chikitsa Chatuspada, Rogi Roga Pariksha Siddhantha, Astasthan Pariksha.

### **Importance of Kriya Kaala according to stages of Dosha and their management.**

Chikitsa sutra and Management of vridhhi (increased) and kshaya (decreased) of Dosha, Dhatu and Mala, Ojo Vyapat (Kshaya, Visramsa and Vyapat) and its management. Chikitsasutra and Management of Sama-Nirama states, Roga-Anutpattikara Chikitsa, Roga Prashamana Chikitsa (Doshapratyanika, Vyadhipratyanika, Ubhayapratynika), Doshopakrama, Chikitsa sutra and Management of Sthanantara Dosha (Ashayapakarsha, Anuloma/Pratiloma gati of Dosha, Vimarga gamana of Dosha), Knowledge of Lina Dosha & its management, Diagnosis, Chikitsa Sutra and Management of Avarana and of Dhatu Pradoshaja diseases, Importance of Dosha, Dushya , Bala, Kaala, Agni, Prakriti, Vaya, Sattva Satmya, Desha, Ahara and stage of diseases in treating them. Chikitsa Sutra and Management of 'Samanyaja and Nanatmaja' diseases.

Detailed description of Dvididhopakrama (Santarpana and Apatarpana) and Shadavidhopakrama (Rookshana, Snehana, Swedana, Sthambhana, Langhana and Brimhana). Detailed description of Shodhana, Shamana and Nidana Parivarjana. Knowledge of Aushadha matra, Sevan kaala and Anupana, Definition and Knowledge of Pathya-Apathya with examples of diseases of various systems.



### **Samanya Chikitsa Siddhanta of Manasa Roga.**

- a) Derivation of the term 'Manas', its sthana (place), Guna (qualities) and Karma (functions).

### **Principles & Management of Nutritional deficiency disorders.**

- a) Management of Vardhakyajanita vikara, Indriyapradoshaja vikara, Alzhiemer's Disease, Sleep disorders, General debility.

### **Diseases produced by Genetic, Environmental and Iatrogenic factors**

- a) General introduction and principles of Management of diseases produced by Genetic, Environmental and Iatrogenic factors. Disorders due to drug and Food allergy and their management and other allergic conditions.

### **PART – B**

**50 Marks**

### **Detailed description of Chikitsa Sutra and Management of Jwara and its types**

- a) Detailed description of Chikitsa Sutra and Management of Jwara and its types Etiopathogenesis & relevant Ayurvedic and Modern management of following types of Fevers-Typhoid, Pneumonia, Pleurisy, Influenza, Mumps, Meningitis, Encephalitis, Tetanus, Yellow fever, Plague, Dengue Fever, Chikun Guniya, Leptospirosis, Viral Fever, Anthrax, Masurika (Small pox), Laghu Masurika (Chicken pox), Romantika (Measles).

### **Chikitsa sutra and Management of the diseases of Rasavaha Srotas**

- a) Chikitsa sutra and Management of the diseases of Rasavaha Srotas such as – Pandu, Amavata, Madatyaya, Hridroga, Hridshoola, Hypotension, Hypertension, Anaemia, Rheumatoid arthritis.

## **Chikitsa sutra and Management of the diseases of Raktavaha Srotas**

- a) Chikitsa sutra and Management of the diseases of Raktavaha Srotas such as - Raktapitta, Kamala, Kumbhakamala, Halimaka, Daha, Mada, Murcha, Sanyasa, Vatarakta, Plihadosha, Yakrut dosha, Haemolytic disorders, Hepatitis, Cirrhosis of Liver, Leukaemia, Kushta, Shvitra, Visarpa, Sheetapitta, Udarda, Kotha and Kshudra Roga.

## **Knowledge of National Health Programmes**

- a) Knowledge of National Health Programmes and the relevant Ayurvedic Management of the following diseases enlisted by World Health Organisation- Malaria, Filariasis, Kala Azar, Leprosy, Tuberculosis, AIDS.

## **Introduction of general principles of maintenance of health and management of diseases of following systems of Medicine-**

- a) Yoga, Naturopathy, Unani, Siddha, Physiotherapy and Rehabilitation.

## **Diseases of different Endocrine Glands**

- a) Diseases of different Endocrine Glands- such as Thyroid, Parathyroid, Pituitary, Pancreas and Adrenal glands and their management.

General introduction, types and Management of diseases caused by Vyadhi Kshamatwa Hinata (Immuno deficiency disorders), Auto Immune Disorders.

## **Description and Management of following Emergency Conditions**

- a) Description and Management of following Emergency Conditions- Acute Haemorrhage, Hypertensive Emergencies, Acute abdominal pain (Renal colic, Biliary colic, Gastritis, Pancreatitis, Peritonitis and Appendicitis), Acute Abdomen, Anuria/Oliguria, Congestive Heart Failure, Myocardial Infarction/Angina, Shock, Syncope, Convulsions, Hyperpyrexia, Hyperglycaemia, Hypoglycaemia, Status Asthmaticus, Acute Respiratory distress Syndrome, Drowning and Electric shock.

**PAPER – II**

**100 Marks**

**PART – A**

**50 Marks**

**Chikitsa sutra and Management of the diseases of Pranavaha Srotas**

- a) Chikitsa sutra and Management of the diseases of Pranavaha Srotas such as - Kasa, Shwasa, Hikka, Rajayakshma, Urakshata, Parshwashoola, Bronchitis, Bronchiectasis, Emphysema and COPDs.

**Chikitsa sutra and Management of the diseases of Udakavaha Srotas**

- a) Chikitsa sutra and Management of the diseases of Udakavaha Srotas such as- Shotha, Jalodara, Trishna, Water & Electrolyte Imbalance.

**Chikitsa sutra and Management of the diseases of Annavaha Srotas**

- a) Chikitsa sutra and Management of the diseases of Annavaha Srotas such as – Agnimandya, Aruchi, Ajirna, Anaha, Atopa, Adhmana, Alasaka, Vilambika, Visuchika, Chardi, Grahani, Amlapitta, Gulma, Shoola, Bhasmaka, Acid peptic disorders.

**Principles of treatment and management of Vata Vyadhi**

- a) Principles of treatment and management of Vata Vyadhi such as - Pakshavadha, Ekangavata, Sarvangavata, Ardita, Avbahuka, Kati Graha, Manyastambha, Gridhrasi, Vishwachi, Khalli, Khanja, Pangu, Padaharsha, Padadaha, Vatakantaka, Kroshtukashirsha, Udavarta, Kampavata, Dhatugata and Ashayagata Avarana Vata, other Vata Rogas, Parkinsonism.
- b) Nidana and Chikitsa of Urusthambha, Gullian Barrie syndrome, Muscular Dystrophy, Myasthenia Gravis, Motor Neuron Diseases and Neuralgia.

**Chikitsa Sutra and Management of Mamsavaha Srotas and Medovaha Srotas**

- a) Chikitsa Sutra and Management of Mamsavaha Srotas and Medovaha Srotas such as- Gandamala, Galaganda, Mamsashosha, Arbuda, Apachi, Prameha, Sthaulya, Karshya, Diabetes Mellitus, Dyslipidaemia.

**Chikitsa Sutra and Management of ‘Asthi and Majjavaha Srotas**

- a) Chikitsa Sutra and Management of ‘Asthi and Majjavaha Srotas such as Asthimajja Vidradhi, Asthisoushirya, Asthi kshaya, Sandhigata Vata, Osteo Arthritis, Osteomyelitis, Osteoporosis, Osteopenia.

**Chikitsa sutra and management of Shukravaha srotas**

- a) Chikitsa sutra and management of Shukravaha srotas such as Klaibya, shukralpata, shukradosha, kshina shukra, dhvajabhanga.

**Chikitsa Sutra and Management of diseases of Mutravaha Srotas**

- a) Chikitsa Sutra and Management of diseases of Mutravaha Srotas such as - Mutrakricha, Mutraghata, Ashmari, Cystitis, Nephritis, Nephrotic Syndrome, BPH, Renal Failure.

**Chikitsa Sutra and Management of diseases of Purishavaha Srotas**

- a) Chikitsa Sutra and Management of diseases of Purishavaha Srotas such as – Atisara, Pravahika, Arsha, Purishaj Krimi, IBS and Ulcerative Colitis.

**Chikitsa Sutra and Management of Sexually Transmitted Diseases**

- a) Chikitsa Sutra and Management of Sexually Transmitted Diseases such as – Phiranga, Puyameha, Upadamsha, lymphogranuloma inguinale, Syphilis, Gonorrhoea.

## **Manasaroga**

- a) Introduction, Definition and Management of Kama, Krodha, Lobha, Moha, Mada, Matsarya, Shoka, Bhaya, Vishada, Dainya, Harsha and Pragyaparadha.
- b) Manas and Manovahasrotas, Nidana and Chikitsa of the following disorders - Unmada-Apasmara-Atattvabhinivesha, Chittodvega, Vishada, Anxiety disorders, Depression, Somatoform and Mood disorders, Stress induced disorders, Psychosexual Disorders. Importance of Daivavyapashraya, Sattwavajaya, Adravyabhuta Chikitsa. Medhya Rasayana in the management of Manasa Roga. Bhuta Vidya diagnosis and management of graha disorders.

## **Rasayana**

- a) Derivation, definition and synonyms of Rasayana, importance of Rasayana and its benefits. Indications of Rasayana therapy. Classification of Rasayana. Kutipravesika and Vatatapika Rasayana. Indications of Vatatapika Rasayana. Knowledge of Kayakalpa, Achara Rasayana. Procedures of Kutipravesika, Poorvakarma and specific schedules to be followed after Kutipravesha, benefits of Kutipravesika Rasayana, duration of process, Rasayana yoga and directions for their use. Determination of dose of Rasayana according to age. Rules and regulation after Rasayana therapy, Importance of Immunomodulators and antioxidants in Rasayana therapy.

## **Vajikarana**

- a) Vajikarana Derivation, definition, synonyms, necessity, benefits, importance of fertility, Symptoms of Shûkra (Semen), Vajikaran Dravya and Aushadhi. Properties, doses, methods of administration, ingredients and methods of formation of Rasayana & Vajikarana formulation. Classification and importance of Vajikarana Dravya

### Distribution of practical

1) Daily case record/ 20 cases		- 20 marks
2) Patient examination	a) 1 Long case	- 20 marks
	b) 1 short case	- 10 marks
3) Viva –voice	a) Paper I	- 25 marks
	b) Paper II	- 25 marks
<b>Total</b>		<b>100 Marks</b>

### Reference books:

Sl.No.	Name of the Book	Name of the Author
1.	Ayurvediya Vyadhi Vigyana	Yadavji Trikamji
2.	Roga Pariksha Vidhi	Priyavrat Sharma
3.	Panchakarma Vigyan	Haridasa Sridhar Kasture
4.	Cikitsadarsha	Pandit Rajesvardutta Shastri
5.	Kayachikitsa I-IV	Ramaraksha Pathaka
6.	Ayurved Nidan Chikitsa Siddhanta	Prof. R.H.Singh.
7.	Kayachikitsa Vol. I-IV.	Prof. Ajay Kumar
8.	Davidson's Principles and Practice of Medicine.	
9.	API Text Book of Medicine.	
10.	Harrison's Text Bok of Medicine.	
11.	Cecil Text Book of Medicine.	
12.	Panchkarma Illustrated	Dr. G.Srinivasacharya.
13.	Charak Samhita, Sushrut Samhita, Ashtanga Samgraha and Ashtanga Hridaya with their commentries. Madhav Nidana with Madhukosha Commentary.	

# PANCHAKARMA

# PANCHAKARMA

**Theory One Paper – 100 Marks**

**Practical Viva-voce – 50 Marks**

**Hours of teaching Theory – 100**

**Clinical training: 3 months**

## **Introduction on Panchakarma and Shodhana**

- a) Introduction to Panchakarma, Panchakarma and Shodhana, its importance for promotion of health, prevention and treatment of diseases. Trividha Karma- Purva, Pradhana and Pashchat Karma in relation to Shodhana and their importance. Indications of Shodhana, Shodhana according to Ritu General Principles of doshagati from Koshta to Shaka and vice versa. General precautions (Pariharya Vishaya) for Panchakarma. Specifications of Panchakarma theatre and necessary equipments. Importance of Koshta and Agni Parikshan

## **Snehana**

- a) Etymology and Definition of Sneha and Snehana
- b) Snehayoni- Sthavara and Jangama: Properties of Sneha dravyas, Snehopag Dravyas
- c) General knowledge of Ghrita, Taila, Vasa and Majja with their specific utility and actions Yamaka, Trivrit and Maha Sneha
- d) Metabolism of fat
- e) Achcha and Pravicharana of Sneha
- f) Snehapaka and its importance in Panchakarma

## **Types of Snehana**

### **Bāhya Snehana :**

- a) Methods, indications & contraindications of the following types of Bahyasnehana; Mardana, Unmardana, Pādāghāta, Samvāhana, Karna Purana & Akshi Tarpan, Lepa, Talam



## **Murdhni Taila**

- a) Siro-Abhyanga, Shiro Seka/dhārā, Siro Pichu and Siro-Basti

## **Ābhyantara Snehana**

- a) Three Types of Ābhyantara Snehana: Shodhanārtha, Shamanārtha and Brimhanārtha Snehana, Indications and contraindications for Snehana

## **Shodhanārtha Snehana**

- a) Importance and method of Deepan Pāchan and Rookshana in Shodhanārtha Snehana. Properties of Rookshana Dravya. Samyak Rookshana Lakshana
- b) Consideration of Agni and Koshta in Snehana
- c) Indication of Different Matra, Various dose schedules for Shodhanārtha Snehana; Hraseeyasi, Hrasva, Madhyama and Uttama Mātrā, Ārohana Mātrā
- d) Methods of Shodhanārtha Snehana,
- e) Anupāna of Sneha
- f) Jeerna and Jeeryaman Lakshana
- g) Samyak Yoga, Ayoga and Atiyoga of Snehana, Sneha Vyāpat & their management according to Ayurveda & Modern Medicine
- h) Diet and regimen during Snehana

## **Sadyo Sneha**

- a) Method of administration, dose fixation and utility

## **Shamanārtha Snehana**

- a) Method of administration, dose fixation and utility

## **Bronhanarth Senhana**

- a) Method of administration, dose fixation and utility

## **Avapeedak Sneha**

- a) Method of administration, dose fixation and utility

## **Snehana Kārmukata (mode of action)**

## **Special Procedures**

- a) Takradhara, Udvardanam, Putpāka, Aschotana, Anjana, Gandusha, Kavala, Dhoompāna, Udvardana, Utsādana, Udgharshana, Talapothichil

## **Svedana**

- a) Etymology and Definition of Sveda and Svedana
- b) Classifications of Sveda/Svedana
- c) General Sweda dravya, Properties of Sweda dravyas, Swedaopag dravyas ,
- d) Indications and contraindications of Svedana
- e) Ten Types of Niragni Svedana
- f) Knowledge of 13 types of Sagni Svedana and Chaturvidh Svedan
- g) Detailed Knowledge with their Utility of the following Svedana procedures: Sankara/Pinda Sveda-Ruksha and Snigdha Sveda Patrapinda Sveda, Jambir Pinda Sveda, Vāluka Sveda, Churna Pinda Sveda, Kukkutand Pinda Sveda, Shashtika Shalipinda Sveda, Nadi Sveda, Bashpa Sveda Ksheer dhooma ,Ksheer Seka, Kwath Seka, Avagaha Sveda, Dhanymla Dhara Parisheka Sveda, Pizichil, Upanaha Sveda, Annalepa
- h) Local Basti such as Kati Basti, Janu Basti, Greeva Basti and Urobasti
- i) General precautions during Sagni Svedana and Methods to protect vital during svedana
- j) Samyak Yoga, Ayoga and Atiyoga of Svedana
- k) Complications of Svedana and their Management according to Ayurveda & Modern Medicine
- l) Diet and management during and after Svedana
- m) Parihār Vishaya

- n) Svedana Kārmukata (Mode of action)
- o) General Knowledge about current Sudation techniques like Sauna bath, Steam bath

### **Vamana Karma**

- a) Etymology, definition and importance of Vamana Karma
- b) Utility of Vamana Karma in health and disease
- c) Indications and Contraindications for Vamana
- d) Knowledge of Koshta and Agni
- e) General knowledge of Vamana and Vamanopaga drugs; properties, actions, preparations, preservation with special reference to Madanphala, Kutaj, Nimba, Yashti, Vacha
- f) Purva Karma of Vamana: Deepan-Pāchana, Abhyantara Snehana and diet
- g) Management of one gap day-Abhyanga & Svedana, diet, special Kapha increasing diet.
- h) Preparation of the patient on Morning of Vamana day
- i) Vamaka Yoga, Anupana, fixation of dose and method of administration
- j) Administration of Vamanopaga Dravya such as milk, sugarcane juice, Yashtimadhu decoction
- k) Lakshana indicating Doshagati during the process
- l) Management during Vamana Karma & observations
- m) Symptoms of Samyak Yoga, Ayoga and Atiyoga of Vamana Karma
- n) Post Vamana management
- o) Types of Shuddhi-Hina, Madhya and Pravara
- p) Peyadi Samsarjana Krama and Tarpanadi Kram with their specific indications
- q) Complication of Vamana and their management with Ayurveda and modern drugs
- r) Pariharya Vishaya
- s) Vamana Karmukata (Mode of action).

### **Virechana Karma**

- a) Etymology, definition and importance of Virechana Karma
- b) Utility of Virechana Karma in health and disease
- c) Indications and Contraindications for Virechana
- d) Knowledge of Koshta and Agni
- e) Classification of Virechana Drugs, General properties of Virechana dravya

- f) General knowledge of single and compound Virechan drugs; properties, actions, preparations, preservation with special reference to Trivrutta, Aragvadha, Eranda, Katuki, Jaipal
- g) Purva Karma of Virechana: Deepan- Pachana, Abhyantara Snehana and diet
- h) Management of 3 gap days-Abhyanga, Svedana & diet
- i) Management on Morning of Virechana day
- j) Preparation of Virechana Kalpa, Anupana, dose and method of its administration
- k) Method of Virechana Karma and management during Virechana Karma & observations
- l) Symptoms of Samyak Yoga, Ayoga and Atiyoga of Virechana Karma
- m) Post Virechana management
- n) Types of Shuddhi-Hina, Madhya and Pravara and accordingly Samsarjana Krama
- o) Complications of Virechana and their management with Ayurveda and modern drugs
- p) Pariharya Vishaya
- q) Virechana Kārmukatā (Mode of action)

### **Basti Karma**

- a) Etymology, definition and importance of Basti as Ardha-Chikitsa
- b) Utility of Basti Karma in health and disease
- c) Basti Yantra- Putaka & Netra, Detailed study of traditional Basti Yantra and their Doshas Knowledge of alternative Basti Yantra-enema can, enema syringe, modified plastic/rubber bag for Putaka, modified plastic netra.
- d) Classifications of Basti
- e) Karma, Kāla and Yoga Basti schedules along with their utility.

### **Niruha Basti**

- a) Its etymology, synonyms, definition, classifications, sub-classifications & indications and contraindications.
- b) Dose fixation of Niruha Basti according to age
- c) Contents and Method of preparation of Niruha Basti dravya
- d) Diet
- e) Administration of Niruha Basti
- f) Pratyāgamana Kāla, Post Niruha Basti management

- g) Samyak Yoga, Ayoga and Atiyoga of Niruha.
- h) Complication of Niruha Basti and its management according to Ayurved and Modern Medicines
- i) Pariharya Vishaya and kala

#### **Anuvasana Basti:**

- a) Its etymology, synonyms, definition, classifications, sub-classifications & indications and contraindications.
- b) Dose fixation of Anuvasan Basti according to age
- c) Contents and Method of preparation of Anuvasan Basti dravya
- d) Diet
- e) Administration of Anuvasan Basti
- f) Pratyāgamana Kāla, Post Anuvasan Basti management
- g) Samyak Yoga, Ayoga and Atiyoga of Anuvasana.
- h) Complication of Anuvasan and its management according to Ayurved and Modern Medicines
- i) Pariharya Vishaya and kala
- j) Basti Kārmukatā (Mode of action).

#### **Knowledge of following types of Basti**

- a) Madhutailika Basti, Erandmuladi Basti, Yāpana Basti, Pichchha Basti, Kshira Basti, Kshara Basti, Vaitarana Basti, Panchaprasutik Basti, Lekhan Basti, Krumighna Basti, Tiktashir Basti, Ardhamātrika Basti

#### **Uttara Basti**

- a) Its definition, indications and contraindications, Detailed study of traditional Basti Yantra and their Doshas Knowledge of alternative Basti Yantra.
  - a. Preparation of patient,
  - b. Preparation of Trolley for Uttarbasti,
  - c. drug preparation and Fixation of dose,
  - d. method of administration in male and females,
  - e. observations,
  - f. complications and their management

## **Nasya**

- a) Etymology, definition, Significance of Nasya Karma.
- b) Classifications and sub-classifications
- c) Knowledge of general Dravya used for Nasya Karma, Shirovirechan Gana, Shirovirechanopag dravyas
- d) Indications and contraindications of Nasya
- e) Time of administration of Nasya
- f) Dose fixation of different types of Nasya
- g) Diet and regimen before and after Nasya Karma
- h) Administration of Marsha, Pratimarsha, Avapeedaka, Dhoomapana and Dhuma Nasya
- i) Symptoms of Samyak-yoga of Nasya,
- j) Complication of Nasya and their management
- k) Parihār Vishaya
- l) Nasya Karmukata (mode of action)

## **Raktamokshana**

- a) Definition, importance and Types of Raktamokshana
- b) General Principles and rules of Raktamokshana
- c) Classification of Raktamokshan
- d) General Indication and Contra indication of Raktamokshan

## **Jalaukavacharana**

- a) Knowledge of different types of Jalauka (Leech), Indications and contraindications of Jalaukavacharana, various types of Jalauka. Method of Application, Samyak Lakshan, Complication of Jalaukavacharana and their management with Ayurveda and Modern medicines.

## **Pracchāna**

- a) Indications and contraindications of Pracchana. Method of Application, Samyak Lakshan, Complication of Pracchana and their management with Ayurveda and Modern medicines

## Sirāvedha

- a) Indications and contraindications of Siravedha. Method of Application, Samyak Lakshan, Complication of Siravedha and their management with Ayurveda and Modern medicines
- b) Knowledge of emergency management of complications such as water & electrolyte imbalance, shock, bleeding per rectal, hematemesis, epistaxis

## Physiotherapy

- a) Definition, Utility and Importance of Physiotherapy.
- b) Basic Knowledge of Static exercise, Infrared, Short wave diathermy, Electromagnetic therapy, Wax bath therapy, Ultrasonic therapy.

## PRACTICALS / CLINICAL TRAINING –

### Total Duration of 3 Months posting

- a) OPD (for 1-Month): observation of OPD patients, selection of the patients, observation of OPD base Panchakarma procedures
- b) IPD (Panchkarma) and Panchakarma Unit – Observation of different procedures of Panchakarma, Assistance to the procedure under guidance of Panchakarma specialist
- c) Under clinical posting, each student has to study and write 15-long Cases and 10 short cases in prescribed format
- d) Long case Paper- minimum 1 Vaman , 1 Virechan, 1Niruha & Anuvasan Basti, 1Nasya, 1 Raktamokshan
- e) Short case paper –Minimum one each of Pinda sweda, Shirodhara,Abhyanga, Netra Tarpan, Bahya Basti, Nadi Sweda etc.

### Distribution of Marks

1.	Practical Record of 25 procedures	05 Marks
2.	Long Procedure	10 Marks
3	Long Procedure Viva	05 Marks
4	Short Procedure	08 Marks
5	Viva on Short Procedure	02 Marks
6	General Viva-voce	20 Marks
<b>Total</b>		<b>50 Marks</b>

## Reference Books

Sl.No.	Name of the Book	Name of the Author
1.	Charak Samhita with Commentary of Ayurveda Dipika by Chakrapanidatta & Jalpakalpataru by Gangadhara	
2.	Sushrut Samhita with the Sushruta Nibhandha Samgraha Commentary of Dalhana & Nyayachandrika Panjika of Gayadasa on Nidana Sthana	
3.	Ashtanga Hridaya with Sarvanga Sundara & Ayurveda Rasayana Commentaries	
4.	Ashtanga Sangraha with Shashilekha Commentaries	
5.	Ayurvediya Panchakarma Chikitsa	Dr Mukundilal Dwivedi
6.	Panchakarma Vigyan	Dr Haridas Shreedhar Kasture
7.	Illustrated Panchakarma	Dr.G Srinivasa Acharya
8.	Clinical Panchkarma (English)	Dr. P.Yadaiah
9.	Prayogika Panchkarma (Hindi)	Dr. P. Yadaiah
10.	Vivida Vyadhiyome Panchkarma (Hindi)	Dr. P. Yadaiah
11.	The Panchkarma Treatment of Ayurveda with Kerala Specialtie	Dr. T.L. Devaraj
12.	Panchkarma Therapy	Dr. R.H. Singh
13.	Ayurveda-Principles and Panchakarma Practice	Dr Mandip R. G. & Prof. Gurdip Singh
14.	Principles and Practice of Basti	Dr. Vasudevan & Dr. L. Mahadevan
15.	Panchakarma Sangraha	Dr. Manoj Shamkuwar
16.	Essential of Panchakarma Therapy	Dr.Pulak Kanti Kaur
17.	Principles and Practice of Panchakarma	Vaidya Vasant Patil
18.	Harrison's Principle of Internal Medicine	
19.	Guyton's Physiology	



# **SHALYA TANTRA**

(General Surgery)

# SHALYA TANTRA

(General Surgery)

**Theory Two Papers – 100 Marks Each**

**Practical - Viva voce – 100 Marks**

**PAPER –I**

**100 Marks**

**Part – A**

**50 Marks**

**Definition of Shalya, Shalya Tantra and its importance. Introduction to Shalya**

**Tantra:**

- a) Historical background and progress made.
- **Target** - Fluency in textual reading and comprehension.
  - **Preferable targets** - Know recent developments and controversies.

**Description of Yantra, Shastra, Anushastra:**

- a) Definition, number, types, uses, Dosha, Guna, Karma. Relevant modern instruments.
- **Target** - Basic understanding of the concepts of Yantra and Shastra. Acquaintance with commonly used surgical instruments. Knowledge of textual descriptions.
  - **Preferable targets** - Knowledge about currently used surgical instruments, their specifications, procurement sources etc.

**Nirjantukarana / Sterilization:**

- a) Methods, types and its role in surgical practice.
- **Target** - Basic surgical discipline of maintaining asepsis.
  - **Preferable targets**- Knowledge of recently developed chemicals, instruments for sterilization.

**Sangyaharan / Anaesthesia: Definition and Types.**

**Local anaesthesia –**

- a) Drugs, Techniques, Indications, Contraindications, Complications and their Management.

### **Regional and General anaesthesia-**

- 1) Drugs, Techniques, Indications, Contraindications, Complications and their Management.
- **Target-**Basic knowledge of the drugs and instruments of anaesthesia. To observe the process of induction, monitoring and recovery.
- **Preferable targets-** Assisting and handling anaesthesia.

### **Trividha Karma – Purva Karma, Pradhana Karma and Paschat Karma.**

- **Target-** Capability to identify conditions which can affect the outcome of surgery in pre, intra and post- operative period.
- **Preferable targets-** Experience of handling incidents.

### **Ashtavidha Shastra Karma - Surgical procedures.**

- **Targets-** Appreciation and comprehension of concepts and indications of different procedures.
- **Preferable targets** –Hands on experience of surgical procedures.

### **Yogya - Experimental Surgery.**

- **Target** –Appreciation and comprehension of concepts of Yogya. Idea of patient's safety in experimental training.
- **Preferable targets-** Hands on training on mannequins.

### **Marma: Nirukti, types, description and importance.**

- **Target** –Clinical application of concepts of marma.
- **Preferable targets-** Study of relevance of marma in the light of current anatomical and surgical knowledge.

### **Kshara and Kshara Karma:**

- a) Nirukti, Pradhanyata, Guna, Dosha, Karma, Prakara, Yogya, Ayogya, Procedure, Upadrava and Chikitsa.
- b) Kshara nirmana vidhi, knowledge of Kshara Varti, Taila and Pichu.
- c) Kshara Sutra – Preparation, Indications, Contraindications and Method of

application, Complications and their Management.

- **Target** – Capability to identify and practice the use of kshara, kshara sutra in common clinical conditions.
- **Preferable targets** – Broader knowledge of current trends and ongoing researches in kshara application.

**Agnikarma: Mahatva, Upakarana, Vidhi, Akrti bheda, Yogya, Ayogya and Upadrava Chikitsa.**

- a) Contemporary techniques and tools of Agnikarma.
- **Target** - Capability to appreciate the clinical indications and comprehend Agnikarma procedure.
  - **Preferable targets** - Hands on experience of use of cautery in surgical practice.

**Raktamokshana: Mahatva, Prakara - Siravyadha, Pracchanna, Shringa, Alabu, Jaloukavacharana – Yogya, Ayogya, Procedure, Upadrava and Chikitsa.**

- **Target-** Capability to appreciate and comprehend clinical indications of Jaloukavacharana and other Raktamokshana procedures.
- **Preferable targets** - Uses of bloodletting in current therapy.

**Bandha Vidhi – Prayojana, Dravya, Indications, Contraindications, Prakara, Upadrava, Pichu, Plota, Kavalika and Vikeshika.**

- **Target-** Hands on experience of techniques of bandaging.
- **Preferable targets** - New generation of bandaging and splintage tools.

**Pranasta Shalya and Nirharana Upaya.**

- **Target** – Importance of concepts of Sushruta in the management of Shalya and concerns of patient safety. Identification and management of foreign bodies.
- **Preferable targets** - Current concepts and diagnostic tools of dealing with foreign bodies.

**Fluid, Electrolyte, Acid Base Balance and Nutrition:**

- a) Introduction of physiology of fluids and electrolytes.

- b) Dehydration and over hydration.
  - c) Specific electrolyte loss, Acidosis, Alkalosis, Symptomatology and Management.
  - d) Electrolyte changes in specific diseases like pyloric stenosis, intestinal obstruction and anuria.
  - e) Various replacement fluids in surgery, mode of administration and complications.
  - f) Nutrition.
- **Target** – Capability to identify and manage fluid and electrolyte imbalance. Ability to administer parenteral fluid.
  - **Preferable targets** - Advanced techniques of fluid and electrolyte assessment and management.

**Rakta Mahatwa, Raktasrava / Haemorrhage: Prakara and Lakshana.**

- a) Raktastambhana – Haemostasis.
  - b) Blood Transfusion –Blood groups, Compatibility, Indications, Contraindications and Complications with Management.
  - c) Component therapy.
- Target-Knowledge of achieving haemostasis in haemorrhage.
  - Preferable targets - Detailed knowledge of blood bank techniques.

**Antibiotics, analgesics, anti-inflammatory and emergency drugs in surgical practice.**

- **Target** – Working knowledge of commonly used drugs.
- **Preferable targets** - Advanced pharmacological study of the above drugs

**Diagnostic techniques –**

- a) X-ray, Imaging techniques, Ultrasonography, CAT Scan, MRI, Biopsy / Cytological study.
- **Target-** Knowledge of proper indications for optimum investigational tools and their interpretation.
  - **Preferable targets** - Capability to work independently in the field of diagnostic techniques.

**Shat Kriyakala in surgical practice.**

- **Target-** Clinical utility of the concepts.
- **Preferable targets** - Applied aspects of Kriyakalas in the light of current concepts of pathogenesis.

**Nirukti, Nidana, Samprapti, Prakara, Lakshana, Sadhya-asadhyata, Upadrava and Chikitsa of the following disorders.**

- Vranashotha - Inflammation
  - Vidhradi - Abscess
  - Pidika - Boils
  - Nadi Vrana - Sinus / Fistulae
  - Vrana Granthi - Keloid / Hypertrophic scar
  - Marmagata - Shock
  - Kotha – Gangrene and Principles of Amputation.
  - Granthi - Cyst
  - Arbuda - Tumour
- **Target-** Clinical application of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

**Vrana – Nirukti and Prakara**

- Nija Vrana – Nidana, Samprapti, Vrana Vasthu, Prakara, Lakshana, Vrana Pariksha – Sthana, Vrana Akrti, Srava, Gandha, Vedana. Vrana Avastha- Dustavrana, Shuddha Vrana, Ruhyamana Vrana, Samyak Roodha Vrana, Vrana Sadhya-asadhyatha and Vrana Upadrava.
- Vrana Chikitsa – Pathya-apathya and Shashti Upakrama, Vranitagara and Rakshakarma.
- Agantuja Vrana :
  - Sadyo Vrana - Traumatic wounds – Nidana, Prakara, Lakshana, Upadrava and Chikitsa.
  - Management of bites and stings.
- Dagdha Vrana – Burns and scalds.

- e) Ulcer - Types and their management.
- f) Wound healing stages and their management.
- g) Pramehapidaka - Diabetic carbuncle and wounds.

- **Target** - Clinical application of the concepts.
- **Preferable targets** - Hands on experience of management of different conditions.

**Twak Vikara - Nidana, Samprapti, Lakshana and Chikitsa of Chippa – Paronychia, Kadara – Corn and Kshudra rogas.**

- **Target** - Clinical application of the concepts.
- **Preferable targets** - Hands on experience of management of different conditions.

**Manya Vikara – Nidana, Samprapti, Lakshana and Chikitsa of Galaganda – Goitre, Gandamala, Apachi –Lymphadenitis, Pashanagardhabha – diseases of parotid gland.**

- **Target**-Clinical application of the concepts.
- **Preferable targets** - Hands on experience of management of different conditions.

**Sira Vikara - Venous disorders – Superficial and Deep venous thrombosis, Haemangioma, Varicose veins - Diagnosis and their Management.**

- **Target** - Clinical application of the concepts.
- **Preferable targets** - Hands on experience of management of different conditions.

**Dhamani Vikara - Arterial disorders – Nidana, Samprapti, Lakshana and Chikitsa of Aneurysm, Buerger's disease, Atherosclerosis, Raynaud's disease.**

- **Target** - Clinical application of the concepts.
- **Preferable targets** - Hands on experience of management of different conditions.

**Snayu Vikara –**

a) Diseases of tendons and ligaments – Tennis elbow, Ganglion and their Management.

- **Target** - Clinical application of the concepts.
- **Preferable targets** - Hands on experience of management of different conditions.

**Care of AIDS - HIV and hepatitis infected patients.**

- Target - *Knowledge of safety precautions.*

**PAPER – II**

**100 Marks**

**Part – A**

**50 Marks**

**Bhagna – Skeletal injuries: Prakara including pathological fracture, Samanya Lakshana, Upadrava and Chikitsa.**

- a) Description of fracture of following bones with Clinical features, Diagnosis, Complications and Management – scapula, clavicle, humerus, radius, ulna, femur, patella, tibia and pelvis bones.
  - b) Sandimoksha - Dislocation: Dislocation of following joints with Clinical features, Diagnosis, Complications and Management of shoulder, elbow and hip.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

**Diseases of bone:**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies, Osteomyelitis, Cysts, Tumours and Tuberculosis.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

**Cranio-cerebral injuries:**

- a) Mechanism, Pathology, Classification, Investigations, Complications and primary management.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

**Diseases of Spine:**

- a) Mechanism, Pathology, Classification, Investigations, Complications and primary management of Tuberculosis, Ankylosing Spondylitis and Disc prolapse.



- **Target** - Clinical utility of the concepts.
- **Preferable targets** - Hands on experience of management of different conditions.

#### **Diseases of breast:**

a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Sthana Vidradhi - Breast abscess and Sthana Arbuda - Breast tumours.

- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.
- Diseases of chest: Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Chest injury, Pleural effusion, Pleurisy and Tumours.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

#### **Diseases of esophagus:**

a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies, Oesophagitis, Varices, Ulcer and Tumours.

- **Target** - Clinical utility of the concepts.
- **Preferable targets** - Hands on experience of management of different conditions.

#### **Gulma Roga –**

a) Nidana, Prakara, Lakshana, Upadrava and Chikitsa.

#### **Shoola vyadhi –**

a) Nidana, Prakara, Lakshana, Upadrava and Chikitsa.

- **Target** - Clinical utility of the concepts.
- **Preferable targets** - Hands on experience of management of acute abdomen.

#### **Udara Roga:**

a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Jalodara - Ascites, Chidrodara – Perforation, Peritonitis and Badhagudodara-Intestinal obstruction.

- **Target** - Clinical utility of the concepts.
- **Preferable targets** - Hands on experience of management of different conditions.

#### **Diseases of stomach and duodenum:**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Pyloric Stenosis, Peptic Ulcer and Tumours.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

#### **Diseases of small intestine:**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Tuberculosis, Obstruction and Perforation.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

#### **Diseases of large intestine –**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Tuberculosis, Obstruction, Perforation, Tumours, Appendicitis, Crohn's disease and Ulcerative Colitis.
- **Target** - Clinical utility of the concept.
  - **Preferable targets** - Hands on experience of management of different conditions.

#### **Diseases of Rectum and Anal Canal –**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital disorders, Arshas - Haemorrhoids, Parikartika - Fissure-in-ano, Bhagandara - Fistula-in-ano, Guda Vidradi - Anorectal abscesses, Gudabhramsa - Rectal prolapse, Sanniruddaguda - Anal stricture, Incontinence, Rectal Polyp and Tumours.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

#### **Abdominal injuries and their management.**

- **Target** - Clinical utility of the concepts.

- **Preferable targets** - Hands on experience of management of different conditions.

**Part – B**

**50 Marks**

**Diseases of Liver:**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Yakrit Vidhradi - Abscess, Neoplasia, Portal hypertension and Yakritdalyodar –Hepatomegaly.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

**Diseases of Gallbladder:**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Cholecystitis, Cholelithiasis, Obstructive jaundice and Tumours.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

**Diseases of Pancreas:**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Pancreatitis, Cysts of Pancreas and Tumours.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

**Diseases of Spleen –**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Pleehodara – Splenomegaly and Splenic rupture.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

**Diseases of Kidney and Ureters –**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies, Polycystic kidney, Injuries, Perinephric abscess, Calculus and Neoplasms.

- **Target** - Clinical utility of the concepts.
- **Preferable targets** - Hands on experience of management of different conditions.

#### **Diseases of Urinary bladder –**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies, Injuries, Ashmari - Vesical Calculus, Cystitis and Neoplasms.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

#### **Mutraghata and Mutrakrichra –**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. Retention of urine.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

#### **Diseases of Prostate –**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Prostatitis, Prostatic abscess, Benign Enlargement of Prostate and Carcinoma of Prostate.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

#### **Diseases of Urethra –**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Urethritis, Stricture and Rupture.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

#### **Diseases of Penis:**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies, Niruddhaprakasha Phimosis, Parivartika Paraphimosis, Avapatika Prepuceal ulcer, Arbuda Tumours and Lingarsha Penile Warts.

- **Target** - Clinical utility of the concepts.
- **Preferable targets** - Hands on experience of management of different conditions.

### **Diseases of Scrotum and Testis:**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Epididymo-orchitis, Epididymal cyst, Scrotal filariasis, Shukrashmari - Seminal calculus, Torsion of testis, Ectopic testis, Undescended testis and Tumours.

### **Vridhi Roga:**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Mutravridhi – Hydrocele.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

### **Antra Vridhi –**

- a) Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Hernia - Inguinal, Femoral, Epigastric, Umbilical, Incisional and rare forms of Hernia.
- **Target** - Clinical utility of the concepts.
  - **Preferable targets** - Hands on experience of management of different conditions.

## **PRACTICALS**

### **Content of Practicals:**

- a) Identification, uses, demonstration of surgical instruments and methods of sterilization.
- b) Training of case taking, bed side clinicals and case presentation.
- c) Demonstration and Practical training in Anaesthesia.
- d) Training to develop skills in following Parasurgical and other procedures
- i. Kshara Karma
  - ii. Agnikarma
  - iii. Kshara Sutra
  - iv. Raktamokshana

- v. Application of bandages and splints
- vi. Catheterization
- vii. Wound management procedures like Parisheka and Patradana
- viii. Ryle's tube aspiration
- ix. Injections -Intramuscular / Intravenous / Subcutaneous / Intradermal
- x. Incision and drainage of abscess
- xi. Suturing of open wounds

### **Observation of following procedures**

- a) Circumcision
- b) Hydrocele
- c) Hernial repair
- d) Vasectomy
- e) Haemorrhoidectomy
- f) Fistulectomy
- g) Fissurectomy
- h) Appendectomy
- i) Cholecystectomy

### **Training of Surgical Emergencies and Management.**

<b>Clinical Training (Indoor and Outdoor)</b>	<b>09 Months</b>
Shalya (Samanya)	03 Months (atleast one month in OT)
Shalya (Kshara and Anushastra Karma)	03 Months (atleast one month in OT)
Asthi and Sandhi Chikitsa (Orthopaedics &Trauma)	02 Months
Anaesthesia	15 days
Radiology	15 days

### **Distribution of Practical Marks**

Daily records	- 10 Marks
Instruments	- 20 Marks
Short case	- 10 Marks
Long case	- 20 Marks
Viva – voce	- 40 Marks
<b>Total</b>	<b>- 100 Marks</b>

## Reference Books

Sl.No.	Name of the Book	Name of the Author
1.	Sushruta Samhita, Ashtanga Sangraha, Ashtanga Hridaya, Charaka Samhita	
2.	The Surgical instruments of the Hindus	Girindranath Mukhopadhyaya
3.	Shalya Tantra Samuchchaya	Pandit Ramadesh Sharma
4.	Shalya Vigyan (Part 1-2)	Dr. Surendra Kumar Sharma
5.	Shalya Samanvaya (Part 1-2)	Vd. Anantaram Sharma
6.	Shalya Pradeepika	Dr. Mukund Swaroop Verma
7.	Soushruti	Dr. Ram Nath Dwivedi
8.	Clinical Shalya Vigyan	Dr. Akhilanand Sharma
9.	Bhagna Chikitsa	Dr. Prabhakar Janardhan Deshpande
10.	Kshara sutra management in anorectal ailments	Dr. S.K. Sharma, Dr. K.R.Sharma and Dr. Kulwant Singh
11.	Anorectal diseases in Ayurveda	Dr. Sijoria and Dr. Praveen Kumar Chowdary.
12.	Adhunika Shalya Chikitsa Siddanta	Dr. Katil Narshingham Udupa
13.	Agnikarma Technology Innovation	Dr. P.D. Gupta
14.	Shalya Tantra Ke Siddhant	Dr. K.K.Takral
15.	Recent advances in the management of Arshas / Haemorrhoids	Dr. P. Hemantha Kumar
16.	Arsha Evum Bhagander Mein sutra Avacharan	Vd. Kanak Prasad Vyas
17.	Kshara Sutra	Dr. S.N.Pathak
18.	Surgical ethics of Ayurveda	- Dr. D.N. Pande
19.	Bailey and Love's Short Practice of Surgery	Norman.S. Williams, Charles.V. Mann and R.C.G. Russell
20.	Clinical methods in surgery	S. Das
21.	Textbook of Operative Surgery	S. Das
22.	Shalya Vigyan (Sachitra)	Anantram Sharma
23.	Anushastra Karma	Dr. D.N. Pande
24.	Concept of Vrana is Ayurveda	Dr. Lakshman Singh
25.	Significance for Poorva Karma in	- Dr. Lakshman Singh

	Surgical Patient	
26.	Sangyahan Prakash	- Dr. D.N. Pande
27.	A concise Text Book of Surgery	- S. Das
28.	A manual on Clinical Surgery	- S. Das
29.	A System of Surgical Diagnosis	- T.N. Patel
30.	A Practical Guide to Operative Surgery	- S. Das
31.	Drugs and Equipment for Anaesthesia	- Arun kumar
32.	Manual of Surgical Instruments	- M.M. Kapur
33.	Ward Procedures	- Patel Mansukh. B
34.	Recent trends in the management of Arshas / Haemorrhoids	Dr. P. Hemantha Kumar
35.	Primary Anaesthesia	- Maurice King
36.	Synopsis of Anaesthesia	- Lee
37.	Clinical Anatomy/ Surgical Anatomy	- John E.Skandalakis
38.	Surgical Instruments of the Hindus	- Girindharnath Mukopadyay
39.	Outline of Orthopedics	- John Crawford Adams and David Hamblen. L
40.	Outline of Fracture	- John Crawford Adams
41.	Recent trends in the management of Bhagandara / Fistula-in-ano	Dr. P. Hemantha Kumar
42.	Principles and Practice of Agnikarma	Dr. Anand Kumar and Dr. Kanchan Shekokar
43.	Manipal Manual of Surgery	Dr. Rajgopal Shenoy



# **SHALAKYA TANTRA**

**(Head & Neck including Ophthalmology, Ear, Nose, Throat & Dentistry)**

## SHALAKYA TANTRA

(Head & Neck including Ophthalmology, Ear, Nose, Throat & Dentistry)

**Theory Two Papers – 100 Marks Each**

**Practical/Viva voce – 100 Marks**

## NETRA ROGA VIGYAN

**Paper I**

**100Marks**

### **Introduction**

- a) Shalakyatantra nirukti, Parichayam, Ithihasam
- b) Netra rachana shariram (Mandala, Patala, Sandhi, Drushti Vichara) and Netra Kriya Sharira alongwith modern anatomy of Eye.
- c) Eye examination and knowledge of basic instruments/equipments required for examination of Eye.
- d) Netrarognanam – Samanya Hetu (Nija and agantuja), Purvarupa, Samprapti, Rupa and Chikitsa.
- e) Classification of Netraroga and its importance.

### **Netra Samanya and Vishishta Chikitsa - Kriya Kalpa**

- a) Netra and Chakshu swasthya hitkara Dinacharya, Ritucharya, Aahara evam Vihara.
- b) Kriya-kalpa-Seka, Aschyotana, Pindi, Vidalaka, Tarpana, Putapaka, Anjana and importance of Panchkarma in Netra Chikitsa.
- c) Basic fundamentals of Netra Shastra Chikitsa e.g. Purva – Pradhana - Paschat karma, Ama-Pachyaman-Pakva Vrana shotha, Vranitopasana, Pranashtashalya, & Vranbandhana. Methods and concepts of sterilization, asepsis and antisepsis as per ancient and modern point of view.
- d) Basic applied knowledge of Ashtavidha shastrakarma, agni, kshara, raktamokshana in Netra rogas.
- e) Essential diagnostic and therapeutic modern pharmacological agents required in Netra Chikitsa

### **Sandhigata Roga(Diseases of junctional areas of eye)**

- a) Number of sandhigata rogas, detailed etiology, pathology, clinical features and management of Pooyalasa and Srava Rogas.
- b) Brief Study of krimi granthi, Parvani and Alaji Rogas.
- c) Study of Acute and Chronic Dacryocystitis, Epiphora, Blepharitis including their aetiology, pathology, signs & symptoms, differential diagnosis and medical & surgical management.

### **Vartmagata Roga (Diseases of Lids)**

- a) Number of vartmagata rogas, and detailed knowledge of etiology, pathology, clinical features and management of Anjananamika, Utsangini, Lagana, Vatahata vartma, Pakshma kopa, Sikta vartma, Pothaki, Klinna vartma, Krichhronmeelana and Kukunaka diseases of Vartma.
- b) Brief Knowledge of Vartmarbuda, Utklishta vartma, Nimesh, Pakshmathata, Vartmarsha
- c) Knowledge of Hordeolum, Ptosis, Trachoma, Trichiasis, Entropion, Ectropion including their Etiology, signs and symptoms differential diagnosis and medical & surgical management.

### **Shuklagata Roga(Diseases of sclera and conjunctiva)**

- a) Number of Shuklagata rogas, detailed knowledge of etiology, pathology, clinical features and management of Arma, Arjuna and Shuktika
- b) Brief Knowledge of Sira pidika, Sira jala, Pishtaka, Balasgrathita.
- c) Study of Pterygium, Scleritis, Episcleritis, Sub-Conjunctival Hemorrhage including their Etiology, signs and symptoms, differential diagnosis and medical & surgical management.

### **Krishnagata Roga (Diseases of cornea and uvea)**

- a) Number of krishnagata rogas, detailed knowledge of Etiology, Pathology, Clinical features, differential diagnosis, complications and Management of Savrana /kshata Shukla (Shukra), Avrana shukra (Shukla)
- b) Brief knowledge of Sira shukla, Akshipakatyaya and Ajakajata.
- c) Knowledge of Corneal ulcer, Corneal Opacity, Uveitis, Acute Iridocyclitis,

Staphyloma, their aetiology, pathology, symptoms, differential diagnosis, complications and management.

### **Sarvagata Roga (Diseases effecting all parts of eye)**

- a) Number of Sarvagata rogas, detailed knowledge of etiology, pathology, clinical features, complications, differential diagnosis and Management of Abhishyanda, Adhimantha, Hatadhimantha and Shushkakshipaka.
- b) Brief Knowledge of Amloshit, Vata paryaya, Anyato vata, Sashopha & Ashophakshipaka- Pilla roga, Sirotkata and Siraharsha.
- c) Knowledge of Conjunctivitis, Glaucoma, Dry Eye Syndrome including their etiology, pathology, clinical features, differential diagnosis, complications and their management.

### **Drishtigata Roga (vision disorders)**

- a) Number of Drishtigata rogas detailed knowledge of - etiology, pathology, clinical features, differential diagnosis and management of Timira, Kacha and Linga nasha.
- b) Brief Knowledge of Abhighataja lingnasha, sanimittaja & Annimittaja Lingnasha Doshandhya/Kaphavidagdha drishti, Naktandhya, Ushna vidagdha drishti, Pittavidagdha drishti, Dhumadarshi, Hriswajadya, Gambhirika, Nakulandhya, Nayanabhighata.
- c) Knowledge of Refractive errors, Cataract including their etiology, pathology, clinical features, differential diagnosis, complications and their management.
- d) Study of Eale's disease, Hypertensive & Diabetic Retinopathies, Age related Macular degeneration, Strabismus, Retinitis pigmentosa, Night blindness, Amblyopia, Central serous retinopathy, Optic Neuritis and Optic atrophy

### **Miscellaneous Diseases**

- a) Xerophthalmia and other malnutritional eye disorders.
- b) Knowledge of ocular trauma and their management.
- c) Introduction to Eye bank, Eye donation, Corneal Transplantation
- d) Preventive Ophthalmology and Community Ophthalmology

## SHIRA - KARNA- NASA- MUKHA ROGAS

### PAPER II

100 Marks

#### Samanya Chikitsa

- Study of therapeutic procedures like Sveda, Kavala, Gandusa, Dhuma, Murdhni Taila, Nasya, Pratisarana, Karna Purana, karna prakshalana, nasa prakshalana Mukha Lepa.
- Ashtavidha shastrakarma and anushastrakarma used in the treatment of Shira, Karna, Nasa evam Mukha Rogas.

#### Shiro Roga

- Importance and Superiority of Shira.
- Number, general etiology, pathology and cardinal features of shiro rogas and kapalgata rogas along with their common line of management/treatment.
- Detailed study of Vataja, Pittaja, Kaphaja shirashoola, Suryavarta, Ardhavabhedaka, Khalitya, Palitya.
- Brief Knowledge of Raktaja shiraha shoola, Krimija shiraha shoola, Kshayaja shiraha shoola & Sannipataja shiraha shoola, Ananta vata, Indralupta, Darunaka.
- Detailed study of Headache, Migraine its differential diagnosis and treatment.

#### Karna Roga

- Detailed study of Rachana and Kriyasharir of Karna (Ear) & Shravanendriya as per Ayurvedic and modern view, Examination of Ear along with instruments/equipments required in Ear examination.
- Detailed study of etiology, pathology, classification, clinical features and management of diseases of Karna – karna shool, karna nada & shweda, Badhirya, karnastrava, karna pratinaha, pootikarna, karnagoothaka, karnavidradhi.
- Brief Knowledge of karna kandu, karnapaka, karnarsha, karnarbuda, krimikaran & karnapali rogas, Karna sandhana (Auroplasty), fundamentals, method and Vaikritpaham
- Detailed study of Otagia, ASOM, CSOM, Deafness, wax including their etiology, pathology, clinical features, differential diagnosis, complications and medical & surgical management

- e) Brief Knowledge of Otomycosis, Otosclerosis, Tinnitus, Vertigo, Foreign body in ear and Noise pollution.

### **Nasa Roga**

- a) Detailed study of Rachana and Kriyasharir of Nasa (Nose and paranasal sinuses)& Ghranendriya as per Ayurvedic and modern view, Examination of Nose. along with instruments/equipments required in Nose examination.
- b) Detailed study of Pratishtyaya, Dushta pratishtyaya, Nasanaha, Kshavathu, Nasagata raktapitta & Nasarsha.
- c) Brief Knowledge of Putinasa, Bhranshatu, Peenasa, Apeenasa, Nasarbuda, Nasashotha, Dipta, Nasa Sandhana.
- d) Detailed study of Rhinitis & Sinusitis Epistaxis, Nasal Polyp, DNS, Foreign body including their Etiology, pathology, clinical features differential diagnosis and medical & surgical management.
- e) Brief Knowledge of Nasal trauma, Tumours of nose and Para nasal sinuses.

### **Mukha Roga (Diseases of Oral Cavity)**

- a) Detailed study of Rachana and Kriyasharir of Mukha Rogaadhithana–oshtha, dantamoola, danta, jivha, talu, gal, sarvasara (Oral cavity ) as per Ayurvedic and modern view along with their Basic examination including instruments/equipments required for the examination.
- b) Mukha and Danta Swasthya as per ancient and modern concepts including prevention of malignancy of oral cavity.
- c) Number and general aetiology, pathology, cardinal features of Mukha rogas along with their common line of management/treatment.

### **Oshtha Roga (Diseases of Lips)**

- a) Detailed study of Etiology, pathology, classification, clinical features and management of - Oshtha prakopa, khandoshtha
- b) Brief Knowledge of Gandalaji, Jalarbuda, Kshataja Oshthaprakopa
- c) Knowledge of cleft lip.

### **Dant Mula Gata Roga (Diseases of Periodontia)**

- a) Detailed study of Etiology, pathology, classification, clinical features and management of - Shitada, Dantaveshta, Upakush, Danta Nadi, Danta Vidradhi, Adhimansa
- b) Brief Knowledge of dantapupputaka, Saushira, Mahasaushira, Danta Vaidarbha , Paridara, Vardhana.
- c) Detailed study of Etiology, pathology, classification, clinical features and management of Gingivitis, Apical abscess, Periodontitis (Pyorrhoea).

### **Danta Roga (Dental Diseases)**

- a) Detailed study of Etiology, pathology, classification, clinical features and management of Daalan, Krimidanta, Dantaharsha, Danta sharkara, Hanumoksha
- b) Brief Knowledge of karala, Bhanjanak , Kapalika, Shyava Danta, Danta bheda,
- c) Danta chaal, Adhidanta, Danta Utpatana including Jalandhar bandha method and Danta Purna.
- d) Knowledge of Dental Caries, Dental Tartar & Tooth extraction.

### **Jihwa Gata Roga (Diseases of Tongue)**

- a) Detailed study of Etiology, pathology, classification, clinical features and management of - jivha kantaka (vataja, pittaja and kaphaja)
- b) Brief Knowledge of Upajihva, Adhijihva, Alasa.
- c) Knowledge of Glossitis, Tongue Tie, Ranula, Benign and Malignant Tumors of tongue.

### **Talu Roga (Diseases of Palate)**

- a) Detailed study of Etiology, pathology, classification, clinical features and management of - Gala shundika, Talushosha, Talupaka
- b) Brief Knowledge of Talupupputa, Adhrusha, Kacchapa, Talvarbuda, Mamsasanghata.
- c) Knowledge of Cleft palate, palatitis, uvulitis and tumours of the palate.

### **Kantha and Gala gata Roga (Diseases of Pharynx & Larynx)**

- a) Detailed study of Etiology, pathology, classification, clinical features and

- management of - Tundikeri, Kantha shaluka, Gilayu, Galaganda, Swrabhedha, Galavidradhi.
- b) Brief Knowledge of Rohini, Galashotha, Kantharbuda, Kanthavidradhi, Galarbuda Galaugham, Vrindam, Ekavrindam, Valaya, balasa , Shataghni, Swaraghna.
  - c) Detailed study of Etiology, pathology, classification, clinical features and management of - Pharyngitis, Laryngitis, Tonsillitis & Adenoiditis
  - d) Brief Knowledge of foreign body in the throat, Carcinoma of Larynx & Pharynx, Dysphagia Diphtheria & diseases of salivary glands.

**Sarvasara Mukha Roga (Generalised mucosal affections of the oral cavity)**

- a) Detailed study of Etiology, pathology, classification, clinical features and management of Sarvasar mukhapaka
- b) Brief Knowledge of urdhvaguda, putivaktrata, mukharbuda
- c) Detailed Knowlege of Stomatitis.

**VI Miscellaneous Diseases**

- a) National Programme for Prevention and Control of Deafness.

**PRACTICAL**

**Content of Practical**

- a) Identification, Uses, Demonstration of surgical/non-surgical equipment/ instruments, materials used in shalakya chikitsa. Method of sterilization. Training of case taking, bedside clinics and case presentation.
- b) Training in para- surgical procedures-
  - i. Kshara karma
  - ii. Agnikarma
  - iii. Raktamokshana
  - iv. Training of ward procedures. Application of bandages, wound management
  - v. Training of minor procedures (ashtavidha)
  - vi. Observation of surgical procedures in Shalakya

**Clinical Training 04 Months (OPD, IPD OT and kriya kalpa)**



### Distribution of Practical marks

1)	Long Case	30 Marks
2)	Short Case	20 Marks
3)	Identification of instruments quipments,medicines,etc	10 Marks
4)	Viva – voce	30 Marks
5)	Daily Record (Case record)	10 Marks
<b>Total</b>		<b>100 Marks</b>

### Reference Books:-

Sl.No.	Nmae of the Book	Name Of the Author
1.	Shalakyta Tantra	Dr. Rama Nath Dwivedi
2.	Shalakyta Vigyan	Dr. Ravindra Chandra Choudhary
3.	Abhinava Netra Chikitsa	Acharya Vishva Nath Dwivedi
4.	Netra Chikitsa Vigyan	Dr. Ravindra Chandra Choudhary
5.	Netra Roga Chikitsa	Dr. Munje
6.	Netra Roga Vigyan	Dr. Hans Raj
7.	Parson's Diseases of Eye	
8.	Diseases of ENT Log and Turner	
9.	Shalakyta Tantra	Shiv Nath Khanna
10	Atext book of ophthalmology in Ayurveda	Dr. P.K.Shantha kumara
11	Shalakyta Kriya Kalpa Vigyan	Prof. K. S. Dhiman
12	Useful portions of Charak, Sushrut, Vagbhata	

**RESEARCH METHODOLOGY  
AND MEDICAL STATISTICS**

## **Research methodology and Medical statistics**

**Total Marks 50 (Part A-30 and Part B- 20)**

**PART – A**

**Research Methodology**

**30 Marks**

Brief historical background of research in Ayurved and contemporary medical science  
Evidences of researches in ayurvedic classics

Etymology, definitions and synonyms (Anveshana, Gaveshana, Prayeshana, Anusandhan and Shodha) of the word Research

**Research in Ayurved - Scope, need, importance, utility**

**Types of Research (familiarization of the terms)**

- a) Pure and Applied
- b) Qualitative , Quantitative and Mixed

**Observational and interventional.**

**Research process (Importance of each steps in brief)**

- a. Selection of the topic
- b. Review of the literature
- c. Formulation of Hypothesis
- d. Aims and Objectives
- e. Materials and methods
- f. Observations and results
- g. Methods of communication of Research

**Research tools – Role of the pramanas as research tools**

**The concept and importance of ethics in research**

**Concept of Evidence Based Medicine and Scientific Writing**

Importance of IT in data mining and important research data portals concerned with

**Part – B**

**Medical-Statistics**

**20**

**Marks**

**Definition, scope and importance of the Medical statistics**

**Common statistical terms and notations**

- a) Population
- b) Sample
- c) Data
- d) Variable
- e) Normal distribution

**Collection and Presentation of data**

- a) Tabular
- b) Graphical
- c) Diagrammatical

**Measures of location**

- a) Average
- b) Percentile

**Measures of Central Tendency**

- a) Arithmetic mean
- b) Median
- c) Mode

**Variability and its measurement**

- a) Range
- b) Standard deviation
- c) Standard error

## Introduction to probability and test of significance

## Parametric and non parametric tests

## Introduction to commonly used statistical soft-wares.

## Reference books for Research methodology :

Sl.No.	Name of the Book	Name of the Author
1	Dawson, Catherine, 2002, Practical Research Methods, New Delhi, UBS Publishers' Distributors	Kothari, C.R.,
2	Research Methodology-Methods and Techniques, New Delhi,	Wiley Eastern Limited.
3	Kumar, Ranjit, 2005, Research Methodology-A Step-by-Step Guide for Beginners, (2nd.ed), Singapore,	Pearson Education
4	Students guide to research methodology – Undergraduates. Alexandria Medical Students Association.	
5	Health research methodology. A guide for training in research methods. 2nd edition. Manila,.	World Health Organization Regional Office for the Western Pacific, 2001

## Reference Books for statistics:

Sl.No.	Name of the Book	Name of the Author
1	Health research methodology. A guide for training in research methods. 2nd edition.	Manila, World Health Organization Regional Office for the Western Pacific, 2001.
2	Statistical methods in medical research. Oxford Blackwell	P.Armitage (Ed)
3	Statistical methods .	Snedecor GW and Cochran, WG
4	Altman, D. G. (1991). Practical statistics for medical research. London: ChapmanPrinciples	A. Bradford Hill

	of Medical Statistics by	
5	Interpretation and Uses of Medical Statistics by	Leslie E Daly, Geoffrey J Bourke, James MC Gilvray.
6	Research in Ayurveda-	M S Baghel
7	research methodology in ayurveda-	V.J.Thakar,Gujarat Ayurved University
8	Ayurveda anusandhan paddhati-	P.V.Sharma
9	Research methodology methods and statistical techniques-	Santosh Gupta. Greenhouse SW
10	The growth and future of Biostatistics (A view from the1980s) Statistics in Medicine	Knapp GR & Miller MC.
11	Clinical epidemiology and Biostatistics, NMS series	Antonisamy B, Christopher S & Samuel PP.
12	Biostatistics :	Sundara Rao PSS & Richard J.
13	Principles and practice An introduction to Biostatistics, PHI	Senn S (1997).
14	Statistical Issues in Drug Development. Chichester:	John Wiley & Sons.
15	Methods in Bio-statistics for Medical Students-	BK Mahajan
16	Vaidyakeeya Sankhiki Shastra-	Dr.S.S.Savrikar

## **ATTENDANCE**

A minimum 75% of attendance in subject (Both theory and practical) shall be essential for appearing the examination. A minimum 5-10% of attendance can be permitted on medical grounds with the consent of Head of the Institution with valid proof.

## **DECLARATION OF RESULTS:**

Results to be announced as per Pondicherry University norms.

***NOTE:** It is compulsory to follow the Academic calendar as per Pondicherry University.*

CHAPTER - V  
**COMPULSORY ROTATORY INTERNSHIP**

The duration of Compulsory Rotatory Internship shall be *one year* and the student shall be eligible to join the compulsory internship programme after passing all the subjects from first to the final professional examination and the internship programme shall be start after the declaration of the result of final professional examination.

**The Internship Programme and time distribution shall be as follows:-**

The interns shall receive an orientation regarding programme details of internship programme along with the rules and regulations, in an orientation workshop, which shall be organised during the first three days of the beginning of internship programme and a work book shall be given to each intern, in which the intern shall enter date-wise details of activities undertaken by him or her during his or her training;

Every intern shall provisionally register himself with the concerned State Board or Council and obtain a certificate to this effect before joining the internship program;

The daily working hours of intern shall be not less than eight hours;

Normally one-year internship programme shall be divided into clinical training of six months in the Ayurvedic 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:

Provided that where there is no provision or permission of the State Government for allowing the graduate of Ayurveda in the hospital or dispensary of Modern Medicine, the one-year Internship shall be completed in the Hospital of an Ayurvedic College.

The clinical training of six or twelve months, as case may be, in the Ayurvedic hospital attached to the college or in non-teaching hospitals approved by Central Council of Indian Medicine shall be conducted as follows-



Sl.No	Departments	Distribution of six months	Distribution of twelve months
1.	Kayachikitsa	Two months	Four Months
2.	Shalya	One month	Two months
3.	Shalakyā	One month	Two months
4.	Prasuti evam Striroga	One month	Two months
5.	Balroga-Kaumarabhritya	Fifteen days	One month
6.	Panchakarma	Fifteen days	One month

Six months training of interns shall be carried out with an object to orient and acquaint the intern with the National health Programme and the intern shall undertake such training in one of the following institutes, namely

- Primary Health Centre
- Community Health Centre or District Hospital
- Any recognised or approved hospital of modern medicine
- Any recognised or approved Ayurvedic hospital or Dispensary

Provided that all the above institutes mentioned in clauses 1 to 2 shall have to be recognised by the concerned University and concerned Government designated authority for taking such training.

#### **Detailed Guidelines for internship programme:**

The guidelines for conducting the internship clinical training of six or twelve months in the Ayurvedic Hospital attached to the college and the intern shall undertake the following activities in the respective department as shown below-

**Kayachikitsa-** The duration of internship in this department shall be two months or four months with following activities:-

- a) All routine works such as case taking, investigations, diagnosis and management of common diseases by Ayurvedic Medicine;
- b) Routine clinical pathological work such as haemoglobin 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
- c) Training in routine ward procedures and supervision of patients in respect of their diet, habits and verification of medicine schedule;

**Panchakarma-** The duration of internship in this department shall be fifteen days or one month with following activities-

- a) Panchakarma procedures and techniques regarding purva karma, pradhan karma and pashchat Karma;

**Shalya-** The duration of internship in this department shall be one month or two months and intern shall be practically trained to acquaint with the following activities-

- a) Diagnosis and management of common surgical disorders according to Ayurvedic principles;
- b) Management of certain surgical emergencies such as fractures and dislocations, acute abdomen;
- c) Practical training of aseptic and antiseptics techniques, sterilization;
- d) Intern shall be involved in pre-operative and post-operative managements;
- e) Practical use of anesthetic techniques and use of anesthetic drugs;
- f) Radiological procedures, clinical interpretation of X-ray, Intra Venous Pyelogram, Barium meal, Sonography and Electro Cardio Gram;
- g) Surgical procedures and routine ward techniques such as-
- i.* Suturing of fresh injuries;
  - ii.* dressing of wounds, burns, ulcers and similar ailments;
  - iii.* incision of abscesses;
  - iv.* excision of cysts;
  - v.* venesection;
  - vi.* application of Ksharasutra in ano rectal deseases;

**Shalaky-** The duration of internship in this department shall be one month or two months and intern shall be practically trained to acquaint with the following activities:-

- a) Diagnosis and management of common surgical disorders according to Ayurvedic principles;
- b) Intern shall be involved in Pre-operative and Post-operative managements;

- c) Surgical procedures in Ear, Nose, Throat, Dental problems, Ophthalmic problems;
- d) Examinations of Eye, Ear, Nose, Throat and Refractive Error with the supportive instruments in Out-Patient Department;
- e) Procedures like Anjana Karma, Nasya, Raktamokshan, Karnapurana, Shirodhara, Putapak, Kawal, Gandush at Out-Patient Department level;

**Prasuti evam Striroga-** The duration of internship in this department shall be one month or two months and intern shall be practically trained to acquaint with the following activities:-

- a) Antenatal and post-natal problems and their remedies, antenatal and post-natal care;
- b) Management of normal and abnormal labours; and
- c) Minor and major obstetric surgical procedures;

**Balroga-** The duration of internship in this department shall be fifteen days or one month and intern shall be practically trained to acquaint with the following activities:-

- a) Antenatal and post-natal problems and their remedies, antenatal and post-natal care also by Ayurvedic principles and medicine;
- b) Antenatal and post-natal emergencies;
- c) Care of new born child along with immunization programme;
- d) Important pediatric problems and their Ayurvedic managements.

**Internship training in Primary Health Centre 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 programmes;
- 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 familiaried with the work of maintaining the relevant register like daily patient register, family planning register, surgical register and take active participation in different Government health schemes or programmes;
- f) Participate actively in different National Health Programmes implemented by the State Government;

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.

**Assessment:**

After completing the assignment in various Sections, the interns have to obtain a completion certificate from the head of the Section in respect of their devoted work in the Section concerned and finally submitted to Principal or Head of the institute so that completion of successful internship can be granted.

**Migration of Internship**

The Migration of internship shall be with the consent of the both college and University, in case of migration is between the colleges and two different Universities.

- a) In case migration is only between colleges of the same University, the consent of both the colleges shall be required.
- b) The migration shall be accepted by the University on the production of the character certificate issued by institute or college and application forwarded by the college and University with a “No Objection Certificate”, as case may be.

## CHAPTER - VI

### SCHEME OF EXAMINATION

The theory examination shall have minimum twenty per cent. short answer questions having maximum mark up to forty per cent. and minimum four questions for long explanatory answer having maximum marks up to sixty per cent. and these questions shall cover entire syllabus of subject

The minimum marks required for passing the examination shall be fifty per cent. in theory and fifty per cent. in practical or clinical or viva-voce, wherever applicable separately in each subject.

A candidate obtaining (75%) seventy-five per cent marks in the subject shall be awarded distinction in the subject.

The supplementary examination shall be held within six months of regular examination and failed students shall be eligible to appear in its supplementary examination, as the case may be.

Each student shall be required to maintain seventy-five per cent. attendance in each subject (in theory and practical) for appearing in the examination and in this regard a class attendance card shall be maintained for each student for the different subjects and the Principal shall arrange to obtain the signature of the students, teachers at the end of each course of lectures and practical instructions and send the cards to each Head of the Department for final completion before the commencement of each examination.

In case a student fails to appear in regular examination for cognitive reason, he or she shall appear in supplementary examination as regular students, whose non-appearance in regular examination shall not be treated as an attempt and such students after passing examination shall join the studies with regular students and appear for next professional examination after completion of the required period of study.

**The following facts may be taken into consideration in determining classwork in the subject**

- a) Regularity in attendance;
- b) Periodical tests; and
- c) Practical work.

**Number of Papers and Marks for theory and practical / Viva-voce:**

Name of the subject		No. of hours of teaching			Details of Maximum Marks			
		Theory	Practical	Total	No.of papers	Theory	Practical / viva-voce	Total
<b>1<sup>st</sup> Professional</b>								
1.	Padarth Vigyan evam Ayurved ka Itihas	100	--	100	Two	200	--	200
2.	Sanskrit	200	---	200	One	100	---	100
3.	Kriya Sharir	200	200	400	Two	200	100	300
4.	Rachana sharir	300	200	500	Two	200	100	300
5.	Maulika siddhanta evam Ashtanga hridaya (Sutrasthana)	150	--	150	One	100	50	150
<b>2<sup>nd</sup> Professional</b>								
1.	Dravyaguna vigyan	200	200	400	Two	200	200	400
2.	Roganidan evam viktiti vigyan	200	200	400	Two (01-Pathology 01-Ayurveda)	200	200	400
3.	Rasashastra evam Bhaishajya kalpana	200	200	400	Two	200	200	400
4.	Charaka Samhita (Purvardha)	200	--	200	one	100	50	150
<b>3<sup>rd</sup> Professional</b>								
1.	Agada Tantra vyavaharAyurveda evam vidhi vaidyak	200	100	300	One	100	50	150
2.	Swasthavritta and yoga	200	100	300	Two	200	100	300
3.	Prasuti evam striroga	200	200	400	Two	200	100	300
4.	Balaroga	100	100	200	One	100	50	150
5.	CharakaSamhita (Uttarardha)	200	--	200	One	100	50	150
<b>Final Professional</b>								
1.	Kayachikitsa	300	200	500	Two	200	100	300
2.	Panchakarma	100	200	300	One	100	50	150
3.	Shalya Tantra	200	150	350	Two	200	100	300
4.	Shalakya Tantra	200	150	350	Two	200	100	300
5.	Research Methodology and Medical Statistics	50	--	50	One	50	--	50

**NOTE:**

The period of theory and practical shall not be less than sixty minutes (one hour) and the duration of the practical of clinical subjects and Rachana Sharir (Dissection) shall be of atleast one hundred and twenty minutes (two hours).

- a) Clinical training of the students shall start from third professional onwards.
- b) The clinical training in the hospital attached with college to the students shall be as follows:-

<b>I.</b>	<b>Kayachikitsa</b> (Indoor and Outdoor):	<b>Eighteen Months</b>
	<i>a.</i> Kayachikitsa (Samanya)	Six months
	<i>b.</i> Manasroga	Three months
	<i>c.</i> Rasayan and Vajikaran	Three months
	<i>d.</i> Panchakarma	Three months
	<i>e.</i> Rog Nidan evam Vikriti Vigyan	Three months
<b>II.</b>	<b>Shalya</b> (Indoor and Outdoor):	<b>Nine Months</b>
	<i>a.</i> Shalya (Samanya)	<b>Three months</b> ( <i>minimum one-month in Operation Theatre</i> )
	<i>b.</i> Shalya (Kshar and Anushastra Karma)	<b>Three months</b> ( <i>minimum one-month in Operation Theatre</i> )
	<i>c.</i> Ksharsutra	<b>Two months</b>
	<i>d.</i> Anaesthesia	<b>Fifteen days</b>
	<i>e.</i> Radiology	<b>Fifteen days</b>
<b>III.</b>	<b>Shalaky Tantra</b> (Indoor and Outdoor):	<b>Four months</b> ( <i>minimum one-month in Operation Theatre</i> )
<b>IV.</b>	<b>Prasuti evam Stiroga</b> (Outdoor and indoor)	<b>Three months</b>
<b>V.</b>	<b>Kaumarabhritya</b> (Outdoor and indoor)	<b>One month</b>
<b>VI.</b>	<b>Atyayik (casualty)</b>	<b>Two months</b>

CHAPTER - VII  
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 Pondicherry University examination 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 - VIII

### **MIGRATION**

The Students may be allowed to take the migration to continue their study to another college after passing the first professional examination, but failed students transfer and mid-term migration shall not be allowed.

For migration, the students shall have to obtain the mutual consent of both colleges and Universities and it shall be against the vacant seat after obtaining “No Objection Certificate” from Central Council.

## PATTERN OF THEORY QUESTION PAPER FOR SANSKRIT

- a) The question paper shall be three hours duration.
- b) The paper should cover the entire topic areas of the subject in accordance with the prescribed syllabus of the CCIM.
- c) The question paper shall have the maximum marks hundred.
- d) The total number of question paper is twenty –three.
- e) All the questions are divided in two sections as part –A and part – B. Each section contains 50 marks.
- f) The question paper shall be serially numbered from 1 to 23. Part –A is bearing 1 to 14 and Part – B is 15 to 23.
- g) There shall be sub numbers for each question except the questions number 15 & 16.
- h) There shall be choice in each question papers except the questions number 12 to 19.
- i) Question from 15 to 19 are from Garbha-vyakaranam.
- j) Question from 20 and 21 are from Vaidyakiya-subhasitam.
- k) Question from 22 and 23 are from Panchatantra (Aparikshita-karakam).

### DIVISION OF MARKS

#### Part – A

1.	Sanjnaprakaranam	$2\frac{1}{2} \times 2 = 5$
2.	Definition of technical terms (from Sanjna, Vibhakti & Sandhi)	$1 \times 5 = 5$
3.	Sabdarupani	5
4.	Dhaturupani	5
5.	Sandhichheda (Sandhiprakaranam)	$1 \times 3 = 3$
6.	Sandhi (Sandhiprakaranam)	$1 \times 3 = 3$
7.	Samasa	$1 \times 3 = 3$
8.	Pratya	$1 \times 3 = 3$
9.	Vibhaktisadutvam	$1 \times 3 = 3$
10.	Correct the error	$1 \times 3 = 3$
11.	Vachyaprayoga	$1 \times 3 = 3$
12.	Sanskrit passage to English Translations	3
13.	Sanskrit Sloka to English Translations	3
14.	English passage to Sanskrit Translations	3

## Part – B

15.	Translation of the prose	5
16.	Word order and meaning of the verse	5
17.	Word meaning	1x5=5
18.	Sandhichheda	1x5=5
19.	Grammatical formation	1x5=5
20.	Translation of the verse	3x3=9
21.	Short notes	2x3=6
22.	Story writing	2x4 =8
23.	Moral of the story	2x1=2

## PATTERN OF THEORY QUESTION PAPER FOR RESEARCH METHODOLOGY

- The Question Paper shall be of **one hour & thirty minutes (90 Minues)** duration.
- The paper should cover the entire topic areas of the subject in accordance with the prescribed syllabus of the CCIM (Central Council of Indian Medicine).
- The Question Paper shall have the Maximum Marks **fifty**.
- The total number of questions is **fifteen**.
- The questions shall be serially numbered from **1 to 15**.
- There shall be no sub-numbers for the questions.
- There will be no choice in any of the Question Papers.

## Part -A

- One** essay question of **10** marks,
- Two** short essay questions of **5** marks each
- Five** short answer questions of **2** marks each.

## Part - B

- One** essay question of **10** marks,
- Two** short essay questions of **5** marks each
- Five** short answer questions of **2** marks each.

## **PATTERN OF THEORY QUESTION PAPER FOR REMAINING SUBJECTS**

- a) The Question Paper shall be of **three hours** duration.
- b) The paper should cover the entire topic areas of the subject in accordance with the prescribed syllabus of the CCIM (Central Council of Indian Medicine).
- c) The Question Paper shall have the Maximum Marks **hundred**.
- d) All subjects, except Sanskrit, shall have the following pattern :-
- e) The total number of questions is **twenty-two**
- f) The questions shall be serially numbered from **1 to 22**.
- g) There shall be no sub-numbers for the questions.
- h) There will be no choice in any of the Question Papers.

### **Part -A**

- d) **One** essay question of **10** marks,
- e) **Five** short essay questions of **5** marks each
- f) **Five** short answer questions of **3** marks each.

### **Part - B**

- a) **One** essay question of **10** marks,
- b) **Five** short essay questions of **5** marks each
- c) **Five** short answer questions of **3** marks each.