ANNAMALAI



UNIVERSITY

ANNAMALAINAGAR

DEPARTMENT OF PHYSICAL EDUCATION

BACHELOR OF PHYSICAL EDUCATION AND SPORTS

(B.P.E.S)

(THREE YEARS)

REGULATIONS & SYLLABUS

WITH EFFECT FROM THE ACADEMIC YEAR 2019-20

BACHELOR OF PHYSICAL EDUCATION AND SPORTS B.P.E.S Degree Course

(Three Years)

<u>REVISED REGULATIONS AND SYLLABUS</u> (for the students admitted from 2019-2020 onwards)

1. Preamble

The three year Bachelor of Physical Education (B.P.E.S) is a degree course designed on the basis of the new regulation 2018 of U.G.C. (Regulation Norms and procedures). The main aim of the programme is to prepare the component teacher educated with the skills needed to become effective physical educational administrators, with national and global vision.

The programme creates opportunities for students to develop the knowledge and understanding of physical education in depth.

2. Eligibility for Admission to the Course

- a. Applicants should have passed the +2 examination in 10 + 2 pattern of the Government of Tamil Nadu or any other equivalent examination recognized by the Government of Tamil Nadu.
- b. The candidates should not have completed 25 years of age as on 1st July. However, relaxation for SC/ST candidates shall be given as per Government of Tamilnadu norms.
- c. He / she must be medically fit and free from any deformities, students will undergo medical examination at the time of admission.
- e. Admission shall be made on the basis of ranking for a total of 150 marks as detailed below.

1.	Qualifying Examination	40 marks
2.	Participation in Games & Sports	15 marks
3.	Games Skill test	15 marks
4.	Track and Field Skill test	30 marks
	a) 100 m – 10 Marks	
	b) Shot-put – 10 Marks	
	c) Long Jump – 10 Marks	
	Total	100 Marks

Note: Marks obtained in Qualifying Examination shall be converted to a maximum of 40 marks. For example if a candidate secured 800 marks out of 1200. His / Her marks for qualifying examinations is [800 / 1200] x 40 = **26.66 marks**.

3. Course of Study

- a) Duration of the Course The duration of the course of study is three (03) academic years, consisting of four semesters. The total working days shall not be less than 200 days in an Academic year. Each semester consists of not less than 100 working days excluding examination.
- b) Each working day shall consist of four hours of Practical Work (Morning and Evening 2 hours for each session) and three hours of theory in between.
- c) Undergoing Internship, Intensive Practice Teaching in neighbouring schools and attending the annual leadership training camp shall be compulsory for all the students.

4. Attendance

The students with 75% attendance and above are permitted to appear for the University examinations. However, the Vice Chancellor may give a rebate / concession not exceeding 10% in attendance for exceptional cases only on Medical Grounds

5. Continuous Assessment for Part I, II & III – Theory Papers.

a. Written Examination - 20 Marks:

- I. Continuous assessment shall be graded by the concerned subject teachers. Two tests will be conducted for each paper. Each test carries a maximum of 10 marks and the average of two tests shall be considered for continuous assessment.
- II. Pre-Semester shall be held at the end of each semester before the final semester examination covering all the portions. Each paper carries 75 marks and this will be converted into 10 marks.

The average of marks obtained in the two continuous assessment tests along with converted marks obtained in Pre-semester Examination will constitute 20 marks out of 25 for internal assessment.

Method of Calculation :

	Test Marks	Average Marks	Total Marks						
First Test	10								
Second Test	10	10							
Pre-Semester		10	20						

III. However, in the case of students who miss the tests for any valid reasons with prior permission from the Professor and Director, Department of Physical Education and Sports Sciences (Viz. Participating in Sports and Games competitions), he/she may be granted special permission to write the tests before the commencement of semester examination.

b. Assignment / Seminar - 3 Marks:

The teachers shall give assignments to the students and 3 marks are allotted for assignments. This may be of any accepted method such as Seminar, Project, Written materials, Record etc.

c. Attendance - 2 Marks:

Regularity in attending theory and Practical classes shall be graded as per the percentage of attendance.

Percentage of Attendance	Marks
95 – 100	2
90 – 94	1.5
85 – 89	1
80 - 84	0.5

Method of Calculation for Overall Internal Assessment (Max 25 marks) :

	Test Marks	Average Marks	Total Marks
First Test	10		
Second Test	10	10	
Pre-Semester		10	20
Assignment			03
Attendance			02
Maximum Marks			25

6. Requirement for Passing

No candidate shall be eligible for the award of the B.P.E.S. degree unless he / she has passed the examinations in Part I, II, III and IV.

A student who fails in any one or more papers in the semester examination will be permitted to rewrite the paper or papers in the subsequent semester examination.

To qualify for the degree, supplementary candidates are required to pass all the papers prescribed for the course within a period of three years after he/she complete the course. Beyond this period, the candidate shall follow the current syllabi for the examination if applicable. Examination fee will be collected normally according to the rules and regulations of the university. A Separate examination fee will be collected in this case.

Students who fail in a paper/papers are permitted to apply for recounting or revaluation in examination section of the University within the prescribed period with specified fee.

Appeal against the results of the semester examination shall be made to the controller of examinations by the student concerned through the Professor and Director of Physical Education and Sports Sciences within 15 days of the publication of results by paying re-totalling / revaluation fee.

7. Grading System

To pass in an examination a student has to score a minimum of 40% marks in each paper – Theory and Practical.

Minimum Passing : 40% Marks.

MARK	GRADE POINT	LETTER GRADE
90 and Above	10	S
85 - 89	9	D+++
80 - 84	8.5	D++
75 - 79	8	D+
70 - 74	7.5	A+++
65 - 69	7	A++
60 - 64	6.5	A+
55 - 59	6	В
50 - 54	5.5	С
45 - 49	5	Y
40 - 44	4.5	Z
Less than 40	RE-APPEAR	RA
Absent	ABSENT	Ab

GRADE POINT

Programme Educational Objectives

- 1. Involve in understanding the attitudes of the teacher education.
- 2. Understand the content, and organization of various resource required for education programme.
- 3. Projecting the students for involving in various physical education activities.
- 4. Develop competencies in organizing various level sports meet such as intramurals and extramural.
- 5. Develop and improve the professional skill, attitudes, values and interests needed to become the best teacher educator.

SCHEME OF EXAMINATIONS B.P.E.S FIRST SEMESTER

	Part	Code	Subject	Credit	Inter	Exter	Total
				Hours	nal	nal	
Part - I		19BPET-101	Tamil – I / Other Language	3	25	75	100
Part - II		19BPEE-102	English – I	3	25	75	100
Part - III	Core	19BPES-103	General Knowledge and History of Physical Education	3	25	75	100
	Elective	19BPEL-104	Fitness and Wellness	3	25	75	100
	Allied	19BPEA-105	General Science	3	25	75	100
Pr	actical	19BPEP -106	Practical - I	10	200	-	200
		1. Calisthenics	s & Minor Games		50	-	50
		2. Drill & Mare	ching		50	-	50
		3. Basketball			50	-	50
		4. Badminton	& Kabaddi		50	-	50

B.P.E.S SECOND SEMESTER

	Part	Code	Subject	Credit Hours	Inter nal	Exter nal	Total
Part - I		19BPET-201	Tamil – II / Other Language	3	25	75	100
Part - II		19BPEE-202	English – II	3	25	75	100
Part	Core	19BPES-203	Organization and Administration	3	25	75	100
- III	Elective	19BPEL-204	Science of Yoga	3	25	75	100
	Allied	19BPEA-205	Anatomy and Physiology	3	25	75	100
Pr	actical	19BPEP -206	Practical - II	10	200	-	200
		1. Dands & Ba	aiteks		50	-	50
		2. Light Apparatus			50	-	50
		3. Handball &	Kho-Kho		50	-	50
		4. Volleyball			50	-	50

	Part	Code	Subject	Credit	Inter	Exter	Total	
				Hours	nal	nal		
Part - I		100057 201	Tamil – III / Other	3	25	75	100	
		19DFE1-301	Language				100	
P	art - II	19BPEE-302	English – III	3	25	75	100	
	Core	10PDFS 303	Methods in	3	25	75	100	
Part		19DFES-303	Physical Education				100	
- III	Elective		Scientific	3	25	75		
		19BPEL-304	Principles of Sports				100	
			Training					
	Allied	100054 205	Health and Safety	3	25	75	100	
		19DFEA-303	Education				100	
Pr	actical	19BPEP -306	Practical - III	10	200	-	200	
		1. Short, Midd	le, Long Distance		25	-	25	
		Running & Re	lay Races					
		2. Long Jump			25	-	25	
		3. Triple Jump			25	-	25	
		4. Shot put & Hammer			25	-	25	
		5. Discus			25	-	25	
		6. Javelin			25	-	25	
		7. High Jump	& Pole Vault		25	-	25	
		8. Hurdles			25	-	25	

B.P.E.S THIRD SEMESTER

B.P.E.S FOURTH SEMESTER

	Part	Code	Subject	Credit	Inter	Exter	Total
				Hours	nal	nal	
Part - I		19BPET-401	Tamil – IV / Other	3	25	75	100
		190101 101	Language				100
Pa	art - II	19BPEE-402	English – IV	3	25	75	100
	Core		Exercise	3	25	75	
Part		19BPES-403	Physiology and				100
- III			Nutrition				
	Elective		Rules of Games	3	25	75	
			and Sports – I				
		19BPEL-404	(Track and Field				100
			and Cross				
			Country)				
	Allied	198PEA-405	Elementary	3	25	75	100
		190101100	Statistics				100
Pr	actical	19BPEP -406	Practical - IV	10	200	-	200
		1. Yoga, Gymr	nastics, Pyramid,		20	-	20
		Malkhamb					
		2. Ball Badmin	nton, Tennis,		30	-	30
		Tennikoit					
		3. Football			50	-	50
		4.Teaching Pra	actice(General		50	-	50
		Lesson)					
		5.Teaching Pra	actice(Particular		50	-	50
		Lesson)					

	D	0.1			.		m · 1
	Part	Code	Subject	Credit	Inter	Exter	Total
				Hours	nal	nal	
	Core	19BPES-	Test Measurement and	3	25	75	100
		501	Evaluation				100
	Core	19BPES-	Kinesiology and	3	25	75	100
		502	Biomechanics				100
Part	Core		Rules of Games and	3	25	75	
- III		19BPES-	Sports – II (Football,				100
		503	Ball Badminton,				100
			Tennis & Tennikoit,)				
	Core		Rules of Games and	3	25	75	
		1000000	Sports – III				
		19BPES-	(Basketball,				100
		504	Badminton, Kabaddi &				
			Softball)				
Part	Non		, , , , , , , , , , , , , , , , , , ,	3	25	75	
- IV	Major	19BPNE-	Environmental Studies				100
	Elective	505					
Pr	actical	19BPEP-	Practical - V	10	200	-	200
		506					
		1. Marking	(Ground) [Marking manual		50	-	50
		for Sports 8	Games must be				
		submitted t	o the concern staff]				
		2. Project M	leet Athletics		50	-	50
		3. Hockey			50	-	50
		4. Netball, 7	Throw ball & Table Tennis		50	-	50

B.P.E.S FIFTH SEMESTER

B.P.E.S SIXTH SEMESTER

	Part	Code	Subject	Credit	Inter	Exter	Total
				Hours	nal	nal	
	Core	19BPES-	Care and Prevention of	3	25	75	100
Part - III Part - IV Pr		601	Sports Trauma				100
	Core	10PDFS	Fundamentals of	3	25	75	
		19DFES-	Sports Psychology and				100
Part		002	Sociology				
- III	Core		Rules of Games and	3	25	75	
		19BPES-	Sports – IV				100
		603	(Hockey, Handball,				100
			Cricket & Netball)				
	Core		Rules of Games and	3	25	75	
		19BPES-	Sports – V (Volleyball,				100
		604	Kho-Kho, Table Tennis				100
			& Throwball)				
Part	Non	10BDNF_		3	25	75	
- IV	Major	605	Computing Skills				100
	Elective	000					
Pr	actical	19BPEP-	Practical - VI	10	200	-	200
		606					
		1. Bharath	iam & Aerobics		50	-	50
		2. Project I	Meet Major Games		50	-	50
		3. Cricket	& Softball		50	-	50
		4. Hockey			50	-	50

Programme Outcomes (POS)

To gain knowledge in the field of physical education and various sports skills in winning ways, the student teacher expected to undergo these skills.

PO 1: To get the knowledge of multi lingual language both in reading and writing in prose and poetry, such as, Tamil and English.

PO 2: To get the general knowledge in the field of physical education during the ancient period and present era.

PO 3: To apply the knowledge of fitness and wellness with various types of training on different types of physical fitness components and the physiological system through exercise with nutritional values.

PO 4: Implementing the knowledge on organizing various sports and games, drawing fixtures, supervising and administering various play fields. To apply the knowledge of various test and measurement of games and sports and analysis of evaluation of the outcome of the test.

PO 5: To attain the knowledge of various yogic methods, such as, asanas, pranayama, bandhas and kriyas and their role in ancient and modern periods.

PO 6: To apply the general science knowledge, anatomy, physiology in the field of physical education and apply knowledge of human body motion and uses of various joints. Trauma management with care and prevention.

PO 7: To construct and marking of various play field and standard and nonstandard track, update the rules of sports, such as, Athletics and cross country, football, ball badminton, tennis, tennikoit, basketball, badminton, kabaddi, softball hockey, handball, cricket, netball, volleyball kho-kho, table tennis and throw ball and apply the rules in various events such as, inter-class, inter-college, interuniversity etc.

PO 8: To attain and implement the knowledge on various statistical tool in the field of physical education with the uses of computers.

PO 9: To use knowledge of various natural resources, various terrains eco system and bio-diversity and conservation methods.

PO 10: To apply the sports psychological and sociological knowledge during play situation.

SEMESTER - I

	<u> </u>				
19BPET-101	TAMIL	L	Т	Р	С
		3	0	0	3

COURSE OBJECTIVES:

The student teacher

- To learn Tamil through great poets.
- To learn the history of sports and games in Tamil.
- Can learn Tamil grammar.

myF - 1

(1) ghujpahh; : fhzp epyk; Ntz;Lk; ey;yNjhh; tPiz

(2) Rujh:

rpf;fdk;

myF - 2

GJikg;gpj;jd; rpWfijfs;

- 1. flTSk; fe;jrhkpg; gps;isAk;
- 2. rhg tpNkhrdk;
- 3. nghd;dfuk;

myF - 3 (ciueil)

tpisahl;Lf;fspd; Njhw;wKk; tsh;r;rpAk;

tpisahl;L tiuaiw - tpisahl;bd; Njhw;wk; - jkpoh; tho;tpy; tpisahl;L - tpisahl;L tif njhif - tpisahl;Lf; nfhs;iffs;.

myF - 4 nkhopg; gapw;rp

- 1. nghUe;jpa nrhy; jUjy;
- 2. kuGj; njhlh;fs;
- 3. fiyr; nrhw;fs;

myF - 5 jkpo; ,yf;fpa tuyhW

- ehl;Lg;Gw ,yf;fpa tuyhW> ehl;Lg;Gwg; ghly;fs;> ehl;Lg;Gwf; fijfs;> ehl;Lg;Gf; fijg; ghly;fs;> gonkhopfs;> tpLfijfs;.
- 2. ciueil ,yf;fpa tuyhW> rpWfijfs;> Gjpdq;fs; Njhw;wKk; tsh;r;rpAk;.
- 3. ftpij ,yf;fpa tuyhW kuGf; ftpijfs;> GJf; ftpijfs; Njhw;wKk; tsh;r;rpAk;.
- 4. ehlf ,yf;fpaj;jpd; Njhw;wKk; tsh;r;rpAk;.

Course outcome

The student should able

- CO1 : To acquire Tamil knowledge through various poets stories.
- CO2 : To acquire knowledge of small stories in Tamil.
- CO3 : To know the history and its development of sports in Tamil.

	Mapping with Programme Outcomes													
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10				
CO1	3	-	-	-	-	-	-	-	-	-				
CO2	3	-	-	-	-	-	-	-	-	-				
CO3	3	-	-	-	-	-	-	-	-	-				

Jiz E}w;gl;bay;

- 1. Nguh. vk;khu; milf;fyrhkp> (2000) jkpo; ,yf;fpa tuyhW> uhrp gjpg;gfk;> nrd;id 73.
- 2. e. kiyaurp> (2013)> jkpo; ,yf;fpaq;fspy; tpisahl;Lf; \$Wfs; ghit gjpg;gfk;> kJiu-1.
- 3. nrh. gukrptk;> (2000)> ew;wkpo; ,yf;fzk;> gl;Lg; gjpg;gfk;> nrd;id-40.
- 4. rq;f,yf;fpa E}y;fs; fof ntspaPL.

19BPEE-102	BASIC LANGUAGE SKILLS	L	Т	Ρ	С
		3	0	0	3

COURSE OBJECTIVES:

The student teacher

- to learn English how to listen and speak
- to learn how to behave people with verbal conversation.
- Can observe the English writing skills.
- The students may learn how to read the books in English language.

LISTENING & SPEAKING:

UNIT – I

- a) Greeting people & responding to greetings.
- b) Introduction oneself & other people.
- c) Asking for & giving personal details (name, occupation... etc.)

UNIT – II

- a) Using the telephone exchanging information & taking messages
- b) Describing a visual clipping.

WRITING :

UNIT –III

- a) Completing forms with personal details bio-data & curriculum vitae.
- b) Paragraph writing converting note making to paragraph.
- c) Interpreting advertisements.

UNIT - IV

- a) Grammar in usage
- b) Descriptive writing describing a scene / a person / a situation
- c) Translation 50 words.

UNIT – V

- a) Cabuliwallah Rabindranath Tagore
- b) The Least Leaf H. Henry
- c) Upper Division Love -Manohar Malgonkar.

Course outcome

The student should able

CO1: To acquire English knowledge by learning skills.

CO2: To acquire English writing skills.

CO3: To know the grammatical skills in English.

	Mapping with Programme Outcomes												
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10			
CO1	3	-	-	-	-	-	-	-	-	-			
CO2	3	-	-	-	-	-	-	-	-	-			
CO3	3	-	-	-	-	-	-	-	-	-			

Reference:

1. The last leaf & other stories by Anand Kumar (Balackle Books).

19BPES-103

COURSE OBJECTIVES:

The student teacher

- To know the expansion of various abbreviations related with physical education.
- To know the meaning and definition of physical education and their aims and objectives.
- History of physical education in India and other countries.
- Acquire knowledge about youth welfare programmes offering by various agencies.

UNIT I: Abbreviations & Terminologies

- a. Abbreviations (in sports) : AIU, AAFI, IAAF, IAF, AFC, AICS, AILTA, AIWHA, BAI, BCCI, FISU, IHF, IOA, IOC, ICC, FIBA, FIFA, FIVB, NCC, NSO, NSC
- b. Sports Terminology: Archery, Billiards, Bowling, Equestrian, Fencing, Golf, Polo, Rugby, Skiing, Snooker, Yachting.

UNIT II: Awards, Trophies and Schemes

Honours and Awards. Outstanding National & International Personalities in various Sports & Games. Cups and Trophies - India and International . Functions and Schemes of Sports Authority of India , Sports Development Authority of Tamilnadu, Tamil Nadu Physical Education and Sports University.

UNIT III: Physical Education in Ancient India

History of Physical Education in Vedic period, Epic period, Buddhist period. Development of Indigenous activities - Yogic system of physical exercise.

UNIT IV: Physical Education in Other Countries and Development of Physical Education

Physical Education in Ancient Greece, Rome and European countries. Contributions to the growth of Physical Education by leaders and movements: Germany: Johann Bernhard Basedow, Johann Christoph Friedrich GutsMuths, Adolph Spiess, Role of Philanthropinum and Turnverein Movement. Sweden: Per Henrik Ling and Swedish medical gymnastics. Denmark: Franz Nachtegall, Niels Bukh.

UNIT V: Physical Education Teacher Training and Sports Promotion

YMCA and its contribution: Contribution of H.C.Buck and Contribution of Mary Crowe Buck. Teacher Training Institutions in Physical Education. Indian Olympic Association, National Sports Federations and Associations. Youth Welfare Programmes: N.C.C., N.F.C., N.D.S., N.S.O., Scouting and Guiding, Youth hostels, Youth festivals, Camping Mountaineering. National Physical Fitness Programme

Course outcome

The student should able

- CO1- To attain the knowledge about various organization in India and their functions.
- CO2- To understand honours and awards in outstanding personalities in various sports and games.
- CO3- To Know History of physical education periods in Ancient India.
- CO4- Improve the knowledge in the area of physical education and its development in India and in the world.
- CO5- Recognize and distinguish the functional operations of national and international competition of Indian Olympic Association.

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
CO1	-	3	-	1	-	-	-	-	-	-		
CO2	-	3	-	1	-	-	-	-	-	-		
CO3	-	3	-	1	-	-	-	-	-	-		
CO4	-	3	-	1	-	-	-	-	-	-		
CO5	-	3	-	1	-	-	-	-	-	-		

References:

- 1. Competitions Success Review Year Book. (2014) New Delhi : Competition Review Pvt. Ltd.
- 2. General Knowledge Digest (2014), New Delhi: Wheelers Publishing.
- 3.Bucher, A.C. (1984). Foundations of physical Education, St.Louis. The L.V.Mosby Co.
- 4. Chelliah, S.N. (1989) Udarkalvi Enral Enna? Chennai: RajmohanPathippagam.
- 5. Khan, E.A. (2000) History of Physical Education, Patma, Scientific Books Co.
- 6.Knapp, C. & Hagman E.P. (1949) Teaching Methods-for Physical Education, New York: McGraw Hill Book Co. Inc.
- 7.Rajagopalan, K.A. (1969) Brief History of Physical Education in India. Delhi: Army Publishers
- 8. Thirunarayanan, C. & Hariharan S. (1969) Methods in Physical Education, Karaikudi.
- 9. Thomas, J.P. (1980) Physical Education Lesson: Chennai: Gnanodaya Press.
- 10. Thirunarayana. C (1967). Analytical History of Physical Education. Karaikudi.

19BPEL-104	. FITNESS AND WELLNESS	L	Т	Ρ	С				
		1	1	1	3				

COURSE OBJECTIVES:

The student teacher

- To know about the purpose and needs of physical fitness and wellness.
- To get an idea about various tests to assess the fitness and wellness.
- To know various diseases and their effects on human being.
- To know the difference between men and women fitness.

UNIT – I – INTRODUCTION

Meaning and Definition" of Physical Fitness, Physical Fitness Concepts and Techniques, Principles of physical fitness, Physiological principles involved in human movement, Components of Physical Fitness. Current trends in fitness and conditioning,

UNIT II NUTRITION, BALANCED DIET

Components of total health fitness and the relationship between physical activity and lifelong wellness. Nutrients; balanced diet- mal nutrition. Weight Management – proper practices to maintain lose and gain..

UNIT III – ENDURANCE TRAINING

Endurance Training, Safety techniques - proper warm-up, cool down, and stretching. Assess cardio respiratory fitness and set goals to maintain or improve fitness levels. Cardio respiratory activities including i.e. interval training, incline running, distance running, aerobics and circuits.

UNIT IV – ANAEROBIC TRAINING

Resistance Training for Muscular Strength and Endurance; principles of resistance training, Safety techniques. Resistance training principles and concepts; basic exercises (including free weight exercise, weight machines, exercise bands and tubing, medicine balls, fit balls) Advanced techniques of weight training.

UNIT V – FLEXIBILITY TRAINING

Flexibility Training, Relaxation Techniques - types of flexibility exercises (i.e dynamic, static), Develop basic competency in relaxation and breathing techniques. Pilates, Yoga.

III. PRACTICAL

The Fitness tests should be taught in the indoor and outdoor test area

Course outcome

The student should able

CO1- To attain the knowledge about various components of fitness.

- CO2- Improve the knowledge in the area of physical fitness and the wellness of women at various stages in their life.
- CO3- How to improve cardio respiratory fitness knowledge.
- CO4 Can use various method of anaerobic fitness.

CO5- Relate yoga with health and fitness.

Mapping with Programme Outcomes												
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
CO1	1	-	3	-	1	-	-	-	-	-		
CO2	-	-	3	-	1	-	-	-	-	-		
CO3	-	-	3	-	1	-	-	-	-	-		
CO4	-	-	3	-	1	-	-	-	-	-		
CO5	-	-	3	-	1	-	-	-	-	-		

REFERENCES:

- David K.Miller& T. Earl Allen, Fitness, A life time commitment, Surjeet Publication Delhi 1989.
- Dificore Judy, the complete guide to the postnatal fitness, A & C Black Publishers Ltd. 35 Bedford row, London (1998)
- Dr. A.K. Uppal, Physical Fitness, Friends Publications (India), 1992. Warner W.K Oeger& Sharon A. Hoeger, Fitness and Wellness, Morton Publishing Company, 1990.
- Elizabeth & Ken day, Sports fitness for women, B.T Batsford Ltd, London, 1986.
- Emily R.Foster, KarynHartiger& Katherine A Smith, Fitness Fun, Human Kinetics Publishers 2002.
- Lawrence, Debbie, Exercise to Music. A & C Black Publishers Ltd 37, Sohe Square, London 1999. Robert Malt. 90 day fitness plan, D.K. Publishing Inc. 95. Madison Avenue, New York 2001.

19BPEA-105	GENERAL SCIENCE	L	Т	Ρ	С
		3	0	0	3

The student teacher

- To know about basics in science.
- Can learn all the properties in physics, chemistry and biology.

UNIT - I

Importance of Science – Various basic sciences, Value of knowledge required for physical education. Physics - Mechanics – General Properties of Matter Motion, Velocity, Projectile, Laws of motion, Force, Centrifugal force, Centripetal force, Gravity, Force of gravity, Center of Gravity, Equilibrium, Work, Power and Energy, Transformation of Energy, Friction, Levers Barometer – Boyle's Law, Osmosis, Diffusion, Density, Specific gravity.

UNIT – II

Heat: Effect of hear, Thermometer, specific heat and latent heat, (Their importance in daily life), transfer of heat, (Conduction, Convection, Radiation).

Light: Nature of light, Reflection of light, at plane and curved surfaces, Lenses (Camera, Human eye, Astronomical Telescope and Compound Microscope)

UNIT – III

Sound: Characteristics of sound, elementary idea of production and transmission of sound, loudness, pitch, hearing process.

UNIT – IV Chemistry

Indestructibility of matter, Atom, Molecule, Element compound and Mixture. Oxygen, Oxidation and Reduction, Acids, Bases, Salts, Solubility, Crystallization, Hydrogen, water, Hard and soft water, Carbon, Carbon dioxide, Nitrogen, Ammonia, use of nitrates, chlorine.

Introduction to organic chemistry, Carbohydrates, Proteins, Amino acids, fats.

UNIT - V Biology

Living organism, cell, protoplasm, cell division, Cellular structure of plants and Animals, Reproduction in plants and Animals, An elementary study, Bacteria and virus, Inter dependence of plants and Animals, Evolution and Heredity.

Course outcome

The student should able

CO1- To attain the knowledge about importance of physics.

CO2- Attain the knowledge about heat and light.

CO3- Attain the knowledge about sound.

CO4- Attain the knowledge about chemistry, indestructibility of matter.

CO5- Attain the knowledge about biology and living organism.

Mapping with Programme Outcomes												
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
CO1	-	-	-	-	-	3	-	-	-	-		
CO2	-	-	-	-	-	3	-	-	-	-		
CO3	-	-	-	-	-	3	-	-	-	-		
CO4	-	-	-	-	-	3	-	-	-	-		
CO5	-	-	-	-	-	3	-	-	-	-		

Reference Books:

1. Physics by W.L. Whitely Published by University Tutorial Press Ltd., Clifton House, Eouch Road, London, N.W.I. 1959 Sh.1961.

2. Chemistry for Matriculation By G.H. Baily and H.W. Bansor, University Tutorial press, London 1956.

3. Biology made Simple by E.P. Hanssure, Publishers Dudly and Co. Inc.Garden City, New York, 1956.

		1			
19BPET-201	TAMIL – II	L	Т	Ρ	С
		3	0	0	3

COURSE OBJECTIVES

The student teacher

- To learn Tamil through literatures.
- To learn Tamil through various types of exercises.
- Can learn Tamil historical development.

myF - 1

- 1. ee;jpf; fyk;gfk;
- 2. jkpo; tpl J}J

myF - 2

- 1. jpUf;Fw;whyf; FwtQ;rp (Fwj;jp kiytsk; \$Wjy;)
- 2. Kf;\$ly; gs;S (ehl;L tsk;)
- **myF 3.** jkpohpd; tPu tpisahl;Lfs;
 - VW jOTjy;> kw;NghH> tpw;NghH> Ntl;il> rpyk;gk;> fshp

myF - 4 nkhopg; gapw;rp

- 1. gpio ePf;fk;
- 2. tpsk;gu thrfq;fis cUthf;Fjy;
- 3. NeHfhzy;
- **myF 5** jkpo; ,yf;fpa tuyhW
 - 1. rpw;wpyf;fpa tuyhW
 - 2. fpUj;Jt ,yf;fpa tuyhW
 - 3. ,Ryhkpa ,yf;fpa tuyhW
 - 4. fhg;gpa ,yf;fpa tuyhW

Course outcome

The student should able

CO1 :To acquire Tamil knowledge through various literatures.

CO2 : To acquire knowledge of small stories in Tamil.

CO3 : To know the history and development of Tamil literature.

	Mapping with Programme Outcomes												
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10			
CO1	3	-	-	-	-	-	-	-	-	-			
CO2	3	-	-	-	-	-	-	-	-	-			
CO3	3	-	-	-	-	-	-	-	-	-			

Jiz E}w;gl;bay;

- 1. Nguh.vk;khH milf;fyrhkp (2000) jkpo; ,yf;fpa tuyhW> uhrp gjpg;gfk;> nrd;id 73.
- 2. j.kiyaurp> (2013), jkpo; ,yf;fpaq;fspd; tpisahl;Lf; \$Wfs; ghit gjpg;gfk;> kJiu-1.
- 3. nrh.gukrptk; (2000)> ew;wkpo; ,yf;fzk;> gl;Lg; gjpg;gfk;> nrd;id.40.
- 4. rq;f,yf;fpa E}y;fs;-fof ntspaPL.

19BPEE-202	ENGLISH – II DEVELOPING THE	L	Т	Р	С
	LANGUAGE SKILLS	3	0	0	3

The student teacher

- to learn English how to listen and speak
- to learn how to invite, decline and accept a person.
- Can improve the English writing skills.
- The students may get knowledge by reading the books written by various authors in English language.

LISTENING & SPEAKING:

UNIT – I

- a) Asking for & giving permission
- b) inviting a person-accepting/declining

WRITING:

UNIT –II

- a) Grammar in usage.
- b) Translation-idoms & phrases.
- c) Filling up forms Bank chalans/pay in slips/Demands Draft, Railway Reservation/Cancellation.

UNIT - III

- a) Welcoming a foreign visitor & describing region & country
- b) Letter writing
- c) Descriptive writing-describing on event.

$\mathbf{UNIT} - \mathbf{IV}$

- a) Ode to the best wind- P.B.Shelley
- b) The Gift of India- Sarojini Naidu
- UNIT -V
 - a) The Man Who Could Work Miracles H.G.Wells
 - b) The Verger Somer Set Maugham.

Course outcome

The student should able

CO1 :To improve English knowledge by learning skills.

CO2 :To improve English writing skills.

CO3 :Can use various grammatical skills in English.

Mapping with Programme Outcomes												
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
CO1	3	-	-	-	-	-	-	-	-	-		
CO2	3	-	-	-	-	-	-	-	-	-		
CO3	3	-	-	-	-	-	-	-	-	-		

Reference:

- 1. The last leaf & other stories by Anand Kumar (Balackle Books).
- 2. The Silent Song- K.M.Tharakan (Macmillan)

19BPES-203	ORGANISATION AND	L	Т	Ρ	С
	ADMINISTRATION	3	0	0	3

The student teacher

- To know how to organize and administrate various events in physical education.
- Understand about the play field facilities.
- Get the knowledge of importance of good teacher and handling time table.
- To know about the need and principles public relation.

UNIT – I

Meaning – Nature and scope of organization and administration, principles of organization and administration. Scheme of organization.

UNIT – II

Facilities:

- a. Play field location, standard, preparation, layout and Maintenance.
- b. Gymnasium construction, factors, care and maintenance and allied facilities.
- c. Swimming pool construction, dimension, filtration and supervision of swimming pool.

Equipments in Physical Education:

Need and importance, lists of equipments, suggested type of equipments, criteria for selection procedure of purchase, care and maintenance, store- keeping routine care repairs, disposal etc.

UNIT – III

Staff and Leadership:

Importance of qualified teacher, qualifications of good teacher, values, staff co-operation, student leadership, values of student of leadership. Selection and training of student leaders, role of student leaders, recognition of student leaders. Time – Table: Physical Education classes, factors affecting time-table, required periods, instruction period, practice period, games period, participation periods.

UNIT – IV

Programme of Activities:

- a. Intramurals Importance of organizing Intramurals, Units of competition, activities, points systems role, awards and incentives for participation.
- b. Extra murals: Educational emphasis, Civil practices, extent of participation, Selection conditioning of teams, Training team and management, sports tours.

Office Managements:

Setting up and management of office correspondence records and reports filing, relationship with superior officer and assistants, parents, pupils. Financial Budget: Physical Education Budget – budget making income and expenditure, accounting petty cash, fund imp rest.

UNIT – V

Public Relation:

Definition – Need of Public relations in physical education. Principles of public relations in physical education. Techniques and Media of Relation with the public, parents, pupils and other agencies.

Evaluation:

Need and importance – Method of evaluation in terms of objectives. Detection of deficiencies, examination in physical education - follow up action for improvement.

Course outcome

The student should able

CO1- Attain knowledge of planning and coordinate various events in physical education.

CO2- To know maintenance of play field and equipment.

CO3- Acquire knowledge about using various teaching aids.

CO4- Can get innovative ideas after practically conducting various intramural and extramural tournaments.

CO5- To understand relation with the public and parents.

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
CO1	-	-	-	3	-	-	2	-	-	-		
CO2	-	-	-	3	-	-	2	-	-	-		
CO3	-	-	-	3	-	-	2	-	-	-		
CO4	-	-	-	3	-	-	2	-	-	-		
CO5	-	-	-	3	-	-	2	-	-	-		

Reference Books:

1. Voltmer and Essliger – Organization and Administration, Times of India Press, Bombay 1964.

2. P.M. Joseph, Organization of Physical Education O.S: A.T.I.P.E. Kaudivali (Bombay), 1956.

3. Hughes and French – Administration of Physical Education. Ronald Press Co., New York, 1954.

4. Forsyth and Duncan, Administration of Physical Education, Prentice Hall, New York 1951.

5. Bucher, Administration of School Health and Physical Education Programmes, C.V. Mosby Co., St. Louis. 1967.

6. J.P. Thomas, Organization of Physical Education.

7. Bennett, Bruce L. Mapwell L. Howell and Vriel Simri Comparative Physical Education and Sports Lea and Fabiger Pub, Philadelphia, 1983

19BPEL-204	SCIENCE OF YOGA	L	Т	Р	С
		3	0	0	3

COURSE OBJECTIVES:

The student teacher

- To know the history of yoga and its sutras.
- To know the eight limbs of yoga.
- To learn various types of bandhas, mudras and kriyas.
- To know about the development of yoga in India and abroad.

UNIT I: Introduction to Yoga

Meaning, Definition, Aim, Concept, Scope of Yoga. Schools of Yoga Hastangayoga: Yama, Niyama, Asana, Pranayama, Prathyahara, Dharana, Dhyana and Samadhi.

UNIT II: Yoga and Physical Education

Meaning and Definition of Physical Education – Relationship between Yoga and Physical Education. Comparison of Yoga Practices and Physical Exercises.

UNIT III: Asana

Asana: Meaning, Definition, Types of asanas. Benefits of Asana: Physiological, Psychological and Therapeutical values.

UNIT IV: Pranayama and Meditation

Pranayama meaning., Definition, Aim, Concept of Pranayama - Types of pranayama - Physiological, psychological and Therapeutical values. Meaning, Definition, Aim, Concept of Meditation

UNIT V: Bandhas, Shatkriyas and Mudras

Bandhas and Mudras - Meaning. Definition, values. Shat kriyas Neti (Jala, Sutra) Dhauti (Varmana, Vastra) Bhasti, Nauli, Trataka, Kapalabhati. Surya Namaskar.

Course outcome

The student should able

CO1- Attain the knowledge of yogic education.

CO2- Get an awareness of advantages of yoga in the field of physical education.

CO3- To know effects of asana on physiological conditions.

CO4- Analyze and interpret rhythmic movement with apparatus.

CO5- Have the knowledge of bandhas, mudras and kriyas and their advantages for sports personals.

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
CO1	-	-	-	-	3	1	-	-	-	-		
CO2	-	-	-	-	3	1	-	-	-	-		
CO3	-	-	-	-	3	1	-	-	-	-		
CO4	-	-	-	-	3	1	-	-	-	-		
CO5	-	-	-	-	3	1	-	-	-	-		

REFERENCES :

Gharote M.L. (1982) Guidelines for Yogic Practice; Lonawala: Medha Publications. Iyengar B.K.S(1985) The Art of Yoga; Indus: Harpic Collins P.Ltd.

Thirumalai Kumar. S and Indira S, (2011) Yoga in Your Life: Chennai: The Parkar Publication.

19BPEA-204	ANATOMY AND PHYSIOLOGY	L	Т	Р	С
		3	0	0	3

COURSE OBJECTIVES:

The student teacher

- Understand the basics in anatomy and physiology.
- Find various muculo-systems of the body.
- To know about the constituents of blood and its function.
- Can understand the nervous system.

UNIT I: Introduction

Need and importance of anatomy and physiology for the students of physical education. Define Cell Tissue. Microscopic structure of the cell. Classification, Structure and functions of various types of tissues.

UNIT II: Musculo Skeletal System

Skeletal systems: Names of the bones of upper and lower extremities - Classification of joints. Names of the major muscles and their actions.

UNIT III: Cardio Respiratory System

Blood: Functions of blood, Composition of blood, lymph and its functions. Cardiovascular system: Structure of the heart, Systematic, pulmonary, Coronary circulation. Definition of respiration, Structure and functions of the respiratory system, Mechanism for respiration, Lung volumes.

UNIT IV: Nervous System

Structure and functions of Brain, Spinal cord reflex arc. Hormones and their roles.

UNIT V: Digestive System

Structure and functions of alimentary canal - Accessory organs - liver, Pancreas, Gall bladder.

Course outcome

The student should able

CO1- To understand the structures of cells and tissues.

CO2- To acquire knowledge about the structures of bones in our body.

CO3- To know effects of various types of exercises on various systems.

CO4- To Know measure the bodily function such as hormones and their role.

CO5- Identify and describe the different organs of the human body and its regulation.

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
CO1	-	-	-	-	-	3	-	-	-	-		
CO2	-	-	-	-	-	3	-	-	-	-		
CO3	-	-	-	-	-	3	-	-	-	-		
CO4	-	-	-	-	-	3	-	-	-	-		
CO5	-	-	-	-	-	3	-	-	-	-		

REFERENCES:

- 1. Chelliah, N. (1989) Dhekathai Therindu Kolvom, Chennai: Rajmohan Pathippagam.
- 2. Murugesh, N. (1990) Anatomy physiology and Health Education, Madurai: Sathiya Publishers,
- 3. Pearce, E.B. (1962) Anotomy and Physiology for Nurses, London: Faber and Faber Ltd.
- 4. Pearce, J. W. (1959) Anatomy for students and Teacher of Physical Education, London: Edward Arnold and Co.

19BPET-301	TAMIL-III	L	Т	Ρ	С
		3	0	0	3

The student teacher

- To learn Tamil through great poets.
- To learn the history of sports and games in Tamil.
- Can learn Tamil literature.

myF - 1

1. jpUthrfk; - khzpf;f thrfH

(jpUfg;ghit Kjy; 5 nra;As;fs;

 ehyhapuj; jpt;a gpuge;jk; - Mz;lhs; thuzk; Mapuk; njhlq;fp 5 nra;As;fs;

myF - 2

fk;guhkhazk;

(Re;ju fhz;lk; - Ch; NjL glyk; Kjy; 74 nra;As;fs;)

myF - 3. rKjha Nehf;fpy; jkpoh; tpisahl;Lf;fs; -1

tho;f;iff;F gad;gLk; tpisahl;L - tpisahl;L newpKiwfs;. tpisahLtjw;F Vw;w trjpfs;. tpisahl;L nghJ - tpisahl;by; Mz; ngz; ghFghL - tpisahl;Lk; ngz;fSk;.

myF -4 nkhopg; ngaw;rp

- 1. Ntiy tha;g;G Ntz;b tpz;zg;gk; vOJjy;
- 2. fbjk; vOJjy;
- 3. Neh;f;fhzy;

myF - 5 jkpo; ,yf;fpa tuyhW

- 1. gy;yth; fhy gf;jp ,yf;fpa tuyhW
- 2. gpw;fhyr; Nrhoh; fhy ,yf;fpa tuyhW

Course outcome

The student should able

CO1: To acquire Tamil knowledge through various poets stories.

CO2: To acquire knowledge of small stories in Tamil.

CO3: To know the history and its development of sports in Tamil

	Mapping with Programme Outcomes											
Cos PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 PO9 PO1												
CO1	3	-	-	-	-	-	-	-	-	-		
CO2	3	-	-	-	-	-	-	-	-	-		
CO3	3	-	-	-	-	-	-	-	-	-		

Jiz E}w;gl;bay;

- 1. Nguh. vk;khh; milf;fyrhkp> (2000) jkpo; ,yf;fpa tuyhW> uhrp gjpg;gfk;> nrd;id-73.
- 2. j.kiyaurp> (2013)> jkpo; ,yf;fpaq;fspy; tpisahl;Lf; \$Wfs;-ghit gjpg;gfk;> kJiu-1.
- 3. nrh. gukrptk;> (2000)> ew;wkpo; ,yf;fzk;> gl;Lg; gjpg;gfk;> nrd;id-40.
- 4. rq;f,yf;fpa E}y;fs; fof ntspaPL.

BPEE-302	PROGRESSIVE LANGUAGE SKILLS	L	Т	Р	С
		3	0	0	ß

The student teacher

- to learn English how to listen and speak
- to learn how to use comprehension.
- Can improve the English descriptive writing and translation skills.
- The students may get knowledge by reading the books written by various authors in English language.

LISTENING & SPEAKING

UNIT-I

- a) Discussing interests & leisure activities.
- b) Checking in & out of a hotel.
- c) Complaint & apology.

WRITING

UNIT – II

- a) Comprehension.
- b) Developing hints.

UNIT – III

- a) Descriptive Writing Comparing & Contrasting.
- b) Translation Sentences English to Tamil.

UNIT - IV

- a) Where The Cross is Made O Eugene O'Neil
- b) Pip & The Convict Guy R. Williams

UNIT – V

- a) The Dream of The Message A.P.J. Abdul Kalam
- b) Women of the Public Sphere Dona.S.Sanzone.

Course outcome

The student should able

CO1: To improve English knowledge by learning skills.

CO2: To improve English writing skills.

CO3: Can use various grammatical skills in English.

	Mapping with Programme Outcomes												
Cos	Cos PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 PO9 PO10												
CO1	3	-	-	-	-	-	-	-	-	-			
CO2	3	-	-	-	-	-	-	-	-	-			
CO3	3	-	-	-	-	-	-	-	-	-			

REFERENCE:

- 1. A.K. Rama Bushanam "Human Values through English Prose" (Blackle)
- 2. Short Plays of Yesterday & Today V. Sachidanandam.

19BPES-303	METHODS IN PHYSICAL EDUCATION	L	Т	Р	С
		3	0	0	3

The student teacher

- Can learn planning and presentation of various teaching aids
- to learn various methods of teaching physical activities such as, commandoral, demonstration, imitation and dramatization.
- Know the various types of drawing fixtures.

UNIT I: Method

Meaning – Factors influencing method, Presentation techniques: Planning – Presentation – Steps in the way of presentation. Teaching aids – Class management – General – Specific – Principles to be adopted for good class management.

UNIT II: Lesson Plan

Values – Types: General and Particular lesson plan. Command: Response Command – Rhythmic Command. Methods of Teaching Physical Activities: Command, Oral, Demonstration, Imitation, Dramatization, At-will, Set-drill, Part, Whole, Whole-Part-Whole methods.

UNIT III: Tournaments

Meaning-Types. Method of drawing fixtures for knock out/elimination league/Round Robin. Combination Tournament : Knock out – cum – knock out, knock out – cum – league, league – cum – league, league – cum – knock out . Challenge Tournament. Intramural – Extramural.

Unit IV: Methods of Teaching

Methods of teaching with special reference to different kinds of physical activities: Calisthenics - Gymnastics- Minor games- Major games- Rhythmic activities. Organisation and conduct of competition in sports and games: Individual sports- Group competition.

Unit V: Supervision

Supervision – Meaning and Need for supervision – Guiding principles of supervision: Qualities and qualification of a supervisor – supervisors relationship with the administrator and the physical education teacher. Techniques of Supervision: Visitation – Periodical – Surprise – Request- Social, Visitation.

Course outcome

The student should able

- CO1- Classify the types of presentation, techniques and technical preparations required for physical education lessons.
- CO2- Construct the lesson plans for various physical education activities.
- CO3- Individually can draw fixtures to know the individual sports and group competitions.
- CO4- Describe and use various teaching methods according to suitability.

CO5- Can improve their supervision.

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
CO1	-	-	-	3	-	-	-	-	-	-		
CO2	-	-	-	3	-	-	-	-	-	-		
CO3	-	-	-	3	-	-	-	-	-	-		
CO4	-	-	-	3	-	-	-	-	-	-		
CO5	-	-	_	3	_	_	-	_	-	-		

REFERENCES:

Cosmin. H.Rosalind, C.& Jackson, C. (1960) Methods in Physical Education, London: W.B. Saunders Co.

Dheer, S., & Radhika Kamal (1991) Organization and Administration of Physical Education, New Delhi :Friends Publication.

Greyson Daughtrey. (1969). Methods in Physical Education and Health for Secondary Schools. London: W. B. Saunders Company.

Michael W. Metzler. (2000). Instructional Models for Physical Education. London: Allyn and Bacon.

Sachdeva, M.S (1983) Modern Approach to School Organization and Administration, Ludhina: Parkash Brothers Educational Publisher.

Sharad Chandra Mishra. (2009). Methods of Physical Education. New Delhi: Sports Publication.

Thirunarayanan, C. & Hariharan, S (1969) Methods in Physical Education Karaikudi: South India press.

Voltmer, Edward (1979) The Organization and Administration of Physical Education, New Jersey.: Prentice Hall, Inc.

19BPES-304	SCIENTIFIC PRINCIPLES OF SPORTS	L	Т	Р	С
	TRAINING	3	0	0	3

COURSE OBJECTIVES:

The student teacher

- Can learn principles, characteristics and aims of sports training.
- To learn various components of physical fitness.
- Know the various methods of training.

UNIT I: Sports Training

Sports Training: Definition, Aims, Characteristics, Principles of sports training. Physical Fitness: components of physical fitness - importance of physical fitness - Training Load.

UNIT II: Strength, Speed and Endurance

Definition of strength -types of strength-importance of strength - factors determining strength - training method for strength improvement - loading procedure for strength training. Definition of speed - forms of speed - factors determining various speed performance - training - methods of increasing speed.

UNIT III: Endurance

Definition of endurance - types of endurance - importance of endurancefactors determining endurance training methods for improving endurance.

UNIT IV: Flexibility and Coordinative Abilities

Definition of flexibility - types of flexibility - factors determining flexibility - methods improving flexibility. Coordinative abilities – types – Characteristics - training methods for improving coordinative abilities.

UNIT V: Various Method of Training

Circuit Training Fartlek Training - Internal method - Weight training -Resistance training, Plyometric ,Core training - Functional training, Swiss ball training, Medicine Ball Training.

Course outcome

The student should able

CO1- Understand the modern concept of sports training.

CO2- Can use various method of sports training for improving speed and strength.

CO3- . Can use various method of sports training for improving Endurance.

CO4- Can use various method of sports training for improving flexibility.

CO5- To attain the knowledge various method of training for improving sports performance.

	Mapping with Programme Outcomes												
Cos PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 PO9 PO													
CO1	-	-	3	-	-	-	-	-	-	-			
CO2	-	-	3	-	-	-	-	-	-	-			
CO3	-	-	3	-	-	-	-	-	-	-			
CO4	-	-	3	-	-	-	-	-	-	-			
CO5	-	-	3	-	-	-	-	-	-	-			

REFERENCES:

- 1. Jenson, G. and Fisher, A.G (1972) Scientific Basis of Athletic Conditioning, 2nd ed., Philadelphia: Lea and Fibiger.
- 2. Jones, B.J. (1982) Guide to Effective Coaching Principles and Practices. Allyn and Bacon, Inc.
- 3. Singh, H. (1984) Sports Training, General Theory and Physical Fitness NIS, Patiala.
- 4. Thomas, J.P (1964) Let us Coach Soccer, New Delhi:YMCA Publishing House.
- 5. Thomas, J.P (1971) Scientific Weight Training for Games and Sports, Chennai: Gnanodaya Press.

19BPEA-305	HEALTH AND SAFETY EDUCATION	L	Т	Р	С
		3	0	0	3

COURSES OBJECTIVES:

The student teacher

- Easily understand the concepts of health, heredity and environment.
- Can learn the how to solve the health problems at school.
- Know the various safety methods follow at home and school.

UNIT I: Introduction

Health - Meaning, Definition and concepts - Factors influencing health -Health determinants, Heredity and environment. Health problems of India -Population and health - Environment pollution. Personal hygiene.

UNIT II: School Health

Problems - Growth Stress of school planning Health instruction, Health appraisal follow up, Health service and supervision. Role of Physical Education Teacher in School Health Programmes.

UNIT III: Infections

Causes of diseases - Mode of infection, Spread of infection - Public health measure to combat infection - Public health administration - Sanitation - Water supply. Immunity - Prophylactic immunisation - Programmes – AIDS Communicable diseases, Malaria, Typhoid, Cholera, Dysentry, Leprosy, Tuberculosis, STD, Polio, Tetanus Drug abuse - Alcohol, Smoking Family welfare -Sex education

UNIT IV: Safety At Home

Environment and structure, Electrical connections, Bathrooms and Lavatory, Storing articles,. Kitchen and Fire place, Storing medicines, Principles of movements in daily living.

UNIT V: Safety at School and Physical Education

Safety at school structure and environment: Area, Surface, Building, Furniture and fixtures. School procedures and policies precautionary and emergency equipment. Collection of information: address of parents, hospitals and doctors, police, fire station, ambulance service. Safety in physical education and Sports: During Training and Competition, Dress and Safety equipments. Principles of safety: in organising Physical Education Classes, Demonstration and Competitions.

Course outcome

The student should able

CO1-To solve the health related problems.

CO2- Solve all the safety problems at home and schools.

CO3-May improve the immunity power of the individuals.

CO4- To look at the natural resources and related environmental issues.

CO5- To Know Safety for Physical education classes.

	Mapping with Programme Outcomes												
Cos PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 PO9 PO													
CO1	-	-	3	-	-	-	-	-	-	-			
CO2	-	-	3	-	-	-	-	-	-	-			
CO3	-	-	3	-	-	-	-	-	-	-			
CO4	-	-	3	-	-	-	-	-	-	-			
CO5	-	-	3	-	-	-	-	-	-	-			

REFERENCES :

Mangal, S.K. & Chandra, P.C. (1979) Health and Physical Education Ludhiana. R.D. Tandon Broth,.

Neiniah, (1997) School Health Education, New Delhi: Harper & Bros.:

Park, J.E. (2001)Text Book of Preventive and Social Medicine.: Chennai.

BPET- 401	TAMIL	L	Т	Ρ	С
		3	0	0	3

The student teacher

- To learn Tamil through great saints.
- To learn the history of sports and games in Tamil.
- Can learn Tamil exercises.

myF - 1

jpUf;Fws; : mwj;Jg;ghy;: tho;f;ifj; Jizeyk;> kf;fs; NgW> nghUl;ghy;: fy;tp> Nfs;tp. fhkj;Jghy;: Fwpg;G mwpjy;> Gzh;r;rp kfpo;jy;.

myF - 2

gj;Jg;ghl;L

neLey;thil

myF - 3

rKjha Nehf;fpy; jkpoh; tpisahl;Lf;fs; - 2.\$l;Lzh;T tpiahl;Lf;fs;: rhh;G tpisahl;Lfs; - rkak; rhh;e;j tpisahl;Lf;fs;> tpisahl;by; ek;gpf;ifAk; gof;ftof;fq;fSk; - ,aw;ifNahL ,iajy; - tpisahl;by; mw czh;T mwptpaYk; tpisahl;Lk; - tpisahl;Lk; tuyhw;W epfo;Tk; - tpisahl;by; Fw;wKk; jz;lidAk;.

myF -4

nkhopg;ngaw;rp

- 1. Mq;fpyj;jpy; ,Ue;J jkpOf;F nkhop ngah;j;jy;
- 2. jkpopy; ,Ue;J Mq;fpyj;Jf;F nkhop ngah;j;jy;

myF - 5

jkpo; ,yf;fpa tuyhW

- 1. rq;f,yf;fpa tuyhW
- 2. mw ,yf;fpa tuyhW

Course outcome

The student should able

CO1 :To acquire Tamil knowledge through various literatures.

CO2: To acquire Tamil literature knowledge.

	Mapping with Programme Outcomes											
Cos	os PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 PO9 PO											
CO1	3	-	-	-	-	-	-	-	-	-		
CO2	3	-	-	-	-	-	-	-	-	-		

Jiz E}w;gl;bay;

- 1. Nguh.vk;khu; milf;fyrhkp> jkpo; ,yf;fpa tuyhW> uhrp gjpg;gfk;> nrd;id-73.
- 2. Kidtu; j.kiyaurp> (2013)> jkpo; ,yf;fpaq;fspy; tpisahl;Lf; \$Wfs;- ghit gjpg;gfk;> kJiu-1.
- 3. Kidtu;.nrh. gukrptk;> (2000)> ew;wkpo; ,yf;fzk;> gl;Lg; gjpg;gfk;> nrd;id-40.
- 4. rq;f,yf;fpa E}y;fs; fof ntspaPL.

19BPEE-402	CAREER LISTENING AND SPEAKING	L	Т	Р	С
		3	0	0	3

COURSE OBJECTIVES:

The student teacher

- to learn spoken English.
- Can improve the report writing and interview taken in English.
- The students may get knowledge by reading the books written by various authors in English language.

UNIT - 1

- a) Group discussion predicting and describing future possibility.
 - 1. Globalization

- 2. Consumerism
- 3. Current event.
- b) Interview focus on personality development and body language.

WRITING

UNIT - II

- a) Report Writing
- b) Note Making

UNIT - III

- a) How to write an e-mail
- b) Descriptive writing writing with a purpose.

UNIT - IV

- a) How soon hath time John Milton.
- b) Leave this chanting Robindranath Tagore.

UNIT – V

- a) Dharma in Tirukural C. Subramanian
- b) Love all serve all Derek Williams.

Course outcome

The student should able

CO1: To improve English knowledge by learning skills.

CO2: To improve English writing skills.

CO3: Can use various grammatical skills in English.

Mapping with Programme Outcomes												
Cos PO1 PO2 PO3 PO4 PO5 PO6 PO7 PO8 PO9 PO												
CO1	3	-	-	-	-	-	-	-	-	-		
CO2	3	-	-	-	-	-	-	-	-	-		
CO3	3	-	-	-	-	-	-	-	-	-		

REFERENCE:

- 1. A.K. Rama Bhushanam "Human values through English prose" (Blackle)
- 2. Shankuntala Bharvani "The best Words" Nissian Ezekial.

19BPES-403	EXERCISE PHYSIOLOGY AND	L	Т	Р	С
	NUTRITION	3	0	0	3

COURSE OBJECTIVES:

The student teacher

- Can learn about the effect of exercise on various muscular contraction and various system.
- Can attain knowledge about the particles of food and its usages for sportsman.
- May get additional knowledge about sports nutrition.

UNIT I: Muscular Contraction and Exercise

Properties and composition of voluntary muscles. Minute structure of voluntary muscle. Sliding Filament Theory of Muscular Contraction- Conditions affecting muscular contraction.

UNIT II: Effect of Exercise on Human Body System

Effect of exercise on: Muscular system, Circulatory system – Respiratory system.

UNIT III: Effect of Exercise on Human Body System

Effect of exercise on: Nervous system- Digestive system - Endocrine system.

UNIT IV: Basic Food Group

Carbohydrates, Fats and Protein as a source of fuels. vitamins - Fat soluble and Water soluble- Minerals. Balanced diet. Importance of water in an athletic diet.

UNIT V: Sports Nutrition

Diet for sports competition- supplement to the daily diet. Vitamins, Minerals, Fluids. Electrolyte replacement, Carbohydrate loading, Protein loading, Calcium and iron supplement. Pre-event meal. Time for pre-event meal, Alternate eating pattern, Foods to avoid. Exercise and weight control, Crash dieting, Weight Control.

Course outcome

The student should able

- CO1 To gain knowledge about possessions, alignment of muscles and muscle
- **CO2** To improve knowledge about effect of exercise on muscular, circulatory and respiratory systems.
- **CO3** To increase knowledge about effect of exercise on nervous, digestive and endocrine systems.
- CO4 To understand about balanced diet includes carbohydrates, fats, protein and
- **CO5** Can suggest various food particles such as, carbohydrate, protein, calcium and iron supplementation to the sportsmen.

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
CO1						3						
CO2			1			3						
CO3			1			3						
CO4			3			1						
CO5			3			1						

REFERENCE:

- 1. Amrit Kumar (1995) Introduction to Exercise Physiology, Chennai: Poompugar Pathipagam.
- 2. Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc.,
- 3. David, L Costill. (2004). Physiology of Sports and Exercise. New Jersey: Human Kinetics.
- 4. Fox, E.L., Mathews, D.K. (1981). The Physiological Basis of Physical Education and Athletics. Philadelphia: Sanders College Publishing.
- 5. Gayton A.C (1984). Functions of the Human Body. London: W.B. Saunders & Co.
- 6. Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sanders co.
- 7. Karpovich & Sinnings(1955) Physiology of Muscular activity. London: W.B. Saunders Cp.,
- 8. Morehouse and Miller (1974) Physiology of Exercise. St.Louis : C.V. Mosby Co.
- 9. Reily T (1981) Sports Fitness and Sports Injuries , London :Faber and Faber.

- 10. Sandhya Tiwaji. (1999). Exercise Physiology. New Delhi :Sports Publishers.
- 11. Scott, N. Nisonson B. & Nicholos, J (1985) Principles of sports Medicine, London: William & Walkin,.
- 12. Vincent, T. Murche. (2007). Elementary Physiology. New Delhi ;Sports Publication.
- 13. William, D. Mc Aradle. (1996). Exercise Physiology, Energy, Nutrition and Human Performance. Philadelphia: Lippincott Williams Company.
- 14. Williams, S. & Rod, W. (2001) Nutrition and Diet, Therapy 2nd Edition, London: W.B. Saunder College Publishing.

19BPES-404	RULES OF GAMES AND SPORTS – I	L	Т	Р	С
	(TRACK AND FIELD AND CROSS	З	0	0	3
	COUNTRY)				

The student teacher

- Learn about the methods of marking of standard and non-standard track.
- Can attain knowledge about the marking of field events.
- Familiar with latest rules and their interpretations.

UNIT I: Methods of Marking Non Standard Track

Method of marking Non Standard Track: 200m, 400m track, Calculation of Stagger, Diagonal Excess, Compensated Arc Start, Relay Exchange Zones.

UNIT II: Methods of Marking Standard Track

Method of marking Standard Track: 400m track, Calculation of Stagger, Diagonal Excess, Compensated Arc Start, Relay Exchange Zones, Marking for Hurdles event.

UNIT III: Methods of Marking Field Events

Method of marking Shot-put Circle and Sector, Hammer Throw Circle and Sector, Discus Throw Circle and Sector, Long Jump, Triple Jump, High Jump and Pole Vault.

UNIT IV: General Competition Rules and Their Interpretations

Track event: Start, Race, Finish, Timing, Seeding and Draws, Tie Breaking, Hurdle Races, Relay races. Field Events: Vertical Jumps Horizontal Jumps Throwing Events General Competition Rules of Cross country races: Course, Distances, Start, drinking / sponging and refreshment stations, race.

UNIT V: Officials in Track and Field & Cross Country

Authorities and Duties of Officials in Track and Field Meet and Cross country races: International Officials, Competition Officials Additional Officials.

Course outcome

The student should able

- CO1 To understand the concept and mechanism of marking various non-standard
- **CO2** To know the concept and mechanism of marking various standard tracks.
- **CO3** To familiar in marking various field events.
- **CO4** To update the knowledge of latest rules and their interpretations.
- **CO5** To describe the duties of officials in track, field and cross country races

	Mapping with Programme Outcomes												
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10			
CO1	2						3						
CO2	2						3						
CO3	2						3						
CO4	2						3						
CO5	2						3						

REFERENCES:

- 1. Authors Guide (2014) IAAF Competition Rules 2014-2015, Monaco Cedex: IAAF Publishing .
- 2. Viswanath, M.J.(2002) Track and Field Marking & Athletics Officiating Manual, Chennai: Silver Star Publication.
- 3. Wright Gary, A (1990) Step by Step guide-Track & Field, New Jeysey: Associates Mahan.

19BPEA-405	ELEMENTARY STATISTICS	L	Т	Р	С
		3	0	0	3

COURSE OBJECTIVES:

The student teacher

- To completely describe a data set, using appropriate descriptive statistics.
- Students shall know how to organize, manage, and present data.
- Show ability to explore and organize data for analysis.

UNIT – 1 – INTRODUCTION

Meaning and Definition of Statistics. Function, need and importance of Statistics. Types of Statistics. Meaning of the terms, Population, Sample, Data, Types of data. Variables: Discrete, Continuous. Parametric and non parametric statistics.

UNIT II -MEASURES OF CENTRAL TENDENCY

Meaning, uses and formulation of frequency table. Meaning, advantages of Measures of central tendency – mean, median and mode - Grouped data and Ungrouped data.

UNIT – III – MEASURES OF VARIABILITY

Meaning, Purpose, Calculation and advances of Range, Quartile, Deviation, Mean Deviation, Standard Deviation – Grouped data and Ungrouped data.

UNIT – IV – NORMAL CURVE

Normal Curve. Meaning of probability – Principles of normal curve – Properties of normal curve. Divergence form normality – Skewness and Kurtosis.

UNIT V – GRAPHICAL REPRESENTATIONS

Graphical representation in Statistics; Line diagram, Bar diagram, Histogram, Frequency Polygon, give Curve.

PRACTICAL

It is recommended that the theory topics be accompanied with practical based on computer software of statistics.

Course outcome

The student may / will

- **CO1** Know the fundamentals in statistics.
- **CO2** Know how to organize, manage and present data.
- **CO3** To use and apply a wide variety of grouped and ungrouped data.
- CO4 Demonstrate understanding of the properties of probability and probability
- **CO5** To construct of various representation of graphs.

	Mapping with Programme Outcomes												
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10			
CO1								2					
CO2				1			1	2					
CO3				1			1	2					
CO4				1				2					
CO5				1				2					

REFERENCES:

Best J.W (1971) research in Education, new jersey: Prentice Hall, Inc

Clark D.H (1999) Research Problem in Physical Education 2nd edition, Eaglewood Cliffs, Prentice Hall, Inc.

Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities. Illonosis; Human Kinetics;

Kamlesh,M.L. (1999) Research Methodology in Physical Education and Sports. New Delhi.

Rothstain, A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc.

Sivaramakrishnan S (2006) Statistics for Physical Education, Delhi; Friends Publication

Thiurumalaisamy (1998), Statistics in Physical Education, Karaikkudi, Senthilkumar Publications.

19BPES-501	TEST, MEASUREMENT AND	L	Т	Р	С
	EVALUATION	3	0	0	3

COURSE OBJECTIVES:

The student teacher

- Learn about the purpose of test, measurement and evaluation in physical education.
- Can attain knowledge in establishing a test (reliability, objectivity and validity).
- May know about various fitness and sports skill test.

UNIT I: Introduction to Test, Measurement and Evaluation

Meaning and Definition of test, measurement and Evaluation. Need and importance of test and measurement in physical education.

UNIT II: Criteria and Administration of Test

Criteria of test, Scientific authenticity (reliability, objectivity - validity - availability of norms). Administrative feasibility and educational application. Administration of test: advance preparation - Duties during testing - Duties after testing.

UNIT III: Fitness Test

Physical fitness test: AAHPERD Health-Related Fitness Battery (revised in 1984) - Roger's physical fitness Index. Cardio vascular test : Harvard step test, 12 minutes run test, Multi-stage fitness test (Beep test). Motor Fitness: Indiana. Motor Fitness Test (For elementary and high school boys, girls, and College Men), JCR test. SDAT World Beaters Battery Test (For VI, VII & VIII Standard School Boys and Girls)

UNIT IV: Sports Skill Test

Badminton - Miller wall volley test – French short service test. Basketball -Johnson Basket ball test – Leilich Basketball test. Cricket : Sutcliff Cricket test. Hockey - Friedal field Hockey test.

UNIT V: Sports Skill Test

Sports Skill Test: Football - Johnson soccer test – McDonald soccer test. Tennis - Dyer Tennis test. Volleyball - Brady volley ball test – Russell Lange Volleyball test.

Course outcome

The student may / will

- **CO1** To understand the need & importance of test, measurement and evaluation in physical education.
- **CO2** To describe the criteria, classification and administration of test.
- **CO3** To explain different physical fitness and skill tests.
- **CO4** To attain knowledge on various sports skill tests in badminton, basketball, cricket and hockey.
- **CO5** To succeed knowledge on various sports skill tests in football tennis and volleyball

	Mapping with Programme Outcomes												
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10			
CO1				3			1						
CO2				3			1						
CO3			1	3									
CO4				3			1						
CO5				3			1						

REFERENCES:

- 1. Barrow, H.M. and McGee, R.A. (1964) Practical Approach to Measurement in Physical Education, Philadelphia : Lea and Febiger.
- 2. Bovard, J.F., Cozens, F., W. & Hagman, P.E. (1949) Test and Measurements in Physical Education, Philadelphia: W.B. Sunders Company.
- 3. Campbell, W.R. & Tucker, N.M. (1967) An Introduction in Physical Education, London: G.Bell and Sons Ltd.
- Getchell B. Physical Fitness (1979): A Way of Life, 2nd ed. New York: John Wiley and Sons, Inc.
- 5. Cureton, T.K. (1947) Physical Fitness Appraisal and Guidance, St.Louis: The Mosby Company.
- 6. Hunsicker, P.A. & Montoye, H.J. (1953) Applied Test and Measurements in Physical Education, New York: Prentice Hall Inc

- 7. Luc Leger (1983), Testing Physical Fitness, Eurofit Experimental Battery Provisional Handbook, : UK : Strasbourg
- 8. Meyers, C.R. & Belsh, E.T. (1962) Measurement in physical Education, New York: The Ronald press Company.
- 9. Wilgoose, C.E (1967) Evaluation in Health Education and physical Education, New York :McGraw Hill Book Company, Inc.

19BPES-502	KINESIOLOGY AND BIOMECHANICS	L	Т	Р	С
		3	0	0	3

The student teacher

- Learn about the basics and usages of kinesiology in physical education.
- Can attain knowledge about various types of joints and muscles.
- May know about various mechanical principles.

UNIT I: Introduction of Kinesiology

Introduction: History and Development. Role of Kinesiology in physical education.

UNIT II: Muscles and Joints

Joints, Classification of Joints, Construction of synovial joints of the body movement. Origin, Insertion and action of muscles: Pectoralis major, Biceps, Triceps (Anterior and Posterior), Trapezius, Sartorius Rectus Femoris, Quadriceps, Hamstring. Types of muscles contraction: isotonic, isometric, Isokinetic.

UNIT III: Basics of Biomechanics

Biomechanics in Sports - Mechanical principles, laws of motion, types of Motion, Factors influencing motion, air, gravity and water friction, simple machines - Levers - Types of levers and examples in from the human body. Equilibrium: Meaning, Definition and types.

UNIT IV: Motion

Mechanics of movements: force production - application - follow pre-requisite of efficient motion, psychomotor - Mental and emotional. Preliminary motion considerations - Whole motion - Body segment motion.

UNIT V: Biomechanical Analysis in Sports

Application of Biomechanics to skill learning

- 1. Track and Field: Sprint, Shot-put and High Jump.
- 2. Games:
 - a. Basketball
 - b. Cricket
 - c. Badminton
 - d. Kabaddi
 - e. Hockey

Course outcome

The student may / will

- **CO1** To know the history, development, need and importance of kinesiology.
- **CO2** To develop an understanding of the fundamental connection between structure and basic functions for muscles and joints.

- **CO3** To know the types and functions of biomechanics in physical education.
- **CO4** To explain mechanical movements of motion.
- **CO5** To attain knowledge about the applications of biomechanics in sports and games.

	Mapping with Programme Outcomes												
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10			
CO1		1				2							
CO2						3							
CO3			1			3							
CO4			1			3							
CO5													

REFERENCES:

Broor, (2000) Efficiency of Human Movements, London: Saunders & Co.,

Kelly, D. L. (1999) Kinesiology and Fundamentals of Motion Description, Prentice Hall.

McClusg, A. (1989) Human Kinetics and Analysis of Body Movements, London: William Heinmann,

Sunderarajan, G. S. (1979) Bio-mechanics of Sports and Games, Chennai: Roshan Publication.

Neil D.E. (1992) Kinesiology and Anatomy and Motion, London: Mosby and Co.

19BPES-503	RULES OF GAMES SPORTS - PART – II	L	Т	Ρ	С
	(Football, Ball Badminton, Tennis & Tennikoit,)	3	0	0	3

COURSE OBJECTIVES

The student teacher

- Learn about the prerequisites of an official.
- Can attain knowledge about the history of various organization of various games.
- Familiar with various dimensions of play field.
- Can know about the latest rules and their interpretations.

UNIT I: Prerequisites of an Official

Qualification and Qualities of officials, Philosophy of Officiating in the above listed four games.

UNIT II: History and Organizational Setup

History and Development, International, national level organisational setup, Major Tournaments and Trophies in the above listed four games.

UNIT III: Principles and Mechanism of Officiating

General principles of officiating - Duties and powers of officials - Mechanism of officiating in the above listed four games.

UNIT IV: Dimensions of Play Field

Measurements of play fields of the above listed four games.

UNIT V: Rules and Their Interpretations

Rules and interpretation of the above listed four games.

Course outcome

The student may / will

- **CO1** To Learn about the prerequisites of officials-philosophy of officiating of above listed four games.
- **CO2** To know the history, development, national, international set-up and tournaments of above listed four games.
- **CO3** To gain knowledge about principles and mechanism officiating- duties and powers of officials of above listed four games.
- **CO4** To familiar in marking of above listed four games.
- CO5 To appraise the rules, regulation and interpretation of above listed four

	Mapping with Programme Outcomes												
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10			
CO1				1			2						
CO2		2					2						
CO3				1			2						
CO4				1			2						
CO5				1			2						

REFERENCES:

Anand, R.L. (1987) Play Field Manual Patiala: NIS Publication.

Bonder, J.B. (1984)How to be a Successful Coach. New York: Prentice Hall. Bunn, J. W. (1951) The Art of Officiating Sports, Prentice Hall: Englewood Cliff. Chelliah, S.N. (1984), Vilayattu Vithi Muraihal, Chennai: Raj Mohan Pathipagam. Buck .H.C (2000)Rules of Games and sports, New Delhi: YMCA Publishing House, Masse Hall.

19BPES-	RULES OF GAMES SPORTS - PART - III	L	Т	Р	С
504	(BASKETBALL, BADMINTON, KABADDI	3	0	0	3
	& SOFTBALL)				

COURSE OBJECTIVES

The student teacher

- Learn about the prerequisites of an official.
- Can attain knowledge about the history of various organization of various games.
- Familiar with various dimensions of play field.
- Can know about the latest rules and their interpretations.

UNIT I: Prerequisites of an Official

Qualification and Qualities of officials, Philosophy of Officiating in the above listed four games.

UNIT II: History and Organizational Setup

History and Development, International, national level organisational setup, Major Tournaments and Trophies in the above listed four games.

UNIT III: Principles and Mechanism of Officiating

General principles of officiating - Duties and powers of officials - Mechanism of officiating in the above listed four games.

UNIT IV: Dimensions of Play Field

Measurements of play fields of the above listed four games.

UNIT V: Rules and Their Interpretations

Rules and interpretation of the above listed four games.

Course outcome

The student may / will

- **CO1** To Learn about the prerequisites of officials-philosophy of officiating of above listed four games.
- **CO2** To know the history, development, national, international set-up and tournaments of above listed four games.
- **CO3** To gain knowledge about principles and mechanism officiating- duties and powers of officials of above listed four games.
- **CO4** To familiar in marking of of above listed four games.
- CO5 To appraise the rules, regulation and interpretation of above listed four

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
CO1				1			2					
CO2		2					2					
CO3				1			2					
CO4				1			2					
CO5				1			2					

REFERENCES :

- 1. Anand, R.L. (1987) Play Field Manual Patiala : NISPublication.
- 2. Authors Guide (2014) FIBA Official Basket Rules, Munich, Germany.
- 3. Bonder, J.B. (1984) How to be a Successful Coach. New York, Prentice Hall Inc.
- 4. Buck .H.C (2000)Rules of Games and sports, New Delhi: YMCA Publishing House, Masse Hall,
- 5. Bunn, J.W. (1951) The Basketball Coaches' Guide to Success, Prentice Hall,
- 6. Bunn, J. W. (1951) The Art of officiating Sports, Prentice Hall, Englewood Cliff.
- 7. Chelliah, S.N. (1984), Vilayattu Vithi Muraihal, Chennai : Raj Mohan Pathipagam

19BPES-	ENVIRONMENTAL STUDIES	L	Т	Р	С
505		3	0	0	3

COURSE OBJECTIVES

The student teacher

- Can obtain knowledge about the environment.
- To learn about the ecosystems of earth.
- To obtain knowledge about the natural resources.
- Can know about environmental pollution and preventive methods.

UNIT 1 : Introduction to Environmental Studies

- Multidisciplinary nature of environmental studies;
- Scope and importance; Concept of sustainability and sustainable development.

UNIT 2 : Ecosystems

What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems:

- a) Forest ecosystem
- b) Grassland ecosystem
- c) Desert ecosystem
- d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

UNIT 3: Natural Resources: Renewable and Non-renewable Resources

- Land resources and landuse change; Land degradation, soil erosion and desertification.
- Deforestation: Causes and impacts due to mining, dam building on environ ment,
 - forests, biodiversity and tribal populations.
- Water: Use and over-exploitation of surface and ground water, floods, drough ts,
 - conflicts over water (international & inter-state).
- Energy resources: Renewable and non renewable energy sources, use of alter nate

energy sources, growing energy needs, case studies.

UNIT 4: Biodiversity and Conservation

- Levels of biological diversity: genetic, species and ecosystem diversity; Biogeographic zones
 - of India; Biodiversity patterns and global biodiversity hot spots
- India as a megabiodiversity nation; Endangered and endemic species of India
- Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.
- Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.

UNIT 5: Environmental Pollution

- Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution
- Nuclear hazards and human health risks
- Solid waste management: Control measures of urban and industrial waste.
- Pollution case studies.
- Climate change, global warming, ozone layer depletion, acid rain and impact s on human communities and agriculture.
- Human population growth: Impacts on environment, human health and welf are.

Course outcome

The student may / will

- **CO1** To realise the value, scope and multidisciplinary nature of environmental
- **CO2** To gain knowledge about meaning structure and function of various
- **CO3** To look at the renewable and non-renewable resources.
- **CO4** To learn about levels of biodiversity and conservation.
- **CO5** To understand the various types of environmental pollution.

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
CO1									3			
CO2				1					2			
CO3				1					2			
CO4				1					3			
CO5									3			

REFERENCES:

1. Carson, R. 2002. Silent Spring. Houghton Mifflin Harcourt.

- Gadgil, M., & Guha, R. 1993. This Fissured Land: An Ecological History of India. Univ. of California Press.
 Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, Londo n, Routledge.
- 3. Gleick, P. H. 1993. Water in Crisis. Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute, Oxford Univ. Press.
- 4. Groom, Martha J., Gary K. Meffe, and Carl Ronald Carroll. Principles of Conservation Biology. Sunderland: Sinauer Associates, 2006.
- 5. Grumbine, R. Edward, and Pandit, M.K. 2013. Threats from India's Himalay a dams. Science, 339: 36---37.
- McCully, P. 1996. Rivers no more: the environmental effects of dams (pp. 29-64). Zed Books.
- 7. McNeill, John R. 2000. Something New Under the Sun: An Environmental History of the Twentieth Century.
- 8. Odum, E.P., Odum, H.T. & Andrews, J. 1971. Fundamentals of Ecology. Philadelphia: Saunders.
- 9. Pepper, I.L., Gerba, C.P. & Brusseau, M.L. 2011. Environmental and Pollution Science. Academic Press.
- 10.Rao, M.N. & Datta, A.K. 1987. Waste Water Treatment. Oxford and IBH Publishing Co. Pvt. Ltd.
- 11. Raven, P.H., Hassenzahl, D.M. & Berg, L.R. 2012. Environment. 8th edition. John Wiley & Sons.
- 12. Rosencranz, A., Divan, S., & Noble, M. L. 2001. Environmental law and policy in India. Tripathi 1992.
- 13. Sengupta, R. 2003. Ecology and economics: An approach to sustainable development. OUP.
- 14. Singh, J.S., Singh, S.P. and Gupta, S.R. 2014. Ecology, Environmental Science and Conservation. S. Chand Publishing, New Delhi.
- 15. Sodhi, N.S., Gibson, L. & Raven, P.H. (eds). 2013. Conservation Biology: Voices from the Tropics. John Wiley & Sons.
- 16. Thapar, V. 1998. Land of the Tiger: A Natural History of the Indian Subcontinent.
- 17. Warren, C. E. 1971. Biology and Water Pollution Control. WB Saunders.
- 18. Wilson, E. O. 2006. The Creation: An appeal to save life on earth. New York: Norton.
- 19. World Commission on Environment and Development. 1987. Our Common Future. Oxford University Press.

19BPES-	CARE AND PREVENTION OF SPORTS	L	Т	Р	С
601	TRAUMA	3	0	0	3

The student teacher

- Can obtain knowledge about the posture and its objectives.
- To learn about the normal curve and deviation in posture.
- Can learn about massage.
- Get knowledge in sport injuries and treatment.

UNIT I: Corrective Physical Education

Definition and objectives of Corrective Physical Education . Posture and body mechanics . Standards of standing posture . Values of good posture. Drawbacks and causes of bad posture . Postural tests-Examination of the spine.

UNIT II: Posture

Normal curve of the spine and its utility. Kyphosis, Lordosis, Deviations in posture: Kypholordosis, Flat back, Scoliosis, Round shoulders, Knock knee, Bow leg, Flat foot. Causes for these deviations and treatment including exercises.

UNIT III: Movements

Passive, Active, Assisted, Resisted exercise for Rehabilitation.

UNIT IV: Massage

Brief history of massage - Massage as an aid for relaxation - Points to be considered in giving massage - Physiological, Chemical, Psychological effects of massage - Indication/contra indication of massage - Classification of the manipulations used in massage and their specific uses on the human body -Stroking manipulation: Effleurage - Pressure manipulation : Petrissage Kneading (finger Kneading, circular) Ironing Skin Rolling - Percussion manipulation : Tapotement, Hacking, Clapping, Beating, Pounding, Slapping, Cupping, Poking, Shaking Manipulation, Deep massage.

UNIT V: Sports Injuries Care and Treatment and Supports

Principles pertaining to the prevention of Sports injuries - Care and treatment of Exposed and unexposed injuries in sports - Principles of apply cold and heat, Infra red rays-Ultrasonic. Therapy-Short wave diotherapy. Principles and techniques of Strapping and Bandages.

Note : Each student shall submit Physiotherapy record.

Course outcome

The student may / will

- **CO1** To acquire knowledge about objectives of corrective physical education, Posture and body mechanics.
- **CO2** To get knowledge about finding the defects in body posture and corrective
- **CO3** Apply the concept of various rehabilitation exercise in post injury care.
- CO4 To learn various types of massages and its application to the injured

CO5 To update the knowledge in the field of treatment with various types of

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
CO1			1			2						
CO2			1			2						
CO3			1			3						
CO4			1			3						
CO5			1			2						

REFERENCE:

Dohenty .J. Meno.wetb, Moder D (2000)Track & Field, EngleWood Cliffs, Prentice Hal

Lace, M.V.(1951) Massage and Medical Gymnastics, London: J & A Churchill Ltd. . Mc Ooyand Young(1954) Test and Measurement, New York: Appleton century.

Naro, C.L.(1967) Manual of Massage and, Movement, London: Febra and Febra Ltd. Rathbome, J.I. (1965)Corrective Physical Education, London: W.B. Saunders &Co. Staffordand Kelly,(1968) Preventive and Corrective Physical Education, New York. The Ronald Press Co.

L	Т	Р	С
3	0	0	3

The student teacher

- To obtain knowledge about the sports psychology.
- To learn about various types of motivation.
- Can learn about defects in learning and intelligence.
- Can learn about culture, civilization and relationships with society.

Sports Psychology

UNIT – I

Meaning and importance of psychology. Nature, relationship of sports with psychology, scope of sports psychology.

UNIT – II

Brief account of the development of self-influence of heredity and environment. Motivation extrinsic and intrinsic, motivations motive incentive, stimuli, motivation for learning and performance.

UNIT – III

Problems of achievement and adjustment among individuals in learning – influence of intelligence.

Sports Sociology

UNIT – IV

Nature and scope of sociology, relationship of sociology with other social sciences. Foundations of physical education – sociological aspect. Culture civilization and culture relationship and socialization.

$\mathbf{UNIT} - \mathbf{V}$

Socialization, socialization institutions, sports and socialization. Social stratification, Sports and social stratification.

Course outcome

The student should able

- **CO1** To describe the nature, scope and importance of psychology, relationship of sports with psychology.
- **CO2** To apply various types of motivational methods to sportsperson.
- **CO3** To develop adjustment qualities among individuals and distinguish the influence of intelligence.
- **CO4** To describe the nature, scope and importance of sociology, relationship of sports with sociology.
- **CO5** To understand socialization through participation in Physical Education

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
CO1										3		
CO2			1							2		
CO3			1							2		
CO4										3		
CO5			1							2		

Reference Books:

1. M.C. Iyer R.M. Society, London, Macmillan and company.

2. Jay J. Coakley, Sports in society issues and controversies St.. Louis, Mosby College Publishing Co., 1986.

3. Edwards, Sociology of Sports - III Iliinois Dorsey Press, 1986.

4. N.I. Ponomoryou, Sports and Society - Moscow: Progress Publisher, 1981.

5. John D. Lauther, Sports Psychology – Prentice Hall Inc., Englewood Cliffs,

6. Bryant J. Gatty, "Psychology – in contemporary sports", Englewood Cliffs, New Jersey.1973.

7. Robert N. Singer, "Coaching Athletics and Psychology", McGraw Hill Book Co, New York.

8. H.T.A. Whiting K. Korman, L.B. Henry and M.G. Jones, "Personality and Performance in Physical Education and Sports", - Henry Kimton Publishers, London 1973.

19BPES-	RULES OF GAMES AND SPORTS - PART -IV	L	Т	Р	С			
603	(HOCKEY, HANDBALL, CRICKET, NETBALL)	3	0	0	3			

COURSE OBJECTIVES:

The student teacher

- Learn about the prerequisites of an official.
- Can attain knowledge about the history of various organization of various games.
- Familiar with various dimensions of play field.
- Can know about the latest rules and their interpretations.

UNIT I: Prerequisites of an Official

Qualification and Qualities of officials, Philosophy of Officiating in the above listed four games.

UNIT II: History and Organizational Setup

History and Development, International, national level organisational setup, Major Tournaments and Trophies in the above listed four games.

UNIT III: Principles and Mechanism of Officiating

General principles of officiating - Duties and powers of officials - Mechanism of officiating in the above listed four games.

UNIT IV: Dimensions of Play Field

Measurements of play fields of the above listed four games.

UNIT V: Rules and Their Interpretations

Rules and interpretations of the above listed four games.

Course outcome

The student may / will

- **CO1** To Learn about the prerequisites of officials-philosophy of officiating of above listed four games.
- **CO2** To know the history, development, national, international set-up and tournaments of above listed four games.
- **CO3** To gain knowledge about principles and mechanism officiating- duties and powers of officials of above listed four games.
- **CO4** To familiar in marking of above listed four games.
- CO5 To appraise the rules, regulation and interpretation of above listed four

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
CO1				1			2					
CO2		2					2					
CO3				1			2					
CO4				1			2					
CO5				1			2					

REFERENCES:

- 1. Ashok Kumar, (2004)Hand Ball, New Delhi: DPH Publishers.
- 2. Ashwin Shaw(2001) Cricket manual, New Delhi: Luther worth Publishers.
- 3. Claime Michal, Taverna (2009) Field Hockey Techniques, Tactics, London: Human Kinetics.
- 4. Elizabet Ander (2009) Field Hockey Steps to Success, London: Human Kinetics.
- 5. Jain (2005) Play and learn Hand ball, Bangalore :KSK Publishers.
- 6. Tan Poin (2009) coaching youth cricket, London: Human Kinetics.

19BPES-	RULES OF GAMES AND SPORTS - V	L	Т	Р	С
604	(VOLLEYBALL, KHO-KHO, TABLE	3	0	0	3
	TENNIS & THROWBALL)				

COURSE OBJECTIVES:

The student teacher

- Learn about the prerequisites of an official.
- Can attain knowledge about the history of various organization of various games.
- Familiar with various dimensions of play field.
- Can know about the latest rules and their interpretations.

UNIT I: Prerequisites of an Official

Qualification and Qualities of officials, Philosophy of Officiating in the above listed four games.

UNIT II: History and Organizational Setup

History and Development, International, national level organisational setup, Major Tournaments and Trophies in the above listed four games.

UNIT III: Principles and Mechanism of Officiating

General principles of officiating - Duties and powers of officials - Mechanism of officiating in the above listed four games.

UNIT IV: Dimensions of Play Field

Measurements of play fields of the above listed four games.

UNIT V: Rules and Their Interpretations

Rules and interpretation of the above listed four games.

Course outcome

The student may / will

- **CO1** To Learn about the prerequisites of officials-philosophy of officiating of above listed four games.
- **CO2** To know the history, development, national, international set-up and tournaments of above listed four games.
- **CO3** To gain knowledge about principles and mechanism officiating- duties and powers of officials of above listed four games.
- **CO4** To familiar in marking of above listed four games.
- CO5 To appraise the rules, regulation and interpretation of above listed four

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
CO1				1			2					
CO2		2					2					
CO3				1			2					
CO4				1			2					
CO5				1			2					

REFERENCES:

- 1. Buck H.C. (2001)Rules of Games and sports, New Delhi: Y.M.C.A Publishing House
- 2. Then Lokesh (1995), Skills & Tactics-swimming, New Delhi: Sports Publication.
- 3. Saggar S.K.(1994) Play better Volleyball, New Delhi: Kay Kay Printers.
- 4. Jain Deepak (2001) Teaching and Coaching Table Tennis, New Delhi: Khel Sathiya Kendra.

19BPES-	COMPUTING SKILLS	L	Т	Р	С				
605		3	0	0	3				

COURSE OBJECTIVES:

The student teacher

- Gain basic knowledge about computers.
- Can learn about the MS tool bar.
- Can use the MS excel title bar.
- Get knowledge in MS Power Point.

UNIT-I

Introduction to computer, Definition, Types of Computer, basic parts, Hardware, Soft ware Input and Output devices, Arithmetic & Logic Unit, Control Unit, CPU, Comparison of human being and computer.

UNIT-II

Microsoft Word: Title Bar, Menu bar, Standard tool bar, Formatting tool bar, Ruler, Status bar, task bar. Creating documents, formatting, editing, deleting, copying, saving.

UNIT - III

Microsoft excel Title Bar, Menu bar, Standard tool bar, Formatting tool bar, Formula bar, Rules, Status bar, task bar. Creating documents, formatting, editing, deleting,

copying, saving, charts and mathematical operations.

Unit IV

Microsoft Power point Preparing a slide, Animation, Clipart, pictures from file background designing, Computers and Communications, Copying, saving, Presentation, working with slides, adding slides, printing, running a slide show presentations.

Unit – V

Internet: Introduction, History, Uses, Connection, Worldwide Web, Usage of internet explorer, Search box, E-mail, Outwork express, Inbox, Outbox, Sent items, Drafts, Sending Messages, save, print, reply, forward, previous message and text, chatting, Role of computer in coaching techniques in Sports Sciences, research & data analysis, literature collection through internet, Practical

MS-WORD

- 1. Create advertisements in MS WORD.
- 2. To illustrate the concept of mail merging in word.
- 3. Document creation with scientific notation
- 4. Text manipulation with scientific notation
- 5. Table creation, table formatting and conversion
- 6. Mail Merger and Letter preparation

- 7. Drawing and flow chart.
- 8. Show the different effect for the given text in the document
- 9. Create a table of employee and calculate the net salary.
- 10. Design a table with merge cells and split cells technique.

EXCEL SHEET

- 1. To create a spreadsheet to analyze the marks of the students in a class and to create appropriate charts.
- 2. Charts in spread sheets.
- 3. Formula and formula editor.
- 4. Conclusion of objects, pictures and graphics protecting the document and sheet.
- 5. Sorting and import! Export features.
- 6. Create suitable chart to show the census data in India for the year 2000 to 2004.
- 7. Create a suitable chart to show the students average in the class.
- 8. Create an electronic spreadsheet of student marks and find the total, average and respective class secured by each student.
- 9. Show the error tracing lines if an error occurred in a calculation
- 10. Generate the numbers vertically starting from 10 to 100 with step value 5.

POWER POINT

- 1. To create the presentation for the department using the power point.
- 2. Animation in power point presentation
- 3. Designing the power point presentation
- 4. Timing for the slides in power point presentation
- 5. Back ground designing in power point presentation

Course outcome

The student may / will

- **CO1** To understand the introduction of computer with all parts, soft and hard wares.
- **CO2** To understand the knowledge of Microsoft word
- **CO3** To recognise the knowledge of Microsoft excel
- **CO4** To familiar the knowledge of Microsoft power point
- **CO5** To gain knowledge about internet usages and Learn to create, format and edit features of MS word, MS excel and MS power point.

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10		
CO1				-				3				
CO2								3				
CO3				1				3				
CO4				1				3				
CO5				1				3				

REFERENCE

Venugopal ,Fundamentals of Computers, Prentice All India.

Sudharsan.C & John Manojkumar Computer Fundamentals, RBA publication, Chennai

Dromwey, How to solve it by computer, Tata Mcgraw, Gill.

Jayashree., Computer for beginners, Vikas Publishing House, New Delhi.