

# **DEPARTMENT OF PHYSICAL EDUCATION**

# **BACHELOR OF PHYSICAL EDUCATION AND SPORTS (B.P.Ed)**

(TWO YEARS)

# **REGULATION & SYLLABUS**

WITH EFFECT FROM THE ACADEMIC YEAR 2019-20

#### BACHELOR OK PHYSICAL EDUCATION

## **B.P.Ed. Degree Course**

(Two Years)

# REVISED REGULATIONS AND SYLLABUS (for the students admitted from 2019 -2020 Onwards)

## 1. Preamble

The Bachelor of Physical Education (B.P.Ed) two years (four semesters, Choice Based Credit System) programme is a professional programme meant for preparing Physical Education Teachers for High Schools (class VI to X) and for conducting physical education and sports activities for classes XI and XII.

## 2. Eligibility for Admission to the Course

# (As per the NCTE Notification Published in the Government of India Gazette dated July $5^{\rm th}$ 2014)

- (i) Bachelor's degree in any discipline with 50% marks and having at least participation in the Inter-College / Inter Zonal / District / School competition in sports and as recognized by the AIU/IOA/SGFI/ Govt. of India, (or)
- (ii) Bachelor's degree in Physical Education with 45% marks, (or)
- (iii) Bachelor's degree in any discipline with 45% marks and studied physical education as compulsory / elective subject, (or)
- (iv) Bachelor's degree with 45% marks and having participated in National / Inter University/ State competition or secured 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> position in Inter College/ Inter -Zonal / District / School competition in sports and games as recognized by the AIU/IOA/SGFI/Govt. of India, (or)
- (v) Bachelor's degree with participation in International competitions or secured 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> position in National / Inter -University competition in sports and games as recognized by respective federations/ AIU/IOA/SGFI/ Govt. of India, or
- (vi) Graduation with 45% marks and at least three years of teaching experience (for deputed in service candidates i.e. trained physical education teachers / coaches).

<u>Note:</u>- A candidate shall be eligible for admission to the Bachelor of Physical Education degree course (B.P.Ed) if he/she has received a degree in 10+2+3 or 10+2+4 or 10+2+5 pattern from a recognized University.

- a) A minimum inter school level participation in sports and games is compulsory.
- b) The candidates should not have completed 30 years of age as on 1st July. However, relaxation of 3 years shall be given for SC/ST candidates.
- c) Ex-Servicemen / Experienced Physical Education Teachers shall be given relaxation of 6 years of age.
- d) The candidate should be medically fit and free from any deformity.
- e) Pregnant women are not permitted either for admission or to undergo the course. If violated, they will not be permitted to continue the course.

## 3. Admission Procedure

Admission shall be made on the basis of ranking for a total of 150 marks as detailed below:-

1.	Qualifying Examination	20 Marks
2.	Participation in Games & Sports	25 Marks
3.	Games Skills Test	50 Marks
4.	Fitness Test	50 Marks
5.	Bonus marks for possession of basic degree in Physical Education(B.Sc, Physical Education of Bachelor of Physical Education(B.P.E) or Bachelor of Physical Education and Sports(B.P.E.S) or Diploma in Physical Education (D.P.Ed)	05 Marks
	Total	150 Marks

<u>Note:</u> Marks obtained in qualifying Degree shall be converted to a maximum of 20 marks. For example if a candidate secured 1800 marks out of 2400. His / Her marks for qualifying examinations is [1800 / 2400] x 20 = 15 marks. **Games and Sports Participation:** (Maximum Marks: 25)

The norms for award of marks for the sports and games participation are furnished hereunder. Any one which is applicable / advantageous.

1.	Representing the Country	25
	Securing first two places in National / All	20
	India / Inter - University	
3.	Representing State / University	15
4.	Representing District / Division	10
5.	Representing Colleges / School	05
	(Supporting certificates should be produced)	

## Games and Sports Skill Test: Maximum Marks: 50

The candidate should choose any one of the games included in the All India Inter University (AIU) competitions. **Track and Field: Maximum Marks:** 50

Candidates will be tested in the following Track and Field events:-

a) 100 M. - 20 Marksb) Shot-Put - 15 Marks

c) Long Jump - 15 Marks

<u>Note:</u> The games skill test and Track and Field events will be conducted by three judges.

## 4. Course of Study

- a) Duration of the Course The duration of the course of study is two (02) 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 neighboring schools and attending the annual leadership training camp/educational tour (stadium visit) shall be compulsory for all the students.
- d) The Course of study shall consist of three parts Viz Part I, Part II & Part III as follows:-

Part- I Theory	(Core, Discipline Specific Elective and Generic Elective)
Part- II	Practicum
Part- III	Internship [Teaching Practice]

# SCHEME OF EXAMINATION

## **B.P.Ed FIRST SEMESTER**

	Code	Subject	Hours	Credit	Int.	Ext.	Tota
Part- I	19BPDC 101	History, Principles and	4	4	25	75	100
Foundation of Physic		_					
	Education						
	19BPDC 102	Anatomy, Physiology and	4	4	25	75	100
		Physiology of Exercise					
	19BPDC 103	Theory of Sports and	4	4	25	75	100
		Games -I					
	19BPDE 104	a) Contemporary Issues	4	4	25	75	100
	in Physical Education (or b) Officiating and						
		Coaching					
Part- II	19BPDP 105	Games and Sports- I	6	4	100	-	100
		(Practicum)					
	19BPDP 106	Track & Field Events- I	6	4	100	-	100
		(Practicum)					
	19BPDP 107	Practical I [Practicum]	3	2	50	-	50
	19BPDP 108	Practical II [Practicum]	6	4	100	-	100
Part- III	19BPDI109	Practical I [Internship]	3	2	50	-	50
		TOTAL	40	32	500	300	800

Note: Total number of Hours requires to earn 4 credits for each theory course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

B	.P	.Ed	SECOND	SEMESTER
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	Code	Subject	Hours	Credit	Int.	Ext.	Tota
Part- I	19BPDC201	Sports Psychology And Sociology	4	4	25	75	100
	19BPDC 202	Educational Technology and Methods in Physical Education	4	4	25	75	100
	19BPDC 203	Organization, Administration, Recreation and Camping in Physical Education	4	4	25	75	100
	19BPDE 204	a) Health Education and Environmental Studies (or) b) Yoga Education	4	4	25	75	100
Part- II	19BPDP 205	Games and Sports- II [Practicum]	6	4	100	-	100
	19BPDP 206	Practical III [Practicum]	3	2	50	-	50
Part- III	19BPDI 207	Teaching Practice- I [Internship]	6	4	50	50	100
	19BPDI 208	Teaching Practice- II [Internship]	6	4	50	50	100
	19BPDI 209	Practical II [Internship]	3	2	50	-	50
		TOTAL	40	32	400	400	800

Note: Total number of Hours requires to earn 4 credits for each theory course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

## **B.P.Ed THIRD SEMESTER**

	Code	Subject	Hours	Credit	Int.	Ext.	Tota
Part- I	I 19BPDC301 Sports Training		4	4	25	75	100
	19BPDC 302	Research And Statistics.	4	4	25	75	100
	19BPDC 303	OC 303 Computer Application in Physical Education		4	25	75	100
	19BPDE 304	a) Sports Management and Curriculum Design (or) b) Sports Nutrition And Weight Management	4	4	25	75	100
Part- II	Part- II 19BPDP 305 Games and Sports- III (Practicum)		6	4	100	-	100
	19BPDP 306	Track & Field Events- II (Practicum)	6	4	100	-	100
	19BPDP 307	Practical IV [Practicum]	6	4	100	-	100
Part- III	Part- III 19BPDI 308 Annual Leadership Training Camp [Internship]		3	2	50	-	50
	19BPDI 309	Project Meet [Internship]	3	2	50	-	50
		TOTAL	40	32	500	300	800

Note: Total number of Hours requires to earn 4 credits for each theory course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

## **B.P.Ed FOURTH SEMESTER**

	Code	Subject	Hours	Credit	Int.	Ext.	Tota
Part- I	19BPDC401	Measurement and	4	4	25	75	100
		Evaluation in Physical					
		Education					
	19BPDC 402	Kinesiology and	4	4	25	75	100
		Biomechanics					
	19BPDC 403	Theory of Sports and Games -II	4	4	25	75	100
19BPDE 404		a) Fitness, Wellness and Olympic Movement (or) b) Sports Medicine, Physiotherapy and Rehabilitation	4	4	25	75	100
Part- II	19BPDP 405	Games and Sports- IV [Practicum]	6	4	100	-	100
	19BPDP 406	Practical V [Practicum]	3	2	50	-	50
Part- III	19BPDI 407	Game of Specialization (Any one of the Major Games)	6	4	50	50	100
	19BPDI 408	Track and Field-IV [Coaching Lesson Plan]	6	4	50	50	100
	19BPDI 409	School Internship/Coaching Lesson [Internship], Measurement and Evaluation, Kinesiology and Biomechanics, [Internship]	3	2	50	-	50
		TOTAL	40	32	400	400	800

Note: Total number of Hours requires to earn 4 credits for each theory course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

# Part-II PRACTICUM

Participation and learning the skills and techniques and the teaching methods of the activities are as follows:

Code No.	Activities for Semester- I	MARK
19BPDP 105	Games and Sports- I: Basketball, Football, Handball	100
	and Volleyball.	
19BPDP 106	Track and Field Events Part- I: Sprint, Middle and	100
	Long Distance Running, Long Jump, Shot Put,	
	Discus Throw, Javelin Throw and Relay Races	
19BPDP 107	Practical - I: Marching, Indigenous Activities and	50
	Yogic Practices Marching, Indigenous Activities:	
	March past and Flag	
	Hoisting Indigenous Activities Dands and	
	Baithaks, Malkhamb. Yogic Practices: Asanas,	
	Pranayama, Kriyas, Bandhas, Mudras,	
	Suryanamaskar and Meditation. Common Yoqa	
	Protocol (AYUSH): Lessening Exercises (Calana Kriyas):	
	Neck Bending, Trunk Trusting, Knee Movement.	
	Standing Posture: Tadasana, Urksasana, Pada-	
	Hastasana, Ardhacakrasana, Trikonasana. Sitting	
	Posture: Bhadrasana, Ardha Ustrasana, Sasankasana,	
	Vakrasana, Prone Posture: Bhujangasana,	
	Setubandhasana, Pavanamuktasana,	
	Savasana, Kapalabhati, Pranayama: Nadisodhana /	
	Anuloma Viloma Pranayma, Bhramari	
	Pranayma. Dhayana in Sambhavimudra,	
19BPDP 108	Practical - II: Calisthenics and Rhythmic Activities	100
	Calisthenics: Standing, Sitting, Turning, Clapping,	
	Bending, Moving, Stepping, Twisting, Launching	
	Folk Dances, Aerobic Dance, Lezium, Gymnastics,	
	Aerobics ,Pyramid and Tumbling,	
	Activities for Semester- II	
19BPDP205	Games and Sports- II: Cricket, Hockey, Kabaddi and	100
	Kho-Kho	
19BPDP206	Practical III [Practicum]: Light Apparatus: Indian	50
	Clubs, Dumb-bells, Hoops, Wands, Pole Drills, Tipri	
	(Kolattam) -(30marks) Minor Games: Relay Games,	
	Circle Games, Tag Games, Goal / Point Scoring Games	
	and Miscellaneous Games -(20 Marks)	
	Activities for Semester- III	
19BPDP 305	Games and Sports- III: Badminton, Ball	100
	Badminton, Netball and Tennis	
19BPDP 306	Track and Field Events Part II: Triple Jump, Pole	100
	Vault, High Jump, Hammer Throw, Hurdles and	
19BPDP 307	Practical - IV : Fitness Training: Conditioning	100
	<b>Exercises:</b> General and Specific. Training Methods:	
	Weight Training (Free Weight and Machine Weights) -	
	Circuit Training - Interval Training - Fartlek Training -	
	Plyometrics - Kayak & Canoeing	
	- 19 - 11 - 10 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	

	Activities for Semester- IV	
19BPDP405	Games and Sports- IV: Table Tennis, Tennikoit,	100
	Softball and Throwball	
19BPDP406	<b>Practical -IV:</b> Swiss ball Training - Medicine Ball	50
	Training -Core Board Training, Theraband and	
	Ladder Training	

Part- III - INTERNSHIP / TEACHING PRACTICE

In Internship a student (Teacher Trainee) is undergoing supervised practical training. Internship / Teaching Practice includes Teaching Observation in the Department. Intensive Teaching Practice in the neighboring schools. The programme includes teaching indigenous activities, basic skills in sports and games giving exposure to teachers in the teaching-learning process.

Schools for intensive teaching shall be decided by the Staff-incharge of Teaching Practice and Head of the Department. A minimum of 30 lessons, students shall complete 15 General and 15 Particular lessons / Coaching Lessons in 15 working days under the supervision of the assigned Department of physical education staff in the schools.

Sl.no	Internship / Teaching Practice for Semester I	MARK				
19BPDI 109	<b>Practical III</b> : Participating in Intramural and Extramural Tournaments, Care and Maintenance of Play Fields	50				
Sl.no	Internship / Teaching Practice for Semester II					
19BPDI 207	Teaching Practice- I: (General Lesson)	100				
19BPDI 208	<b>Yeaching Practice- II:</b> ( Particular Lesson)					
19BPDI 209	Practical- II: School Internship / Teaching Practice -5 General Lessons 8s 5 Particular Lessons at School and 5 Lessons at Faculty Intramurals and Extramural Tournaments Internship / Teaching Practice for Semester III	50				
19BPDI 308	Annual Leadership Training Camp / Picnic / Hiking/Trekking / Stadium Visit (Compulsory for All Students)	50				
19BPDI 309	-Organising Project Sports Meet,- 20 Marks - Participating in Intramurals and Extramural Tournaments-10 Marks, -Care and Maintenance of Play Fields- 10 Marks -Computer Practicals-10 Marks	50				
	Internship / Teaching Practice for Semester IV					
19BPDI 407	School Internship / Intensive- Coaching Lesson (Team Games) Game of Specialization (Any one of the	100				
19BPDI 408	School Internship / Intensive- Coaching Lesson (Track and Field) (Any two of the Track and Field	100				
19BPDI 409	-Unified Play Days: 15 lessons in Teaching mass demonstration exercises at Elementary Schools- 25 MarksKinesiology and Biomechanics/ Physiotherapy and Rehabilitation, Intramurals and Extramural Tournaments-25	50				

Scheme of Teaching Practice Examination

Examination	Les	son	Credits	Marks
University	General	Internal	2	50
External	Lesson	External	2	50
Practice		Total	4	100
Teaching	Particular	Internal	2	50
Examination	Lesson	External	2	50
		Total	4	100
Intensive	General	Internal	2	50
Teaching	Lesson 85	External	-	-
Practice	Particular	Total	2	50
Coaching	Coaching	Internal	2	50
	Lesson (Track	External	2	50
Internship /	and Field)	Total	4	100
Intensive Teaching	Coaching	Internal	2	50
Practice -	Lesson (Team	External	2	50
(During School Visit)	Games)	Total	4	100
School Visity	<u> </u>	Total	18	450

The practice teaching examination shall be conducted by the University at the end of the II & IV semesters. There shall be one external and one internal examiner. The Practice teaching lesson plan record shall be submitted at the time of the University practice teaching practical examinations. Summary of Part Wise Scheme of Examination.

Part	Section	%	Credits	Marks
I	Theory	50	64	1600
II	Practicum	50	38	950
III	Internship /Teaching Practice		26	650
	Total		128	3200

#### Note:

- I. For the Teaching Practice & Coaching examination conducted by the University, there shall be one External and one Internal Examiner.
- II. For Practice Teaching each student shall maintain a Teaching Practice Coaching Lesson Record book, which shall contain records of 10 General and 10 Particular lessons.
- III. A candidate who fails in Teaching Practice Coaching Examination may present himself/herself in the subsequent university practice teaching Examination.

## IV. 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

## V. Continuous Internal Assessment for Part I- Theory Papers

#### a. Written Examination- 20 Marks

- 1. Continuous assessment shall be graded by the concerned subject teachers. Three tests will be conducted for each paper.
- 2. Each test carries a maximum of 75 marks and the average of best two tests shall be considered.

3. However, in the case of students who miss the tests for any valid reasons with prior permission from the Head of the Department (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- 5 Marks

The teachers shall give assignments to the students and 5 marks are allotted for assignments. This may be of any accepted method such as Seminar, Project, Written materials, Record etc.,

# c. Pre-Semester / Model Examination - 75 Marks

- 1. Pre-Semester/Model examination shall be held at the end of each semester before the final semester examination covering all the portions and 75 marks are awarded for this examination.
- 2. Each paper carries 75 marks and this will be converted into 25 marks.
- 3. The continuous Internal assessment marks plus Pre-Semester/ Model Examination divided by two shall be the **final internal mark for 25.**

## VI. Requirement for Passing

No candidate shall be eligible for the award of the B.P.Ed degree unless he/she has passed the written examinations (Part-I) the Practical (Part-II) and Practice Teaching (Part-III).

## VII. Grading System

To pass in an examination a student has to score a minimum of 50% marks in each theory (Part-1) paper; Practice Teaching Internal and External Combined) (Part-II) and has to score a minimum of 40% of marks in the external alone. The grading system is given below

MARK	GRADE POINT	LETTER GRADE
90 and Above	10	S
85 and above but below 89	9	D+++
80 and above but below 84	8.5	D++
75 and above but below 79	8	D+
70 and above but below 74	7.5	A+++
65 and above but below 69	7	A++
60 and above but below 64	6.5	A+
55 and above but below 59	6	В
50 and above but below 54	5.5	C
Less than 50	RE-APPEAR	RA
Absent	ABSENT	Ab

# <u>Inter University Sports Participation and Special Permission</u> for University Examination

## a). University Examination- Special Permission

A student representing the University / State / Nation in a game or sport and misses the University Semester Examination will appear for a special supplementary University Examination as Stipulated by the University.

## b). Internal Test- Special Permission

In case, a student unable to appear for an internal test due to participation in inter collegiate, university sports competition/ any such programme of the university with prior permission from the concerned head of the faculty / department, he/she may be permitted to appear for a special test /tests before the presemester examination.

Such a student appearing for a special supplementary University Examination shall not be considered as an arrear / arrears in a paper / papers and shall not be deprived of **RANK in the University.** 

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.

## 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 physical education during the ancient period and present era. Attain the basic knowledge of foundation of Physical Education.
- PO 2: To apply the knowledge of anatomy, physiology, sports medicine, physiotherapy, rehabilitation, sports nutrition, kinesiology and biomechanics, including function of the skeleton system, physiological system, kinetic and kinematic movement of the human body and forces, levers and law of motion of the body. To get the knowledge of various health problems, diseases of the people and their environment.
- PO 3: To know the function planning, programme planning, organizing the tournaments for able and disabled students and their classification and adaptation of motor ability. To get the knowledge of

drawing the budget, maintain records, how to handle the teaching techniques and aids, lesson plans etc.

- PO 4: To attain the knowledge of various yogic methods, such as, asanas, pranayama, bandhas and kriyas and their role in ancient and modern periods.
- PO 5: To use sociological and psychological foundations, philosophies, and biological foundations of physical education and know the uses of various techniques in theories and types of learning of the individual and know how to transfer of learning.
- PO 6: To construct and marking of various play field and standard and non-standard track, update the rules of sports and games, such as, Volleyball, Handball, Badminton, Soft-ball, Cricket, Hockey, Football, Kho-Kho, Kabaddi, Ball badminton and Athletics and apply it in various types of tournaments, like inter-class, intercollege, inter-university etc.
- PO 7: To know the various issues in curriculum, physical activity and wellness, upgrade the nutritional knowledge, types of tools to improve the fitness and wellness, guidance and its perspective, contribution of various leaders in guidance and counseling and its contribution in the field of physical education.
- PO 8: To set up the knowledge of various types of sports training, its various periods, various components of training etc. To apply the knowledge of various test and measurement of games and sports and analysis of evaluation of the outcome of the test.
- PO 9: To attain the practical knowledge of educational technology, teaching technique, introduction of computer applications etc.
- PO 10: To attain the psychological knowledge and know and solve the psychological disorders of sports person.

# B.P.Ed REVISED SYLLABUS [2019 ONWARDS]

## SEMESTER - I

19BPDC-101	HISTORY, PRINCIPLES AND	L	T	P	С
	FOUNDATION OF PHYSICAL EDUCATION	4	0	0	4

# **COURSE OBJECTIVES:**

Student Teacher will be trained on

- Understanding the physical education during ancient period.
- Acquire knowledge regarding the historical development of physical education in India.
- Familiarize with the aim, scope and significance of recreation and camping
- Familiarize with various agencies offering recreation
- Know the different aspects of leadership

#### **COURSE CONTENT:**

### **Unit-1: Introduction**

• Meaning, Definition and Scope of Physical Education

- · Aims and Objectives of Physical Education
- Importance of Physical Education in present era.
- · Misconceptions about Physical Education.
- · Relationship of Physical Education with General Education.
- Physical Education as an Art and Science.

# Unit- 2 - Historical Development of Physical Education in India and Olympic Movement

- Indus Valley Civilization Period. (3250 BC 2500 BC)
- Vedic Period (2500 BC 600 BC)
- Early Hindu Period (600 BC 320 AD) and Later Hindu Period (320 AD 1000AD)
- Medieval Period (1000 AD 1757 AD)
- British Period (Before 1947) and Physical Education in India (After 1947)
- Y.M.C.A. and its' contributions.
- The significant stages in the development of ancient Olympics and modern Olympics
- Significance of Olympic Ideals, Olympic Rings, Olympic Flag
- Para Olympic Games Summer Olympics Winter Olympics -Youth Olympic Games

# Unit- 3- Foundation of Physical Education

- Philosophical foundation:
- Idealism, Pragmatism, Naturalism, Realism, Humanism, Existentialism and Indian Philosophy and Culture.
- Fitness and wellness movement in the contemporary perspectives
- Sports for all and its' role in the maintenance and promotion of fitness.

## Unit-4- Biological Principles of Physical Education

#### Biological

- Growth and development
- Age and gender characteristics
- Body Types
- Anthropometric differences

# Unit-5- Psychological and Sociological Principles of Physical Education Psychological

- Learning types, learning curve
- Laws and principles of learning
- Attitude, interest, cognition, emotions and sentiments Sociological
- Society and culture
- Social acceptance and recognition
- Leadership
- · Social integration and cohesiveness.

#### COURSE OUTCOME:

## After completion of this course, the students will be able to

**CO1:** Understand the scope, objective and importance of physical education during present era. during present era contraction

**CO2:** Know the historical development of physical education in India

**CO3:** realize the significance of recreation and also to know the agencies offering recreation

**CO4:** familiar with the method of organizing camps and camp activities

**CO5:** Improve their leadership qualities

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10		
CO1	3											
CO2	3											
CO3							2					
CO4			3									
CO5							3					

#### REFERENCE

- 1. Bucher, C. A. (n.d.) Foundation of physical education. St. Louis: The C.V. Mosby Co.
- 2. Deshpande, S. H. (2014). Physical Education in Ancient India. Amravati: Degree college of Physical education.
- 3. Mohan, V. M. (1969). Principles of physical education. Delhi: Metropolitan Book Dep.
- 4. Nixon, E. E. & Cozen, F.W. (1969). An introduction to physical education. Philadelphia: W.B. Saunders Co.

19BPDC-102	ANATOMY, PHYSIOLOGY AND	L	T	P	C
	PHYSIOLOGY OF EXERCISE	4	0	0	4

#### **COURSE OBJECTIVES:**

- Realize the basic concepts relating to gender and to provide logical understanding of Anatomical and Physiological difference in Male and Female
- Gain awareness on various perspectives of blood and circulatory system.
- Gain insight on digestive system, functions of glands and nervous system.
- Make acquainted about physiology and its importance in the field of physical education
- Recognize the effect of exercise on cardiovascular system

### **COURSE CONTENT:**

#### UNIT-I

- Introduction of Basic Concepts of Anatomy and Physiology
- Structure and Functions of cell.
- · Tissues and their Classification.
- Basic introduction of body systems.
- Anatomical and Physiological difference in Male and Female.

#### UNIT-II

- Definition of Physiology and its importance in the field of Physical Education and Sports
- · Classification of Skeletal system.
- · Types and structure of bones and joints.

- Different types of Movement around the Joints.
- · Structure and Classification of Muscles
- Properties of Muscles
- Types of Muscular contraction
- Function of the Autonomic nervous system and Central nervous system, Reflex Action.

#### UNIT-III

- Constituents of blood and their function
- Blood groups and Clotting of blood,
- The structure and properties of the heart
- The Respiratory passage and exchange of gases in the lungs
- Mechanism of respiration (internal and external respiration)
- oxygen debt, second wind, vital capacity
- Structure and functions of the digestive system,
- Metabolism,

#### **UNIT-IV**

- The Digestive system: structure and functions of the digestive system, Digestive organs, Metabolism
- The Excretory system: Structure and functions of the kidneys and the skin.
- The Endocrine glands: Functions of glands pituitary, Thyroid, Parathyroid, Adrenal, Pancreatic and the sex glands.
- Nervous systems: Function of the Autonomic nervous system and Central nervous system. Reflex Action,
- Sense organs: A brief account of the structure and functions of the Eye and Ear.

#### **UNIT-V**

- Effect of exercise and training on cardiovascular system.
- Effect of exercise and training on respiratory system.
- Effect of exercise and training on muscular system,
- Physiological concept of physical fitness,
- warming up, conditioning and fatigue.
- Basic concept of balanced diet Diet before, during and after competition.

#### **COURSE OUTCOME:**

## After completion of this course, the students will be able to

- **CO1:** understand about the skeletal system, joints of the body and types of muscle
- **CO2:** gain knowledge of the circulatory and respiratory systems
- **CO3:** know the structure and functions of the digestive system, excretory system, endocrine glands, nervous system and sense organs
- **CO4:** familiar with the functions of skeletal muscle, nerve control of muscular activity and fuel for muscular activity
- **CO5:** identify the effect of exercise on cardiovascular, respiratory and muscular system and also the physiological concept of conditioning and balanced diet

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10		
CO1		3										
CO2		3										
CO3		3										
CO4		3					2	1				
CO5		3					1	2				

#### REFERENCES:

- 1. Gupta, A. P. (2010). Anatomy and physiology. Agra: SumitPrakashan.
- 2. Gupta, M. and Gupta, M. C. (1980). Body and anatomical science. Delhi: Swaran Printing Press.
- 3. Guyton, A.C. (1996). Textbook of Medical Physiology, 9th edition. Philadelphia: W.B.Saunders.
- 4. Karpovich, P. V. (n.d.). Philosophy of muscular activity. London: W.B. Saunders Co.
- 5. Lamb, G. S. (1982). Essentials of exercise physiology. Delhi: Surject Publication.
- 6. Moorthy, A. M. (2014). Anatomy, physiology and health Education. Karaikudi: Madalayam Publications.
- 7. Morehouse, L. E. & Miller, J. (1967). Physiology of exercise. St. Louis: The C.V. Mosby Co. Pearce, E. C. (1962). Anatomy and physiology for nurses. London: Faber & Faber Ltd. Sharma, R. D. (1979). Health and physical education, Gupta Prakashan. Singh, S. (1979). Anatomy of physiology and health education. Ropar: Jeet Publications.

19BPDC-103	THEORY OF SPORTS AND GAMES - I	L	T	P	С
		3	0	0	3

## **COURSE OBJECTIVES:**

- Highlight the importance of Organization and Administration in physical education and Program planning
- Procedures in Maintenance of Records and Registers, methods of preparing budget
- Describe the Facilities and equipment in an educational institution.
- Make familiar about various methods of teaching physical activities
- To know the various types of teaching aids and its importance's.
- To teach the method of Preparing general and specific lesson plan, the types of tournaments

## **COURSE CONTENT:**

## UNIT-I: General Introduction, Rules and regulations of games and sports-

- Athletics
- Badminton Tennis -Ball Badminton Volleyball
- Basketball -Handball
- Cricket

## UNIT -II Each game or sports to be dealt under the following heads

- History and development of the Game and Sports.
- Ground preparation, dimensions and markings
- · Standard equipment and their specifications
- Ethics of sports and sportsmanship

## UNIT-III - Duties of the Officials and System of Officiating

- Duties of officials the following games; Badminton & Ball badminton, Basketball, Cricket, Tennis ,and Volleyball.
- System of officiating and official signals of the following games; Badminton & Ball badminton, Basketball, Cricket, Tennis, and Volleyball.

## UNIT-IV - Planning, Construction, Marking of Track and Field Events

- Planning, Construction and Marking of play fields, Standard and Non-Standard Track
- Arc start Double arc start
- Computation of R.D.R Stagger distance and Diagonal Excess
- Marking of Shotput and Discus throwing sector
- Long Jump and High Jump, Runway and Landing area.

## UNIT-V Conditioning exercises and warming up (Game/Event Specific).

- Concept of conditioning and warming up.
- Role of weight training in games and sports.
- Teaching of fundamental skills &their mastery (technique, tactic and different
- phases of skill acquisition).
- Recreational and Lead up games
- Strategy Offence and defense, Principles of offence and defense.

## **COURSE OUTCOME:**

## After completion of this course, the students will be able to

- **CO1:** Know the qualification and responsibilities of physical education teachers and the principles of Program planning
- **CO2:** Gain knowledge in maintenance of Records and Registers, methods of preparing budget
- **CO3:** Gain knowledge in construction and maintenance of gymnasium and swimming pools, layout of play fields
- **CO4:** Familiar with the various methods of teaching physical activities and presentation techniques, to Understand various types of teaching aids and principles and advantages of team teaching
- **CO5:** Prepare lesson plan and familiar with drawing of various types of fixtures Develop competence in organization and administration of various competitions

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10		
CO1						3						
CO2						3						
CO3						3						
CO4						3						
CO5						3						

#### REFERENCES:

- 1. Broyles, F. J. &Rober, H. D. (1979). Administration of sports, Athletic programme: A
- 2. Managerial Approach. New York: Prentice hall Inc.

- 3. Bucher, C. A. (1983). Administration of Physical Education and Athletic programme.St.
- 4. Lolis: The C.V. Hosby Co.
- 5. Kozman, H.C. Cassidly, R. & Jackson, C. (1960). Methods in Physical Education. London: W.B. Saunders Co.
- 6. Pandy, L.K. (1977). Methods in Physical Education. Delhe: Metropolitan Book Depo. Sharma, V.M. & Tiwari, R.H.: (1979). Teaching Methods in Physical Education. Amaravati: Shakti Publication.
- 7. Thomas, J.P.(1967). Organization & administration of Physical Education. Madras Gyanodayal Press.
- 8. Tirunarayanan, C. & Hariharan, S. (1969). Methods in Physical Education. Karaikudi: South India Press.
- 9. Voltmer, E. F. & Esslinger, A. A. (1979). The organization and administration of Physical Education. New York: Prentice Hall Inc.

19BPDE-104 (a)	CONTEMPORARY ISSUES IN PHYSICAL	L	T	P	С
	EDUCATION (Elective)	3	0	0	3

#### COURSE OBJECTIVES:

- Emphasize the purpose and goals of adapted physical education
- Explore the different classification of disability
- Teach the classification of activities according to the disabilities and ground marking.
- To know the various competitions.
- To teach the rules of adopted games and class management

#### **COURSE CONTENT:**

#### **UNIT - 1:**

Concept of Fitness - Meaning and Definition of Fitness - Type of fitness - Definition and component of physical fitness - Changing concept of physical fitness

#### **UNIT - 2:**

Concept of Wellness and Lifestyle - Concept and dimensions of wellness - Cyber culture and modern life style - Diseases due to lifestyle - Their prevention and management through physical activities - Construction of Wellness profile

#### **UNIT** - 3:

Principle of Exercise Programme - Means of fitness development - aerobic and anaerobic exercises - Principle of obesity control and weight management - Concept of sets, repetition, volume, intensity, density of exercise - Concept of designing different fitness training programme for different age group

#### **UNIT** - 4:

Safety Education and Fitness Promotion - Definition and need of Safety Education -Determination of desirable body weight - Health drinks and sports drinks- their need and importance - Common injuries and their management

#### **COURSE OUTCOME:**

# After completion of this course, the students will be able to

**CO1:** understand the movement educational concept and objectives of adapted physical education

**CO2:** know the classification and sub classification of Differentially able

**CO3:** distinguish the activities according to the disabilities and also familiar with the equipments and ground marking for personal and group activities

**CO4:** know about the international competitions for disables

**CO5:** understand rules of adopted games and class management and also teaching methods adopted in sports

			Mappii	ng with	Progran	nme Ou	tcomes			
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10
CO1			3				1			
CO2			3							
CO3			3			2	1			
CO4			2			3	1			
CO5			3			2	1			

#### REFERENCE:

- 1. Difiore, J.(1998). Complete guide to postnatal fitness. London: A & C Black,.
- 2. Giam, C.K & The, K.C. (1994). Sport medicine exercise and fitness. Singapore: P.G. Medical Book.
- 3. Mcglynn, G., (1993). Dynamics of fitness. Madison: W.C.B Brown. Sharkey, B. J.(1990). Physiology of fitness, Human Kinetics Book.

19BPDE-104 (b)	OFFICIATING AND COACHING	L	T	P	С
	[Elective]	1	1	1	3

#### **COURSE OBJECTIVES:**

- · Describe the concept of officiating and coaching
- Describe the Coach as a mentor
- To teach the duties of official
- · To acquire the knowledge of system of officiating

## **COURSE CONTENT:**

## Unit- I: Introduction to Officiating and coaching

- Concept of officiating and coaching Importance and principles of officiating
- Relation of official and coach with management, players and spectators
- · Measures of improving the standards of officiating and coaching

#### Unit- II: Coach as a Mentor

- Duties of coach in general, pre, during and post game.
- Philosophy of coaching
- · Responsibilities of a coach on and off the field
- Psychology of competition and coaching

#### Unit- III: Duties of Official

- Duties of official in general, pre, during and post game.
- Philosophy of officiating
- Mechanics of officiating position, signals and movement etc.
- Ethics of officiating

# Unit- IV: Qualities and Qualifications of Coach and Official

- Qualities and qualifications of coach and official
- · General rules of games and sports

# Unit- V: Rules pertaining inter collegiate and inter university tournaments

- Eligibility rules of intercollegiate and inter-university tournaments, preparation of T A, DA bills,
- · Integrity and values of sports

## **COURSE OUTCOME:**

## After completion of this course, the students will be able to

**CO1:** Understand the need of officiating and coaching

**CO2:** Acquire the knowledge of qualities of a coach

**CO3:** Know the qualifications of a coach

**CO4:** Knowledge of mechanism of officiating

CO5: Familiar with the rules pertaining inter collegiate and inter university

tournaments

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10		
CO1				3								
CO2				3								
CO3				3								
CO4				3								
CO5				3								

#### REFERENCES:

- 1. Bunn, W. (1968). The Art of Officiating Sports. Englewood cliffs N.J. Prentice Hall.
- 2. Bunn, J. W. (1972). Scientific Principles of Coaching. Englewood cliffs N. J. Prentice
- 3. Dyson, G. H. (1963). The mechanics of athletics. London: University of London Press Ltd .
- 4. Lawther, J.D. (1965). Psychology of Coaching. New York: Pre. Hall. Singer, R. N. (1972). Coaching, athletic & Psychology. New York: M.C. Graw Hill

## **SEMESTER - II**

19BPDC-201	SPORTS PSYCHOLOGY AND SOCIOLOGY	L	T	P	С
		4	0	0	4

#### **COURSE OBJECTIVES:**

- Know the need and importance of sports psychology
- · Acquire knowledge of basic considerations in motor learning.
- Know the need and importance of sports sociology
- Understand sports as social institution
- Know the different psychological aspects involved in sports performance

#### COURSE CONTENT:

### UNIT- I

Meaning, Definition, Need and Importance of Sports Psychology. Motor Learning: Basic Considerations in Motor Learning - Motor Perception - Factors Affecting Perception - Perceptual Mechanism. Intelligent Quotient.

#### UNIT- II

Personality: Meaning, Definition, Structure, Types, Effects of Personality on Sports Performance. Motivation: Meaning and Definition, Types of Motivation: Intrinsic, Extrinsic. Achievement Motivation. Theories and Dynamic of Motivation in sports.

#### UNIT- III

Anxiety: Meaning and Definition, Nature, Causes, Competitive Anxiety and Sports Performance. Stress: Meaning and Definition, Causes. Stress and Sports Performance. Aggression: Meaning and Definition, Aggression and Sports Performance. Self Concept: Meaning and Definition

#### UNIT- IV

Sports Sociology: Meaning and Definition - Sports and Socialization of Individual, Sports as Social Institution. National Integration through Sports. Fans and Spectators: Meaning and definition, Advantages and disadvantages of Sports Performance. Leadership: Meaning, Definition, types. Leadership and Sports Performance.

## UNIT- V

Group: Meaning and Definition, Group Size, Groups on Composition, Group Cohesion, Group Interaction, Group Dynamics. Current Problems in Sports and Future Directions - Sports Social Crisis Management - Women in Sports: Sports Women in our Society, Participation pattern among Women, Gender inequalities in Sports.

#### COURSE OUTCOME:

## After completion of this course, the students will be able to

**CO1:** know the perceptual mechanism

**CO2:** Learn Theories and Dynamic of Motivation

**CO3:** Understanding the aspects of National Integration through Sports

**CO4:** Know the Participation pattern among Women

**CO5:** Improve their leadership qualities

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10		
CO1					1					3		
CO2					1					3		
CO3					1					3		
CO4					1					3		
CO5					1					3		

## **REFERENCE BOOKS:-**

- 1. Authors Guide (2013) National Library of Educational and Psychological Test (NLEPT) Catalogue of Tests, New Delhi: National Council of Educational Research and Training Publication.
- 2. Jay Coakley. (2001). Sports in Society Issues and Controversies in International Education, Me-Craw Seventh Ed.
- 3. John D Lauther (2000) Psychology of Coaching. New Jersy: Prenticce Hall Inc.
- 4. Jain. (2002), Sports Sociology, Heal Sahety Kendre Publishers.
- 5. John D.Lauther (1998) Sports Psychology. Englewood, Prentice Hall Inc.
- 6. Miroslaw Vauks & Bryant Cratty (1999) . Psychology and the Superior Athlete.London: The Macmillan Co.
- 7. Richard, J. Crisp. (2000). Essential Social Psychology. Sage Publications.
- 8. Robert N. Singer (2001). Motor Learning and Human Performance. New York: The Macmillan Co.
- 9. Robert N. Singer. (1989) The Psychology Domain Movement Behaviour. Philadelphia: Lea and Febiger.
- 10. Thelma Horn. (2002). Advances in Sports Psychology. Human Kinetic.
- 11. Whiting, K, Karman, Hendry L.B & Jones M.G. (1999) Personality and Performance in Physical Education and Sports. London: Hendry Kimpton Publishers.

## **SEMESTER - II**

10PPPC 000	EDUCATIONAL TECHNOLOGY AND	L	T	P	С
19BPDC-202	METHODS IN PHYSICAL EDUCATION	4	0	0	4

## **COURSE OBJECTIVES:**

- To understand the teaching methods
- Understanding the methods of teaching
- Acquire knowledge regarding the teaching aids.
- Familiarize with the lesson plan involved in teaching physical education activities
- Familiarize with the types of tournaments

#### **COURSE CONTENT:**

## UNIT - I Introduction to Educational Technology

Education and Educational Technology- Meaning and Definitions - Types of Education- Formal, Informal and Non- Formal education- Educative Process -Importance of Devices and Methods of Teaching.

## UNIT - II Teaching Technique

Teaching Technique - Lecture method, Command method, Demonstration. method - Imitation method, project method, etc. - Teaching Procedure - Whole method, whole - part - whole method, part - whole method - Presentation Technique -Personal and technical preparation - Micro Teaching - Meaning, Types and steps of micro teaching - Simulation Teaching - Meaning, Types and steps of simulation teaching.

## UNIT -III: Teaching Aids,

Teaching Aids - Meaning, Importance and its criteria for selecting teaching aids. Teaching aids - Audio aids, Visual aids, Audio - visual aids, Verbal, Chalk board, Charts, Model, Slide projector, Motion picture etc. Team Teaching - Meaning, Principles and advantage of team teaching. Differences between Teaching Methods and Teaching Aids.

## **UNIT -IV: Lesson Planning**

Lesson Planning - Meaning, Type and principles of lesson plans. General and specific lesson plans. Incentives; credit, awards, trophies, certificates. Methods of Physical education promotion.

## UNIT-V - Tournaments and Competitions

#### Tournament:

Importance of Tournament, Types of Tournament and its organization structure -Knock-out Tournaments, League or Round Robin Tournaments, Combination Tournament and challenge Tournament. Organization structure of Athletic Meet - Sports Event Intramurals 85 Extramural Tournament planning.

## Competition:

Athletic type of competitions.-Rhythmic Activities Group competitions-Gymnastic Competitions

#### **COURSE OUTCOME:**

## After completion of this course, the students will be able to

**CO1:** know about the importance of education and educational technology and the types of teaching methods

- **CO2:** identify the teaching and presentation techniques involved in teaching physical education activities
- **CO3:** recognize various types of teaching aids and principles and advantages of team teaching
- **CO4:** prepare general and particular lesson plan and also know the means and method of physical education promotion
- **CO5:** understand the organization structure of various typed of tournaments and also familiar with drawing of various types of fixtures and gain knowledge regarding organization of intramurals & extramural tournament

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10		
CO1									3			
CO2			3						2			
CO3			3						2			
CO4			3						2			
CO5			2			3						

## **REFERENCE BOOKS:-**

- 1. Sampath, K., Pannirselvam, A. & Santhanam, S. (1981) Introduction to Educational Technology. New Delhi: Sterling Publishers Pvt. Ltd.
- 2. Kozman, H.C. Cassidly, R. & Jackson, C. (1960). Methods in Physical Education. London: W.B. Saunders Co.
- 3. Pandy, L.K. (1977). Methods in Physical Education. Delhe: Metropolitan Book Depo. Sharma, V.M. & Tiwari, R.H.: (1979). Teaching Methods in Physical Education. Amaravati: Shakti Publication.
- 4. Bhatia, & Bhatia, (1959). The Principles and Methods of Teaching. New Delhi: Doaba House.
- 5. Sharma, V.M. & Tiwari, R.H.: (1979). *Teaching Methods in Physical Education*. Amaravati: Shakti Publication.
- 6. Tirunarayanan, C.& Haiharan.S(1969), Methods in Physical Education . Karaikudi: South India Press

#### **SEMESTER - II**

19BPDC-	ORGANIZATION, ADMINISTRATION,	L	T	P	C
203	RECREATION AND CAMPING IN PHYSICAL	1	0	0	4
203	EDUCATION	4	U	U	4

#### **COURSE OBJECTIVES:**

- To know the meaning of organization and administration
- Understanding the methods of maintaining physical education records and registers.
- To know the method of preparing physical education budget.
- Understand the facilities involved in Gymnasium and Swimming Pool

#### **COURSE CONTENT:**

## **UNIT - I: Organization and Administration**

Meaning and importance of Organization and Administration in physical education Qualification and Responsibilities of Physical Education teacher and pupil leader Planning and their basic principles, Program planning: Meaning, Importance, Principles of program planning in physical education. Functions of Planning, organizing, staffing, directing, communicating, co-ordination, controlling, evaluating and innovating.

#### UNIT - II: Office Management, Record, Register

Office Management: Meaning, definition, functions and kinds of office management Records and Registers: Maintenance of attendance Register, stock register, cash register, physical efficiency record, Medical examination Record.

## UNIT - III: Budget

Budget: Meaning, Importance of Budget making, Criteria of a good Budget, Sources of Income, Expenditure, Preparation of Budget.

#### UNIT - IV: Facilities and Time Table Management

Facilities and equipment management: Types of facilities Infrastructure-indoor, out door. Care of school building, Gymnasium, swimming pool, Play fields, Play grounds Equipment: Need, importance, purchase, care and maintenance. Time Table Management: Meaning, Need, Importance and Factor affecting time table

## **UNIT- V: Supervision**

Meaning and Need for Supervision – Guiding principles of Supervision.- Functions of the Supervisor - Instruction and Professional growth - Methods in supervision: Visits – Periodical, Surprise, request, Visitation Procedure, Report on the visit

## **COURSE OUTCOME:**

## After completion of this course, the students will be able to

**CO1:** know the responsibilities of physical education teachers and the principles of Program planning

- **CO2:** gain knowledge regarding office management, maintenance of records and registers
- **CO3:** obtain knowledge in Preparing physical education budget
- **CO4:** Realize the need of various facilities, equipment and also familiar with time Table management
- **CO5:** understand various supervision techniques adopted for the promotion of physical education program

			Mappir	ng with	Progran	nme Out	tcomes			
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10
CO1			3			1				
CO2			3							
CO3			3							
CO4			2			3	1			
CO5			2				1			

## **REFERENCE BOOKS:-**

- 1. Chandra shekar (2009) Sports Administration, New Delhi, Khel Sahitya Kendra.
- 2. Charles A. Bucher, Jay S. Shivers, Richard D. Bucher (1984,1974), Recreation for today's Society, Newjersey.
- 3. John By (1990), Organizing Successful Tournaments, Human kinetics.
- 4. March krotee (2007), Management of Physical Education and Sports, Tata MC Graw -Hill
- 5. Reddy Y S (2011), Administration and Management of Physical Education Sports, Friends kinetics
- 6. Broyles, F. 1. &Rober, H. D. (1979). Administration of Sports, Athletic programme: A Managerial Approach. New York: Prentice hall Inc.
- 7. Bucher, C. A. (1983). *Administration of Physical Education and Athletic Programme*. St. Lolis: The C.V. Hosby Co. 29
- 8. Voltmer, E. F. & Esslinger, A. A. (1979). The Organization and Administration of Physical Education. New York: Prentice Hall Inc.

#### **SEMESTER - II**

PPDC 204 (a)	HEALTH EDUCATION AND	L	T	P	С
BPDC-204 (a)	ENVIRONMENTAL STUDIES	4	0	0	4

#### **COURSE OBJECTIVES:**

- Understand the importance of health and need of health education.
- Get knowledge of communicable and non-communicable diseases.
- Understand the school health problem
- Know the Need and Importance of environmental studies
- Know the different environmental issues

#### **COURSE CONTENT:**

## **UNIT - I: Health Education**

Concept, Dimensions, Spectrum and Determinants of Health Definition of Health, Health

Education, Health Instruction, Health Supervision Aim, objective and Principles of Health Education Health Service and guidance instructions in personal hygiene.

## UNIT -II: Health Problems in India

Communicable and Non Communicable Diseases - Obesity, Malnutrition, Adulteration in food, Environmental sanitation, Explosive Population.

#### UNIT - III: School Health Problem

Personal and Environmental Hygiene for schools - Objectives of school health services, Role of health education in schools Health Services - Care of skin, Nails, Eye health services, Nutritional services, Health appraisal, Health record, Healthful school environment, first- aid and emergency care etc.

#### UNIT - IV: Environmental Science

Definition, Scope, Need and Importance of environmental studies. Concept of environmental education, Historical background of environmental education, Celebration of various days in relation with environment. Plastic recycling & probation of plastic bag / cover. Role of school in environmental conservation and sustainable development.

#### UNIT - V: Natural Resources related environmental issues

Water resources, food resources and Land resources Definition, effects and control measures of Air Pollution, Water Pollution, Soil Pollution, Noise Pollution, Thermal Pollution Management of environment and Govt. policies, Role of pollution control board.

#### **COURSE OUTCOME:**

## After completion of this course, the students will be able to

- **CO1:** realize about the concept of health and health education
- **CO2:** understand the health problems in India, nutritional aspects and prevention and control of communicable and non communicable diseases
- **CO3:** understand about Personal and Environmental hygiene, apply the comprehensive knowledge of the concept of health education, school health services
- **CO4:** realize the value of environmental science and understand role of school in environmental conservation and sustainable development
- **CO5:** look at the natural resources and related environmental issues and also prevention of the environment related problems

			Mappii	ng with	Progran	nme Out	tcomes			
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10
CO1		3					2			
CO2		3								
CO3		1					2			
CO4		3					1			
CO5		3								

## **REFERENCE BOOKS:-**

- 1. Pande, P. K. & Gangopadhyay, S. R. (2005). Health education for school children, New Delhi: Friends
- 2. Srivastava, A. K. (2010). Health and fitness. New Delhi: Sports
- 3. Dheer, S., Kamal, R. &Basu, M. (2005). Introduction to health education. New Delhi: Friends
- 4. Mishra, S. C. (2009). Health and physical education. New Delhi: Sports
- 5. Raman, B. M. T. (2010), Health Exercise and Fitness, New Delhi: Sports
- 6. K.Park (2015), Textbook of Preventive and Social Medicine: Banarsidas Bhanot

## SEMESTER - II

BPDC-204 (b)	YOGA EDUCATION	L	T	P	С
BFDC-204 (b)	TOGA EDUCATION	4	0	0	4

#### **COURSE OBJECTIVES:**

- Understand the aim and objectives of yoga.
- Acquire knowledge yoga sutras
- Familiarize with astanga yoga
- To know the effects of asanas and pranayama on various systems
- Acquire the knowledge regarding Bandhas, Mudras and Kriyas

#### **COURSE CONTENT:**

#### **UNIT** - I Introduction

Meaning and Definition of Yoga- Aims and Objectives of Yoga -Yoga in Early Upanishads -The Yoga Sutra: General Consideration -Need and Importance of Yoga in Physical Education and Sports .

## UNIT - II Foundation of Yoga

The Astanga Yoga: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi. Yoga in the Bhagavadgita - Karma Yoga, Raja Yoga, Jnana Yoga and Bhakti Yoga

#### **UNIT -III Asanas**

Effect of Asanas and Pranayama on various system of the body. Classification of asanas with special reference to physical education and sports

## UNIT -IV Bandhas, Mudras and Kriyas

Influences of Relaxative, meditative posture on various systems of the body, Types of Bandhas and Mudras . Type of Kriyas.

## **UNIT - V Yoga Education**

Basic, applied and action research in Yoga - Differences between Yogic practices and physical exercises - Yoga education centers in India and abroad -Competitions in Yogasanas

#### **COURSE OUTCOME:**

## After completion of this course, the students will be able to

- **CO1:** understand the objectives, need and importance of yoga in physical education and sports
- **CO2:** Know about the foundation of yoga and differentiate between various stages of astanga yoga
- **CO3:** identify the effect of Asanas and Pranayama on various systems of the body and also apply and demonstrate various benefits of yoga to be applied in the field of sports
- **CO4:** Familiar with the meditative posture on various system of the body and also demonstrate different bandhas, mudras and kriyas
- **CO5:** identify the difference between yogic practices and physical exercises, relate yoga with health and wellness and also develop yogic programs/schedules

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO7	PO8	PO9	PO10						
CO1				3								
CO2				3								
CO3				3								
CO4				3								
CO5				3								

## **REFERENCE BOOKS:-**

- 1. Sharma, S. K. (2010). Yoga. New Delhi: Sports
- 2. Yadav, Y. P. & Yadav, R. (2003). Art of yoga. New Delhi: Friends
- 3. Sharma, J. P. (2010). Teaching of yoga. New Delhi: Friends
- 4. Gore, C.S. (2011), Yoga and Health, New Delhi: Sports

#### **SEMESTER - III**

BPDC-301	SPORTS TRAINING	L	T	P	С
BPDC-301	SPORTS TRAINING	4	0	0	4

## **COURSE OBJECTIVES:**

Student Teacher will be trained on

- Understand the scientific principles of sports training.
- Fix and adopt the training load
- Prepare the sports person for the competition

## **COURSE CONTENT:**

## UNIT- I

Sports Training: Meaning, Definition, Characteristics and Principles – Training Load: External and Internal Load - Principles of Training Load – Overload: Symptoms and Tackling – Periodization: Types, Aims and Content of Various Periods – Preparatory, Competition and Transition – Plan: Short term and Long term

## UNIT- II

Warming Up: Definition – Types – Importance of Warming Up – Types of Sports Training and their Purpose: Weight Training (Free Weight and Machine Weights) – Circuit Training – Interval Training – Plyometric Training – Fartlek Training – Swiss Ball Training – Medicine Ball Training – Cross Training.

#### UNIT- III

Strength - Definition of strength - Types of Strength: Maximum strength, explosive strength, strength endurance, general strength, specific strength, relative strength. Importance of strength- Factors determining strength- Training method for strength improvement - Loading procedure for strength training.

## UNIT- IV

Speed - Definition of speed - Forms of speed, reaction speed, movement speed, acceleration ability, loco-motor ability. Speed endurance - Factors determining speed performance - Training methods for increasing speed.

#### UNIT- V

Endurance: Definition – Types – Importance – Training Methods for improving Endurance – Coordinative Abilities: Definition – Types and Training Methods for Improving Coordinative Abilities – Flexibility: Definition – Types - Methods for Improving Flexibility

## **COURSE OUTCOME:**

## After completion of this course, the students will be able to

- **CO1:** understand the modern concept of sports training, components of training load and competition plan
- **CO2:** identify the importance of warm-up and also various types of Sports Training and their Purpose
- **CO3:** know various types of strength and the means and methods of developing strength
- **CO4:** familiar with the factors determining speed performance and also training methods for increasing speed.
- **CO5:** recognize the training methods used for improving Endurance and Coordinative Abilities

	Mapping with Programme Outcomes												
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10			
CO1								3					
CO2								3					
CO3								3					
CO4								3					
CO5								3					

#### **REFERENCE BOOKS:-**

- 1. Gangopaddhayoy, S. R. (2008). Encyclopedia of Sports Training. New Delhi: Sport Publication
- 2. Anand, R.L (1987) Play Field Manual, Patiala: NIS Publication.
- 3. Arnheim, D., & William, E Prentice. (1991). Principles of Athletic Training. St.Louis: Mosby Year Book.
- 4. Arnheim D., & William E Prentice. (1978). Athletic Training. St. Louis: Mosby Year Book.
- 5. Authors Guide (2014) IAAF Competition Rules 2014-2015, Monaco Cedex: IAAF Publishing .
- 6. Authors Guide (2002) Rules of Games and Sports, New Delhi : YMCA Publishing House
- 7. Bonder, J.B (1984). How to be a Successful Coach. New York: Prentice Hall, Inc.
- 8. Breshahan, Tuttle., & Cretzmeyer. (1997). Track and Field Athletics. New Jersey: Prentice Hall, Inc.
- 9. Bunn, J. W (1951) The Art of Officiating Sports, Englewood Cliff.: Prentice Hall,
- 10. Cart E.Klafs., &D Arnheim. (2000) Modern Principles of Athletic Training St.Louis: C. V. Mosphy Company.
- 11. Thomas, J.P. (1982). Let us Coach Soccer. New Delhi: The YMCA Publishing House.

## **SEMESTER - III**

BPDC-302	RESEARCH AND STATISTICS	L	T	P	С
BPDC-302	RESEARCH AND STATISTICS	4	0	0	4

## **COURSE OBJECTIVES:**

- Know the characteristics of research.
- Understand the sampling techniques.
- Know the procedures involved in research proposal
- Understand the meaning of statistics and its types
- Know the meaning of normal probability curve

# COURSE CONTENT:

#### UNIT- I

Research: Definition - Meaning and Characteristics of Research -Need and Importance and Scope of Physical Education and Sports. - Classification and Methods of Research - Research Ethics - Research Problem: Criteria for selecting and locating research problem - Hypothesis: Meaning - formulation of Hypothesis - Types of hypothesis **UNIT-II** 

Sampling: meaning of sample- types of sample - Research design:- meaning - need of research design- features - Experimental research- Meaning - Need of experimental research - Historical research: Meaning- collection of data: Primary and secondary source - Survey: case study - Need of case study

## UNIT- III

Related Literature: Need of related literature in research -sources -Tools of Research - Questionnaire- Construction of questionnaire, Interview: types of interview - Reliability: Instrument reliability - Meaning - Need and importance - Research Proposal: Meaning -Important aspects - Significance of Research Proposal. - Research Reports: Format in Physical Education: Introduction- literature survey- Methodology-Analysis - Summary and Conclusions -Format of bibliography

## UNIT- IV

Statistics: Meaning, Definition, and Importance of statistics in Physical education - Types of statistics: Descriptive – inferential - Class Distribution: Histogram, Frequency Polygon, Frequency Curve. Cumulative Frequency Polygon, "O"give - Measures of Central tendency: Mean-Median – Mode for group and ungroup data- Merits and demerits of measures of central tendency

#### UNIT- V

Measures of variability: Meaning – range – mean deviation – standard deviation - calculation for group and ungrouped data - Merits and demerits of measures of variability - Percentiles and Quartiles: Meaning, Importance, Computing from Group and Ungrouped data - Probability – Meaning – Normal curve – properties of normal curve - Graphical representation: Types: Bar diagram- line graph - Pie Diagram

#### **COURSE OUTCOME:**

# After completion of this course, the students will be able to

- **CO1:** understand the basic framework of research process and the formulation of hypothesis
- CO2: gain knowledge of the sampling techniques and research design involved
- **CO3:** identify various sources of information for literature review and Familiar with the procedure followed in preparation of research report
- **CO4:** know how to organize, manage, and present data and also understand the procedure of computing measures of central tendency
- **CO5:** compute measures of central tendency and draw the different types of graphical representations

	Mapping with Programme Outcomes												
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10			
CO1		3											
CO2		3											
CO3		3											
CO4		3											
CO5		3											

#### **REFERENCE BOOKS:-**

1. Chiris Gratton and Ian Jones (2012) Research Methods for Spot StudiesRO.ge publication

- 2. C.Ashok (2008) Research Abstracts in Physical Education and Sports SciencesNew Delhi. kalpaz publication
- 3. Kothari C.R (1985) Research MethodologyP.N-New age International (p) limited
- 4. Murthy A.M (2009) Research Methods in Physical Education Sports and Exercise Science, (India)New Delhi willness. Friends publications
- 5. Sharma kalpana (2011) Research Methods in Health and Physical Education (India) New Delhi willness. Friends publication
- 6. Smith mark, (2010) Research Methods in Sport. British library cataloguing publication.

#### **SEMESTER - III**

19BPDC-	COMPUTER APPLICATION IN PHYSICAL	L	T	P	С
303	EDUCATION	4	0	0	4

#### **COURSE OBJECTIVES:**

Student Teacher will be trained on

Ш	To know the necessity of computer application in physical education
	Helps to improves the computer assisted works in sports drawings
	Able to use the sports applications and software in physical education
	Acquire knowledge regarding the official presentations of physical education
	Improve the Internet knowledge to training the various games and sports

#### COURSE CONTENT:

#### **UNIT** - I Introduction to Computer

Characteristics of a Computer- History of Computers- Generations of Computer-Classification of Computers- Hardware and Software- Types of Software Input and Output devices – Application of Computers used in Physical Education.

#### **UNIT - II MS Word**

Introduction to MS Word -Creating, Saving and Opening a Document - Formatting and Editing features, Page setup, Paragraph Alignment, Spelling and Grammar check, Printing option, Inserting Tables, Page number, Header and Footer.

#### **UNIT - III MS Excel-**

Introduction to MS Excel- Creating, Saving and Opening Spreadsheet - Creating Formulas and Functions - Applications of Simple Formula and useful functions on Physical Education - Format and Editing features adjusting columns width and row height - understanding charts.

#### **UNIT - IV MS Power Point**

Introduction to MS Power Point - Creating, saving and opening a ppt. file - Format and editing features slide show, design, inserting slide number- Picture, graph, table.

#### **UNIT - V Network and Internet**

Network - Types of Network: LAN, MAN, WAN. Internet - World Wide Web (www). Browsing, Search Engine, Electronic mail.

Note: Practical: As per the topic mentioned above the concerned faculty will give them practical exposer as well as practical assignment and this will be evaluated as an integral part of the internal assessment.

#### **COURSE OUTCOME:**

## After completion of this course, the students will be able to

**CO1:** Understand concept of computer application in physical education field

**CO2:** Analyze sporting data of various types via astute use of statistical packages

**CO3:** Practice mathematics, statistics, information technology in sport technology

**CO4:** Offer hands on knowledge in computer application and software

**CO5:** have aware of types networks, internet

	Mapping with Programme Outcomes												
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10			
CO1					2					3			
CO2					2					3			
CO3					2					3			
CO4					2					3			
CO5					2					3			

## **REFERENCE BOOKS:-**

- 1. Michael Miller. Absolute Beginner's Guide to Computer Basics, Portable Documents: Pearson Education
- 2. Rajaraman. Fundamentals of Computers: Prentice-Hall of India Pvt. Limited
- 3. Psrija M. Computer Education: Introduction, Lakshya Publication, New Delhi.
- 4. Jayachitra M. Computer Application in Physical Education, Friends Publication, New Delhi.
- 5. Kumar S. Computer Application in Physical Education, Nipun Prakashan, New Delhi.

#### **SEMESTER - III**

19BPDC-304	SPORTS MANAGEMENT AND CURRICULUM	L	T	P	С
(a)	DESIGN	4	0	0	4

## **COURSE OBJECTIVES:**

- Understanding the concepts of sports management.
- Acquire knowledge regarding guidelines for selection of equipments and supplies
- Know the basic principles of curriculum construction
- Know the curriculum setup for physical education
- Know the Multimodal curriculum

#### **COURSE CONTENT:**

#### UNIT- I

Nature and Concept of Sports Management. Progressive concept of Sports Management.-The purpose and Scope of Sports Management-Essential skills of Sports Management-Qualities and Competencies required for the Sports Manager-Event Management in Physical Education and Sports

#### UNIT- II

Purchase and Care of Supplies of Equipment, Guidelines for selection of Equipments and Supplies, Purchase of equipments and supplies, Equipment Room, Equipment and supply Manager. Guidelines for checking, storing, issuing, care and maintenance of supplies and equipments. Public Relations in Sports: Planning the Public Relation Program – Principles of Public Relation – Public Relations in School and Communities – Public Relation and the Media.

#### UNIT-III

Basic principles of curriculum construction - Curriculum design, meaning, importance and factors affecting curriculum design- Principles of curriculum design according to the needs of the students and state and national - level policies - Role of teachers

#### **UNIT-IV**

Areas of health education, Physical Education and recreation - Curriculum design - experience of education, field and laboratory - Teaching practice - Professional competencies to be developed - facilities and special resources for library, laboratory and other facilities.

#### UNIT-V

Multimodal curriculum - Instructional models - Establishing a safe environment-Class management-Effective teaching behaviour - Instructional strategies.

## **COURSE OUTCOME:**

# After completion of this course, the students will be able to

**CO1:** understand the concept and essential skills of sports management

**CO2:** know the procedure followed in purchase of equipments and supplies and also appraise the public relations in sports

**CO3:** realize and apply basic principles of curriculum construction

**CO4:** design different curriculum and also professional competencies to be developed

**CO5:** know the different instructional strategies

	Mapping with Programme Outcomes												
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10			
CO1			2										
CO2			3										
CO3							3						
CO4			2				3						
CO5							3						

## **REFERENCE BOOKS:-**

- 1. Ashton, D. (1968). Administration of Physical Education for Women. New York: The Ronal Pres Cl.
- 2. Bucher, C.A. (1979). Administration of Physical Education and Athletic Programme.7th Edition, St. Louis: The C.V. Mosby Co.
- 3. Daughtrey, G. & Woods, J.B. (1976). Physical Education and Intramural Programmes, Organization and Administration. Philadelphia U.S.A.: W.B. Sounders Cp..
- 4. Cassidy, R. (1986). Curriculum Development in Physical Education. New York: Harper & Company.
- 5. Cowell, C.C & Hazelton, H.W. (1965). Curriculum Designs in Physical Education. Englewood Cliffs: N.J. prentice Hall Inc.
- 6. Larson, L.A. (1983)Curriculum Foundation in Physical Education. Englewood Cliffs: N.J. prentice Hall Inc.
- 7. Underwood, G.L. (1983), The Physical Education Curriculum in Secondary School: Planning and implementation. England: Taylor and Francis Ltd.
- 8. Willgoose, C.E. (1979). Curriculum in Physical Education. 3<sup>rd</sup> Ed. Englewood Cliffs.: N.J. Prentice Hall, Inc.

## **SEMESTER - III**

19BPDC-304	SPORTS NUTRITION AND WEIGHT	L	T	P	С
(b)	MANAGEMENT	4	0	0	4

#### **COURSE OBJECTIVES:**

- Understanding basic concepts of nutrition
- Acquire knowledge regarding classifications of food
- Know the importance of nutrition for fitness
- Know the weight control strategies

#### COURSE CONTENT:

#### Unit I. Introduction to the science of Nutrition

Basics of Nutrition -Malnutrition -Over Nutrition and Under Nutrition. Need and Importance of nutrition- Functions, Sources and Recommended, daily allowance of Nutrients - Proteins, Carbohydrates, Fats, Vitamins, Minerals and Water.

## Unit II. Food and Nutritional Planning

Classification of Food: Acidic, Alkaline and Neutral foods. Nutritive and Caloric value of different food stuffs. Energy requirement for different Sports Activities. Balanced diet. Nutritional planning and Nutritional tips for Sports Persons

## Unit III. Nutritional Status

Factors affecting Nutritional status. Measuring Nutritional status. Place of Nutrition in health, Importance of Nutrition in fitness.

## **UNIT-IV Weight Management**

Obesity, Nutrition, diet, exercise and weight control. Brief concepts of the following: Use of Alcohol, drugs and doping and their effects on sports performance.

## **UNIT-V Dietary fiber**

Dietary fiber; fiber deficiency, Symptoms of various nutrients and remedies for malnutrition, Glycogen loading, Importance of fluids in sports.

#### **COURSE OUTCOME:**

## After completion of this course, the students will be able to

**CO1:** gain knowledge regarding the importance of nutrition and recommended daily allowance of nutrients

**CO2:** know nutritive and caloric value of different food stuffs and also energy requirement for different sports activities

**CO3:** understand the importance of nutrition in fitness

**CO4:** factor affecting weight management and values of weight management

**CO5:** design diet plan and exercise schedule for weight gain and loss and also know the importance of fluids in sports

	Mapping with Programme Outcomes												
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10			
CO1							3						
CO2							3						
CO3							3						
CO4							3						
CO5							3						

## **REFERENCE BOOKS:-**

- 1. Mc. Devitt, Maxine, E and Sumathy Rajagopal Mudambi, Human Nutrition: Principles and Application in India. New Delhi:, Prentice Hall of India, 1969.
- 2. Mottram, V.H. Human Nutrition London: Arnold Company, 1968.
- 3. Somagyi J.C. and others (Editors). Nutrition in Early Childhood and Its Effect on Later Life. Basel: Karger Publishers, 1982.
- 4. Melwin H. William. Nutrition for Health Fitness And Sports. New York: McGrawhill company, 1995.
- 5. Scott, K. Powers and Stephen L. Dodd. Total fitness: Exercise, Nutrition and Wellness. Boston: Allyn and Bacon, 1999.

#### **SEMESTER - IV**

19BPDC-	MEASUREMENT AND EVALUATION IN	L	T	P	С
401	PHYSICAL EDUCATION	4	0	0	4

#### **COURSE OBJECTIVES:**

- Know the importance of test and measurement in physical education.
- Acquire knowledge regarding the criteria of selection of test
- Familiarize the physical fitness test and cardio vascular test
- Know the sports skill tests

#### **COURSE CONTENT:**

#### UNIT-I

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 Education Application. Administration of Test: Duties of Advance Preparation – Duties during testing – Duties after testing

#### **UNIT-III**

Physical Fitness Test: AAPHERD Health Related Fitness Battery (Revised in 1984) – Roger's Physical Fitness Index. Cardio Vascular Test: Harvard Step Test, 12 Minutes Run /Walk 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 High School Boys and Girls.

#### **UNIT-IV**

Sports Skill Test: Badminton: Miller Wall Volley Test – French Short Service Test, Basketball: Johnson Basketball Test – Leilich Basketball Test, Hockey: Firedal Field Hockey Test, Schimithal French Field Hockey Test.

## **UNIT-V**

Sports Skill Test: Football: Johnson Soccer Test – McDonald Soccer Test. Tennis: Dyer Tennis Test, Volleyball: Brady Volleyball Test – Rusell Lange Volleyball Test.

## **COURSE OUTCOME:**

## After completion of this course, the students will be able to

- **CO1:** understand the need & importance of test, measurement and evaluation in physical education
- **CO2:** gain knowledge regarding the criteria, classification and administration of test
- **CO3:** assess physical and motor fitness components using various test and measurements

**CO4:** evaluate various games skills of badminton, basketball and hockey games using sports skill assessments test

**CO5:** estimate various games skills of football, tennis and volleyball games using sports skill assessments test

	Mapping with Programme Outcomes												
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10			
CO1								3					
CO2								3					
CO3								3					
CO4						2		3					
CO5						2		3					

## **REFERENCE BOOKS:-**

- 1. Barrow, H.M.. and McGee, R.,A (1964.) Practical Approach to Measurement in Physical Education, Lea and Febiger, Philadelphia.
- 2. Bovard, J.F., Cozens, F., W. and Hagman, P.E.(1949)Test and Measurements in Physical Education, W.B. Sunders Company, Philadelphia.
- 3. Campbell, W.R. and Tucker, N.M. (1967)An Introduction in Physical Education, G.Bell and Sons Ltd., London.
- 4. Cureton, T.K. (1947)Physical Fitness Appraisal and Guidance, The C.Mosby Company, St.Louis.
- 5. Getchell B. Physical Fitness (1979): A Way of Life, 2nd ed. New York: John Wiley and Sons, Inc.
- 6. Hunsicker, P.A. and Montoye, H.J. (1953) Applied Test and Measurements in Physical Education, Prentice Hall Inc., New York.
- 7. Luc Leger (1983), Testing Physical Fitness, Euro fit Experimental Battery Provisional Handbook, Strasbourg: UK
- 8. Meyers, C.R. and Belsh, E.T. (1962) Measurement in Physical Education, The Ronald press Company. New York. Sports, New Delhi: Friends Publications.
- 9. Wilgoose, C.E (1967) Evaluation in Health Education and Physical Education, McGraw Hill Book Company, Inc, New York.

#### SEMESTER - IV

	10					
19BPDC-	KINESIOLOGY AND BIOMECHANICS	L	T	P	С	
402		4	0	0	4	

## **COURSE OBJECTIVES:**

- Understanding the concepts of kinesiology and biomechanics.
- Know the types of muscular contractions.
- Familiarize with movement analysis
- Know the concepts of biomechanical analysis

# **COURSE CONTENT:**

#### UNIT-I

Introduction to Kinesiology and Sports Biomechanics: Meaning and Definition of Kinesiology and Sports Biomechanics. Importance of Kinesiology and Sports Biomechanics to Physical Education Teacher, Athletes and Sports Coaches.

Terminology of Fundamental Movements. Fundamental concepts of following terms: Axes and Planes, Centre of Gravity, Equilibrium, Line of Gravity

## UNIT-II

Fundamental Concept of Anatomy and Physiology: Joints and Muscles, Types of Muscle Contractions. Posture: Meaning, Types and Importance of good posture. Fundamental concepts of following terms: Angle of Pull, All or None Law, Reciprocal Innervations.

#### UNIT-III

Mechanical Concepts: Force - Meaning, definition, types and its application to sports activities. Lever - Meaning, definition, types and its application to human body. Newton's Laws of Motion - Meaning, definition and its application to sports activities. Projectile - Factors influencing projectile trajectory.

#### **UNIT-IV**

Kinematics and Kinetics of Human Movement: Linear Kinematics – Distance and Displacement, speed and velocity, Acceleration Angular kinematics – Angular Distance and Displacement, Angular Speed and velocity, Angular Acceleration. Linear Kinetics – Inertia, Mass, Momentum, Friction. Angular Kinetics – Moment of inertia ,Couple, Stability.

#### UNIT-V

Biomechanical Analysis: Biomechanical Analysis of following Track and Field Events: Running, Horizontal and Vertical Jumping, Throwing Events Biomechanical Analysis of Skill of Major Games.

## **COURSE OUTCOME:**

## After completion of this course, the students will be able to

**CO1:** know the importance of kinesiology and biomechanics in physical education

**CO2:** develop an understanding of the fundamental connection between structure and basic functions for muscles and joints.

**CO3:** analyze mechanical concepts and its application to sports activities

**CO4:** gain knowledge about kinematics and kinetics of human movement

**CO5:** analyze sport movements and design movement-oriented exercise

	Mapping with Programme Outcomes										
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10	
CO1		3									
CO2		3									
CO3		3									
CO4		3									
CO5		3									

## **REFERENCE BOOKS:-**

- 1. Bunn, J. W. (1972). Scientific principles of coaching. Englewood Cliffs, N.J.: Prentice Hall Inc.
- 2. Hay, J. G. & Reid, J. G.(1982). *The anatomical and mechanical basis of human motion*. Englewood Cliffs, N.J.: Prentice Hall Inc.
- 3. Hay, J. G. & Reid, J. G.(1988). *Anatomy, mechanics and human motion*. Englewood Cliffs, N.J.: prentice Hall Inc.
- 4. Hay, J. G. (1970). *The biomechanics of sports techniques*. Englewood Cliffs, N.J.: Prentice Hall, Inc.
- 5. Simonian, C.(1911). Fundamentals of sport biomechanics. Englewood Cliffs, N.J.: Prentice Hall Inc.

#### **SEMESTER - IV**

10DDD0	THEORY OF SPORTS AND GAMES -II	L	T	P	С
19BPDC- 403	[Hockey/Football/Kho-Kho/	4	0	0	4
	Kabaddi/Ballbadminton and Athletics]	_			-

#### **COURSE OBJECTIVES:**

- Understanding the marking procedures of hurdles and relay races.
- Know the rules and regulations of hurdles and relay races.
- Understand the mechanism of officiating
- Know the markings of Hockey, Football, Kho-Kho, Kabaddi and Ballbadminton
- Know the rules of Hockey, Football, Kho-Kho, Kabaddi and Ballbadminton

## **COURSE CONTENT:**

## UNIT-I

Specifications and Markings of Hurdles – Relay Races – Triple Jump – Pole Vault and throwing Hammer- Duties and Responsibilities of the Officials

#### UNIT-II

Rules and their interpretations of Hurdle Races, Relay Races – Triple Jump – Pole Vault – Throwing the Hammer.

## UNIT-III

Qualification and qualities of an official – General Principles of Officiating – Mechanisms of Officiating: Hockey, Football, Kho-Kho, Kabaddi and Ballbadminton - Duties and powers of officials.

## **UNIT-IV**

Measurement and markings of the following games: Hockey, Football, Kho-Kho, Kabaddi and Ballbadminton

#### UNIT-V

Rules of the following games and their Interpretation: Hockey, Football, Kho-Kho, Kabaddi and Ballbadminton.

#### **COURSE OUTCOME:**

## After completion of this course, the students will be able to

**CO1:** Mark various track and field events and also know the duties and responsibilities of officials

**CO2:** Familiar with the Rules and their interpretations various track and field events

**CO3:** Understand the Principles and Mechanisms of Officiating and also officials Duties of the games Hockey, Football, Kho-Kho, Kabaddi and Ballbadminton

**CO4:** Know the marking of play field/court of various major games.

**CO5:** Familiar with the Rules and their interpretations various games

	Mapping with Programme Outcomes										
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10	
CO1						3					
CO2						3					
CO3						3					
CO4						3					
CO5						3					

## **REFERENCE BOOKS:-**

- 1. George Immanuel, "Track and Field event layout and Marking".
- 2. AAFI Rules Book.
- 3. R.L. Anand, Play Field Manual Patiala: "NIS Publication", 1990.
- 4. H.C. Buck, Rules of Games and Sports, Madras: YMCA Publications, 1992.
- 5. Bunn, J. W. The Art of officiating Sports, Prentice Hall, Englewood Cliff. M.J. 1951.
- 6. Bunn, J. W. The Basketball Coaches' Guide to Success, Prentice Hall, New York, 1951

#### **SEMESTER - IV**

BPDC-404	FITNESS, WELLNESS AND OLYMPIC	L	T	P	C
(a)	MOVEMENT	4	0	0	4

#### **COURSE OBJECTIVES:**

- Learn about the importance and scope of fitness and wellness
- Conceptualize the vital significance of fitness and wellness
- Enable the students to understand the concepts of nutrition
- Acquire knowledge regarding the concepts of fitness
- Teach the students the scope, concept and components of wellness
- Make understand the concept of designing different fitness training in Olympic Movement

#### **COURSE CONTENT:**

## **UNIT-I Concept of Physical Education and Fitness**

Definition, aims and objectives of physical education, fitness and wellness - Importance and scope of fitness and wellness - Modern concept of physical fitness and wellness - Physical Education and its relevance in inter disciplinary context

## **UNIT-II Fitness and Lifestyle**

Fitness-types of fitness and components of fitness - Understanding of fitness - Modern lifestyle and hypo kinetic disease-prevention and management - Physical activity and health benefits

## **UNIT-III Wellness and Lifestyle**

Meaning, Definition and Scope of wellness - Concept and Components of wellness - Dietary guidelines of good health- health promotion and diseases prevention- Nutrition - Issues related to body image, stress management, mental health, and wellness throughout life- healthy aging.

## **UNIT-IV Olympic Movement**

Origin of Olympic movement - Philosophy of Olympic movement - The early history of the Olympic movement - The significance stages in the development of the modern Olympic movement - Educational and cultural values of the Olympic movement

## **UNIT-V Modern Olympic Games**

Modern Olympic Games - Significance of Olympic Ideals, Olympic Rings, Olympic Flag - Olympic protocol for member countries - Olympic code of Ethics - Olympic in action - Sports for All

#### **COURSE OUTCOME:**

## After completion of this course, the students will be able to

**CO1:** know the importance and modern concept of physical fitness and wellness

**CO2:** prescribe the prevention and management of hypo kinetic disease and get acquainted with the new challenges

**CO3:** relate the underlying science of wellness and disease to opportunities for promoting and protecting health across the life course

**CO4:** understand the educational and cultural values of the Olympic movement

**CO5:** gain knowledge regarding modern Olympic games

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10		
CO1	1						3	2				
CO2		2					3	1				
CO3		1					3			2		
CO4						3						
CO5						3						

#### **REFERENCE BOOKS:-**

- 1. Bunn, J. W. (1972). Scientific principles of coaching. Englewood Cliffs, N.J.: Prentice Hall Inc.
- 2. Hay, J. G. & Reid, J. G.(1982). *The anatomical and mechanical basis of human motion*. Englewood Cliffs, N.J.: Prentice Hall Inc.

- 3. Hay, J. G. & Reid, J. G.(1988). *Anatomy, mechanics and human motion*. Englewood Cliffs, N.J.: prentice Hall Inc.
- 4. Hay, J. G. (1970). *The biomechanics of sports techniques*. Englewood Cliffs, N.J.: Prentice Hall, Inc.
- 5. Simonian, C.(1911). Fundamentals of sport biomechanics. Englewood Cliffs, N.J.: Prentice Hall Inc.

#### **SEMESTER - IV**

BPDC-404	SPORTS MEDICINE, PHYSIOTHERAPY AND	L	T	P	С
(b)	REHABILITATION	4	0	0	4

#### **COURSE OBJECTIVES:**

- Understanding the Modern Concepts and Importance. Athletes Care and Rehabilitation.
- Acquire knowledge regarding the Guiding Principles of Physiotherapy
- Familiarize with various Principles of Therapeutic Exercise
- Know about fractures, dislocations and cramps

#### **COURSE CONTENT:**

### UNIT-I:

Sports Medicine: Meaning, Definition, Aims, Objectives, Modern Concepts and Importance. Athletes Care and Rehabilitation: Contribution of Physical Education Teachers and Coaches. Sports Injuries: Meaning, Importance, Prevention of injuries in sports – Common sports injuries- Diagnosis.

## **UNIT-II:**

Physiotherapy: Definition- Guiding Principles of Physiotherapy, Importance of Physiotherapy, Introduction and Demonstration of Treatments- Electrotherapy – Infrared rays – Ultraviolet Rays- Short Wave Diathermy- Ultrasonic rays.

## UNIT-III:

Hydrotherapy: Introduction and demonstration of treatments of cry therapy, Thermo therapy. Contrast Bath, Whirlpool Bath – Steam Bath – Sauna Bath – Hot Water Fomentation – Massage: History of Massage – Classification of Manipulation (Swedish System) physiological Effect of Massage.

## **UNIT-IV:**

Therapeutic Exercise: Definition and Scope – Principles of Therapeutic Exercise – Classification, Effects and uses of Therapeutic exercise – passive Movements (Relaxed, Forces and passive- stretching) – active movements (concentric, eccentric and static) application of the therapeutic exercise: Free Mobility Exercise – Sholuder, Elbow – Wrist and Finger Joints- Hips, Knee, Ankle and Foot joints – Trunk, Head and Neck Exercises.

## **UNIT-V:**

Thermotherapy: Meaning, Definition, Methods and Uses. Posture, Postural Deformities: Kyposis, Lordosis, and Scoliosis. Therapeutic Exercises and Uses. First Aid- Treatment – Shock, Sun Stroke- General Rule, Fainting, Abrasion, Dog Bite, Snake Bite, Cuts, Poisoning, Drowning, Bleeding, Laceration- Blisters – Contusion-

Strain – Sprain – Fracture- Dislocation and Cramps – Bandages- kinds of Bandages and Dressings- trapping and supports.

## **COURSE OUTCOME:**

## After completion of this course, the students will be able to

**CO1:** outline the objectives of sports medicine and athletes care and rehabilitation

**CO2:** take care of the preventive and curative aspect of sports injuries

**CO3:** understand hydrotherapy treatment and physiological effect of massage

**CO4:** apply the concept of rehabilitation exercise in post injury care

**CO5:** realize and apply different modalities of therapy

	Mapping with Programme Outcomes											
Cos	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10		
CO1		3					2					
CO2		3										
CO3		3										
CO4		3										
CO5		3										

#### **REFERENCE BOOKS:-**

- 1. Christrine, M.D., (1999), Physiology of sports and exercise. USA: Human Kinetics.
- 2. Conley, M.(2000), Bioenergetics of Exercise training. In T.R. Baechie, & R.W. Earle, (Eds).
- 3. Essentials of Strength Training and Conditioning(pp. 73-90). Champaign. IL: Human Kinetics.
- 4. David, R.M. (2005), Drugs in sports, (4th Ed). Routledge Taylor and Francis Group.
- 5. Hunter, M.D.(1979). A dictionary for Physical educators. In H.M. Borrow & R. Mc Gee, (Eds.), A Practical approach to measurement in Physical Education (pp:573-74). Philadelphia: Lea & Febiger.