



## ITM UNIVERSITY SCHOOL OF SPORTS EDUCATION

Scheme of B.P.E.S. (Bachelor of Physical Education and Sports)

Ordinance:= 65 A

Degree Title : Bachelor of Physical Education and Sports (B.P.E.S.)

Name of the School : School of Sports Education

Duration : 4 years

1 Year (Two Semesters) Undergraduate Certificate in Physical Education and Sports

2 Years (Four Semesters) Undergraduate Diploma in Physical Education and Sports

3 Years (Six Semesters) Bachelor's Degree in Physical Education and Sports

4 Years (Eight Semesters) Bachelor's Degree (Honors/Research) in Physical Education and Sports

Eligibility:

The candidate must have completed his/her Higher Secondary (10+2 scheme examination or Intermediate examination or the pre-university (10+2) or any other equivalent examination recognized by the M.P. Board of Secondary Education or any other Board recognized for this purpose by ITM University Gwalior as equivalent. Reservation and age rules as per State Govt.

After completing the requirements of a three-year Bachelor's degree, candidate who meet a minimum CGPA of 7.5 shall be allowed to continue studies in fourth year of the undergraduate programme to pursue and complete the Bachelor's (Honors/Research) degree.

Admission Procedure: As decided by ITM University Gwalior from time to time

Total Seats: 100.

Fee Structure: As decided by ITM University Gwalior from time to time.

Examination, Curriculum and Related Regulation:

As per ordinance 65A of ITM University Gwalior

**Eligibility:** A candidate shall be eligible for the degree of Bachelor of Physical Education & Sports when he/she has completed the requirement of examination successfully as per ordinance No-.65A

**Attendance:** Attendance in theory and practical subjects shall be compulsory. A minimum of 75% attendance is required separately for each theory and practical's subjects.

**General Instruction:**

For matters not covered in this ordinance, general rules of ITM University Gwalior, as applicable in semester examination shall apply

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

### **General Rules and Scheme of Examination**

The Examination for the degree of Bachelor of Physical Education and Sports will be of 8 semester ( four years) duration:

B.P.E.S. 1 year ( semester I and Semester II)

B.P.E.S. 2 year (Semester III and Semester IV)

B.P.E.S. 3 year (Semester V and Semester VI)

B.P.E.S. 4 year (Semester VII and Semester VIII)

A candidate, who –

Completed his/her Higher Secondary (10 + 2scheme) examination or Intermediate examination or the pre-university (10+2) or any other equivalent examination recognized by the M.P. Board of Secondary Education or any other Board recognized for this purpose by as equivalent thereof

Admission subject to being selected on the basis of admission tests prevailing in the year when admission is sought in the department.

After obtaining Indian or foreign qualifications recognized as equivalent to those mentioned in 2 (a) above by the ITM University Gwalior and on the basis of admission tests, shall be admitted to Semester – I for the degree of Bachelor of Physical Education & Sports

After completing the requirements of a three-year Bachelor's degree, candidate who meet a minimum CGPA of 7.5 shall be allowed to continue studies in fourth year of the undergraduate programme to pursue and complete the Bachelor's (Honors/Research) degree.

The provisions of ordinance 65A will be applicable for this course.

**Examination:** The examination will be conducted according to ordinance 65A

The medium of instruction shall be English .

**BPES SCHEME OF EXAMINATION**  
(As per Ordinance 65 A)



**SCHOOL OF SPORTS EDUCATION**

**NAME OF COURSE: BPES**

**SEMESTER: I**

**SUBJECT WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS**

S. No.	Subject Code	Subject Name & Title	Maximum Marks Allotted							Credits Allotted Subject wise			Total Credits	Remark
			Theory Slot			Practical Slot				Period per week				
			End Sem.	Mid Sem. MST (Two tests average)	Quiz/ surprise test/ Class participation/ assignment	End Sem.	Progressive Evaluation	Internal Viva	Total marks	L	T	P		
1.	PEL-101	Basic and Systemic Anatomy	60	20	20				100	3	2	-	5	
2.	PEL-102	Foundations of physical education	60	20	20				100	3	2	-	5	
3	PEL 103	English	60	20	20				100	3	2		5	
4.	PEP - 104	Athletics-I				60	20	20	100	-	-	3	3	
5.	PEP-105	Gymnastics-				60	20	20	100	-	-	3	3	
6.	PEP-106	Yoga				60	20	20	100	-	-	3	3	
Total Marks			180	60	60	180	60	60	600				24	

**Maximum Marks: (Theory) - 100**  
**(Practical) - 100**

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## SCHOOL OF SPORTS EDUCATION

NAME OF COURSE: BPES

SEMESTER: II

## SUBJECT WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS

S. No.	Subject Code	Subject Name & Title	Maximum Marks Allotted							Credits Allotted Subject wise			Total Credits	Remark
			Theory Slot			Practical Slot				Period per week				
			End Sem.	Mid Sem. MST (Two tests average)	Quiz/ surprise test/ Class participation/ assignment	End Sem.	Progressive Evaluation	Internal Viva	Total marks	L	T	P		
1.	PEL-201	Educational psychology	60	20	20				100	3	2	-	5	
2.	PEL -202	Methods in physical education/	60	20	20				100	3	2	-	5	
3.	PEL -203	Basic computer application	60	20	20				100	4	1	-	5	
4.	PEP -204	Athletics II				60	20	20	100	-	-	3	3	
5.	PEP-205	Basketball				60	20	20	100	-	-	3	3	
6.	PEP-206	Mass demonstration				60	20	20	100	-	-	3	3	
Total Marks			180	60	60	180	60	60	600				24	

Maximum Marks: (Theory) - 100

7 (Practical) - 100

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**SCHOOL OF SPORTS EDUCATION**

**NAME OF COURSE: BPES**

**SEMESTER: III**

**SUBJECT WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS**

S. No.	Subject Code	Subject Name & Title	Maximum Marks Allotted							Credits Allotted Subject wise			Total Credits	Remark
			Theory Slot			Practical Slot				Period per week				
			End Sem.	Mid Sem. MST (Two tests average)	Quiz/ surprise test/ Class participation/ assignment	End Sem.	Progressive Evaluation	Internal Viva	Total marks	L	T	P		
1.	PEL – 301	Physiology &Physiology of exercise	60	20	20				100	3	2	-	5	
2.	PEL – 302	Fitness nutrition &training	60	20	20				100	3	2	-	5	
3.	PEL – 303	Environmental science	60	20	20				100	3	2	-	5	
4.	PEP – 304	Badminton				60	20	20	100	-		3	3	
5.	PEP – 305	Volleyball				60	20	20	100	-	-	3	3	
6.	PEP – 306	Football				60	20	20	100	-	-	3	3	
Total Marks			180	60	60	180	60	60	600				24	

**Maximum Marks: (Theory) - 100**  
**(Practical) - 100**

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**SCHOOL OF SPORTS EDUCATION**

**NAME OF COURSE: BPES**

**SEMESTER: IV**

**SUBJECT WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS**

S. No.	Subject Code	Subject Name & Title	Maximum Marks Allotted							Credits Allotted Subject wise			Total Credits	Remark
			Theory Slot			Practical Slot				Period per week				
			End Sem.	Mid Sem. MST (Two tests average)	Quiz/ surprise test/ Class participation/ assignment	End Sem.	Progress ive Evaluati on	Intern al Viva	Total mark s	L	T	P		
1.	PEL – 401	Kinesiology	60	20	20				100	3	2	-	5	
2.	PEL – 402	Basics of Sports training	60	20	20				100	3	2	-	5	
3.	PEL – 403	Correctives in physical education	60	20	20				100	3	2	-	5	
4.	PEP – 404	Hockey				60	20	20	100	-	-	3	3	
5.	PEP – 405	Cricket				60	20	20	100	-	-	3	3	
6.	PEP – 406	Taekwondo/Judo				60	20	20	100	-	-	3	3	
Total Marks			180	60	60	180	60	60	600				24	

Maximum Marks: (Theory) - 100  
(Practical) - 100

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SCHOOL OF SPORTS EDUCATION

NAME OF COURSE: BPES

SEMESTER: V

SUBJECT WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS

Subject-Wise Distribution of Marks and Corresponding Credits							
S.	Subject	Subject Name &	Maximum Marks Allotted		Credits Allotted Subject wise	Total Credits	Remark
			Theory Slot	Practical Slot	Period per week		

No.	Code	Title	End Sem.	Mid Sem. MST (Two tests average)	Quiz/ surprise test/ Class participation/ assignment	End Sem.	Progressive Evaluation	Internal Viva	Total marks	L	T	P		
1.	PEL – 501	Management of Physical Education	60	20	20				100	3	2	-	5	
2.	PEL – 502	Tests& Measurement in Physical Education	60	20	20				100	3	2	-	5	
3.	PEL- 503	Sports Specialization –I	60	20	20				100	3	2	-	5	
4.	PEP – 504	Floorball				60	20	20	100	-	-	3	3	
5.	PEP – 505	Handball				60	20	20	100	-	-	3	3	
6.	PEP – 506	Teaching practice (activity)				60	20	20	100	-	-	3	3	
<b>Total Marks</b>			<b>180</b>	<b>60</b>	<b>60</b>	<b>180</b>	<b>60</b>	<b>60</b>	<b>600</b>				<b>24</b>	

Maximum Marks: (Theory)      - 100  
(Practical)                      - 100

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SCHOOL OF SPORTS EDUCATION

NAME OF COURSE: BPES

SEMESTER: VI

SUBJECT WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS

S. No.	Subject Code	Subject Name & Title	Maximum Marks Allotted							Credits Allotted Subject wise			Total Credits	Remark
			Theory Slot			Practical Slot				Period per week				
			End Sem.	Mid Sem. MST (Two tests average)	Quiz/ surprise test/ Class participation/ assignment	End Sem.	Progressive Evaluation	Internal Viva	Total marks	L	T	P		
1.	PEL - 601	Research processes	60	20	20				100	3	2	-	5	

		in Physical education												
2.	PEL – 602	Applied statistics in Physical education & Sports Sciences	60	20	20				100	3	2	-	5	
3.	PEL – 603	Sports Specialization –II	60	20	20				100	3	2	-	5	
4.	PEL – 604	Kho/Kho/& Kabaddi				60	20	20	100	-	-	3	3	
5.	PEP – 605	Tennis				60	20	20	100	-	-	3	3	
6.	PEP – 606	Teaching practice ( theory )				60	20	20	100	-	-	3	3	
<b>Total Marks</b>			<b>180</b>	<b>60</b>	<b>60</b>	<b>180</b>	<b>60</b>	<b>60</b>	<b>600</b>				<b>24</b>	

Maximum Marks: (Theory) - 100  
(Practical) - 100

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SCHOOL OF SPORTS EDUCATION

NAME OF COURSE: BPES

SEMESTER: VII

SUBJECT WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS

S. No.	Subject Code	Subject Name & Title	Maximum Marks Allotted							Credits Allotted Subject wise			Total Credits	Remark
			Theory Slot			Practical Slot				Period per week				
			End Sem.	Mid Sem. MST (Two tests average)	Quiz/ surprise test/ Class participation/ assignment	End Sem.	Progressive Evaluation	Internal Viva	Total marks	L	T	P		
1.	PEL - 701	Sports biomechanics	60	20	20				100	3	1	-	4	
2.	PEL - 702	Sports journalism & mass	60	20	20				100	3	1	-	4	



		media/Adapted physical education												
3.	PEL - 703	Talent identification	60	20	20				100	3	1	-	4	
4.	PEP - 704	Internship							100	-	-		6	
5.	PEP - 705	Weight training				60	20	20	100	-	-	3	3	
6.	PEP - 706	Table Tennis				60	20	20	100	-	-	3	3	
<b>Total Marks</b>			<b>180</b>	<b>60</b>	<b>60</b>	<b>180</b>	<b>60</b>	<b>60</b>	<b>600</b>				<b>24</b>	

**NOTE:**The Internship program will consist of 75marks and evaluation of the report will be of 25 marks

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**NAME OF COURSE:** BPES

**SEMESTER:** VIII

**SUBJECT WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS**

S. No.	Subject Code	Subject Name & Title	Maximum Marks Allotted							Credits Allotted Subject wise			Total Credits	Remark
			Theory Slot			Practical Slot				Period per week				
			End Sem.	Mid Sem. MST (Two tests average)	Quiz/ surprise test/ Class participation/ assignment	End Sem.	Progressive Evaluation	Internal Viva	Total marks	L	T	P		
1.	PEL - 801	Health education	60	20	20				100	3	2	-	5	
2.	PEL - 802	Sports medicine and	60	20	20				100	3	2	-	5	

		Physiotherapy												
3.	PEL - 803	Curriculum designs	60	20	20				100	3	2	-	5	
4.	PEL - 804	Dissertation							100	-	-		6	
5.	PEP - 805	Coaching lessons				60	20	20	100	-	-	3	3	
<b>Total Marks</b>			<b>180</b>	<b>60</b>	<b>60</b>	<b>100</b>	<b>20</b>	<b>20</b>	<b>500</b>				<b>24</b>	

**NOTE: The distribution of marks for the dissertation will be as follows: Evaluation of thesis =50 marks , pre -submission viva voce +25 marks and external viva +25marks**

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Program Outcomes (PO):

POs of General Higher Education Programs: Students BPES degree programs at the time of graduation will be able to do :

PO's UG programs

PO 1 Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives

PO2 Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.

PO3 Social Interaction: Elicit views of others, mediate disagreements and help reach conclusions in group settings.

PO4 Social Interaction: Elicit views of others, mediate disagreements and help reach conclusions in group settings.

PO 5 Effective Citizenship: Demonstrate empathetic social concern and equity-cantered national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.

PO 6 Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.

PO 7 Environment and Sustainability: Understand the issues of environmental contexts and sustainable development

PO 8 Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological changes

Programme Specific Outcomes (PSO) of B.P.E.S.:

The programme specific outcomes are:

PSO 1. To provide each student with the opportunity to participate in a comprehensive programme consisting of skill development, lead up games, team sports and physical fitness activities.

PSO2. Train students achieve skills, and strategies associated with different sports, and get learning experiences of physical activities.

PSO 3. To inculcate in students, the spirit of co-operation, leadership, fair play and sportsmanship.

PSO 4. To provide foundation of sport studies with the knowledge of various science viz exercise physiology, sport psychology etc.

PSO 5. To promote mass participation in physical education and sports through intramural and extramural programmes.

PSO 6. Achieve a thorough knowledge and issues related to sports.

PSO 7. To enable students to apply knowledge, skills and expertise gained from the programme to sport events.

PSO 8. Students will acquire a comprehensive knowledge and sound understanding of fundamentals of Physical Education.

PSO 9. Students will develop practical, theoretical skills in Physical Education.

PSO 10. Students will be prepared to acquire a range of general skills, to specific skills to communicate with society effectively and learn independently.

## BPES SEMESTER - I

### BASIC AND SYSTEMIC ANATOMY- PEL 101

- CO-1 Recall about the skeletal system, muscular system, Cardiovascular system and Respiratory system. BL-1
- CO-2 Describe structure and function of cells and tissues. BL-2
- CO-3 Apply the knowledge of various systems in physical education BL-3
- CO-4 Simplify the different structures for students to understand. BL-4
- CO-5 Evaluate the current working status of different systems of body of an athlete. BL-5

#### Unit - I Introduction

##### 1.1 Meaning and Concept of Anatomy

##### 1.2 Need and Importance of anatomy for the students of Physical Education.

##### 1.3 structure and functions of cells.

- i-Structure of cell

- ii-Properties of cell

- iii-Constituents of cell and their functions

##### 1.4 structure and functions of tissues

- i-definition of tissue

- ii-Classification of tissues

- iii-Structure and functions of various types of tissues

#### Unit – II Skeletal system

##### 2.1 composition of bone

- i-Microscopic structure of bone

- ii-Classification & Functions of bones

##### 2.2 Joints

- i- Definition & classification of joints

- ii-Anatomical structure of synovial joints

- iii-Characteristics of synovial joints

- iv- movements around a joint

#### Unit - III

##### 3.1 Muscles

- i-Structural classification of muscles

- ii-Functional classification of muscles
- iii-Microscopic structure of muscles (skeletal, cardiac and smooth)
- iv-Functions of muscles (skeletal, cardiac and smooth)
- v-Properties of skeletal muscles

#### Unit - IV

- 4.1 Cardio – vascular system
  - 4.1.1-Introduction about heart and cardiovascular system
    - i-Structure of heart
    - ii-Structure of artery, veins and capillaries
    - iii-Types of blood circulation
  - v-Pumping action of heart and its regulation

## Unit - V

### 5.1 Respiratory system

- i-Organs of respiratory system
- ii-Structure of organs
- iii-Types of respiration
- iv-Muscles of respiration
- v-Mechanism of respiration

#### **Books Recommended :**

MC Clerg, Anderon T., Human Kinetics and Analyzing Body Movements,London : William Hein Mann Medical Book Ltd.  
Davis, D.V. Gray's Anatomy : London : Longmans Green and Co. Ltd.  
Pcatce, Evelyn B., Anatomy and Physiology for Nurse : London faber andfaber Ltd.  
Pearce, J.W. Anatomy for students and teachers of Physical Education,London : Edward Arnold and Co.  
Anderson, T. Mc. Clerg. Human Kinetics and Analyzing Body Movements,London : William Heinman Medical Books Led. 1961.

## BPES SEMESTER – I

### FOUNDATION OF PHYSICAL EDUCATION PEL 102

#### Course Outcomes

- CO1 Recognize the scope of physical education BL1
- CO 2 identify the objectives of the Olympics BL 2
- CO3 Apply the benefits of Fitness movement in the society BL 3
- CO4 Analyze the physical education programs in Pre and Post Independence BL 4
- CO 5 Justify the uses of camping/outdoor education for students BL 5

#### Unit – I

##### **Introduction**

- 1.1 Meaning and Definition of Physical Education.
- 1.2 Aims and objective of Physical Education.
- 1.3 Scope of Physical Education.
- 1.4 Need and Importance of Physical Education
- 1.5 Physical Education as an Art as Science

#### Unit – II

##### Olympic Games

- 2.1 History of Olympics, Objectives Of Olympics
- 2.2 Olympic Motto And Olympics Flag
- 2.3Olympics Charter
- 2.4 Opening And Closing Ceremonies
- 2,5 IOC,IOA.

#### Unit – III

- 3.1Meaning of Camp
- 3.2Aims and Objective of the Camps
- 3.3Uses of Camping /outdoor education.
- 3.4Types of Camp and Agencies promoting Camping.
- 3.5 Organization of Camps and factors effecting its organization.

#### Unit – IV

- 4.1 Definition &components of physical fitness.
- 4.2 Benefits of Physical fitness.
- 4.3 Effect of Exercises on muscular ,circulatory ,digestive ,Respiratory system.
- 4.4Warming up and cooling down exercises and their Importance.

#### Unit – V

- 5.1Physical Education in ancient India.
- 5.2 Physical Education in the city states of Greece.
- 5.3Survey of modern physical education in India ,pre and post independenceperiod.
- 5.4 Physical education and sports institutions in India

#### References:

Bucher, Charles,A. Foundation of physical Education St. Louis: The C.V.Mosby Co.1986 dollar 9.50.  
Nixon Engene D. and Couson W. An introduction to physical Education ,Philadelphia,London: W.B.Saunders Co.

1969,  
Oderteuter ,Delbert : Physical Education , New York ,Harper and Brothers publishers1970.  
Sharma ,Jakson ,R. Introduction to physical education , New York: A.S Barnes and Co.1964.  
WillaimsJesesFeiring : The Principle of Education , Philadelphia : W.B.Saunders Co.

## BPES SEMESTER I

Subject: English –I PEL 103

CO 1	Recall nouns and pronouns	BL1
CO 2	Discuss interview skills	BL 2
CO3	Apply the method of report writing	BL3
CO 4	Analyze communication skills	BL4
CO5	Determine presentation skills	BL 5

Unit- 1

1.1 Developing Grammatical Skills  
1.2 Articles  
1.3 Nouns, Pronouns  
1.4 Adjectives and adverbs

Unit - 2

2.1 Correspondence  
2.2 Business letters  
2.3 Notices  
2.4 Presentation Skills  
2.5 Interview Skills  
2.6 Group Discussion  
2.7 Debate  
2.8 Speech  
2.9 Seminar skills

Unit - 3

3.1 Welcome and Vote of thanks  
3.2 Writing of Reports  
3.3 Précis Writing

Unit - 4

4.1 Problematic  
4.2 Reflective  
4.3 Imaginative  
4.4 Communication Skills and Personality development

Unit -5

5.1 Writing paragraphs and essays on topics concerning sports and general awareness.  
5.2 Comprehension a Precise writing  
5.3 Comments on reading material

### References:

‘High School English Grammar and Composition by P.C. Wren and M.Martin,Published by S.Chand and Com. Ltd. Ram Nagar, New Delhi 110055.

An intensive Course in English – Aremedial work book C.d. Sidhu. Published by PryaAdarkar, Orient Longman Ltd. Kamani Marg, Ballard Estate Bombay 400048.

Living English Literature Practice Book for Foreign students W. Standard Alton,Orient Longman Ltd. 1/24, Asaf Ali Road, New Delhi 110002.

### GAMES (PRACTICAL)

### PEP 104 ATHLETICS I, PEP 105 GYMNASTICS AND PEP 106 YOGA

Unit- I. History of game, Federations and Competitions.

# **BPES SEMESTER – I**

Unit- II. Rules and their interpretation.

Unit- III. Fundamental and Advance skills.

Unit- IV. Equipments and their specification and maintenance

.Unit- V. Layout and maintenance of playfields

## **BPES SEMESTER – II**

### **BPES SEMESTER – II**

#### **EDUCATIONAL PSYCHOLOGY PEL 201**

Course outcomes

CO 1 Identify the sources of psychology BL 1

CO 2 .Discuss the personality of sportsmen BL 2

CO 3 Apply factors of motor learning BL3

CO 4 analyze role of motives BL 4

CO 5 Justify the relationship of extrinsic and intrinsic motivation BL5

CO 6 Design long term preparation plans keeping in mind psychological aspects BL6

Unit I :

1.1 Meaning definition & Nature of Psychology

1.2 Sources of psychology

1.3 Psychology as a Sciences

1.4 Branches of Psychology

1.5 Importance of Psychology in Education with special reference to Physical Education.

Unit II:

2.1 Growth and Development

2.2 Meaning of growth and Maturation

2.3 Development of maturation

2.4 Behavioral development with special reference to perceptual ,Language intellectual social, emotional and physical

2.6 Individual differences.

2.7 Heredity and environment as cause of individual differences

2.8 Interaction of heredity and environment.

Unit III :

3.1 Learning -Meaning and nature of learning

3.2 Principles of learning

3.3 Types of learning

3.4 Theories of learning (Trial and error ,conditioned reflex ,insight theory, learning by imitation ).

3.5 Meaning of transfer of training. Conditions of transfer of training. learning curve.

3.6 How to overcome plateau

Unit IV:

4.1 Motivation

i. Meaning of motivation. concept of need, drive, motive, incentive and achievement

ii. Types of Motivation

iii. Role of motivation in teaching physical activities

4.2 Emotion

i. Meaning and nature of emotion. Types of emotion.

ii. Emotional experiences (anxiety and fear ) and their effect on learning of physical activities.

Unit V;

5.1 Personality

i. Meaning and nature of personality.

ii. Physiological and social factors in personality.

ii. Development of personality

5.2 Memory

i. Definition of memory, Types of Memory.

## **BPES SEMESTER – II**

- ii. Mechanism of the process of remembering ,memory training. Meaning of forgetting ,Reasons of forgetting, curves of forgetting, Importance of memory in learning physical activities.

### References :

1. Boaz, G.D General psychology , Madras: Boaz institute of Psychological Service,1957
2. Skinner, C. E. Educational Psychology ,New Delhi : Prentice Hall of India Pvt. Ltd.
3. Lindren, H. E. Educational Psychology in classroom ,New York :John Wiley & Sons Inc. 1963.
4. Kamlesh ,M.L. Psychology of Physical Education and Sports , New Delhi Metropolitan Bros.
5. Snum, Richar M. Psychology in Sports ,Surjeet Publication ,1982
6. Silva ,J.M. and Weinberg R.S Psychology of foundations of Sports , Illinois , Human Kinetics Publishers Inc.

### METHODS IN PHYSICAL EDUCATION PEL 202

- CO1- To recall he concept of teaching method BL-1  
CO2- To describe the techniques of teaching and its importance during the class. BL-2  
CO3- To participate in inter university competition and to conduct classes in smooth manner BL-3  
CO4-To analyze the effectiveness of teaching tools BL-4  
CO5~ To create the importance of tournament and competition among students BL-5  
CO6 – To create and design lesson plan ,teaching aids .BL6

### Unit I

- 1.1Meaning of the term" teaching method" its scope and importance  
i. The factors to be considered in determining the method of teaching.  
1.2 Types of teaching methods  
i.Part-whole method, whole part method, command method, discussion method, project method, demonstration method.  
1.3Principles of teaching

### Unit II

1. Presentation Techniques
  - i. Personal preparation.
  - ii. Technical preparation.
  - iii. Steps of presentation.
  - iv. Command and their techniques.
  - v. Types of class management.
2. Lesson planning
- 2.3 Types of lessons and their values
  - i. Objectives of different lesson plans a
  - ii-different parts of the lesson plan .
  - iii. Skill practice/group work.
  - iv. Class activity/recreation part (reassembly revision and dismissal).

### Unit III

- 3.1 Organization and conduct of competitions
  - i. Track and field
  - ii. Gymnastics.
  - iii. Weight lifting, body building and best physique contest.
  - iv. Wrestling and combatives.
  - v. Swimming, diving -aquatics.
  - vi. Games and sports tournaments.
- 3.2 Tournaments - organization, meaning and their types
  - i. Knock -out types of elimination double elimination tournaments..
  - ii. League-(single-double )or round robin type.
  - iii. Combination type of tournament.
  - iv. Challenge type (ladder-pyramaid type).

### Unit IV



## **BPES SEMESTER – II**

### 4.1 Audio-visual aids and teaching gadgets

- i. Values and uses of audio-visual aids.
- ii. Criteria for selecting the aids.
- iii. Steps to be followed in using teaching aids.
- iv. Special events –Demonstration, .Play days. ,Sports for all.

### Unit V

#### 5.1 Marking of track and play fields:

- i. Track and field - track 400 m standard and 200m.
- ii. Play field - football, volleyball, basketball, hockey, badminton, kabaddi, kho- kho, softball as per international regulation.

### References:

1. Tirunaryanan, c. and hariharan, s. methods in physical education, karai kudi south india press, 1962.
2. Kozman, b. cassidy, rosalind and jakson, c.d., methods in physical education, london: w.b. saunders company, 1960.
3. Knapp, clyde and hagman, e.p. teaching methods for physical education, New York: Mc graw hill book co., 1948.

### BASIC COMPUTER APPLICATIONS PEL 203

#### COURSE OUTCOMES

- |      |   |      |
|------|---|------|
| CO1  | Identify the components of computer                               | BL1  |
| CO 2 | describe the method of word processing.                           | BL 2 |
| CO3  | apply the knowledge in Microsoft excel                            | BL 3 |
| CO 4 | Illustrate the power point presentation techniques.               | BL 4 |
| CO5  | Select the appropriate software for use in physical education     | BL 5 |
| CO6  | Develop physical education lessons with appropriate illustrations | BL 6 |

### Unit I: Introduction to Computer

- 1.1 Meaning & Characteristics of Computer,
  - i Application of Computer with special reference to Physical Education,
  - ii Block Diagram of Computer, classification of Computer,
- 1.2 Introduction to CPU, CU, ALU Memory Unit
- 1.3 Auxiliary Storage Device , Input Devices ,Output Devices ,File ,Program Software –types, Hardware, Language Processors.

### Unit II: Introduction to OS Windows

- 2.1 Definition ,  
Operating System, Objectives and Function of an Operating System,
- 2.2 Types of an Operating System, Windows Features, Windows Desktop setting
- 2.3 Files and Folders, Menus and Icons Windows Accessories, Recycle Bin.

### Unit III: MS-Word

- 3.1 Definition and Types of Word Processor ,
- 3.2 Creating document in MS-word, Formatting features of MS-Word ,Standard Toolbar ,Drawing toolbar Header & Footer ,
- 3.3 Table Handling features ,Insertion of files ,symbols ,pictures, shapes ,clip art and charts,
- 3.4 Equation editor, Spelling and Grammar ,Font color , highlighting and shading.

### Unit IV: MS-Excel

- 4.1 Basic of Electronic Spread Sheet, Saving & quitting worksheet,
- 4.2 Opening & Moving in a worksheet, toolbar and menus, working with formulas and cell referencing, working with graph, functions, and data sorting.

## **BPES SEMESTER – II**

### Unit V: Ms-Power Point and Internet

5.1 Creating presentation, working with different menus, editing and formatting text, inserting data's, pictures, organization charts and graph, drawing, slide show, animation of slides,  
5.2 Internet & World Wide Web (www) ,Electronic Mail, Search Engines, locating information on internet, downloading.

#### References :

- a. Computer Fundamentals: Dr. V Rajaraman.
- b. Fundamentals of Information Technology : Chetan Shrivastava,kalyani Publisers
- c. Fundamentals of Information Technology : Alexis Leon Techword and Vikash Publishing House .
- d. MS –Office:Ron Mansfield ,BPB Publication.
- e. MS-Word 2000: Thumb Rules and :Dr.Snigdha Banerjee ,New Age International Publication.

### GAMES (PRACTICAL)

#### **PEP 204 ATHLETICS II, PEP 205 BASKETBALL , PEP 206 MASS DEMONSTRATION**

Unit- I. History of game, Federations and Competitions.

Unit- II. Rules and their interpretation.

Unit- III. Fundamental and Advance skills.

Unit- IV. Equipments and their specification and maintenance.

Unit- V. Layout and maintenance of playfield

#### **PEP 206 MASS DEMONSTRATION**

Mass demonstration exercises will be taught with wand,umbrella,dumbbells,lezim,hoops,,sari,tipri,Baloons etc

## **BPES SEMESTER – III**

### **PHYSIOLOGY AND PHYSIOLOGY OF EXERCISE PEL 301-**

- |      |   |      |
|------|---|------|
| CO-1 | Recall meaning and concept of exercise physiology.                                | BL-1 |
| CO-2 | Summarize the mechanism of various systems.                                       | BL-2 |
| CO-3 | Apply the knowledge of Physiology in physical education.                          | BL-3 |
| CO-4 | Simplify the functioning of various systems to the athletes                       | BL-4 |
| CO-5 | Justify the importance of various Physiological aspects to the beginner athletes. | BL-5 |
| CO-6 | Design some interesting warming up exercises for athletes.                        | BL-6 |

#### Unit I Introduction

- 1.1 Meaning and concept of the term physiology.
- 1.2 Need for and importance of physiology for the students of physical education.
- 1.3 Meaning and concept of exercise physiology.
- 1.4 Need for and importance of exercise physiology in physical education and sports.

#### Unit II Cardiopulmonary System

- 2.1 The Cardio- vascular system and Blood.
  - i. Cardiac – cycle.
  - ii. Definition of cardiac cycle
  - iii. Concept of cardiac cycle with the help of diagram.

- 2.2 Blood pressure, its maintenance and regulation
  - i. Definition of blood pressure.
  - ii. Types of blood pressure.
  - iii. Measurement of blood pressure.
  - iv. Regulation of blood pressure.
- 2.3 The cardiac output and its regulation
  - i. Concept of cardiac output.
- 2.4 The respiratory System
  - i. Mechanism of Respiration.
  - ii. Pulmonary ventilation and its regulation.
  - iii. Second – wind, Oxygen debt.
- Unit III Digestive, nervous and sensory system
- 3.1 Digestive System
  - i. Absorption of Food
  - ii. General metabolism, metabolism of carbohydrates, fats and proteins.
- 3.2 Nervous System
  - i. Functions of the important parts of the nervous system, cerebrum, medulla oblongata, thalamus, cerebellum and spinal cord.
  - ii. Functions of autonomic nervous system.
- 3.3 Sensory System
  - i. General sensations (cutaneous and kinesthetic)
- 3.4 Brief knowledge about various forms of senses with special reference to vision and hearing.
- Unit IV Excretory, Endocrine and Reproductive Systems
- 4.1 The excretory System –
  - i. Excretion of water from the body through skin (sweating), lungs, kidney and GI Tract.
- 4.2 The Endocrine System -
  - i. Secretion of endocrine glands (Pituitary, Thyroid, Adrenal and Pancreas)
  - ii. Role of their secretion in growth, development and body functions.
- 4.3 Reproductive System -
  - i. Physiology of human reproduction.
  - ii. Basic knowledge of transmission of hereditary characteristics.
- Unit V Physiology of Exercise
- 5.1 Effect of exercise on respiratory, circulatory, and muscular system.
- 5.2 Changes during muscular contraction.
- 5.3 Warming-up, conditioning and training.
- 5.4 Stitch and cramps.

#### References:

1. Anthony, C. Parher and Kolthoff N. Jane, Text Book of Anatomy and Physiology, St. Louis : The C.V.: Mosby Company.
2. Chatterjee, C.C. Human Physiology, Calcutta, Medical Allied Agency.
3. Clarke, David, H. Exercise Physiology, New Jersey : Prentice Hall Inc., Englewood Cliffs.
4. Translated by Myshne, David, A. Text Book for Nurses Training Schools, Moscow, NIR Publishers.
5. Pearce, Evelyn, C. Anatomy and Physiology for Nurses. Calcutta, Oxford University Press.

### BPES III SEM

#### FITNESS TRAINING &NUTRITION PEL 302

CO 1	Recognize the role of diet in sports performance	BL 1
CO2	Interpret the role of hydration in physical activity.	BL 2
CO 3	Calculate daily caloric requirement and expenditure	BL3
CO4	Analyze the common myths of weight loss	BL4
CO 5	Select a balanced diet for school children	BL 5
CO6	Create and prepare weight management plans	BL6

#### Introduction to Sports Nutrition

- 1.1 Meaning and Definition of Sports Nutrition
- 1.2 Basic components of Nutrition
- 1.3 Factor to consider for developing nutrition plan
- 1.4 Balance diet and its components, Nutritional deficiencies.
- 1.5 Understanding of malnutrition and nutritional supplements.

## Unit-II

Nutrients: Ingestion to energy metabolism

- 2.1 Carbohydrates, Protein, Fat – Meaning, classification and its function
- 2.2 Role of carbohydrates, Fat and protein during exercise
- 2.3 Vitamins, Minerals, Water – Meaning, classification and its function
- 2.4 Role of hydration during exercise
- 2.5 Establishing daily caloric requirement and expenditure

## Unit-III

Nutrition and Weight Management

- 3.1 Obesity – Definition, meaning, types and causes of obesity; Health risks associated with Obesity and Solutions for Overcoming Obesity
- 3.2 Concept of BMI (Body mass index), Dieting versus exercise for weight control,
- 3.3 Common Myths about Weight Loss
- 3.4 Concept of weight management in modern era, Factor affecting weight management

## Unit-IV

Steps of planning of Weight Management

- 4.1 Determination of desirable body weight
- 4.2 Daily calorie intake and expenditure in weight management
- 4.3 Role of diet and exercise in weight management
- 4.4 Designing diet plan and exercise schedule for weight gain and loss
- 4.5 Balanced diet for Indian School Children.

## UNIT V

- 3.1 Metabolism in sports
- 3.2 Food Safety –Factors Affecting Nutrition, Energy – BMR, RDA, Weight and Body Composition of Athletes
- 3.3 Carbohydrate loading, sports supplement
- 3.4 Hydration in Athlete, Fluids and electrolyte replacement

- 1- Bates M. Health Fitness Management 2<sup>nd</sup> USA: Human Kinetics 2008
- 2- Fink, H.H., Burgoon, L.A., & Mikesky, A.E. Practical Applications in Sports Nutrition. 4th

- . Jones and Bartlett Publishers 2006
- 3- Lancaster S. & Teodororessu, R. Athletic Fitness for Kids 7<sup>th</sup> USA: Human Kinetics. 2008
  - 4 Nicholas bjorn Fitness Nutrition: The Ultimate Fitness Guide: Health, Fitness, Nutrition and Muscle Building - Lose Weight and Build Lean Muscle (Muscle Building Series 5<sup>th</sup> Create Space Independent Publishing Platform

## ENVIRONMENTAL SCIENCE PEL 303

### COURSE OUTCOMES

- |      |  |      |
|------|--|------|
| CO 1 | . Identify the need of environmental studies and their importance                  | BL1  |
| CO 2 | Explain how the earth works and how we, as human beings, fit into that.            | BL 2 |
| CO 3 | Use the knowledge of the ecosystem and its functions in the society.               | BL 3 |
| CO4  | analyze environmental problems as well as the risks associated with these problems | BL 4 |
| CO5  | Relate the values and threats to bio-diversity                                     | BL 5 |
| CO6  | Design programs for the conservation of natural resources                          | BL6  |

### UNIT – I

- 1.1 Introduction, concept & dynamics of environment. Role, necessity and scope of environmental science. Biosphere- Its segments and relationship.
- 1.2 Atmosphere: Definition, characteristics & important features. Major layers of atmosphere (brief idea)
- 1.3 Emission of temperature in atmosphere & its effects. Physical and chemical properties of atmosphere.

### UNIT – II

- 2.1 Hydrosphere : Introduction and brief idea of major types (fresh and marine) Hydrological cycle.
- 2.2 Physical and chemical properties of water. Biological properties of water.

### UNIT – III

- 3.1 Lithosphere : Introduction and basic idea of earth's structure.
- 3.2 Soil component ; mineral matter, organic matter, soil air, soil water, soil organisms. Physical and chemical properties of soil.
- 3.3 Types of soil based on particle size.
- 3.4 Fertility of soil, improvement of soil fertility by natural and artificial methods, use of biofertilizers.
- 3.5 Soil erosion ; introduction, causes & process of soil erosion, control measures of soil erosion.

### UNIT – IV

- 4.1 Environmental degradation – meaning, definition, process, causes and types – natural and man induced (brief idea)
- 4.2 Accelerated rate of extreme events by anthropogenic activities. Exploitation of natural resources.

### UNIT – V

- 5.1 Consequences of environmental degradation with reference to ; Population explosion. Industrialization and Urbanization. Agriculture Development.
- 5.2 Green House effect meaning, major sources of green house gases and causes. Climate change, Global warming and its effects.

### Text & References:

1. Khaushik & Khaushik, “Fundamentals of Environmental Studies”
2. Somvanshi & Dhupper “Fundamentals of Environmental Studies”
3. Gauba & Bisht “Environmental Studies, Challenges & Solutions A quick Compendium
4. Asthana & Asthana “ A textbook of Environmental Studies

## PRACTICALS

PEP 304 Badminton , PEP 305 Volleyball , PEP 306 Football

.

Unit- I. History of game, Federations and Competitions.

Unit- II. Rules and their interpretation.

Unit- III. Fundamental and Advance skills.

Unit- IV. Equipments and their specification and maintenance.

Unit- V. Layout and maintenance of playfield

.

## BPES IV SEM

### KINESIOLOGY PEL 401

#### Course Outcomes:

CO1: recall the concepts of Kinesiology and fundamental of Mechanisms. BL 1

CO2: describe the Laws of motion and their application to sports activities BL2

CO3: illustrate the anatomical concepts. BL 3

CO4: classify the body movements and body mechanics. BL4

CO5: evaluate the motor skills of daily living. BL5

CO6: apply the knowledge of kinesiology and mechanics of prevention of injury. BL6

#### Unit I: Introduction

1.1 Definition and Brief history.

1.2 Aims and objective of Kinesiology.

1.3 Role of Kinesiology in Physical Education

1.4 Fundamental concepts:

1.5 Definition and brief explanation of the following terms and their application to the human body

1.6 Axes and Planes, Centre of Gravity, Line of Gravity Base, Starting Positions.

#### Unit II: Anatomical Concepts

2.1 Review of classification of joints and muscles, Terminology of fundamental movements.

2.2 Types of Muscle-Contraction (Isometric and Isotonic – concentric, Eccentric), All or None Law, Reciprocal innervations and inhibition group action of muscles and Muscular Co-ordination.

2.3 Major characteristics location and action of major joints of shoulder, hip, knee, elbow, forearm and wrist joints. Location and actions of major muscles at these joints.

#### Unit III: Mechanical Concepts

3.1 Concept of mechanical basic of Kinesiology and its application it physical education and Sports.

3.2 Definition and brief explanation of following basic terms :

Mass, weight, force, motion, equilibrium, friction, speed, velocity, and momentum.

#### Unit IV: Kinesiological fundamental of Mechanisms

4.1 Simple Mechanics found in the Muscular skeletal system (Leverage and its application to human body.

4.2 Laws of motion and their application to sports activities.

4.3 Forces :

i. Moving one's own body.

ii. Giving impetus to external objectives,

iii. Receiving impetus.

4.4 Equilibrium: Role of equilibrium in sports and games.

#### Unit V: Application

5.1 Application of basic mechanical principles to walking, running and jumping.

5.2 Motor skills of daily living.

5.3 Application of mechanics prevention of injury.

#### Reference:

1. Brower, Marion, R. Efficiency of Human Movement. Philadelphia : W. B. Saunders Co. 1966-Dollar.

2. Cooper, John, M. and R.B. Glassgow . Kinesiology . St Louis : C.V. Mosby Company i, 1963.
3. Scott M. Gladys. Analysis of Human Motion, New York .
4. Wells, Katherine P. Kinesiology , Philadelphia. W.B. Saunders Co., 1966.
5. James, G. Hay, J. Gavin Reid. The Anatomical and mechanical Bases of Human Motion. Prentice Hall Inc. New Jersey.
6. Rasch Philip J. and P.K. Burke. Kinesiology and Applied Anatomy. Philadelphia. : LEA and Febiger, 1967.
7. Duan, John W. Scientific Principles of Coaching . Englewood cliffs, N.J. Prentice Hall Inc. 1966.
8. Duvall Elien Neal. Kinesiology . Englewood Cliffs , N.J. Prentice Hall Inc. 1956.

#### BPES SEMESTER – IV

##### BASICS OF SPORTS TRAINING PEL 402

- CO 1 identify the fundamental concepts of the associated terms BL 1
- CO2 Discuss important motor abilities BL2
- CO3 Apply skills to train different fitness components and related planning BL3
- CO 4 Categorize fitness components and how to train them BL4
- CO5 Select appropriate types of periodization in training BL5
- CO6 Create training programs BL 6

##### Unit - I Sports Training

- 1.1 Definition of terms - Conditioning, Teaching, Coaching and Sports Training.
- 1.2 Importance of sports training
- 1.3 Aim, Tasks and Characteristics of Sports Training.
- 1.4 Principles of Sports Training.

##### Unit - II Biomotor abilities and training means -

- 2.1 Concept of biomotor abilities & definition of important motor abilities – cardio – respiratory endurance, muscular endurance, strength, speed, power, agility, flexibility, co-ordination, balance.
- 2.2 Training means and methods for developing various fitness components.

##### Unit - III Warming up and cooling down

- 3.1 Meaning,significance & Types of warming up
- 3.2 General guidelines of warming up
- 3.3 Methods of warming up
- 3.4 Components of warming up
- 3.5 Physiological basis of warming up
- 3.6 Cooling down

##### Unit - IV Environmental factors and sports performance

- 4.1 Introduction
- 4.2 Variation in temperature
- 4.3 Humidity
- 4.4 Altitude
- 4.5 Sports programme at high altitude
- 4.6 Physiological changes during sports program at high altitude

##### Unit – V

##### 5.1 Preiodisation

- i. Concept of periodisation and its importance.
- ii. Different periods of training and their duration.
- iii. Types of periodization.
- iv. Aim and content of different training periods.

##### 5.2 Training cycles

##### References:

1. Essentials of Physical Education, Dr. Ajmer Singh, Dr. Jagtar Singh Gill, Dr. Jagdish Bains, Dr. Rachhpal Singh Brar, Kalyani Publishers, Ludhiana, New Delhi, Noida (UP)
2. Science of Sports Training, Dr. A.K. Uppal, Friends Publications, New Delhi (India)
3. Science of Sports Training, Hardayal Singh
4. Bratty, s perceptual and motor development in infants and children. Prentice hall, 1979
5. Harre, d. principles of training.

## CORRECTIVES IN PHYSICAL EDUCATION PEL 403

### COURSE OUTCOMES

- CO1-Recall the various postural deviations BL 1
- CO2-Describe the common sports injuries BL 2
- CO3 Demonstrate active and passive exercises BL 3
- CO4 -Illustrate method of organizing corrective classes BL4
- CO5 Evaluate the massage techniques BL 5
- CO6- Design new exercises for postural defects BL6

### Unit I:

- 1.1 Meaning and scope of “Correctives” in Physical Education.
- 1.2 Common postural deviations, their causes and remedial exercises :
  - i Kyphosis (ii) Scoliosis (iii) Lordosis
  - (iv) Knock Knees (v) Bowlegs (vi) Flat – feet.
- 1.3 Method of Organizing corrective Gymnastic Classes and its advantages.

### Unit II:

- 2.1 Scope of Sports injuries in Physical Education
- 2.2 Prevention of injuries:.
- 2.3 Common sports injuries and their immediate treatment:
  - (i) Contusion (ii) Abrasion (iii) Laceration
  - (iv) Sprain (v) Strain (vi) Hematoma
  - (vii) Fracture (viii) Dislocation.

### Unit III: Rehabilitation

- 3.1 Definition, aims and objectives and scope of rehabilitation.
- 3.2 Goals of rehabilitation.
- 3.3 An introduction of effects and uses of Therapeutic Modalities in rehabilitation.
  - i Cold Therapy ii Infra Red Radiation
  - iii Contrast Bath iv Wax Bath Therapy
  - v Hydrotherapy (Exercises under water).

### Unit IV:

- 4.1 Definition and scope of Therapeutic Exercises in Athletic injuries.
- 4.2 Classification, Physiological effects and uses of the following:
  - i Active Exercise (Free, Assisted and Resisted, Movements).
  - ii Passive Exercises (Relaxed and forced movements)
  - iii An introduction to progressive resistance exercises methods,
- 4.3 Techniques of Therapeutic Exercises:
  - i Muscles Strengthening Exercises.
  - ii General Principles of Muscle Strengthening.
  - iii Manual-Muscle testing.
  - iv Stretching and Mobilizing Exercises
  - v.. Testing of common soft tissue tightness or contractures and suitable exercises to stretch them.

### Unit V: Therapeutic and Sports Massage

- 5.1 Definition and brief history of massage and remedial exercises.
- 5.2 General approach to a Massage Manipulation.
- 5.3 Common Physiological effects of Massage.
- 5.4 Common Massage Manipulations used in sports and Athletics and their therapeutic uses.
- 5.5 Contra – indications of massages in general.
- 5.6 Techniques of Massage for the limbs, back and neck.

### Books Recommended:

- 1. First Aids to the Injured, New Delhi, St. John Ambulance Association.
- 2. Johnson, W.R. and Buskirk, E.R. “Science and Medicine of Exercise and Sports”, New York, Harper and Row, 1974.
- 3. O'Donoghue D. “Treatment of Injuries to Athletes”, Philadelphia: W.B. Saunders and Company
- 4. Pande, P.K. Gupta, L.C.: ‘outline of sports Medicine’, New Delhi Jaypee Broth, 1987.
- 5. Reilly Thomas: ‘Sport Fitness and sports Injured’, London, Faber and Faber Ltd., 1981.



6. Strauss, R.H. : ' Sports Medicine', Philadelphia, W.B. Saunders Co. , 1984 .
7. Steven Roy, Irvin Richard, ' Sports Medicine, Engle wood cliffn N.J. : Prentice Hall, 1983.
8. Colson John, Proressive Exercise Therapy, Bristol John Wright and sons Ltd. 1969.
9. Danies and worthingham . Muscle Testing : Techniques of Manual Examination, Philadelphia, W.B. Saunders Co.
10. Forster, Palastangas : 'Clayton's Electrotherapy' Delhi CBS Publishers and Distributors.
11. Gardiner M. Dena : 'The Principles of Exercise Theraph' : London : Bell and Hyman, 1981.
12. Kessler Henry H. : The Principles and Practices of Rehabilitatin, Philadelphia, lea and Febiger, 1950.
13. Rathbone J.L. , 'Corrective Physical Education' , London, W.B. Saunders Co.
14. Wood and Backer, Board, Massage : Philadelphia : W.B. Saunders Co.
15. Yliery J. and Cash, M. Sports Massage : London : stanty Paul and co. 1988. RESEARCH PROCESS IN

## **GAMES (PRACTICAL)**

**PEP 404Hockey, PEP 405 Cricket PEP 406 Taekwondo/Judo**

Common syllabus for all games/sport

Unit- I. History of game, Federations and Competitions.

Unit- II. Rules and their interpretation.

Unit- III. Fundamental and Advance skills.

Unit- IV. Equipments/dress and their specification and maintenance.

Unit- V. Layout and maintenance of playfields/arena

## **BPES SEMESTER V**

### **MANAGEMENT OF PHYSICAL EDUCATION PEL 501**

#### **COURSE OUTCOMES**

CO1-Recall the importance of planning and management in educational institutions BL 1

CO2 –Discuss how equipment can be improvised BL 2

CO3 –Demonstrate the qualities of a good teacher BL 3

CO4-Illustrate the role of the teacher in developing good public relations B 4

CO 5-Evaluate the importance of Intramurals B5

CO 6-Design a budget for a school

#### **Unit I**

##### **Introduction**

1.1 Meaning , definition,nature and scope of sports management

1.2 Importance of planning and management in educational institutions.

1.3 Principles of planning and management, organization structure:

1.4 i-Scheme of organization in school, college and university.

ii-. Scheme of organization in the district and state education.

#### **Unit II. Facilities and equipment's**

2.3 Layout of physical education facilities

2.4 Need and importance of equipment for physical education and sports.

2.5 Equipment for physical education and recreational activities.

2.6 Realistic approach in purchases, procedures.

- i. Development of improvised equipments
- ii. Storing, store keeping, Care, maintenance, repairs and disposal of equipment.

### Unit III

#### Staff and Leadership

- 3.1 Head of the Institute, his role in imbuing the spirit of discipline in sports and education.
- 3.2 Importance of qualified teachers of physical education and recreational leaders
- 3.3 Qualities of good teachers of physical education
- 3.4 Student leadership its importance and limitations
- 3.5 Staff cooperation

### Unit IV

#### Intramurals and extramural, Public Relations

##### 4.1 Intramural

- i importance and planning.
- ii Events of Competition,
- iii Time and facility factors
- iv Point system, award recognition

##### 4.2 Extramural

- i Outcomes of participation (educational)
- ii Limitations in participation.
- iii Selection and training of teams.
- iv Participation, finances and other aspects.

##### 4.3 Public Relations

- i. Definition and need.
- ii Principles of public relations in physical education
- iii. Techniques, role of media
- iv Relations with parents, public and other bodies.

### Unit V

#### Office management and budget

- 5.1 Maintenance of records
- 5.2 Office Correspondence, filing and reports.
- 5.3 Physical education budget and its preparation
- i Income & expenditure (sources)
- ii Maintenance of accounts.
- (f). iii Petty cash.

### References:

1. Joseph, P.M. Organisation of physical education, The old students association, TIPE Kandivali (Bombay). 1963.
2. Voltmer, E.F. et al The organisation and administration of physical education, Prentice Hall Inc., New Jersey, 1979.
3. Bucher, C.A. Administration of Physical Education and athletic programmes, The C.V. Mosby Co. London 1983.
4. Zeigler, E.R. and Bowie G.W Management Competency Development in Sports and Physical Education, Lea and Febiger, Philadelphia, 1983.
5. Maheshwari, B.L. Management by Objective, Tata Mc.Graw-Hill Publishing Co. Ltd. New Delhi 1982.
6. Allen L.A. Management and Organisation, McGraw-Hill Book Co. Inc. London 1958.
7. Newman W.H. Administrative Action, Prentice Hall Inc. New Jersey, 1963.
8. Huges, W.L. et al Administration and physical Education. The Ronald Press Co. New York, 1962.

### BPES SEMESTER V

#### TESTS AND MEASUREMENT IN PHYSICAL EDUCATION PEL 502

#### COURSE OUTCOMES

- CO-1 List the different concepts in the subject BL-1
- CO-2 Explain the measures of central tendency BL-2
- CO-3 Use knowledge tests BL-3
- CO-4 Analyze sports skill tests BL-4

CO-5 Select teacher made tests BL-5

#### Unit I :Introduction

- 1.1 Meaning of Test, Measurement and Evaluation .Need and Importance of Test and Measurement and Evaluation in Physical Education.
- 1.2 Meaning of Statistics, Need and Importance of Statistics.
- 1.3 Meaning of Data. Kinds of Data.
- 1.4 Frequency Table – Meaning construction and uses .Population and sample. Sampling techniques – importance and principles.

#### Unit II: Fundamentals of Statistics

- 2.1 Measures of Central Tendency –Meaning uses and calculations from frequency tables.
- 2.2 Measures of variability –meaning uses and calculations.
- 2.3 Graphical representation of Data.
- 2.4 Percentile Meaning, uses and calculations.
- 2.5 Correlations –Meaning, uses and calculations.

#### Unit III: Test and Evaluation and Construction

- 3.1 Knowledge Test. Importance and Types
- 3.2 Items to be included in objective and subjective knowledge tests
- 3.3 Criteria of test selection

#### Unit IV: Measurement of Health Status

- 4.1 Measurement of nutritional status (subjective and objective.)
- 4.2 Somatotyping- A brief account of Kretschmer's and Sheldon's body types.

#### Unit V: Measurement of Social Efficiency, Physical Fitness and Skill Performance

- 5.1 Sports Skill Tests:
  - i. Lockhart and McPherson Badminton Test.
  - ii Johnson Basketball Ability Test.
  - iii McDonald Soccer Test.
  - iv. Brady Volleyball Test.
  - v Dribble and Goal Shooting Test in Hockey.
- 5.2 Fitness Tests –Roger's PFI, AAHPERD Youth Fitness Test, Indiana Motor 5 Fitness Test, JCR Test and Kraus –Weber Test.

#### Reference:

- 1. Clarke ,H.H. Application of Measurement to Health and Physical Education, Englewood Cliffs, N .J. : Prentice Hall Inc.
- 2. Larson ,L. A. and Yacom ,R.D. Measurement and Evaluation in Physical ,Health and Recreation Education .St. Louis :C.V. Mosby Company 1957 .
- 3. Mathews. Donald K. Measurement in Physical Education ,London : W .B. Saunders Company , 1973.
- 4. Neilson ,N.P. : An Elementary course in Statistics ,Test and Measurement in Physical Education , National Tests Polo Alth, 1960.

SPORTS SPECIALISATION PEL 503 will be offered in a game/sport of the choice of students in 5<sup>th</sup> semester

#### CRICKET SPECIALIZATION PEP 503

##### Course outcomes

- CO-1 Recall about the Historical development and Important tournaments in Cricket. BL-1
- CO-2 Explain the fundamental skills and advanced skills of cricket BL-2
- CO-3 Demonstrate the fundamental and advanced skills of cricket BL-3
- CO-4 Simplify the cricket skills with the help of drills BL-4
- CO-5 Evaluate the performance of cricketer by their performances in the matches. BL-5

- 1. historical development of the game with special reference to India.
- 2. Important tournament held at national and International levels and distinguished personalities related to the game.
- 3. National and International bodies ,controlling the sports/game and their function

4. Fundamental Skills.
  - 4.1 Batting
    - i. Forward defensive stroke
    - ii. Backward defensive stroke.
  - 4.2 Bowling
    - i Simple bowling
    - 4.2 Fielding
      - i. Defensive fielding –Orthodox, Unorthodox.
      - 4.3 Offensive Fielding .
      - 4.4 Catching High Catching.Slip Catching.
      - 4.5 Stopping and throwing techniques.
- Wicket keeping technique.
5. Advanced Skill
  - 5.1 Batting
    - (i) Forward defensive stroke
    - (ii) Backward defensive stroke
    - (iii) Forward off drive
    - (iv) Forward on drive.
  - 5.2 Bowling.
    - i Simple bowling techniques.
    - ii Difference between pace.
    - iii Bowling and spin bowling : Off and leg spin bowling.
  - 5.3 Fielding : Different techniques of fielding and its importance.
  - 5.4 Catching : Different types of catching ,its techniques and importance.
  - 5.5 Stopping and throwing : Different techniques and its importance.
  - 5.6 Wicket Keeping : Different techniques and their implications.
- 5.6 Rules and their interpretations and duties of officials.

#### References:

- Micharda ,Barry ,Barry Richard Cricket.London Pelhon Books, 1979.
- Mankar , Vinno, How to play Cricket. Rupa and Company, 1976.
- Greig ,Tony , Greug in Cricket .Bombay, S. Publication, 1975.
- John Snow ,Cricket Fondon : William Dusmomby Publisher Ltd. 1973.

## HOCKEY SPECIALIZATION PEP 503

### COURSE OUTCOMES

- CO1-Recall the history of hockey in India BL1
- CO2-Describe national awards in hockey BL2
- CO3 –Demonstrate the basic and advanced skills BL3
- CO4-Analyze the rules of hockey BL4
- CO5-Evaluate the drills in hockey BL 5

#### Unit I –

- 1.1Origin of Hockey
- 1.2 Ancient hockey,
- 1.3 Hockey in modern India.

#### Unit II - History of Major International and National Hockey Championships

- 2.1World Cup Hockey, Olympic Games, Championship trophy and Asia Cup.
- 2.2Rangaswami Cup, Benton Cup.
- 3.2 National awards in hockey

#### Unit III - Basic and Advance Skills of Hockey -

- 3.1Rolling, Pushing, Hitting, Stopping.
- 3.2Dribbling, Receiving, Flick, Scoop, Dodging and Tackling.

#### Unit IV –

#### 4.1 Play field & Rules

- i- Layout and marking of the hockey field
- ii- Rules of the game of hockey
- iii- Latest changes in the rules and its impact on the game

#### Unit V-

5.1 Drills in Hockey. 5.2 Tests in hockey

5.3 Responsibilities of coach and manager

#### References

- 1- Claire Mitchell-Taverner “Field Hockey Techniques & Tactics”

#### REFERENCES

- 1- Bertagna Joe, The Hockey Coaching Bible, Human Kinetics 2015
- 2- Dave Chambers, The hockey drill book, Human Kinetics; Second edition, 2016

#### FOOTBALL SPECIALIZATION PEP 503

CO1. Remember the origin, history and related knowledge of the game.

CO2. Interpret the laws of the game.

CO3. Demonstrate the skills of the game

CO4. Classify the tactics Field Hockey Techniques & Tactics

CO5. Evaluate their skill level

CO6. Create new tactics accordingly

#### Unit - I History of football (National and International)

Unit - II Organization of federation and association  
(District, State, National and International)

#### Unit –III Techniques

3.1 Advance skill and techniques

3.2 General mechanical principles applied to skill techniques

#### Unit –IV Rules and their interpretations

Unit –V Layout and maintenance of playfields and equipments

#### REFERENCES

- 1. Bill Beswick. (2010). Focused for Soccer. 2nd Edition, Human Kinetics.
- 2. Bobby Moffat. (1985), The Basic Soccer Guide. Collier Books.
- 3- John Hughson, Handbook of Football Studies Routledge, 2018

#### BASKETBALL PEP 503

•CO1: To identify Talented players in Basketball.

•CO2: To demonstrate practices for prevention from injuries.

•CO3: To apply the knowledge of the basic rules in the game to reach at the advance level.

•CO4: To analyze the organizational structure of the game

•CO5: To justify the art of coaching and officiating.

•CO6: To generate agility and speed in players.

Unit- I. History of game, Federations and Competitions.

Unit- II. Rules and their interpretation.

Unit- III. Fundamental and Advance skills.

Unit- IV. Equipments and their specification and maintenance.

Unit- V. Layout and maintenance of playfields

#### KHO-KHO SPECIALIZATION PEP 503

CO1: recognize the basic rules and regulations of kho-kho game.  
CO2: paraphrase about ground measurement.  
CO3: perform different skills in kho-kho.  
CO4: Analyze the responsibilities of the federation.  
CO5: judge the difference between different injuries.

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#### Unit I-

1.1 Construction & maintenance of ground.  
1.2 Introduction of Federation & their Committees

#### Unit II

2.1 Rules of the game and their interpretation.  
2.2 Various Official & their duties for a match

#### Unit III- Skills of Attacker & Defender

#### Unit IV-

4.1 Qualities and philosophy of Coach  
4.2 Organization of KHO-KHO Tournaments  
4.3 Injuries related with a KHO-KHO player & their Immediate Treatment

#### Unit V-

5.1 Lead up activities  
5.2 Coaching Lessons

#### REFERENCES

1-Verma Kavita, (2015) Text book on Kho Kho, International E Publication  
2-Naval Kishore, (2016), How to play Kho Kho, Sports Publication, New Delhi 2.  
3- Khalatkar (2016). Kho-Kho Paperback. Nachiket Prakashan; First Edition, 2016

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#### PRACTICALS

PEP 504 Floorball , PEP 505 Handball , PEP 506 Teaching practice (activity)

Common syllabus for all games/sport

Unit- I. History of game, Federations and Competitions.

Unit- II. Rules and their interpretation.

Unit- III. Fundamental and Advance skills.

Unit- IV. Equipments/dress and their specification and maintenance.

Unit- V. Layout and maintenance of playfields”

#### TEACHING PRACTICE PEP 506

- Each student teacher is expected to take at least five general lessons .
- Lessons will be supervised by the faculty members.
- All the parts of the lesson should be covered progressively

## BPES SEMESTER VI

### RESEARCH PROCESS IN PHYSICAL EDUCATION PEL601

#### A. COURSE OUTCOMES

CO 1-By the end of this lesson, the student will be aware about the research work

CO 2-The students will be understanding the location of the research for respective.BT

CO 3-The students will apply to find out area for search

CO 4-the main to know and analyse the data

CO5- Students can evaluate themselves and the perform well.

CO6- The students will be able to create the idea for relevant topics BT.

#### UNIT I – Introduction

1.1Meaning and Definition of Research

1.2 Need, Nature and Scope of research in Physical Education.

1.3Classification of Research, Location of Research Problem, Criteria for selection of a problem, Qualities of a good researcher.

#### UNIT II – Methods of Research

2.1Descriptive Methods of Research; Survey Study, Case study,

2.2 Introduction of Historical Research, Steps in Historical Research,

2.3 Sources of Historical Research:

i.Primary Data and Secondary Data,

2.4Historical Criticism: Internal Criticism and External Criticism.

#### UNIT III – Experimental Research

3.1 Experimental Research – Meaning, Nature and Importance,

3.1 Meaning of Variable, Types of Variables.

3.3Experimental Design - Single Group Design, Reverse Group Design, Repeated Measure Design, Static Group Comparison Design, Equated Group Design, Factorial Design.

#### UNIT IV – Sampling

4.1Meaning and Definition of Sample and Population.

4.2Types of Sampling; Probability Methods; Systematic Sampling, Cluster sampling, Stratified Sampling. Area Sampling – Multistage Sampling.

4.3Non- Probability Methods; Convenience Sample, Judgement Sampling, Quota Sampling.

#### UNIT V – Research Proposal and Report

5.1 Chapters of Thesis / Dissertation, Front Materials, Body of Thesis – Back materials.

5.2 Method of Writing Research proposal, Thesis / Dissertation.

5.3 Method of writing abstract and full paper for presenting in a conference and to publish in journals ,

5.4Mechanics of writing Research Report, Footnote and Bibliography writing.

#### REFERENCE :

Best J. W (1971) Research in Education, New Jersey; Prentice Hall, Inc Clarke David. H & Clarke H, Harrison (1984) Research processes in Physical Education, New Jersey; Prentice Hall Inc. Craig Williams and Chris Wragg (2006) Data Analysis and Research for Sport and Exercise Science, Londonl Routledge Press Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illonosis; Human Kinetics; Kamlesh, M. L. (1999) Reserach Methodology in Physical Education and Sports, New Delhi Moses, A. K. (1995) Thesis Writing Format, Chennai; Poompugar Pathippagam Rothstain, A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc Subramanian, R, Thirumalai Kumar S & Arumugam C (2010) Research Methods in Health, Physical Education and Sports, New Delhi; Friends Publication Moorthy A. M. Research Processes in Physical Education (2010); Friend Publication, New Delhi

BPES VI SEMESTER  
APPLIED STATISTICS IN PHYSICAL EDUCATION & SPORTS SCIENCES PEL 602

COURSE OUTCOMES

- CO1-Recall the importance of statistics BL 1
- CO2-Interpret data classification BL 2
- CO3-Apply the different types of statistics in research studies BL 3
- CO4-Analyze the measures of dispersion and scales BL 4
- CO5-Select the suitable tests of significance BL 5

UNIT I – Introduction

- 1.1 Meaning and Definition of Statistics.
- 1.2 Function, need and importance of Statistics.
- 1.3 Types of Statistics. Meaning of the terms, Population, Sample, Data, types of data. Variables; Discrete, Continuous.
- 1.4 Parametric and non-parametric statistics.

UNIT II –

- 2.1 Data Classification, Tabulation and Measures of Central Tendency Meaning, uses and construction of frequency table.
  - 2.2 Meaning, Purpose, Calculation and advantages of Measures of central tendency – Mean, median and mode.
- UNIT III – Measures of Dispersions and Scales

3.1 UNIT III

- Meaning, Purpose, Calculation and advances of Range, Quartile, Deviation, Mean Deviation, Standard Deviation, Probable Error.
- 3.2 Meaning, Purpose, Calculation and advantages of scoring scales; Sigma scale, Z Scale, Hull scale

UNIT IV – Probability Distributions and Graphs

- 4.1 Normal Curve. Meaning of probability- Principles of normal curve – Properties of normal curve.
- 4.2 Divergence from normality – Skewness and Kurtosis.
- 4.3 Graphical Representation in Statistics; Line diagram, Bar diagram, Histogram, Frequency Polygon, Ogive Curve.

UNIT V – Inferential and Comparative Statistics

- 5.1 Tests of significance; Independent “t” test, Dependent “t” test – chi – square test, level of confidence and interpretation of data.
  - 5.2 Meaning of correlation – co-efficient of correlation – calculation of co-efficient of correlation by the product moment method and rank difference method.
  - 5.3 Concept of ANOVA and ANCOVA.
- Note : It is recommended that the theory topics be accompanied with practical, based on computer software of statistics.

REFERENCE

- 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) Reserach 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 Thirumalaisamy (1998), Statistics in Physical Education, Karaikudi, Senthilkumar Publications.



## BPES VI

### BPES VI SEMESTER SPORTS SPECIALIZATION

#### BADMINTON SPECIALIZATION PEP 603

##### COURSE OUTCOMES

- CO1-Recall the history of badminton BL1
- CO2-Explain the laws of badminton BL2
- CO3-Apply the terminologies in Badminton BL3
- CO4- Categorize the fundamental skills BL 4
- CO5-Evaluate the systems of play BL5

#### Unit I - History of Badminton

- 1.1 In India
- 1.2 In Asia
- 1.3 In World

#### Unit II – Laws of Badminton

- 2.1 Laws of Badminton with interpretations.
- 2.2 Recommendations to technical officials and their duties.
- 2.3 Terminologies in badminton

#### Unit III – Fixture/Draw in Badminton

- 3.1 Fixture for inter collegiate Badminton Competitions.
- 3.2 University – Zonal and All India University Tournaments

#### Unit IV – Fundamental Skills

- 4.1 Racket and Shuttle Grips
- 4.2 Serrics and Rehires
  - i Forehand and backhand stroke
- 4.3 smash over and clear drops under arm clear drive and net shot.
- ii Basic footwork

#### Singles – Systems of Play

- iv. Doubles – Systems of Play
  - a. Front and Back
  - b. Side by Side
  - c. Rotation

#### Unit V - Basic Tactics Strategy

- warming up
- 5.1 Specific Exercises of warm up and conditioning.
- 5.2 General and Specific warm up.
- 5.3 Fundamental Training drills in Badminton.

#### References:

- 1-Jake Downey, Badminton for Schools.
- 2- Kumar S. (2010). Badminton skills and rules. Vishalkanishk printers.
- 3-Grice T. (2008). Badminton steps to success (2nd ed.). Human kinetics

#### YOGA SPECIALIZATION PEP 603

##### Course outcomes:

- CO1: To explain the importance of asana, pranayama, mudra, and bandha for Health.
- CO2: To demonstrate different kinds of Asana.
- CO3: To associate the importance of Yoga in wellbeing of own and society.
- CO4: To support the effectiveness/need of yoga as game.

CO5: To develop systematic research to unfold the hidden benefits of pranayama and meditation as said by the sages.  
CO6: To design the right yoga protocol for different diseases

Unit- I.

History of Yoga, Federations and Competitions.

Unit- II.

Rules and their interpretation.

Unit- III.

Fundamental and Advance skills used in Yoga competitions.

Unit- IV.

Equipment and their specification and maintenance.

Unit- V.

Layout and maintenance of Yoga Hall

ATHLETICS SPECIALIZATION PEP 603

CO1-Remember the anti doping rules BL 1

CO2-Describe training methods BL 2

CO3-Apply the different techniques in teaching skills BL3

CO4-Analyze techniques of throws BL 4

CO5-Select appropriate equipments BL 5

Unit – I : History

1.1Historical review of various athletic events (after 2000)

1.2Historical review of various sports awards to athletes (after 2000)

Unit –II : Federation and Tournaments

2.1Anti – Doping Rules

2.2Prohibited Agents

2.3Procedure of Testing

Unit – III: Training Methods

3.1Training of Speed

3.2Training of Endurance

3.3Training of Strength

Unit – IV: Skills and Techniques

4.1Techniques of shotput

4.2Technique of Discus throw

4.3Technique of Javelin Throw

4.4Techniques of Baton exchange

4.5 Techniques of Hammer Throw and Pole Vault

Unit – V : Playfields and Equipments

5.1Basic rules of Relay Race, Shotput, Discus throw, Javelin Throw, Hammer throw and Pole Vault.

5.2Mechanics of Officiating All throws, Pole Vault and Relay Races.

i. Equipment of throws, pole vault and relay races .

ii. Layouts and maintenances of all Field events.

GYMNASTICS SPECIALIZATION PEP 603

COURSE OUTCOMES

CO1-Recall the history of gymnastics during the middle age BL1

CO2-Explain the organization of the FIG BL2

CO3-Demonstrate the techniques BL3

CO4-Analyze the skills BL4

CO5 Evaluate the purpose of the code of points BL5

Unit-I History of Gymnastics in world:- Earliest History & Middle age.

1.1 Brief History of Greek, Sweden, Denmark Germany, France.

Unit - II

2.1 Organization of F.I.G.

2.2 Value of gymnastics, how gymnastics can be popularized in India.

Unit – III Training Methods

3.1 Warming up (General and specific)

3.2 Training load.

Unit - IV Techniques:

4.1 Teaching of Advance skills and techniques (at least three on each apparatus)

i Specification of apparatus used for men and women. ii Lay out and maintenance of gymnasium.

Unit - V

5.1 Purpose and goal of code of points

5.2 Evaluation of the Exercise.

REFERENCES

1-Negi, Teach Yourself Women Gymnastics, Sports Publication, 2016.

2-Kunal Negi, Teach Yourself Men Gymnastics, Sports Publication, 2016.

## TAEKWONDO PEL 603

Course Learning Outcome:

CO1: outline the rules regulations and competition procedure

CO2: know layouts of competition arenas and marking and dimensions of the court/arena.

CO3: understand organization structure of concerned sports event

CO4: simplify the art of coaching and officiating

CO5: evaluate the learning pattern of the players, to enhance their performance.

Unit- I.

1.1 History of Taekwondo,

1.2 Federations and Competitions.

Unit- II.

2.1 Rules and their interpretation.

2.2 Rules of World Taekwondo Federation (W.T.F)

2.3 Rules Of International Taekwondo Federation (I.T.F)

2.4 Officiating Rules

Unit- III.

3.1 Fundamental and Advance skills used in Taekwondo competitions.

3.2 Open stance

3.3 Close stance

3.4 Poomsae and Kyourgi

Unit- IV.

4.1 Equipment and their specification and maintenance.

4.2 Upper Body (Head Guard, Chest Guard, Arms Guard, Gloves).

4.3 Lower Body (Abdomen Guard, Shin Guard, Foot Guard)

Unit- V.

5.1 Layout and maintenance of Taekwondo Hall .

5.2 Playing Arena

5.3 Hall Specifications

5.4 Dojang etiquettes.

References

1-Hee Yeon, Park ,Tae kwon do, New York, NY: FACTS ON FILE

2-Sang Kim; Taekwondo Step sparring,

3-Scott Shaw; Taekwondo Basics, Tuttle Martial Arts

## JUDO PEL 603

COURSE OUTCOMES

CO1: outline the rules regulations and competition procedure

CO2: know layouts of competition arenas and marking and dimensions of the court/arena.

CO3: understand organization structure of concerned sports event

CO4: simplify the art of coaching and officiating

CO5: evaluate the learning pattern of the players, to enhance their performance.

CO6: build self-defense quality.

Unit- I.

1.1 History of Judo

1.2 Federation and Competitions.

Unit- II.

2.1 Rules and their interpretation.

2.2 Rules of world judo F

2.3 Officiating Rules

Unit- III.

3.1 Fundamental and Advance skills used in Judo competitions.

3.2 Competition Judging Regulations.

3.3 Information regarding the contest area,

3.4 The technique (waza) judgments,

Unit- IV.

4.1 Equipment and their specification and maintenance.

4.2 Quality of judogi & Kyu

Unit- V.

5.1 Layout and maintenance of Judo Hall.

5.2 Playing Arena .

5.3 Hall Specification.

5.4 Dojang Etiquettes.

## REFERENCES

1-K.Mifune CANON OF JUDO “Principle and Technique” Seibundo

2-Shinkosha. Roosa Mark the teaching of judo: an instructor’s handbook.

## BPES SEMESTER VI

### GAMES (PRACTICAL)

PEP 604 KHO KHO/KABADDI „PEP 605 TENNIS, PEP 606 TEACHING PRACTICE(THEORY)

Common syllabus for all the games/sports

Unit- I. History of game, Federations and Competitions.

Unit- II. Rules and their interpretation.

Unit- III. Fundamental and Advance skills.

Unit- IV. Equipments and their specification and maintenance.

Unit- V. Layout and maintenance of playfields

### PEP 606 TEACHING PRACTICE(THEORY)

- Each student teacher is expected to take at least five lessons on topics from the theory subjects
- Lessons will be supervised by the faculty members.
- All the parts of the lesson should be covered progressively

## BPES VII SEMESTER

### SPORTS BIOMECHANICS PEL 701

#### COURSE OUTCOMES

CO 1 Recognize the skeletal structure of human body by identifying the origin and insertion of various muscles.

BL1

CO2 Explain the meaning and types of motion BL2

CO 3 .Apply newton’s laws of acceleration in sports activities BL 3

CO4 Illustrate the role of static and dynamic stability in sports skills BL 4

CO5 Justify the qualitative and quantitative analysis of human movements BL5

#### UNIT I - Introduction

- 1.1 Meaning, nature, role and scope of Applied kinesiology and Sports Biomechanics.
- 1.2 Meaning of Axis and Planes, Dynamics, Kinematics, Kinetics, Statics Centre of gravity.
- 1.3 Line of gravity plane of the body and axis of motion, Vectors and Scalars.

#### UNIT II - Muscle Action

- 2.1 Origin, Insertion and action of muscles: Pectoralis major and minor, Deltoid, Biceps, Triceps (Anterior and Posterior), Trapezius.
- 2.2 serratus, Sartorius, Rectus femoris, Abdominis, Quadriceps, Hamstring, Gastrocnemius.

#### UNIT III - Motion and Force

- 3.1 Meaning and definition of Motion. Types of Motion: Linear motion, angular motion, circular motion, uniform motion.
- 3.2 Principals related to the law of Inertia, Law of acceleration, and law of counter force.
- 3.3 Meaning and definition of force- Sources of force -Force components .Force applied at an angle - pressure - friction -Buoyancy, Spin - Centripetal force - Centrifugal force.

#### UNIT IV - Projectile and Lever

- 4.1 Freely falling bodies -Projectiles -Equation of projectiles stability Factors influencing equilibrium.
- 4.2 Guiding principles for stability -static and dynamic stability.
- 4.3 Meaning of work, power, energy, kinetic energy and potential energy. Leverage -classes of lever - practical application.
- 4.4 Water resistance - Air resistance -Aerodynamics. Note: Laboratory practicals should be designed and arranged for students internally.

#### UNIT V - Movement Analysis

- 5.1 Analysis of Movement: Types of analysis: Kinesiological, Biomechanical. Cinematographic.
  - 5.2 Methods of analysis - Qualitative, Quantitative, Predictive.
- Note: Laboratory Practicals be designed and arranged internally.

#### REFERENCE:

1. Deshpande S.H.(2002). Manav Kriya Vigyan - Kinesiology (Hindi Edition) Amravati :Hanuman Vyayam Prasarak Mandal.
2. Hoffman S.J. Introduction to Kinesiology. Human Kinesiology publication In.2005.
3. Steven Roy, & Richard Irvin. (1983). Sports Medicine. New Jersey: Prentice hall. Thomas. (2001). Manual of structural Kinesiology, New York: Me Graw Hill. Uppal A.K. Lawrence Mamta MP (2004) Kinesiology. Delhi, Friends Publication .
4. Uppal, A K. (2004), Kinesiology in Physical Education and Exercise Science, Delhi, Friends publications.
5. Williams M (1982) Biomechanics of Human Motion, Philadelphia; Saunders Co.

#### BPES VII SEMESTER

#### SPORTS JOURNALISM AND MASS MEDIA PEL 702

##### Course Objectives –

- CO 1. To introduce the idea of Sport journalism among the student BL1
- CO 2. To understand the relationship between sports journalism and Mass Media BL2
- CO3. To broaden the dimension of students towards sports journalism and literature BL3
- CO 4. To inculcate an interest of Sports journalism and give exposure of Public Relation Officer in media realms BL4
- CO 5. To foster creative ways of thinking about Sports and Mass Media BL5

#### UNIT I Introduction

- 1.1 Meaning and Definition of Journalism, Ethics of Journalism.
- 1.2 Canons of journalism-Sports Ethics and Sportsmanship.
- 1.3 Reporting Sports Events.
- 1.4 National and International Sports News Agencies.

#### UNIT II Sports Bulletin

- 2.1 Concept of Sports Bulletin: Journalism and sports education.

- 2.2 Structure of sports bulletin - Compiling a bulletin - Types of bulletins.
  - 2.3 Role of Journalism in the Field of Physical Education: Sports as an integral part of Physical Education.
  - 2.4 Sports organization and sports journalism - General news reporting and sports reporting.
- UNIT III Mass Media

- 3.1 Mass Media in Journalism: Radio and T.V. Commentary
  - 3.2 Running commentary on the radio - Sports expert's comments.
  - 3.3 Role of Advertisement in Journalism. Sports Photography: Equipment-Editing - Publishing.
- UNIT IV Report Writing on Sports

- 4.1 Brief review of Olympic Games, Asian Games, Commonwealth Games World Cup,
  - 4.2 National Games and Indian Traditional Games.
  - 4.3 Preparing report of an Annual Sports Meet for Publication in Newspaper.
  - 4.4 Organization of Press Meet.
- UNIT -V Journalism

- 5.1 Sports organization and Sports Journalism.
- 5.2 General news reporting and sports reporting.
- 5.3 Methods of editing a Sports report. Evaluation of Reported News.
- 5.4 Interview with and elite Player and Coach.

#### REFERENCE:

Ahiya B.N. (1988) Theory and Practice of Journalism: Set to Indian context Ed3. Delhi : Surjeet Publications Ahiya B.N. Chobra S.S.A. (1990) Concise Course in Reporting. New Delhi: Surjeet Publication Bhatt S.C. (1993) Broadcast Journalism Basic Principles. New Delhi. Haranand Publication Dhananjay Joshi (2010) Value Education in Global Perspective. New Delhi: Lotus Press. Kannan K (2009) Soft Skills, Madurai: Madurai: Yadava College Publication Mohit Chakrabarti (2008): Value Education: Changing Perspective, New Delhi: Kanishka Publication. Padmanabhan. A & Perumal A (2009), Science and Art of Living, Madurai: Pakavathi Publication Shiv Khera (2002), You Can Win, New Delhi: Macmillan India Limited. Varma A.K. (1993) Journalism in India from Earliest Times to the Present Period. Sterling publication Pvt. Ltd.

Venkataiah. N (2009) Value Education,- New Delhi: APH Publishing Corporation. 4

#### TALENT IDENTIFICATION PEL 703 Unit-I

- CO 1 Recognize the ability to identify talent. BL1
- CO2 Interpret the inherited signs and symptoms that make one adept for excellence in a particular sports. BL2
- CO 3 Demonstrate the method of performing anthropometric assessment BL3
- CO4 Analyze the body types and their relation to sports BL4
- CO5 Evaluate the skill tests for ball games BL5
- CO 6 Develop method for talent identification BL 6

Introduction, Meaning, Concept and scope of talent identification in sports

- 1. Need and Importance of talent identification.
- 2. Principles of talent identification.
- 3. Scope of Talent identification.
- 4. Role of Physical Education teacher / coach in talent identification.

#### Unit-II

##### Understanding Human Body

- 2.1 Genetics and Environment and their role in sports performance.
- 2.2 Body types and their relation to sports.
- 2.3 Basic Anthropometry
- 2.4 Anthropometric assessment and data recording.

#### UNIT III

## Fitness Tests

- 3.1 AAPHER youth fitness test
- 3.2 JCR test
- 3.3 Coopers 12 minute run/walk test
- 3.4 Harvard Step test.

## Unit-IV

### Skill Tests for talent identification

- 4.1 Skill tests for Ball games
- 4.2 Skill test for Racket games.
- 4.3 Skill test for Athletic abilities
- 4.4 Psychological tests related to sports abilities.

### UNIT V Talent identification protocols

- 5.1 Test Matrix for Grassroot Talent
- 5.2 Description of talent identification tests
- 5.3 Sports science evaluation

- 1- Russell K. Athletic talent: from detection to perfection. 7<sup>th</sup> Technol Sport 1989
2. Bartmus U, Neumann E, de Marées H.. The talent problem in sports 7<sup>th</sup> Sports Med 1987
- 3- Williams AM, Reilly T.. J Talent identification and development in soccer Sport Sci 2000; ,.
- 4 Kansal, D.K. Test and measurement in sports and physical education New Delhi:D.V.S. Publications 1996

PEP 704 Internship , PEP 705 Weight training, PEP 706 Table tennis

The students will go for Internship to schools/fitness centres for 3 months in which:

- 1-Every student has to work on a honorary basis in the institution/ School/fitness centers.
- 2-Evaluated on the basis of Daily Diary preparation, regularity, teaching quality, sincerity, class control and job execution.
- 3- A student is required to bring a certificate on letter head of the Institute / Organization., specifying that he/she has imparted instruction/training/teaching in that organization w.e.f ..... to ..... and his/her work has been excellent/very good/good/satisfactory/poor (The administrator may tick any one of the five alternatives).

PEP 705 Weight training ,PEP 706 Table tennis

Common syllabus for all the games/sports

Unit- I. History of game, Federations and Competitions.

Unit- II. Rules and their interpretation.

Unit- III. Fundamental and Advance skills.

Unit- IV. Equipments and their specification and maintenance.

Unit- V. Layout and maintenance of playfields

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## HEALTH EDUCATION PEL 801

### COURSE OUTCOMES

CO1: The knowledge would enable the students to recognize the health related issues and the methods to resolve it.

CO2: By the end of this lesson, the student will be able to paraphrase about health education related varied diseases and health related services.

CO3: By the end of this lesson, the student will be able to perform health related services.

CO4: By the end of this lesson, the student will be able to illustrate health goals, health problems and health services.

CO5: By this education, the student will be able to judge different health related issues.

CO6: By the end of this lesson, the student will be able to compose health related services and health care plans.

### Unit I

#### 1.1 Health

- i. Dimensions of Health
- ii. Positive Health
- iii. Concept Of Health
- iv. Ecology of Health
- v. Spectrum of Health
- vi. Determinants of Health.

#### 1.2 Health Education

- i. Concept ,objective and scope
- ii. Principles of Health Education.
- iii. Communication in Health Education.
- iv. Public Health Education in attainment of Health Goals.

### Unit II

#### 2.1 Health Problems

- i. Communicable diseases
- ii. Nutrition
- iii. Environmental sanitation
- iv. Medical Care
- v. Population

#### 2.2 Organization and Administrative set-up of Health System in India

- i. Central level
- ii. State Level
- iii. District Level.

#### 2.3 Planning of Health Education program

- i. Practice of Health Education Program.
- ii. Steps to be followed in Planning Health Education Programs.

#### 2.4 Child Health programs

### Unit III

#### 3.1 Hygiene

- i. The Care of Skin, Mouth, nails, clothing, etc. Importance of rest, sleep and exercise.

#### 3.2 Community Health

- ii. Brief account of Housing water supply ,sewage and refuse disposal .

#### 3.3 School Health Service

- i. History and Health Problems
- ii. Objectives of School Health Service

#### 3.4 Aspects of School Health Service

- i. Health Appraisal ,Remedial measures and follow –up
- ii. Prevention of communicable diseases
- iii. Healthful school environment
- iv. Nutritional services
- v. First –aid and Emergency care
- vi. Mental health,Dental health and Eye health service.



- vii. Health Education for handicapped children.
- viii. School Health record.

#### Unit IV

- 4.1 Food and Nutrition
  - i. Classification of foods ,Proximate Principles, and Role of various nutrient.
- 4.2 definition of balanced diet ,Principles ,. Balanced diet for Indian Players /School children
- i- .Malnutrition and Adulteration of food.

#### Unit V

- 5.1 National Family Welfare Programme
  - i. Concept, need, importance, and role of Health Education in family welfare programme.
- 5.2 Sex Education
  - Concept, need and organization of sex education at school level.
- 5.3 National Health Programs in India
  - i. NMEP (National Malaria Eradication Programme.)
  - ii. DDCP (Diarrhoeal Diseases Control Programme.)
  - iii. NFPC (National Filaria Control Programme.)
  - iv. National TB Control Programme.
  - v. STD Control Programme.
- 5.4 International Health Agencies
  - i. WHO (b) UNICEF (c) UNDP
  - i. (d) FAO (e) ILO

#### Reference:

1. Anderson ,C.L. and Chewell , William H. School Health Practice, St. Louis: The C. V. Mosby Company ,1986.
2. Bedi, Yashpal Social and Preventive Medicine ,New Delhi ,Atmaram and Sons ,1985.
3. Goah ,B.N. Hygiene and Public Health ,Calcutta :Scientific Publishing Co.1989.
4. Hanllon, John ,I. Principal of Public Health Administration Saint Louis :The C.V. Mosby Company 1969.
5. Katz, Alfred ,H ,and Felton , Jean Spencer Health and the community .London :Coltion Mc Millan Limited 1965.
6. Park ,J.E. and Park ,K. Preventive and Social medicine Jabalpur : M/s.Banarsidas Bhanot Publishers,1983.

### BPES SEMESTER VIII

#### SPORTS MEDICINE AND PHYSIOTHERAPY PEL 802

#### COURSE OUTCOMES

- CO1- Recall nature, scope need and importance of sports medicine BL1
- CO2 Describe the various kinds of common injuries, preventive measures and their first aid procedure. BL2
- CO3-Apply practical and theoretical knowledge and application of sports physiotherapy and rehabilitative exercises. BL3
- CO4-Analyze different therapeutic modalities and its safety measures. BL4
- CO 5- Contrast ergogenic aids in sports and its ill effect of different drugs and doping.

#### Introduction to Sports Medicine

- 1.1 Definition, aims and objectives of Sports Medicine
- 1.2 Scope of Sports Medicine
- 1.3 Need and Importance of Sports Medicine
- 1.4 History of Sports Medicine in India and Abroad

#### UNIT – II

##### Injuries in Sports

- 2.1 Classification of Injuries, causes and prevention of sports injuries.
- 2.2 Skin and Muscles Injuries (blisters, corns, abrasions, bruises, burns, cuts and lacerations, muscles strain and ruptures)
- 2.3 Tendons Ligaments, Cartilage, bursa and bone Injuries
- 2.4 Common site-specific injuries in sports Common regional injuries and their management (Head & Neck, Face, Thorax, Abdomen, Pelvis, Upper Limbs and Lower Limbs (shoulder, elbow, Wrist, hip, knee and Ankle joints).

## UNIT-III

### Introduction to Physiotherapy and Therapeutic Exercises and Modalities

#### 3.1 Importance of Physiotherapy; Types of Massage

#### 3.2 Definition and meaning of therapeutic exercise, Classification, Effects and uses of therapeutic Exercises

#### 3.3 Hydrotherapy (Hot and Cold Packs, Whirlpool, Contrast bath), Thermotherapy

#### 3.4 Electrotherapy (Infrared rays – Ultraviolet rays –short wave diathermy – ultrasonic therapy, IFT)

## UNIT-IV

### Doping in Sports

#### 4.1 Ergogenic aids in Sports

#### 4.2 National and International Anti-doping organization and their role

#### 4.3 Classification and types of drugs banned by WADA and NADA, Side effects of drugs

#### 4.4 Blood doping, Types of Blood Doping herapeutic Exercises

## UNIT-V: Massage

### □ Introduction and Definition.

### □ Effects of Massage: Physical, Physiological and Psychological.

### □ General contraindications of Massage

### □ Classification of Massage Techniques and their application, effects and uses:

#### ▪ Superficial Stroking

#### ▪ Effleurage

#### ▪ Kneading

#### ▪ Petrissage

#### ▪ Friction

#### ▪ Percussion

#### ▪ Vibratory Technique

### SUGGESTED READINGS:

## REFERENCES

1. Armstrong and Tucker, Injuries in sports (London: Staples press, 1964).

2-. David, R. M. (2005). Drugs in sports, (4th Ed).Routledge Taylor and Francis Group.

3. Hunter, M. D. (1979). A dictionary for physical educators.

4-. Jeyaprakash, C. S., Sports Medicine, J.P. Brothers Pub., New Delhi, 2003 ➤

5-Bindal, V.D. (2010). Corrective Physical Education, Therapeutic Exercise and Rehabilitation. Agra: Associated Publishing House.

## BPES VIII SEMESTER

## CURRICULUM DESIGNS PEL 803

## COURSE LEARNING OUTCOMES

- CO1Remember the concept and the need for curriculum in schools BL1
- CO2 Describe the social, cultural and the psychological bases of curriculum development BL2
- CO3 Apply the principles employed in sequencing the school curriculum and the syllabus at different levels BL3
- CO 4Classify the various learning sites and resources operating as curriculum supports in the system BL4
- CO5 Evaluate the role of teachers in operationalizing the curriculum bl5
- CO 6 Modify the approaches adopted to evaluate and revise the curriculum at different levels BL6

## COURSE CONTENT

### Unit I: Introduction

- Meaning of curriculum, different perspectives of curriculum
- Need for curriculum in schools, meaning and significance of core curriculum;
- Relationship between curriculum frame work, curriculum, syllabus and textbooks
- Types of curriculum: subject-centered, activity-centered, environmental centered, community-centered and their relevance.

## Unit II: Foundations of Curriculum Development

- Forms of knowledge and structure of a discipline, and their characterization in Different school subjects
- Different perspectives on learning (behaviorists, cognitivists and social constructivists) and their implications to curriculum development
- Socio-cultural bases: Importance of society-school relationships; cultural, social ethos, social changes, knowledge explosion , value transitions, multiculturalism, multilingual aspects, societal aspirations

## Unit III: Curriculum Planning and Implementation

- Change in emphasis and approach to curriculum: learner and activity centered and constructivist based-Curriculum embedded in real life contexts leading to knowledge construction; applicability and relevance to school curriculum planning.
- Brief Review of National curriculum frameworks–2005.
- Principles of planning: Determining objectives, understanding the learner, Selecting material for instruction, Curriculum implementation, selecting methods of teaching, evaluation and Follow-up.
- Curriculum implementation: Operationalizing curriculum into learning situations; Planning and converting curriculum into syllabus and curriculum engagement activities.

## Unit IV: Curriculum Evaluation

- Meaning and importance of curriculum evaluation
- Process of curriculum evaluation and renewal: collecting opinions and views from teachers, students and parents about textbooks and other materials.
- Data collection from achievement tests and periodical assessments, teachers' experiences in transacting every unit;
- Identification of non-attainability of curricular goals/objectives and learning outcomes; constraints faced in implementing the curriculum by school, teachers and other stakeholders

## SUGGESTED READINGS:

- Dewey, John(1959):The Child and the Curriculum, Chicago ,the University of Chicago Press.
- Giroux, Henry et.al (1981): Curriculum and Instruction: Alternatives in Education by MC Cutchan Public Corp, Printed in USA.
- Kumar, Krishna and Malla Reddy (1977). Curriculum Development and Educational Technology.

Dissertation PEP 804 :Students will write a thesis after selecting a appropriate problem under the guidance of the faculty .

## Coaching lessons PEP 804

The students of BPES – VIII Semester need to develop proficiency in taking coaching lesson in selected game specialization. In view of this, the students shall be provided with advance mechanism of coaching in selected game specialization. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class time they are going to handle at school and college level. Each student teacher is expected to take at least five lessons during the course of the sixth semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these coaching lessons, all the parts of the lesson covered progressively.

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