PONDICHERRY UNIVERSITY

(A Central University Established by an Act of Parliament No. 53/1985)

PONDICHERRY UNIVERSITY AFFILIATED COLLEGE

Department of Physical Education, JNRM Bachelor of Physical Education (BPE).



SYLLABUS

SCHEME OF EXAMINATION AND SYLLABUS FOR THE BACHELOR OF PHYSCIAL EDUCATION (B.P.E.) (THREE YEAR) 2020-2021

PONDICHERRY UNIVERSITY AFFILIATED COLLEGE AT ANDAMAN & NICOBAR ISLAND

Department of Physical Education, JNRM Bachelor of Physical Education (BPE).

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BPE (Bachelor of Physical Education)

Aim of the Course

Physical education is an inter disciplinary science involving fields related to education ,human behaviour ,sports and science. The purpose of the three year degree course is to provide a longer period of professional preparation in physical education and sports This is a professional course which enables students to get jobs like Physical Education Teachers in schools, Fitness experts, Training Instructor in Police organisations, Corporate sector etc.

Regulations

The candidate applying for the three year degree programme should have the following requirements for the admission in the BPE course.

- a) Candidate must have passed the Higher Secondary Examination (+2) or any other examination recognized as equivalent there to with minimum 45% marks.
- b) Other requirements
- 1) Candidate seeking admission to BPE must qualify the Physical Fitness Test (Appendix-I)
- 2) Be free from Physical Deformities.
- 3) Should be Medically Fit to undergo the course.
- c) Minimum eligibility the applicant must have represented the District/School in any game/Sports.(AppendixII)

2.Duration of the Course

- i)The course shall be of three years duration spread over six semesters. The total working days for a semester shall not be less than 100 working days. The curriculum and syllabi for course shall be as prescribed from time to time. The Maximum duration to complete the course shall be 5 years.
- ii)The course of study shall consist of six parts viz. Part I, Part II, Part III, Part IV, Part V, Part VI.

3.Attendance

Students must have 85 percent attendance of the total number of working days in theory and practical classes to write the semester examinations.

4.Medium

The medium of instruction shall be English & Hindi.

5.Passing Minimum

Passing Eligibility & Classification for the award of the Degree as existing for the other UG.Degree Courses.

6.Reservation of Seats

- 1. Schedule Tribes (S.T.) a total number of 7.5% for S.T. are reserved.
- 2. Each candidate from these reserved categories while applying for admission will be required to submit a certificate from the competent authority with respect to his/her status as S.T.

^{*} Relaxation allowed as per University Rules.

APPENDIX – I

PH	PHYSICAL FITNESS TEST (QUALIFYING)					
	Male		Female			
(a)	100 mts	(a)	100 mts			
(b)	Shot put (16 lbs)	(b)	Shot put (8 lbs)			
(c)	Broad Jump.	(c)	Broad Jump.			
(d)	Vertical Jump.	(d)	Vertical Jump.			
(e)	12 minutes run and walk.	(e)	8minutes run and walk.			

CRITERIA FOR GRADING OF SPORTS REPRESENTATION

APPENDIX – II

(a)	 	in Olympics, Asian Games, Comm Participation in any sports/Games	, , , , , , , , , , , , , , , , , , , ,
	Maximum 25 Marks		
(b)	National/All India Into National	er Zonal/ National Games /Inter-Sta	ate/FederationCup/ Junior
	Ist Position	20 Marks	
	IInd Position	18	
	IIIrd Position	16	
(c)	School National	-	*
	Ist Position	15 Marks	
	IInd Position	13 Marks	
	III Position	12 Marks	
(d)	National Women Champ	ionship/National Rural Champions	hips
	Ist Position	15 Marks	
	II Position	13 Marks	
	III Position	12 Marks	
(e)	Participation in National	Championships	*
	National Participation	10 Marks	
	National School	10 Marks	
(f)	State championships	•	
	Ist Position	7.5 Marks	
	IInd Position	6 Marks	
	IIIrd Position	5.5 Marks	
	State Participation	5 Marks	
(g)	Inter-Zonal (School) C.B School Nationals, All Ind	S.E Nationals K.V.S. Nationals, Sai ia Public Schools	nik Schools Nationa, Navodya
	Ist Position	10 Marks	
	II Position	8 Marks	
	III Position	6 Marks	
(h)		C.B.S.E Cluster/Regional, K.V.S Re l, Cluster/Regional Public Schools)	gional, Sanik Schools, Regional,
	Ist Position	7.5 Marks	
	IInd Position	6.5 Marks	
	IIIrd Position	5.5 Marks	
(i)	District Level Tournan	nents	
	Ist Position	5Marks	
	IInd Position	4 Marks	

	IIIrd Position	3 Marks			
(j)	Inter School Participation	3 Marks			
	(a) Tournaments mentioned Federation of India/Govt. of	must be approved by Indian Olympic As India.	ssociation/School Games		
	· ·	in the Sports will be determined only if the last eligible three years. Participating all the courses.			
		cluster and regional is equivalent to zone ational is equal to inter-zone or district	` ,		
	(d) In case any candidate is holding the National participation certificate, it must be supported by certificate of participation at state level or position secured at the Inter-Zonal Competition of the same (respective) game.				
	` '	te championships must be considered well or zonal level or an equivalent level pe	11 0		

GRADING SYSTEM

To pass in an examination a student has to scorea minimum of fifty percent mars in each paper and practical's (Internal and external Combined)

Minimum for Passing -50% 50 to 59% -II Class 60 percent and above –I Class

Passing of Result

Result will be passed by the board of examiners of each course and will be submitted to the Academic Council of the college to recommend the eligible for the award of the degree to Pondicherry University.

Revaluation /Re-totalling

The B.P.E.Students appearing for examination are eligible to claim for the revaluation or retotaling within the period of one month after the publication of result.

Fees:

As per university instruction.

BPE (Bachelor of Physical Education)

SYLLABUS

I SEMESTER

B.P.E.I Year I Semester

00109 - English-I

00110 - General Science

00111 - Foundation & Philosophy of Physical Education

00112

- Rule of Games and SportsPartI (Basketball,Badminton,Kabaddi, Kho-Kho)

First Semester

S.No	PAPER	Lecture	Practical	Duration	Mar	ks	Maximu
		Hours/ week	hours/ week	of Exam hrs	Int .	Ext.	m Marks
1	General Science	6		3	25	75	100
2	English-I	6		3	25	75	100
3	Foundation of Physical Education and Sports	5		3	25	75	100
4	Rules of Games and Sports-Part I(Basetball,Badminton,Kabaddi&Kho-Kho)	6		3	25	75	100

II SEMESTER

B.P.E.I Year II Semester

00209 - English-II

00210 - Computer Application in Physical Education

- Introduction to Adaptive Physical Education

- Rules of Games and SportsPart II

 $(Volleyball,\!Swimming,\!Gymnastics,\!Table\text{-}tennis)$

Second Semester

S.	PAPER	Lecture	Practical	Duration	Marl	ΚS	Maximu
No		Hours/ week	hours/ week	of Exam hrs	Int.	Ext.	m Marks
	T 11 T		WCCK	111.5	2.7		100
1	English-II	6		3	25	75	100
2	Computer Application in Physical Education	6		3	25	75	100
3	Introduction to Adaptive Physical Education	5		3	25	75	100
4	Rules of Games and Sports-Part II (Volleyball,	6		3	25	75	100
	Table tennis, Swimming& Gymnastics)						
5	Environmental Studies		As p	er university	norms	3	

III SEMESTER

B.P.E.II Year III Semester

-Sports Management in Physical Education

- Sports Injuries & Physiotherapy, Safety Education

- Methods in physical Education 00312 - Rules of Games and SportsPartIII

(Track & Field and Combined events)

Third Semester

S.No	PAPER	Lecture	Practical	Duration	Mark	KS	Maximu
		Hours/week	hours/week	of Exam hrs	Int.	Ext.	m Marks
1	Sports Management in Physical Education	6		3	25	75	100
2	Sports Injuries & Physiotherapy, Safety	6		3	25	75	100
	Education.						
3	Methods in physical Education	5		3	25	75	100
4	Rules of Games and Sports-Part III	6		3	25	75	100
	(Track & Field and Combined events)						

IV SEMESTER

B.P.E.II Year IV Semester

- Personality Development and Communication Skills

- Test Measurements & Evaluation in Physical Education and Sports

- Sports Nutrition and Health Education 00412 - Rule of Games and SportsPartIV

(Football, Hockey, Softball, Ball Badminton)

Fourth Semester

S.No	PAPER	Lecture	Practical	Duration	Marl	ΚS	Maximum
		Hours/week	hours/week	of Exam hrs	Int.	Ext.	Marks
1	Personality Development and Communication Skills	6		3	25	75	100
2	Test Measurements & Evaluation in Physical Education and Sports	6		3	25	75	100
3	Sports Nutrition and Health Education	5		3	25	75	100
4	Rules of Games and Sports-Part IV (Football, Hockey, Softball, Ball Badminton)	6		3	25	75	100

V SEMESTER

B.P.E.III Year

V Semester

00509

- Recreation ,Camping and Leadership

00510

- Exercise Physiology

00511

-Kinesiology and Biomechanics

00512

- Rule of Games and Sports Part V

(Handball ,Cricket,Netball,Judo)

Fifth Semester

S.No	PAPER	Lecture	Practical	Duration	Marl	KS	Maximum
		Hours/week	hours/week	of Exam	Int.	Ext.	Marks
				hrs			
1	Recreation ,Camping and Leadership	6		3	25	75	100
2	Exercise Physiology	6		3	25	75	100
3	Kinesiology and Biomechanics	5		3	25	75	100
4	Rules of Games and Sports-	6		3	25	75	100
	PartV(Handball,Cricket,Netball,Judo)						

VIthSEMESTER

B.P.E.IIiYear

VI Semester

00609

- Science of Yoga

00610

- Anatomy and Physiology

00611

- Elementary Statistics

00612

- Sports Psychology and Sports Journalism

Sixth Semester

S.No	PAPER	Lecture	Practical	Duration	Marl	ΚS	Maximum
		Hours/week	hours/week	of Exam hrs	Int.	Ext.	Marks
1	Science of Yoga	6		3	25	75	100
2	Anatomy and Physiology	6		3	25	75	100
3	Elementary Statistics	5		3	25	75	100
4	Sports Psychology and sports Journalism	6		3	25	75	100

SCHEME OF EXAMINATION

<u>B.P.E.I Year</u> Part I: Written Examination

S.N0	I SEMESTER	Marks		Maximum Marks
		Int.	Ext.	
00109	English-I	25	75	100
00110	General Science	25	75	100
00111	Paper-I Foundation of Physical Education and Sports	25	75	100
00112	Rules of Games and Sports-Part I (Basketball,Badminton,Kabaddi& Kho-Kho)	25	75	100
			Total Marks	400

S.N0	II SEMESTER	Marks		Maximum Marks
		Int.	Ext.	
00209	English-II	25	75	100
00210	Computer Application in Physical Education	25	75	100
00211	Introduction to Adaptive Physical Education	25	75	100
00212	Rules of Games and Sports-Part II (Volleyball, Table tennis, Swimming& Gymnastics)	25	75	100
			Total Marks	400
	I Semester + II Seme	ester=To	tal	

400 + 400 = 800 Marks

B.P.E.Practicals 00113-Part II: Practicals

Semester	Game/Activity	
		Internal Max.Marks
	1.Minor Games	25
	2.Calisthenics	25
	3.Drills & Marching	25
	4.Basketball	75
	5.Badminton	75
	6.Kabaddi	75
	7.Kho-Kho	75
	8.Officiating(Specialisation)	75
	total	Total 450
Semester	Game/Activity	
		Internal Max.Marks
	1.Dands &Baiteks	25
	2.Light Apparatus	25
	3.Lezium	25
	4. Volleyball	75
	5. Table tennis	75
	6. Swimming	75
	7. Gymnastics	75
	8.Officiating(Specialisation)	75
	total	

I Semester + II Semester = Total 450 + 450 = 900 Marks

B.P.E.II Year Part I : Written Examination

S.N0	III SEMESTER	Marks		Maximum Marks
		Int.	Ext.	
00309	Sports Management in Physical Education	25	75	100
00310	Sports Injuries & Physiotherapy, Safety Education.	25	75	100
00311	Methods in physical Education	25	75	100
00312	Rules of Games and Sports-Part III (Track & Field and Combined events)	25	75	100

S.N0	IV SEMESTER	Marks		Maximum Marks
		Int.	Ext.	
00409	Personality Development and	25	75	100
	Communication Skills			
00410	Test Measurements & Evaluation in	25	75	100
	Physical Education and Sports			
00411	Sports Nutrition and Health Education	25	75	100
00412	Rules of Games and Sports-Part IV	25	75	100
	(Football, Hockey, Softball, Ball			
	Badminton)			
			Total	400
			Marks	
	I Semester + II Seme	ester=To	tal	
	400 + 400 = 8	00Marks	\	

B.P.E.Practicals 00413-Part II: Practicals

Semester	Game/Activity			
		Internal Max.Marks		
III	1.Gymnastics	50		
Semester	2.Yoga	50		
	Track & Field			
	3.Sprint	25		
	4.Long Jump	25		
	5.Triple Jump	25		
	6.Shot put	25		
	7.Discus	25		
	8.Javelin	25		
	9.High Jump	25		
	10.Hurdles	25		
	11.hammer	25		
	12.Pole Vault	25		
	13.Relay	25		
	14.Officiating(Specialisation)	75		
		Total 450		
	total			
IV	1.Marking(Track & Field)	25		
Semester	2.Pyramid &Malkhamb	25		
	3.First Aid	25		
	4. Football	75		
	5.Tennis	75		
	6.Ball Badminton	75		
	7.Tennikoit	75		
	8.Officiating(Specialisation)	75		
	total			
	total	Total 450		
		10tai 430		

B.P.E.II Year PART-III 00413-Teaching Practice

External

1.General Lesson -100
2.Particular Lesson -100
3.IntensiveTeaching -100

Total 300

 $\frac{Note: One \ external \ and \ one \ internal \ examiner \ will \ grade \ the \ students \ and \ the \ average \ marks \ will}{\underline{be \ considered}}$

<u>B.P.E.III Year</u> Part I: Written Examination

S.N0	V SEMESTER	Marks		Maximum Marks
		Int.	Ext.	
00509	Recreation ,Camping and Leadership	25	75	100
00510	Exercise Physiology	25	75	100
00511	Kinesiology and Biomechanics	25	75	100
00512	Rules of Games and Sports-PartV	25	75	100
	(Handball, Cricket, Netball, Judo)			

S.N0	VI SEMESTER	Marks		Maximum Marks
		Int.	Ext.	
00609	Science of Yoga	25	75	100
00610	Anatomy and Physiology	25	75	100
00611	Statistics in Physical Education	25	75	100
00612	Sports Psychology and sports Journalism	25	75	100

B.P.E.Practicals 00613-Part II: Practicals

Semester	Game/Activity	Internal Max.Marks
V Semester	1.Maring(Ground) 2.Aerobics 3.Training MethodsI 4.Handball 5.Cricket 6.Netball 7.Officiating(Specialisation)	25 25 50 75 75 75 75
		Total 400
IV Semester	1.Bharathiam 2.Test and Measurement 3.Training Method II 4.First Aid 5. Hockey 6.Table tennis 7.Officiating(Specialisation)	25 25 50 75 75 75 75
	total	Total 400

B.P.E.III Year PART-III 00613-Coaching Practice

External

1.Internal Examiner	-100
2.External Examiner	-100
Total	200

Note: One external and one internal examiner will grade the students and the average marks will be considere

SYLLABUS OF BPE COURSE 2012-13

<u>SEMSTER – I</u>

PAPER -I

Max. Marks : 75
Internal : 25
Paper Code : 00109
Duration : 3 h

ENGLISH - I

MODULE - I

Oral (common for B.P.E I & II) – Speech and pronunciation with emphasis on (a) Intonation (b) Rhythm (c) Stress (d) Phonetics (e) Fluency. No prescribed examination shall be held in this but special stress on these points have to be given in regular teaching classes.

MODULE – II

A text-book shall be prescribed for extensive reading. It may be an original English novel or a collection of short stories.

MODULE - III

- a. To write an essay consisting of four hundred words on an unfamiliar topic and the nature and scope of the choices of topics will be as follows (i) Reflective (ii) Narrative (iii) Imaginative (iv) Professional.
- b. To write a letter and the nature and scope will be as follows. (i) Personal letters (ii) Business letters (iii) Applications (iv) Circulatory letters (v) Invitations (formal and informal).
- MODULE IV General English Composition. This is intended to train the students so as to acquire skills in the following areas:
- c. To read an unfamiliar passage in order to prepare a resume of the core ideas maintaining logical coherence.
- MODULE-V General English Composition. This is intended to train the students so as to acquire skills in the following areas:
- d. To read an unfamiliar passage followed by a set of questions to be answered from an apprehension of the passage.

Reference Books:

- 1. Sarah Freeman, Written Communication in English New Delhi, Orient Longman, 1971.
- 2. English Communication, Technical Teachers, Training Institute, Madras.

The following textbooks have been prescribed

Extensive Reading: Rudyard Kilpling, Kim. 1901 rpt, Madras. Macmillan India Limited, 1986.

PATTERN OF THE QUESTION PAPERS

The question paper will consist of five parts and all the five parts will have to be attempted. Each part shall have liberal choices of questions. Each question carries fifteen marks and the total marks for the paper will be seventy five. In addition, twenty five marks will be allotted towards internal assessment by the teachers. The duration of the paper will be three hours.

- Part I An essay out of three will have to be written based on the text book prescribed for extensive rea
- Part II A general essay on an unfamiliar topic will have to be written out of three choices.
- Part IIIA passage will be given for comprehension and a few questions will have to be answered based on the reading of the passage.
- Part IV One question will have to be attempted out of three letter writing choices.
- Part VA passage will be given for intensive reading so as to make a resume of i

PAPER -II

Max. Marks : 75
Internal : 25
Paper Code : 00110
Duration : 3 h

GENERAL SCIENCE

UNIT-I

Meaning of science and scope of science in the field of sports and physical education-.Inter relation of science and sports.

UNIT-II

Basic quality and characteristics of living organisim- Cell - Structure and its functions. Muscle-types of muscles according to structure &function.

UNIT-III

Mechanics: Motion, types of motion, speed, velocity, acceleration- Newton's laws of motion—Equilibrium,—Levers – Types of Levers – Projectiles.

UNIT-IV

Force-types of forces, work and energy, forms of energy, sources of energy, law of conservation of energy, friction, factors affecting the friction -gravitation, universal law of gravitation.

UNIT-V

Basic Health Concepts-Food-Component of food -Nutrition-Balance Diet. Disease and its causes Infectious and non infectious diseases.

References

- 1. Physics by W.L. Whitely Published by University Tutorial Press Ltd., Clifton House, Eouch Road, London, N.W.I 1959 Sh.(1961).
- 2. Anderson, T.MC. Lerg Human Kinetics and Aealysing Body Movement,

London, William Heinman Medical Books Ltd., (1961).

3. Davis. D V. Wtay's Anatomy

London, Longmans Green and Co Ltd. (1967)

4. Daval, Ellen Neil Kinesiology,

The Anatomy of Motion.(1961, 1987)

5. Scott, M. Glays Analysis of

Human Motion, New York. (1975)

- 6. Duval Zllen Neil Kinesiology and antomy of Motion. (1970)
- 7. Anderson & Mcclure Human Kinetics and analysis of Body Movements.

WillamHoiken, Landon(1960)

PAPER-III

Max. Marks : 75 Internal : 25 Paper Code : 00111 Duration : 3 hr.

FOUNDATIONS OF PHYSICAL EDUCATION AND SPORTS

UNIT: I

Meaning and Definition of Education and Physical Education – Aims, Objective and Scope of Physical Education, need and importance of physical education in modern society.

UNIT: II

Biological Foundation of Physical Education -Exercise as biological necessity and various periods of growth and development – Differences between boys and girls during the period of adolescence-Body types (Somato Type) according to Sheldon and Kretchemer.

UNIT: III

Psychological Foundation of Physical Education- Sports Psychology – Meaning – Definition – Nature – Scope of Psychology in Physical Education- Psycho-Physical unity of man.-Modren trends in Sports Psychology.

UNIT: IV

Sociological Foudation of Physical Education-Sociology-Meaning-Defination-Social institution and their significance-Family-Peer Group-Community-School/College-State-Nation, Competition and Co-operation in Physical Education.

UNIT: V

Scientific basis of Physical Education – Contribution of Allied Sciences –Anatomy, Physiology, Biomechanics, Kinesiology, Sports Medicine, Psychology, Sociology and Computer Science

Books for References:

- 1. Bucher Charles A., Foundations of Physical Education, St. Louis the C.V. Mosby Company, 1983.
- 2. Kamalesh M.L., Physical Education : Facts and Foundation, New Delhi, P.B. Publications, 1988.
- 3. Thirunarayanan, C. and Hariharan, S., Analytical History of Physical Education, Karaikudi, C.T. & S.H., Publications, 1990.
- 4. Sharma, O.P., History of Physical Education, New Delhi, KhelShitya Kendra, 1998.
- 5. Wakharkar D.G., Manual of Physical Education in India, Pearl Publications Pvt. Ltd., Bombay, 1967

PAPER -IV

Max. Marks : 75
Internal : 25
Paper Code : 00112
Duration : 3 hr.

THEORIES OF GAMES AND SPORTS-I (Basketball, Badminton, Kabaddi& Kho-Kho)

UNIT: I

Origin, History and development of the game- International, National and State Level Organizations and Trophies.

UNIT: II

Fundamental Skill- Lead Up Games - Various System of Play - Selection of Players.

UNIT: III

Training: Warm-up and Warm down - Technical Training - Tactical Training - Coaching Program.

UNIT: IV

Layout of Playfield with all Measurments, Facilities and equipment and its specifications

UNIT: V

Rules and their Interpretation, Methods of Officiating, Duties of Officials

Books for Reference

- 1. Ballon B. Ralph Teaching Badminton Delhi, Surject Publication 1982
- 2. KHO-KHO Rules Book.
- 3. WeinHarat "The Science of Hockey" London Pelham Books, 1979.
- 4. Coleman Brain and Peter Ray, Basset hall, Eash Ardsley, Ep publishing Ltd 1976.
- 5. Tyson Frank "The Cricket Coaching Manual", Calcutta, Rupa& Co, 1985.

<u>SEMSTER – II</u>

PAPER -I

Max. Marks : 75 Internal : 25 Paper Code : 00209 Duration : 3 hr.

ENGLISH – II

MODULE-I

A text-book shall be prescribed for intensive reading. It will be a collection of essays written by native and Indian writers.

MODULE-II

General English Composition – This is intended to train the students so as to acquire skills in the following areas.

a. To learn to detect common errors in English from a set of general statements or twisted sentences from the textbook intensive reading.

MODULE-III

General English Composition:

- b. To learn to acquire from the text book the nuisances in the meanings of various works, which look a like spelling wise, or pronunciation wise for framing new sentence.
- c. To learn to suggest a single word for a group of words in a sentence from the book for intensive reading to develop vocabulary.

MODULE-IV

English Grammar: Remedial teaching aimed at improving a student's deficiencies in the following areas of English Grammar shall be undertaken. a) Articles b) Prepositions

c) Phrasal verbs and Indirect Speeches d) Transformation of sentences.

MODULE-V

English Grammar:

- a) Simple, compound and complex sentences.
- b) Interchange of the Degrees of Comparison.
- c) Interchange of Active and passive voices.
- d) Affirmative, negative, interrogative, explanatory and assertive sentences.

Infinitives, Participles and Gerunds.

Reference Books:

- 1. A.J. Thomas and A.V. Martinet, A. Practical English Grammar, New Delhi: oxford University Press, 1968.
- 2. F.G. French, Common Errors in English OUP.
- 3. F.T. Wood, A Remedial English Grammar for Foreign Students Macmillan Education Limited.

Extensive Reading: M.O. Khan, Ed. Treasures of English Prose, New Delhi: S.Chand& Company (Pvt.) Limited 1988.

Pattern of the question paper

The question paper will consist of five parts and all the five parts will have to be attempted. Each part shall have liberal choice of questions. Each question carries fifteen marks and the total marks for the paper will be seventy-five. In addition, twenty five marks will be allotted for internal assessment by the teachers. The duration of the paper will be three hours.

Part I Five passages out of ten to be annotated from the text-book prescribed for intensive reading.

Part II An essay out of three choices will have to be written chosen from among the lesson of the book for intensive reading.

Part III An essay out of three choices will have to be written chosen from among the lessons of the book for intensive reading.

Part IV General English composition and Grammar. Four questions will have to be answered and there will be liberal choices.

Part V General English composition and Grammar, Four questions will have to be answered and there will be liberal choices.

PAPER -II

Max. Marks : 75 Internal : 25 Paper Code : 00210 Duration : 3 hr.

COMPUTER APPLICATIONS IN PHYSICAL EDUCATION

UNIT - I

Meaning and definition of computer, Components of a Computer System, Central Processing Unit, Visual Display Unit, Keyboard. Input and output devices, mouse, joy stick, scanner, printer.

UNIT -II

Concept of Memory, primary and secondary memory, RAM and ROM, units of memory – byte, kilobytes, megabytes, gigabytes. Storage devices, floppy disc, hard disc, CD ROM and DVD.

UNIT-III

Basic Windows Accessories and MS Word

Introduction to word processor, creating and saving a document, editing and formatting a document, inserting symbol, printing a document, adding headers and footers, numbering pages.

UNIT-IV

MS Excel &MS Power Point

Ms-Excel-Opening – Saving – Editing File – Basic Mathematical Problems – Addition, Subtraction, Multiplication, Division – **Ms Power Point** – Opening – Creating Saving – Deleting Slides / Templates – Slide Show – Important Feature of Power point Presentation.

UNIT-IV

Use of Computer Applications in Physical Education - Preparing entries for athletics and tournaments - Preparing Score sheet, fixtures for athletic events and tournaments.

References:

- 1. Vikas Gupta, (1995) Computer Course, Delhi: PutakMahal.
- 2. French, C.S. (1986) Data Processing, New Delhi: Galgotia Book Source.
- 3. Haggery, T., The Administrative use of computers in professional Sport Organization, New York.
- 4. Maria Langer, World of Windows, Barkeley: Peachpit Press.

PAPER-III

Max. Marks : 75 Internal : 25 Paper Code : 00211 Duration : 3 hr.

INTRODUCTION TO ADAPTIVE PHYSICAL EDUCATION

UNIT-I

Meaning of adaptive physical education, The aims & Objectives of adapted Physical Education, Basis for adapted physical education, Functions of adapted physical education.

UNIT-II

The Adapted Programme in Action

(i) The scope of adapted programme (ii) The adapted programme for elementary schools (iii) The adapted programme for high/ secondary schools (iv) The adapted programming for college & universities

UNIT-III

PERSONNEL PREPARATION

(i) The guiding principles of adopted physical education (ii) The policies for adopted physical Education

UNIT-IV

EVALUTION & MEASUREMENT

- (i) Selection of evaluation procedures (ii) Classification of Handicapped and disabled individual
- (iii) Determination of specific disabilities

UNIT-V

SOCIAL AND PSYSCHOLOGICAL ADJUSTMENT

- (i) Role of Physical Education in preventing maladjustment and in the promotion of adjustment
- (ii) Recreation for the handicapped

References

- 1. H.H. Clark & "Development and Adapted Physical Education" Englewood, Prentice Hall 1964.
- 2. D.H. Clark, A.S. Daniels "Adapted physical Education" New York Harpers & Brothers 1972.
- 3. G.T. Stafford, "Prevention & Corrective Physical Education"
- 4.J.L. Rathoone, "Corrective Physical Education" Philadelphia W.B. Saunders Co. 1968.
- 5. V.V. Hunt, "Recreation for the Handicapped" Prentice Hall inc., 1974
- 6. P.G. Rasch, "Kinesiology and applied anatomy" Lea & Febriger Philadelphia, 1978
- 7. B.J. Cratty, Adapted Physical Education in the main stream love Publishing Company, Denver Calorado 80222. 1989.

PAPER-IV

Max. Marks : 75 Internal : 25 Paper Code : 00212 Duration : 3 hr.

THEORIES OF GAMES AND SPORTS-II (Volleyball, swimming, Gymnastics & Table Tennis)

UNIT: I

Origin, History and development of the game- International, National and State Level Organizations and Trophies.

UNIT: II

Fundamental Skill- Lead Up Games - Various System of Play - Selection of Players.

UNIT: III

Training: Warm-up and Warm down - Technical Training - Tactical Training - Coaching Program.

UNIT: IV

Layout of Playfield with all Measurments, Facilities and equipment and its specifications

UNIT: V

Rules and their Interpretation, Methods of Officiating, Duties of Officials

References

- 1. Ballon B. Ralph Teaching Badminton Delhi, Surject Publication 1982
- 2. KHO-KHO Rules Book.
- 3. WeinHarat "The Science of Hockey" London Pelham Books, 1979.
- 4. Coleman Brain and Peter Ray, Basset hall, Eash Ardsley, Ep publishing Ltd 1976.
- 5. Tyson Frank "The Cricket Coaching Manual", Calcutta, Rupa& Co, 1985.

<u>SEMSTER – III</u>

PAPER -I

Max. Marks : 75
Internal : 25
Paper Code : 00309
Duration : 3 hr.

SPORTS MANAGEMENT IN PHYSICAL EDUCATION

UNIT-I

Meaning and Definition of Sports management - Scope of Sports management - Basic principles of Sports management - Functions of sports management.

UNIT-II

Personal management: Objectives - Personals policies - Personal Recruitment - Role of Personal manager. Programme management: Importance of Programme development - Factors influencing programme development - Competitive sports programs.

UNIT-III

Sports marketing: Meaning - Factors involved in the marketing of sports - Market awareness - Developing a target market strategy - Quality and price of sports products.

UNIT-IV

Supplies of sports Equipments: Guidelines for selection and supply of equipments - Equipment room, Equipment and supply manager - Guidelines for checking, storing and issuing - Care and maintenance of equipments.

UNIT-V

Accounting and Budgeting - Definition and role of accounting in sport and fitness enterprise Raising of funds - Types of Budget - Budget record maintenance - The accounting system.

REFERENCE

- 1. Bucher A. Charles (1993) Management of physical Education and sports (10th ed.,) St.Louis :Mobsy Publishing Company.
- 2. Chelladurai. P (1999) Human Resource Management in sport and Recreation, Human kinetics.
- 3. Chakraborthy, Samiram (1988), Sports Management, Sports publications, New Delhi.
- 4. Lazer. W and Cultey. J Marketing Management. Boston Houghton Miffing Co.
- 5. Ruben Acosta Hernandez, Managing sport organizations, Human kinetics

PAPER -II

Max. Marks : 75 Internal : 25 Paper Code : 00310 Duration : 3 hr.

SPORTS INJURIES, PHYSIOTHERAPY & SAFETY EDUCATION

UNIT - I

Common athletic injuries-Sprain -Strain and their treatment -Types of fracture and their treatment

UNIT - II

Dislocation -Muscle cramp -Bleeding -Wound and its types -Contusion -Abrasion and -Puncture wounds

UNIT - III

Meaning, Nature, need and importance of Physiotherapy. Short wave diathermy, Microwave diathermy, Diapulse Diathermy, Ultra Sound Waves, Infra red rays, Ultra violent rays.

UNIT - IV

Brief History of Massage classification of the Manupulations used in massage the techniques and uses indication and contra- Indications of all manipulations.

UNIT - V

Definition of Safety Education- factors affecting safety Education –need and Importance of Safety Education - Safety in Play fields, swimming pool, Gymnasium.

References:

- 1) Thorndike, Athletic Injuries.
- 2) I.B. Clayton, Text Book of Electro therapy and Action therapy.
- 3) Edwin M. Prasnet, Manual of Massage and Movements.
- 4) R. Foracks, Exercise Therapy.
- 5) M.V.Locs, Manual of Massages.
- 6) AdishLuchwald, Physical Rehabilitation for Daily Living

PAPER-III

Max. Marks : 75 Internal : 25 Paper Code : 00311 Duration : 3 hr.

METHODS IN PHYSICAL EDUCATION

UNIT - I

Meaning of method - Factors influencing method - Presentation technique - Planning and presentation - Personal preparation - Technical preparation - common characteristics of good preparation - step in the way of presentation. Teaching aids - Class management-Principles to be adopted for good class management.

UNIT - II

Lesson plan-Values of lesson plan-Types of lesson plan-General lesson plan- particular lesson plan-Various methods of teaching physical activities.

UNIT - III

Intramural and Extramural competitions- Incentives and awards-methods of organizing and conducting tournaments and sports meet-Game tours.

UNIT - IV

Teaching activities of minor games, major games track and Field, Yogic Practice, Suryanamaskar, Calisthenics, Light apparatus, Rhythmic activities, Commands, Marching.

UNIT - V

Tournaments - Types of Tournament, Knock Out, League, Combination Tournaments, Methods of drawing Fixtures.

References:

- 1. Thirunarayanan C and S. Harihara Sharma, (1989) Methods in Physical Education, Karaikudi.
- 2. Kamelsh M.L. (1994) Scientific Art of Teaching Physical Education, New Delhi: Metropolitan Book Company.
- 3. Bucher, Charles and Krotee, Mar, L. (1993) Management of Physical Education and Sport, London: Mosby Company.
- 4. Kozman and Jackson, Methods in Physical Education, New York: W.B. Saunders Co.
- 5. Bacher and Barnhard, Methods and Materials for Secondary School Physical Education, New York: C.V. Mosby Co.

PAPER -IV

Max. Marks : 75 Internal : 25 Paper Code : 00312 Duration : 3 hr.

THEORIES OF GAMES AND SPORTS-III (TRACK & FIELD)

UNIT - I

History of Track and Field: India, Asia, and World. Organisation of Track and Field, Federations: India, Asia, World

UNIT: II

Fundamental Skill- Lead Up Games - Various System of Play - Selection of Players.

UNIT: III

Training: Warm-up and Warm down - Technical Training - Tactical Training - Coaching Program.

UNIT: IV

Layout of Track & field events with all Measurments, Facilities and equipment and its specifications

UNIT: V

Rules and their Interpretation, Methods of Officiating, Duties of Officials

Books for Reference

- 1. Ballon B. Ralph Teaching Badminton Delhi, Surject Publication 1982
- 2. KHO-KHO Rules Book.
- 3. WeinHarat "The Science of Hockey" London Pelham Books, 1979.
- 4. Coleman Brain and Peter Ray, Basset hall, Eash Ardsley, Ep publishing Ltd 1976.
- 5. Tyson Frank "The Cricket Coaching Manual", Calcutta, Rupa& Co, 1985.

SEMSTER – IV

PAPER -I

Max. Marks : 75 Internal : 25 Paper Code : 00409 Duration : 3 hr.

PERSONALITY DEVELOPMENT & COMMUNICATION SKILLS

UNIT-I

Personality- Meaning and structure of personality. Classifications of personality

UNIT-II

personality development- factor effecting personality develop[ment.Relationship of personality to sports performance, personality differences among different sports groups.

UNIT-III

Meaning of communication-types of communication- barriers in good communication.

UNIT-IV

Listening-types of listening-barriers of good listening-use of listening in sports

UNIT-V

Writing-Communication through writing-profile writing –interview persentation.

Reference

- 1. SafritMargarat J Measurement in Physical Education and Exercises science, St louis Times MorrorMos by college publishing 1986.
- 2. Bosco James Measurement and Evaluation in Physical Education and sports New JersyPrenstice Hall In 1983.
- 3. Barry L.Johnson, Jack K.Nelson and Measurements for Evaluation in physical education the surject Publications.
- 4. A.K. Gupta Tests & Measurements in physical Education sports publication New Delhi $-\,52$
- 5. A Practical applied to measurement in Physical Education HoroldM.Borrow.

PAPER-II

Max. Marks : 75
Internal : 25
Paper Code : 00410
Duration : 3 hr.

TEST, MEASUREMENTS AND EVALUATION IN PHYSICAL EDUCATION

Unit - I

Meaning of Test, Measurement and Evaluation – Brief History of Test, Measurement and Evaluation, - Need and Importance of Measurement and Evaluation in Physical Education.

Unit - II

Classification of Test – Standardized and Teacher Made test – Objective and subjective Tests – Construction of Knowledge's test and skill Test –Administration of Test – Duties during testing – Duties after Testing.

Unit - III

Criteria for Test Selection – Validity – Reliability – Objectivity – Norms - Administrations Economic Feasibility – Educational Applications - Followup.

Unit - IV

 $Definition-Health\ Related\ fitness-Skill\ Related\ Physical\ fitness-JCR\ Test-AAPHER\ youth\ physical\ fitness\ Test-Harvard\ step\ cooper\ 12\ Minute\ Run/\ Walk\ Test.$

Unit - V

Basket ball – Johnson Basketball ability Test, Hockey - Friedel Field Hockey Test Soccer – MC Donald Soccer Test, Volleyball – Russel Lange Volley Ball Test, Badminton – Miller Wall Volley Test. Tennis – Broer Miller Tennis test.

Book for Reference

- 1. SafritMargarat J Measurement in Physical Education and Exercises science, St louis Times MorrorMos by college publishing 1986.
- 2. Bosco James Measurement and Evaluation in Physical Education and sports New JersyPrenstice Hall In 1983.
- 3. Barry L.Johnson, Jack K.Nelson and Measurements for Evaluation in physical education the surject Publications.
- 4. A.K.Gupta Tests & Measurements in physical Education sports publication New Delhi -52
- 5. A Practical applied to measurement in Physical Education HoroldM.Borrow.

PAPER -III

Max. Marks : 75 Internal : 25 Paper Code : 00411 Duration : 3 hr.

SPORTS NUTRITION & HEALTH EDUCATION

UNIT - I

Meaning - Definition of Health Education -Aim, Scope of Health Education- role of International Organizations (WHO, UNICEF), National, State Level Health Organizations

UNIT – II

Physical Health- Physical Fitness – Health related fitness – performance related fitness – components of Health related fitness and performance related fitness – mental health.

UNIT – III

Communicable Diseases - Causes, modes of spread – Prevention of Tuberculosis, Malaria, Dengu, small pox, Chicken pox, and AIDS

UNIT - III

Meaning, Need, Nature and Importance of Nutrition Basics of Nutrition, Carbohydrates, Fats, Proteins, Vitamins, Minerals, Water, Balanced diet, Nutritive value of Food stuffs.

UNIT - IV

Nutrition for Athletes and players, Energy requirements in Sports.Principles of weight control, Exercise is the key to successful weight loss - management for weight loss.

References:

- 1. Hoegerwerner W.K, and HoegerSharan A. (1990) Fitness and Welness, New Jersey: Morton Publishing Company.
- 2. Hazedine, (1985) Fitness for Sports, Ramsburg: The CrowoodRess Ltd.
- 3. Pande P.K. and L.C. Gupta, (1987) Sports Medicine, New Delhi: Jaypee Brothers.
- 4. GoswamiShashikant, (1996) Nutrition for Sports, Patiala: SAINSNIS

PAPER -IV

Max. Marks : 75
Internal : 25
Paper Code : 00412
Duration : 3 hr.

THEORIES OF GAMES AND SPORTS-IV (Football, Hockey, Softball & Ballbadminton)

UNIT: I

Origin, History and development of the game- International, National and State Level Organizations and Trophies.

UNIT: II

Fundamental Skill- Lead Up Games - Various System of Play - Selection of Players.

UNIT: III

Training: Warm-up and Warm down - Technical Training - Tactical Training - Coaching Program.

UNIT: IV

Layout of Playfield with all Measurments, Facilities and equipment and its specifications

UNIT: V

Rules and their Interpretation, Methods of Officiating, Duties of Officials

Books for Reference

- 1. Ballon B. Ralph Teaching Badminton Delhi, Surject Publication 1982
- 2. KHO-KHO Rules Book.
- 3. WeinHarat "The Science of Hockey" London Pelham Books, 1979.
- 4. Coleman Brain and Peter Ray, Basset hall, Eash Ardsley, Ep publishing Ltd 1976.
- 5. Tyson Frank "The Cricket Coaching Manual", Calcutta, Rupa& Co, 1985.

SEMSTER – V

PAPER -I

Max. Marks : 75 Internal : 25 Paper Code : 00509 Duration : 3 hr.

RECREATION, CAMPING & LEADERSHIP

UNIT-I

Recreation: Definition, Scope and Significance – Philosophy and Objectives – Relationship of Play, Work, Leisure and Recreation.

IINIT-II

Agencies Offering Recreation – Home, Governmental, Voluntary, Private and Commercial Agencies.

UNIT -III

Camping - Scope and Significance of Camping-Types of Camps-Selection and lay-out of camp sites.

UNIT-IV

Camp Programme and Activities – Arts and Crafts, Dramas, Music, Hobbies, Dancing, Hiking, Map reading

IINIT₋V

Meaning of leadership-Quality of a good leader-Physical Education teacher as leader.

Reference Books:

- 1. VeenaVerma "Organization & Administration in Physical Education", pub Lokeshthani sports. (2003)
- 2. Mrs. SushilGosain "Sports Management (1991, 2002)
- 3. Yadrindersingh "Sports Management", Llakshay pub (2005)
- 4. K. Chandrashekar "Sports Administration", VinekThaniKnelSahitya Kendra pub., (2004)
- 5. JaemsG.NasonJimpaul "Modern Sports Administration", Pub prentice Hall . (1998)
- 6. Wiles, brown and Cassidy ,) Supervision in Physical Education Engle wood Cliffs , N.J.: Prrrntice Hall . (1956
- 7. Scott and Westhaomper,, From Program to facilities in Physical Education . New york: Harper & bros . (1958)

PAPER-II

Max. Marks : 75 Internal : 25 Paper Code : 00510 Duration : 3 hr.

EXERCISE PHYSIOLOGY

Unit - I

Meaning and scope of Physiology of exercise - Structure and function of skeletal Muscles - Types of Muscle fibers - Red and White - Types of Muscular Contraction - Isotonic Isometric and Isokinetic - Effect of exercise on Muscular system - Hypertrophy, Hypo trophy.

Unit - II

Mechanism of respiration – respiratory muscles – Lung volumes and Capacities - Heart rate – Stroke Volume – Cardiac cycle – Cardiac Output during rest and Exercise – Blood pressure – Systolic, Diastolic – Effect of exercise on Respiratory system and Circulatory system.

Unit - III

Nervous System – Types of Nervous System – Central Nervous System (CNS) and Peripheral Nervous System (PNS) – Structure of Neuron - Effect of exercise on Nervous system.

Unit - IV

Metabolism – Anabolism and catabolism - sources of energy – Aerobic and Anaerobic Metabolism, Fat metabolism and protein metabolism and endocrine system.

Unit- V

Exercise and temperature regulation in Hot and Cold climate – Exercise and Altitude – Sex differences on exercise – aging and exercise – Physical Conditioning.

Books for Reference

- 1. Devrises H.A Physiology of exercise for physical Education and Athletics London, Staples Press-1976.
- 2. More house LE and Milter A.T. Physiology of exercise St Louis, The CV Mosby Company 1976.
- 3. Jonson W.R. Science and Medicine of exercise and sports London Harper & Bros 1974.
- 4. Guyton AC Text book of Medical Physiology W.B. Soundars Company Philadelphia.
- 5. Bourne GH the Structure and function of Muscle London Academic Press.

PAPER-III

Max. Marks : 75 Internal : 25 Paper Code : 00511 Duration : 3 hr.

KINESIOLOGY AND BIOMECHANICS OF SPORTS

UNIT - I

Introduction – Definition – Meaning, Brief History, and Objectives of Kinesiology, Importance of Kinesiology for Physical Education and Sports. planes and Axis, Terminology.

UNIT - II

Classification of Muscles – Structural Classification of Muscles – Kinesiolgical Grouping of Muscles – Location of Origin, Insertion and Action of Muscles at Various Joints of Upper Extremity – (Shoulder Girdles - Shoulder Joint – Elbow Joint – Wrist joint) Lower Extremity - (Hip – Knee – Ankle.)

UNIT - III

Types of Muscular Contraction – Concentric – Eccentric – Static – Isotonic Isometric – Isokinetic. Exercise programme to develop the Front Upper arm, Rear , Upper arm – forearm. Front thigh, Rear thigh- Calf - upper back- Lower back, Neckand Abdomen.

UNIT - IV

Meaning, Aim, Need and Importance of Biomechanics – Mechanical Principles involved in Game and Sports. Displacement Speed, Velocity, Acceleration Motion – Types of Motion. Laws of motions-influence of Motion – Air – Gravity and Water – Friction. Center of Gravity – Equilibrium, Force – Levers – Types of Levers – Projectiles.

UNIT - V

Muscular and Biomechanical analysis of fundamental walking, running, throwing, catching, Pulling, Pushing.

REFERENCES

- 1. Anderson, McClurg T. Biomechanics of Human Motion, New Delhi: Sports Publications. 2003.
- 2. Bartlett, Roger. Introduction to Sports Biomechanics, London: E & FN Spon. 1997.
- 3. Carr, Gerry. Sports Mechanics for Coaches, New York: Human Kinetics. 2004.
- 4. Gladys, Scott M. Kinesiology, New Delhi: Sports Publications. 1998.
- 5. Hamilton, Nancy and Luttgens, Kathryn. Kinesiology, Boston: McGraw Hill. 2002.
- 6. Kreighbaum, Ellen and Barthels, Katharine M. Biomechanics, London: Allyn and Bacon. 1996.
- 7. Robertson .E Gordon D et. al. Rersearch Methods in Biomechanics. New York: Human Kinetics. 2004.
- 8. Shaw, Dhananjoy. Mechanical Basis of Biomechanics, New Delhi: Sports Publications. 2000.

PAPER -IV

Max. Marks : 75 Internal : 25 Paper Code : 00512 Duration : 3 hr.

THEORIES OF GAMES AND SPORTS-V (Cricket, Handball, Netball &Judo)

UNIT: I

Origin, History and development of the game- International, National and State Level Organizations and Trophies.

UNIT: II

Fundamental Skill- Lead Up Games - Various System of Play - Selection of Players.

UNIT: III

Training: Warm-up and Warm down - Technical Training - Tactical Training - Coaching Program.

UNIT: IV

Layout of Playfield with all Measurments, Facilities and equipment and its specifications

UNIT: V

Rules and their Interpretation, Methods of Officiating, Duties of Officials

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- 1. Ballon B. Ralph Teaching Badminton Delhi, Surject Publication 1982
- 2. KHO-KHO Rules Book.
- 3. WeinHarat "The Science of Hockey" London Pelham Books, 1979.
- 4. Coleman Brain and Peter Ray, Basset hall, Eash Ardsley, Ep publishing Ltd 1976.
- 5. Tyson Frank "The Cricket Coaching Manual", Calcutta, Rupa& Co, 1985.

SEMSTER – VI

PAPER -I

Max. Marks : 75 Internal : 25 Paper Code : 00609 Duration : 3 hr.

SCIENCE OF YOGA

UNIT-I

Introduction to Yogasanas - Philosophy of Yoga - Purpose of Yoga - Science awareness — Inadequacy Science Practice of Yoga - Eight Limbs of Yoga - Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi.

UNIT-II

Phase of Yoga - The Body - Entry phase - Static phase and the Exit phase. Effect of Yogasanas - Stretching, Pressure Effect, Gravitation Effect, Relaxation and Mental Experience.

UNIT-III

The Breath - Kinds of Breathing - Exhalation - The flow in the Nostrils and Posture in Yogic Breathing - The Mind - Concentration of Asanas - Perfomance - Static phase on Breath and on the body as a whole.

Techniques and Practice of Yogasanas - Important facts and Precautions, Warming up and Preliminary Exercises for Neck, Eyes, Shoulders, Back, Abdominal Muscles, Legs, Feet and Hands - Technique of Yogasana posture - Do's and Don't's.

UNIT-IV

Beneficial Effects of Yogasana - Time Schedule for Practising Yogasanas and Pranayama - Yoga Stretching and Pranayama for competitive players - Physiological Aspects - Physical and Mental Relaxation - Guide to practice Contemplation - Mediation - Concentration Exercises.

UNIT-V

Techniques and Practice of Yogasanas - Important facts and Precautions, Warming up and Preliminary Exercises for Neck, Eyes, Shoulders, Back, Abdominal Muscles, Legs, Feet and Hands - Technique of Yogasana posture - Do's and Don't's.

REFERENCES

- 1. Erling Peterson, 'Yoga step by step'
- 2. Indra Devi, 'Yoga for you'
- 3. RasalindWiddowson, 'Yoga made Easy'
- 4. M. Rajan, 'Yoga Stretching and Relaxation for Sportsmen'
- 5. M. NarayanaMenon, 'YogasanasFor Health and Longevity'
- 6. RameshwarDass Gupta, 'Daily Yog'

PAPER-II

Max. Marks : 75
Internal : 25
Paper Code : 00610
Duration : 3 hr.

ANATOMY AND PHYSIOLOGY

UNIT - I

Skeletal System

The arrangement of the Skeleton - Functions of the Skeleton - Classification of Joints with examples-Structure of the synovial joints- Movement of the joint.

Muscular System

Functional Classification of Muscles and its significance, General characteristics of Muscles.

UNIT - II

Cardio- Vascular System

Constituents of blood and their functions - Functions of Blood Groups - clotting of blood, Structure and function of the heart and -major blood vessels in different parts of the body - properties of the heart muscle - circulation of the Blood - Cardiac cycle - blood pressure - Pulse rate, cardiac out put.

UNIT - III

Respiratory System

Structure of lungs and Bronchial tree - Mechanism and regulation and respiration - exchange of Gases, Second wind, vital capacity and oxygen debt. Excretory system - Kidney and skin

UNIT - IV

Digestive System

Structure and function of various parts (Gastro intestinal system) – Movement of digestive tract - Function of liver.

UNIT - V

Nervous System

The Nerves- structure and function of cerebrum and Cerebellum - Medulla and Spinal Cord - Reflex arc - Automatic Nervous System.

References:

- 1. Curton, A.C. (1986) Function of the Human Body, London: W.B. Saunders Company.
- 2. Srivastava, et al. (1976) Text Book of Practical Physiology, Calcutta: Scientific Book Agency.
- 3. Morehous and Miller, Physiology of Exercise, St. Louis: The C.V. Mosp Company.
- 4. Kapovich and Sinnser, (1965) Physiology of Muscular Activity, London: W.B. Saunders Company.
- 5. Anderson T.M. (1961) Human Kinetics and Analysing Body Measurements, London: William Heinmann Medical Books Ltd.
- 6. Davis, D.V. (1967) Gray's Anatomy, London: Longman Green and Company Ltd.
- 7. Pearse Evelyn, B., (1967) Anatomy and Physiology for Nurses, London: Faber and Faber Ltd.

PAPER-III

Max. Marks : 75 Internal : 25 Paper Code : 00611 Duration : 3 hr.

STATISTICS IN PHYSICAL EDUCATION

UNIT - I

Meaning and Definition of Statistics, Nature, Need and Importance of Statistics in Physical Education 1.

UNIT - II

Graphical presentaion of data- Bar diagram-Histograms-Ogive.-Measure of Central Tendency- Mean, Median and Mode Definition- Computation of mean and median and mode

UNIT - III

Measure of variability - Range - Quartile deviation- Mean deviation- Standard deviation- Definition-Computation of Quartile deviation, Mean deviation, Standard deviation

UNIT - IV

Measure of relative position- Meaning of percentiles, deciles and quartiles - computation of percentiles, deciles and quartiles

UNIT - V

Measure of Relationship- Meaning and definition of correlation- computation of Karl pearson correlationrank order correlation.

References:-

- 1. Gupta, (1982) Advanced Practical Statistics, New Delhi: Chand & Co.
- 2. Wilks, S.S., (1984) Elementary Statistical Analysis, Calcutta: IBH publishing Co.
- 3. Harry E. Garre (1958) Statistics in Psychology and Education, Bombay: Allied Publishers Ltd.

PAPER -IV

Max. Marks : 75 Internal : 25 Paper Code : 00612 Duration : 3 hr.

SPORTS PSYCHOLOGY AND SPORTS JOURNALISIM

Unit-I

Meaning and definition of Psychology and sports Psychology – Development of sports Psychology in India – Need and importance of sports Psychology in the field Physical Education and sports.

Unit - II

Learning- Meaning, nature and principles of learning. Traditional theories of learning (trial and errors, conditional reflex, learning by insight, learning by imitation). Laws of learning (readiness, effect, exercise). Learning curve and its characteristics.

Unit - III

Motivation and performance- Meaning of motivation, motives, unlearned (innate) and learned (required) motives. Emotions- meaning and type of emotions, influence of emotions on level of achievements.

Unit - IV

Meaning of Journalism and sports Journalism - Canons of Journalism - News, Information and Ideas - Journalism and sports Education.

Unit - V

Mass Media in Journalism, influence of Media on sports and vice-versa. Sports as a social phenomenon and a cultural product.

Books for Reference:

- 1. Alderman A.B. Psychological Behaviour in sports W.B. Saundarcompany, Saundar 1974.
- 2. Puni A.T. Sports psychology chanduga NIS.
- 3. Alderman Psychology Behavior
- 4. Cratty B.J. Psychology and Physical activity
- 5. Singer R.N. Coaching, Athletics and psychology.