

**Learning Outcomes based Curriculum Framework
(LOCF)
for
Physical Education
Undergraduate Programme: A template
2020**



ज्ञान-विज्ञान विमुक्तये

UNIVERSITY GRANTS COMMISSION

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Preamble

Physical Education is a form of one of the most effective means of education imparted through physical exercises, recreational activities and sports. It is an integral part of education. Which by mere participation in it gives the outcomes. These outcomes are both instant as well as have strong carry over values in the life. The children as well as the adults and the old enjoy physical activities & sports and gets benefit in the form of stronger muscles and bones, increased energy, coordination level and most importantly the decreased risk of developing chronic diseases.

The UNESCO in its General Conference in 1978 was convinced that, everyone should be free to develop and preserve his or her physical, intellectual and moral powers. Physical Education and Sport should consequently be assured and guaranteed for all human beings. Physical Education is now a regular feature in the primary and secondary schools as well as it is gaining popularity in the higher education. The course opted for this is elective as well as the core at the college and the university level in India.

The graduate level course in Physical Education and Sports contains subjects varying from foundation of Physical Education to Anatomy, Physiology, Kinesiology, Officiating & coaching, Test & Measurement, Nutrition, Rehabilitation, Psychology, Sports Training, Sports Biomechanics, Methods of Teachings etc. which are aimed to give thorough knowledge and skills to the students. Students perusing physical education courses are fit to join the jobs as physical trainers, coaches, game officials, referees, umpires, curators, gym trainers, life guards, personal trainers etc. During their course of education the students also develop the expertise to establish their own business as entrepreneurs in the field of sports, fitness, recreation, adventure sports, camping, event management etc.

Learning Outcomes-Based Curriculum Framework for B.P.E.S, B.A./B.Sc.Honors in Physical, Health and Sports Education.

1.1 Introduction

The learning outcomes-based curriculum framework for a B.P.E.S., B.A./B.Sc degree in Physical Education is intended to provide a broad framework within which Physical Education programme responds to the needs of students and requirements. The framework is expected to assist in the maintenance of standard and uniformity of Physical Education degrees across the country. This will also help in periodic programme review within a broad framework of agreed expected graduate attributes, qualification descriptors, programme learning outcomes and course-level learning outcomes. The framework, does seek to bring about uniformity in syllabi for a programme of study in Physical Education, teaching-learning process as well as learning assessment procedures. However, the framework is also intended to allow flexibility and innovation in programme design.

1.2 Nature and extent of the B.P.E.S., B.A./B.Sc. degree programme

Physical Education is normally referred to as the science that aims to develop all-inclusive aspects of human personality through physical and sports activities. Physical education is a multidisciplinary subject that cannot be studied in seclusion under the scope of one or two subjects. The scope of Physical Education as a subject is very broad. It caters to the need for developing capability of the students on physical, mental and social aspects. Physical education also aims to develop activity as an alternate and prophylactic medicine. The key areas of study within the Physical Education are *‘Exercise Physiology, Sports Psychology, Sports Sociology, Sports Management, Sports Journalism, Kinesiology- Biomechanics, Sports Training, Sports Medicine, Kinanthropometry etc.*

Degree program in Physical Education covers topics that overlap with the areas outlined above and that address the interfaces of Physical Education with other subjects such as Physiology, Bio-Chemistry, Physics, Physiotherapy, Psychology, Management, Sociology along with training pedagogy employed for enhancing the functional status of individuals with varied needs. As a part of the effort, to enhance the employability of graduates of Physical Education, programs include learning experiences that offer opportunities in various spheres of human existence.

1.3 Aims of the Bachelor's degree programme in Physical Education

Physical education is not only concerned with the physical outcome that accrue from participation in physical activities but also the development of knowledge and attitude conducive to lifelong learning and participation in motor activities. The overall aim of bachelor's degree programme in Physical Education is;

1. The acquisition and refinement of motor skills,
2. To equip the students with the scientific knowledge of body response to various types of exercise.
3. Maintenance of fitness for optimal health and well being,
4. Attainment of knowledge and the growth of positive attitude towards physical activity and sports.

1.4 Characteristic attributes of a graduate in Physical Education

Some of the characteristic attributes of a graduate in Physical Education may include the following;

1. ***Disciplinary Knowledge and Skills:*** The organization of physical and sports activities will develop sense of discipline in the students.
2. ***Skilled Communicator:*** Neuromuscular learning and activation requires good communicable skills on the part of the leader organizing them, which shall be developed in the students in course of their graduation program. Ability will be developed to express thoughts and ideas effectively, demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups. Skills will be developed in verbal and non-verbal communication, preparation and presentation of documents/reports/PPTs. Skills of interpersonal communication and ability to work with diverse population groups, able to use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources and develop digital literacy as applicable to the professional needs will also be developed.
3. ***Critical Thinker and Problem Solver:*** Ability to employ critical thinking and efficient problem solving skills through development of new strategies are expected attributing factors.

4. ***Sense of Inquiry:*** Capability for asking relevant/appropriate questions relating to the issues and problems in the field of physical education, fitness and rehabilitation.
5. ***Leadership:*** The orientation in organization of health and sports promoting physical activities develops appropriate leadership capabilities in the students.
6. ***Skilled Manager:*** Capable of identifying or mobilizing appropriate resources required for organizing fruitful training and coaching programme for athletes of various sports.
7. ***Digitally Literate:*** Capable of using computer for keeping the health related data base of the trainees. Formulating appropriate training programme for individuals as per their need. Capable of employing modern library search tools to locate, retrieve, and evaluate Physical Education & Sports related information.
8. ***Ethical Awareness and Reasoning:*** Avoiding unethical behavior and promoting fair play. Discouraging the use of drugs for performance enhancement. Promoting sports for the development of all round personality of the participants.
9. ***Lifelong Learners:*** Capable of self-paced and self-directed learning aimed at personal development.
10. ***Pursuit of Excellence:*** To have a positive attitude towards developing one's own potentials (both biological & cultural) and talents.
11. ***Respect for Diversity:*** An empathy with other's views and needs as well as respect for their elder's opinion, race or religion and also able to value different cultures and traditions.
12. ***Sense of Justice and Equity:*** To able to recognize social justice and act justly; to have a sense of fairness in life especially in sporting situation.
13. ***Cooperation and Team Work:*** Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group and or a team in the interests of a common cause and work efficiently as a player.

1.6 Qualification descriptors for B.P.E.S., B.A./B.Sc. (Hon's) programme in Physical Education

The qualification descriptors for a B.P.E.S., B.A./B.Sc. (Hon's) programme in Physical Education may include the following:

1. Demonstrate (i) a systematic, extensive and coherent knowledge and understanding of the academic field of study as a whole and its applications, and links to related disciplinary areas/subjects of study; including a critical understanding of the established theories, principles and concepts, and of a number of advanced and emerging issues in the field of Physical Education; (ii) procedural knowledge that creates professionals related to the subject area of Physical Education (iii) skills in one's specialization area and current developments in the academic field of Physical Education, including a critical understanding of the latest developments and an ability to use established techniques of analysis/enquiry within the area of specialization.
2. Demonstrate comprehensive knowledge about materials and skills required for identifying Physical Education related problems and issues, including current research in Physical Education.
3. Demonstrate skills in identifying information, collection of relevant quantitative and qualitative data drawn on a wide range of sources, analysis and interpretation of data using methodologies as appropriate to the subject of Physical Education for formulating evidence-based solutions and arguments;
4. Use knowledge, understanding and skills for critical assessment of a wide range of ideas and complex problems and issues related to the academic field of Physical Education.
5. Communicate the results of the studies undertaken in the academic field of Physical Education accurately in a range of different contexts using the main concepts, constructs and techniques of the subject.
6. Address one's own learning needs relating to current and emerging areas of study relating to Physical Education. Making use of research, and professional materials as appropriate, including those related to new frontiers of knowledge in Physical Education.
7. Apply one's knowledge and understanding related to Physical Education and transferable skills to new contexts as well as to identify and analyze problems, issues and seek solutions to real-life problems.
8. Demonstrate subject-related and transferable skills that are relevant to Physical Education related jobs and employment opportunities.

1.7 Program learning outcomes of B.P.E.S., B.A./B.Sc. degree programme in Physical Education are listed below

This would lead the students to understand historical concept of physical education and relationship between Philosophy, Education and Physical Education. The student would further understand the theoretical implications of philosophies of physical education with modern development and social aspects of Physical Education.

1. The curriculum would enable the pass out to select the inherited talented children for various sports activities.
2. The pass out shall be able to orient children in schools with the fundamental skills of selected sports as per their inherited potential.
3. The pass out shall be able to devise training program for athletes engaged in different sports activities
4. The curriculum shall enable them to officiate, supervise various sports tournaments and orient them in organizing sports events at all levels.
5. The curriculum would enable the pass out students to be entrepreneur (to start their own fitness center, gym, spa etc) and device appropriate fitness program for different genders and age groups of people.
6. The curriculum would enable the pass out to devise training program for physically challenged peoples.

1.8 Teaching-learning processes

The program of study in Physical Education is designed to encourage the acquisition of subject knowledge, orientation in fundamentals skills of different sports and professional skills required for Physical Education-based professions and jobs. Learning experiences are designed and implemented to foster active/participative learning. Development of practical skills will constitute an important aspect of the teaching-learning process. A variety of approaches to teaching-learning process, including lectures, seminars, tutorials, workshops, peer teaching and learning, practicum and project-based learning, field-based learning, substantial laboratory-based practical component and experiments, open-ended project work, games, technology-enabled learning, internship in

industry and research establishments etc. will be adopted to achieve this. Problem-solving skills and higher-order skills of reasoning and analysis will be encouraged through teaching strategies.

1.11 Assessment methods

The assessment of students' achievement in Physical Education will be aligned with the learning outcomes of course /program and the academic/professional skills that the programme is designed to develop. A variety of assessment methods that are appropriate within the subject area of Physical Education will be used. Learning outcomes will be assessed using the written and practical exams, project work, assignments, and presentations. Each theory subject (Core) will be of **four credits** and practical (1 game + 1 athletic/sports event of 2 credits each) would equal to **four credits**, thus total credits for each semester shall be **thirty**. This however may be adjusted according to the examination pattern of the concerned universities. **Thirty percent** of the evaluation for each theory and practical paper will be undertaken by the internal examiner through **sessional tests** and **seventy percent** of the evaluation will be done through **end semester examination**.

Online Coaching Design and Delivery: Following four step will be taken care of while designing online coaching methods.

1. Modeling online instructional practices.
2. Instructor and student interactions
3. Transitioning pedagogical and content knowledge online.
4. Navigating instructional tools and technology.

Virtual instructional platforms such as online lectures, webcast etc. will be used. Students can participate in course work through instant messages, emails and video conferencing. Courses may also integrate DVD videos as part of the training process. Students may examine current topics in the field through the use of textbooks and physical education journals. Students can complete some portion of the education at approved testing sites for the practical components wherever necessary.

Emphasis will be laid on teaching learning process using online modes such as google class room, Cisco WebeX Meeting, OERS, Swayam Platform (www.swayam.gov.in), Swayam Prabha (www.swayamprabha.gov.in) (available on Doordarshan (free dish TV), E-Yantra (www.e-yantra.org), Virtual Labs (www.vlabs.co.in), FOSSEE (www.fossee.in), application of spoken tutorials ([9](http://www.spoken-</p></div><div data-bbox=)

tutorial.org), National Digital Library (www.ndl.iitkgp.ac.in), electronic journals (www.ess.infibnet.ac.in) etc.

Brain Based and Machine Learning: Brain-Based Learning is simply the engagement of strategy based on body/mind/brain research and the "engagement of strategies based on principles derived from an understanding of the brain." There are many strategies , some of them include experiential learning, multiple intelligences and practical simulations.

This course engages brain based learning by using an intense strategy of:

- Mastery Learning
- Learning Styles
- Multiple Intelligences
- Cooperative Learning
- Practical Simulations
- Experiential Learning
- Problem-Based Learning
- Movement Education.

The educators will use some of the techniques suggested for increasing brain based learning in their classes :

- Creating a stress free environment as stress is the biggest inhibitors of brain development
- Reorienting students understanding of the brain like an organ that can be developed just like a muscle developed and shaped through weight training exercises.
- Giving constructive feed back as learning from mistakes is an important aspect of cognitive development.
- New ideas and innovations will be encouraged .
- Breaks in learning with recreational and other constructive activities of interest will be initiated for boosting creativity , cognitive functions and social skills

At the same time subjects like Exercise Physiology, Sport Psychology, Test measurement, Computer Applications etc. require use of machines to do various tests and body analysis which already is introduced in the given subjects. Besides that, assignments, PPTs, project work etc. requires a lot of critical thinking which of course fulfils the aim of brain based learning process.

Simulation Laboratory (for practical sports and games): Simulation based learning integrates cognitive, technical and behavioral skills into an environment where learner believes the setting is

real, act as they would responding in the field, and feel safe to make mistake for the purpose of learning from them. Sports simulation laboratory is to be established to provide the students with a feasible environment where they will learn and practice sports skills using animated videos with continuous rectification of errors till exact simulation of skill is attained. Help may be taken from Youtube Streaming, Swayam Platform (www.swayam.gov.in), Swayam Prabha (www.swayamprabha.gov.in) (available on Doordarshan (free dish TV), E-Yantra (www.e-yantra.org)).

1.12 The proposed semester wise distribution of courses/papers (**Theory**)is given in the following Table:

Semester	Foundational	Skill based	Discipline Specific Elective	Generic Elective	Total
I	3			1	4
II	2			2	4
III	4				4
IV	2	1	1		4
V	3		1		4
VI	1	1	2		4
Total					24

1.13 The proposed semester wise distribution of courses/papers (**Practical**)is given in the following Table:

Semester	Main Paper	Total
I	2	2
II	2	2
II	2	2
IV	2	2
V	2	2
VI	2	2
Total		12

1.14 Course wise subject breakage

Courses		Subjects
Core	Theory	— History and Foundation of Physical Education — Basic and Systemic Anatomy & Physiology — Exercises Physiology — Kinesiology & Sports Biomechanics — Sports Psychology — Sports Training — Health Education — Sports Management — Athletic Care and Rehabilitation — Fitness Training and Nutrition — Officiating and Coaching-I — Officiating and Coaching-II — Officiating and Coaching-III — Officiating and Coaching-IV
	Practical	— Major Ball Game (which should be from the list of SGFI/AIU/IOA) — Track & Field: Running and Jumping Event — Major Ball Game which should be from the list of SGFI/AIU/IOA — Track & Field: Running and Throwing Event — Racket Game which should be from the list of SGFI/AIU/IOA — Indigenous Activities (OR) yoga — Combative Game which should be from the list of SGFI/AIU/IOA — Gymnastics (OR) Swimming — Game of Specialization which should be from the list of SGFI/AIU/IOA — Aerobics and Dance (OR) Weight lifting — Game of Specialization — Power Lifting (OR) Physique Training
Discipline Specific Elective		Sports Journalism Talent Identification Sports Entrepreneurship Adapted Physical Education
Generic Elective		Computer Applications Environmental Science (EVS) English Counseling in Sports
Skill Enhancement		Test & Measurement Exercise Prescription / Therapeutic Exercise
Ability Enhancement Compulsory		State Level Study Tour National Level Study Tour

1.15 Course wise classes and credits are given in Table 2:

Courses	Number	Classes	Credits 1 credit = 1 Theory (Th) period of 1 hour 1 credit = 1 Tutorial (Tut) period of 1 hr. 1 credit = 2 practicum (P) periods of 1 hour each	Total Credits
Core	14	Theory 4	4	4*14 = 56
	12	Practical 2	2	12*2 = 24
				56+24 = 80
Discipline Specific Elective	4	4Th+ 2p	4+2 = 6	4*6 = 24
Generic Elective	4	5Th + 1 Tut	5+1 = 6	4*6 = 24
Skill Enhancement	2	4Th+ 2p	4+2= 6	2*6 = 12
Ability Enhancement Compulsory Courses	2	Project Report	2	2*2 = 4
		Viva voce	2	2*2 = 4
Total Credits				148
In addition to the above courses, two Ability Enhancement Compulsory Courses (such as State Level Study Tour & National Level Study Tour) with 4 credits each may also be conducted. So the total credit for AECC will be 08.				

Course-level learning outcomes

The undergraduate degree program of Physical education will be of three years with six semesters. The **Course-level learning outcomes** for each course within **B.P.E.S., B.A./B.Sc (Honors) degree** programme in Physical Education are given below with content matter (detail syllabus of four units) to be taught in each unit and semester for three years:

(Learning Outcomes of each subject are written on top of each syllabus)

Index for program learning outcome tables:

Table No. 1a)	Foundational courses	: Academic competence
Table No. 1b)	Foundational Courses	: Personal and Behavioral Competence
Table No. 1c)	Foundational Courses	: Social Competence
Table No. 2a)	Skill Based Courses	: Academic competence
Table No. 2b)	Skill Based Courses	: Personal and Behavioral Competence
Table No. 2c)	Skill Based Courses	: Social Competence
Table No. 3a)	Elective courses	: Academic competence
Table No. 3b)	Elective Courses	: Personal and Behavioral Competence
Table No. 3c)	Elective Courses	: Social Competence
Table No. 4a)	Generic Elective Courses	: Academic competence
Table No. 4b)	Generic Elective Courses	: Personal and Behavioral Competence
Table No. 4c)	Generic Elective Courses	: Social Competence

Table 1 (a)														
Programme outcomes	FOUNDATIONAL COURSES													
	His. & Foundati on of Phy. Edu.	Basic & Systemic Anty& Physiolo gy	Exercise s Physiolo gy	Kinesiolog y & Sports Biomechan ics	Sports Psycholo gy	Sports Traini ng	Health Educati on	Sports Managem ent	Athletic Care and Rehabilitati on	Fitness Trainin g and Nutriti on	Officiati ng and Coachin g-I	Officiati ng and Coachin g-II	Officiati ng and Coachin g-III	Officiati ng and Coachin g-IV
Academic Competence (1.1 to 1.8)														
1.1 Disciplinary Knowl edge	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1.2 Professional Skills		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
1.3 Application of Skills to chosen specialization	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1.4 Experiential Learning & Critical Thinking	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1.5 Application to Physical Education related Problems	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
1.6 Knowledge of e-resources & social media								✓						
1.7 Skills in scientific writing & Effective presentation skills		✓	✓	✓										
1.8 Critical evaluation of theoretical approaches	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				

Programme outcomes	TABLE 1 (b) FOUNDATIONAL COURSES													
	His. & Foundati on of Phy. Edu.	Basic & Systemic Anty& Physiolog y	Exercises Physiolo gy	Kinesiolog y & Sports Biomechan ics	Sports Psycholo gy	Sports Traini ng	Health Educati on	Sports Manageme nt	Athletic Care and Rehabilitati on	Fitness Trainin g and Nutriti on	Officiati ng and Coachin g-I	Officiati ng and Coachin g-II	Officiati ng and Coachin g-III	Officiati ng and Coachin g-IV
2. Personal & Behavioural Competence (2.1 to 2. 6)														
2.1 Self development& self regulation skills					✓	✓			✓	✓	✓	✓	✓	✓
2.2 Social skills (empathy) & accountability							✓		✓					
2.3 Cultural and historical sensibility	✓													
2.4 Conversational Competence & Communicatio n skills								✓						
2.5 Appreciating Diverse perspectives	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
2.6 Ability to work in groups & teams (negotiation)						✓				✓	✓	✓	✓	✓

Programme outcomes	TABLE 1 (c) FOUNDATIONAL COURSES													
	His. & Foundati on of Phy. Edu.	Basic & Systemic Anty& Physiolo gy	Exercises Physiolo gy	Kinesiology & Sports Biomechani cs	Sports Psycholo gy	Sports Trainin g	Health Educati on	Sports Manageme nt	Athletic Care and Rehabilitati on	Fitness Trainin g and Nutritio n	Officiati ng and Coaching -I	Officiati ng and Coaching -II	Officiati ng and Coaching -III	Officiati ng and Coaching -IV
3. Social Competence (3.1 to 3.6)														
3.1 collaboratio n, Cooperation & Community feel							✓				✓	✓	✓	✓
3.2 Understandi ng social dynamics & social problems	✓						✓							
3.3 Gender Sensitivity & awareness of gender fluidity issues		✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓
3.4 Ethical, Social & Ecological responsibilit y						✓	✓	✓	✓	✓				
3.5 Moral & Ethical Awareness & reasoning						✓	✓		✓	✓				
3.6 Multilevel Commitmen						✓	✓		✓	✓				

t to health & wellbeing														
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TABLE 2 (a)											
Programme outcomes	SKILL BASED COURSES										
	Test & Measurement	Exercise Prescription / Therapeutic Exercise									
Academic Competence (1.1 to 1.8)											
1.1 Disciplinary Knowledge	✓	✓									
1.2 Professional Skills	✓	✓									
1.3 Application of Skills to chosen specialization	✓	✓									
1.4 Experiential Learning & Critical Thinking	✓	✓									
1.5 Application to physical education related Problems	✓	✓									
1.6 Knowledge of e-resources & social media	✓										
1.7 Skills in scientific writing & Effective presentation skills	✓	✓									
1.8 Critical evaluation of	✓	✓									

theoretical approaches											
TABLE 2 (b)											
Programme outcomes	SKILL BASED COURSES										
	Test & Measurement	Exercise Prescription / Therapeutic Exercise									
2. Personal & Behavioural Competence (2.1 to 2. 6)											
2.1 Self development&self regulation skills	✓	✓									
2.2 Social skills (empathy) & accountability	✓	✓									
2.3 Cultural and historical sensibility											
2.4 Conversational Competence & Communication skills		✓									
2.5 Appreciating Diverse perspectives	✓	✓									
2.6 Ability to work in groups & teams (negotiation)	✓	✓									

TABLE 2 (c)										
Programme outcomes	Skill Based Courses									
	Test & Measurement	Exercise Prescription / Therapeutic Exercise								
3. Social Competence (3.1 to 3.6)										
3.1 collaboration, Cooperation & Community feel	✓	✓								
3.2 Understanding social dynamics & social problems	✓	✓								
3.3 Gender Sensitivity & awareness of gender fluidity issues	✓	✓								
3.4 Ethical, Social & Ecological responsibility										
3.5 Moral & Ethical Awareness & reasoning	✓	✓								
3.6 Multilevel Commitment to health & wellbeing	✓	✓								

Table 3 (a)										
Programme outcomes	ELECTIVE COURSES									
	Sports Journalism	Talent Identification	Sports Entrepreneurship	Adapted Physical Education						
Academic Competence (1.1 to 1.8)										
1.1 Disciplinary Knowledge	✓	✓	✓	✓						
1.2 Professional Skills	✓	✓	✓	✓						
1.3 Application of Skills to chosen specialization	✓	✓	✓	✓						
1.4 Experiential Learning & Critical Thinking	✓	✓	✓	✓						
1.5 Application to physical education related Problems	✓	✓	✓	✓						
1.6 Knowledge of e-resources & social media	✓		✓							
1.7 Skills in scientific writing & Effective presentation skills	✓		✓	✓						
1.8 Critical evaluation of theoretical approaches	✓	✓	✓	✓						

Table 3 (b)										
Programme outcomes	ELECTIVE COURSES									
	Sports Journalism	Talent Identification	Sports Entrepreneurship	Adapted Physical Education						
2. Personal & Behavioural Competence (2.1 to 2. 6)										
2.1 Self development&self regulation skills	✓	✓	✓							
2.2 Social skills (empathy) & accountability	✓	✓	✓	✓						
2.3 Cultural and historical sensibility										
2.4 Conversational Competence & Communication skills	✓		✓	✓						
2.5 Appreciating Diverse perspectives	✓	✓	✓	✓						
2.6 Ability to work in groups & teams (negotiation)	✓	✓	✓	✓						

Table 3 (c)										
Programme outcomes	DISCIPLINE SPECIFIC ELECTIVE COURSES									
	Sports Journalism	Talent Identification	Sports Entrepreneurship	Adapted Physical Education						
3. Social Competence (3.1 to 3.6)										
3.1 collaboration, Cooperation & Community feel	✓	✓	✓	✓						
3.2 Understanding social dynamics & social problems	✓	✓	✓	✓						
3.3 Gender Sensitivity & awareness of gender fluidity issues		✓		✓						
3.4 Ethical, Social & Ecological responsibility		✓								
3.5 Moral & Ethical Awareness & reasoning		✓		✓						
3.6 Multilevel Commitment to health & wellbeing	✓	✓	✓	✓						

Table 4 (a)										
Programme outcomes	GENERIC ELECTIVE COURSE (GE)									
	Computer Applications	Environmental Science (EVS)	English	Counseling in Sports						
Academic Competence (1.1 to 1.8)										
1.1 Disciplinary Knowledge	✓	✓	✓	✓						
1.2 Professional Skills	✓			✓						
1.3 Application of Skills to chosen specialization	✓		✓	✓						
1.4 Experiential Learning & Critical Thinking	✓			✓						
1.5 Application to Physical education related Problems	✓			✓						
1.6 Knowledge of e-resources & social media	✓		✓							
1.7 Skills in scientific writing & Effective presentation skills	✓		✓							
1.8 Critical evaluation of theoretical approaches		✓		✓						

Table 4 (b)										
Programme outcomes	GENERIC ELECTIVE COURSE (GE)									
	Computer Applications	Environmental Science (EVS)	English	Counseling in Sports						
2. Personal & Behavioural Competence (2.1 to 2. 6)										
2.1 Self development&self regulation skills	✓		✓	✓						
2.2 Social skills (empathy) &accountability				✓						
2.3 Cultural and historical sensibility										
2.4 Conversational Competence & Communication skills	✓		✓	✓						
2.5 Appreciating Diverse perspectives	✓	✓	✓	✓						
2.6 Ability to work in groups & teams (negotiation)				✓						

Table 4 (c)										
Programme outcomes	GENERIC ELECTIVE COURSE (GE)									
	Computer Applications	Environmental Science (EVS)	English	Counseling in Sports						
3. Social Competence (3.1 to 3.6)										
3.1 collaboration, Cooperation & Community feel		✓		✓						
3.2 Understanding social dynamics & social problems		✓	✓	✓						
3.3 Gender Sensitivity & awareness of gender fluidity issues				✓						
3.4 Ethical, Social & Ecological responsibility		✓		✓						
3.5 Moral & Ethical Awareness & reasoning		✓		✓						
3.6 Multilevel Commitment to health & wellbeing		✓		✓						

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Semester-I

Paper-I

Title: History and Foundation of Physical Education

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes:

1. The pass out would be able to compare the relationship between general education and physical education.
2. He would be able to identify and relate with the History of Physical Education.
3. He would be able to comprehend the relationship between Philosophy, Education and Physical Education.
4. He would be able to identify the works of Philosophers of Education and Physical Education.
5. He would know recent developments and academic foundation of Physical Education.

Unit-I

Introduction to Physical Education

- 1.1 Meaning, Definition and Scope of Physical Education
- 1.2 Aims and Objective of Physical Education
- 1.3 Importance of Physical Education in present era.
- 1.4 Misconceptions about Physical Education.
- 1.5 Relationship of Physical Education with General Education.
- 1.6 Physical Education as an Art and Science.

Unit-II

Historical Development of Physical Education in India

- 2.1 Vedic Period (2500 BC – 600 BC), Early Hindu Period (600 BC – 320 AD) and Later Hindu Period (320 AD – 1000 AD), Medieval period
- 2.2 Post Mughal British Period (Before 1947) Y.M.C.A. and its contributions.
- 2.3 Physical Education in India (After 1947)
- 2.4 The early history and significant stages in the revival and development of the modern Olympic movement
- 2.5 Educational and cultural values of Olympic movement

Unit-III

Philosophical Foundation of Physical Education

- 3.1 Philosophical foundation: Idealism, Pragmatism, Naturalism, Realism.
- 3.2 Philosophy and Culture.
- 3.3 Fitness and wellness movement in the contemporary perspectives
- 3.4 Sports for all and its role in the maintenance and promotion of fitness.

Unit-IV

Foundation of Physical Education

- 4.1 Biological
 - 4.1.1 Growth and development
 - 4.1.2 Age and gender characteristics
 - 4.1.3 Body Types
- 4.2 Psychological
 - 4.2.1 Attitude, interest.
 - 4.2.2 Cognition, emotions and sentiments.

4.2.3 Practical suggestion from psychology.

4.3 Sociological

4.3.1 Society and culture

4.3.2 Social acceptance and recognition

4.3.3 Leadership in physical education

Teaching Learning Strategies: The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

Virtual instructional platforms such as **online lectures**, webcast etc. are to be used. Students can participate in coursework through instant messages, emails and video conferencing. Google class room, Cisco WebEx Meeting, OERS, Swayam Platform (www.swayam.gov.in), SwayamPrabha (www.swayamprabha.gov.in) (available on Doordarshan (free dish TV), E-Yantra (www.e-yantra.org), Virtual Labs (www.vlabs.co.in), FOSSEE (www.fossee.in), application of spoken tutorials (www.spoken-tutorial.org), National Digital Library (www.ndl.iitkgp.ac.in), electronic journals (www.ess.infibnet.ac.in) etc. are to be used.. Courses may also integrate DVD videos as part of the training process. Students may examine current topics in the field through the use of e- textbooks and e-physical education journals. Students can complete some portion of the education at approved testing sites for the practical components wherever necessary.

Initiating Brain based learning- A stress free environment will be created. Constant feedback regarding their performance will be given to initiate learning from mistakes. Creative thinking for new ideas and innovations will be encouraged. Break in learning will be filled with recreational and constructive activities for boosting cognitive functions.

Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

References:

1. Bucher, C. A. (n.d.) - Foundation of physical education. St. Louis: The C.V. Mosby Co.
2. Deshpande, S. H. (2014) - Physical Education in Ancient India. Amravati: Degree college of Physical education.
3. Dash, B.N. (2003.) –Principles of Education, Neelkamal publication, Hyderabad,

4. Kamlesh, M.L. (2002) –Sociological Foundation of Physical Education, Metropolitan Book co. Pvt. Ltd., Delhi,
5. Pandey, R.S.(1991) Philosophical & Sociological Foundation of Education, Vinod PustakMandir, Agra,.
6. Bhatia, K.K. &Narang, C.L. (1984.)– Philosophical & Sociological Bases of Education, Prakash Bros., Ludhiana,
7. Adams, William.C (1991.) – Foundation of Physical Education Exercises and Sports Sciences, Lea and Febigor, Philadelphia,
8. Dr. Kamlesh M.L. (2004) - Principles and History of Physical Education and Sports, Friends Publication (India) New Delhi.
9. Dr. B.C.Kapri, Fundamentals of Physical Education, Friends Publication, DariyaGanj, Delhi (India).

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Semester-I

Paper-II

Title: Basic and Systemic Anatomy& Physiology

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning Outcomes:

1. The student will be oriented with the basic structure and function of human body by identifying, comparing and relating different systems, organs and their functional and structural units.
2. He would be able to Relate and interpret the role of exercise on body systems and its relation to well being, through literature reviews and physical conditioning exercises.
3. Adapt the art to apply the knowledge of anatomy and physiology in physical activity classes at school level.
4. Construct anatomy and physiology related pedagogical materials exploring their creative imaginations while working in group and using technology.

Unit-I

1. Validation of Anatomy and Physiology in the field of Physical Education
2. Structural and functional demonstration of human cell
3. Skeletal System- classification and functions
4. Anatomical terms related to body movements
5. Structure and types of bones, joints in human body, Effects of exercise on skeletal system

Unit-II

- 2.1 Structure and function of Muscle
- 2.2 Major classifications of Muscles
- 2.3 Types of muscle fiber and Sliding Filament Theory of Muscular Contraction
- 2.4 Types of muscular contractions (Isotonic, Isometric, Isokinetic) and their roles in physical activity.
- 2.5 Concept of agonist and antagonist muscles and muscle imbalance; Effect of exercise on muscular system

Unit-III

- 3.1 Structural and functional introduction to circulatory system
- 3.2 Concept of stroke volume, cardiac output and cardiac index
- 3.3 Respiratory System (structural and organizational overview); Functional mechanism of respiration (External and Internal Respiration)
- 3.4 Concept of recovery oxygen and second wind
- 3.5 Cardio-respiratory adaptations to long term exercise

Unit-IV

- 4.1 Structural units and functional mechanism of digestive system and excretory system
- 4.2 Effect of exercise on Digestive System and Excretory System
- 4.3 Classification of Nervous System on the basis of its structure and functions
- 4.4 Structural and Functional interpretation of neuro-muscular junction with all or none law
- 4.5 Effect of exercise on nervous system

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

Suggested Readings:

1. Appuseries (2012) *How the Human Body Works - Kids Animation Learn Series*. [Online] Available from: [https://www.youtube.com/results?search_query=APPUSERIES+human+body+](https://www.youtube.com/results?search_query=APPUSERIES+human+body) [Accessed 20th July 2016].
2. Bannister, L. H. & et.al.(2000) *Gray'sAnatomy*.Churchill Living Stone.
3. Boone, T. (2014) *Exercise physiology*.Jones& Bartlett Learning.
4. Davidson, D.S. & Morgan, B. (2002) *Human body revealed*. Great Britian, Dorling Kindersley.
5. E Learning for kids- Founding Dreams (Date not Available) *Science- Body Parts*. [Online] Available from: <http://www.e-learningforkids.org/science/lesson/body-parts/>[Accessed 20th July 2016].

6. Foss, M. L., Keteyian, S. J. & Fox, E. L., (1998). *Fox's physiological basis for exercise and sport*. Boston, Mass, WCB/McGraw-Hill.
7. Get Body Smart (2016) *An online examination of human anatomy and physiology-Animated Text Narrations and Quizzes to Explain the Structures and Functions of the Human Body Systems*. [Online] Available from: <http://www.getbodysmart.com/> [Accessed 20th July 2016].
8. Hall, J. E. & Guyton, A. C. (2011). *Guyton and Hall textbook of medical physiology*. Philadelphia, PA, Saunders Elsevier.
9. Jam Campus (2018) *THE PARTS OF A CELL SONG*. [online video] Available at: <https://www.youtube.com/watch?v=NkC9AiJf7gI> [Accessed 03 July 2018].
10. JCCCvideo (2010) *The Plasma Membrane*. [online video] Available at: <https://www.youtube.com/watch?v=moPJkCbKjBs> [Accessed 03 July 2018].
11. Manocchia. P. (2007) *Anatomy of Exercise-A trainer's inside guide to your workout*. New York, A & C Black.
12. Mc Ardle, W.D.; Katch, F.I. & Katch, V.L. (2010) *Exercise physiology- Nutrition, Energy, and human performance*. 7th edition. Philadelphia, Wolters Kluwer and Lippincott Williams & Wilkins.
13. Musical Cells (2013) *Power Pack - The Mitochondria Rock Song*. [online video] Available at: <https://www.youtube.com/watch?v=418U5YPVAI&index=1&list=RD418U5YPVAI> [Accessed 03 July 2018].
14. Nucleus Medical Media (2015) *Biology: Cell Structure I Nucleus Medical Media*. [online video] Available at: <https://www.youtube.com/watch?v=URUJD5NEXC8> [Accessed 03 July 2018].
15. Plowman, S.A. & Smith, D.L. (2001) *Exercise physiology for health, fitness and performance*. 2nd edition. San Francisco, Benjamin Cummings.
16. Robergs, R.A. & Roberts, S. O. (2000) *Fundamental principles of exercise physiology for fitness, performance and health*. Boston, McGraw Hill.
17. Sciencemusicvideos (2011) *The Cell Song*. [online video] Available at: https://www.youtube.com/results?search_query=cell+song [Accessed 02 July 2018].
18. shenoyboy747 (2012) *Call Me Golgi (Carly Rae Jepsen Call Me Maybe PARODY)*. [online video] Available at: https://www.youtube.com/watch?v=y6PU4Xy_nw [Accessed 02 July 2018].
19. St. John Ambulance Australia (2004) *The complete home medical reference*. Gordon Cheers, OM book services.

20. Whiting, W. C., &Rugg, S. (2006). *Dynatomy: dynamic human anatomy*. Champaign, IL, Human Kinetics.
21. xglamgirl43454345x (2012) *Lysosomes and Cell Membrane Song*. [online video] Available at: <https://www.youtube.com/watch?v=hrgXW0PtTjc> [Accessed 03 July 2018].
22. zebras206 (2010) *Rough Endoplasmic Reticulum Song*. [online video] Available at: <https://www.youtube.com/watch?v=PASnAaulK-Y> [Accessed 03 July 2018].
23. Spongelab a global STEM community (no date) *BULD-A-BODY*. [Online]. [Accessed 15 July 2018]. Available from: http://www.spongelab.com/game_pages/bab.cfm

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Semester-Ist

Paper-III

Title: Computer Applications

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning Outcomes

1. The student will be oriented with the basic knowledge of computer applications.
2. The student will be able to apply the knowledge in the framing of training programs.
3. The outcome of this course will help him in gathering, storage and processing of huge information in relation to inputs, outputs and feedback of sports training programs.

Unit-I

Introduction to Computer

- 1.1 Information and communication technology (ICT).
- 1.2 Application of Computers in Physical Education
- 1.3 Components of computer, input and output device
- 1.4 Application software used in Physical Education and sports

Unit-II

Word Processing

- 2.1 Getting started with Microsoft Word

- 2.2 Creating, saving and opening a document
- 2.3 Formatting Editing features Drawing table.
- 2.4 Page Setup, Paragraph Alignment, Spelling and Grammar Check, Printing Option, Inserting Page Number, Graph and Footnote.

Unit-III

Spreadsheet Program

- 3.1 Getting started with Microsoft Excel
- 3.2 Creating, saving and opening spreadsheet
- 3.3 Creating formulas
- 3.4 Format and editing features for charting data.

Unit-IV

Presentation Software

- 4.1 Getting started with Microsoft Power Point
- 4.2 Creating, saving and opening a ppt. file
- 4.3 Format and editing features slide show, design, inserting slide number
- 4.4 Enhancing of Picture, Graph, Table
- 4.5 Finalizing of a presentations

Teaching Learning Strategies: The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

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journals (www.ess.infibnet.ac.in) etc. are to be used. . Courses may also integrate DVD videos as part of the training process.

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

References:

1. Irtegov, D. (2004). Operating system fundamentals. Firewall Media.
2. Frye, C. & Lambert, J.(2015). Microsoft Office 2016 Step by Step, Microsoft Press.
3. Milke, M.(2007). Absolute beginner's guide to computer basics. Pearson Education Asia.
4. Sinha, P. K. & Sinha, P. (2004).Computer fundamentals. 4th edition, BPB Publication.

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Semester-Ist

Paper-IV

Title: Officiating and Coaching-I

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes

1. The pass out would be oriented with the rules regulations of the chosen game.
2. The pass out would be able to lay-out and mark the dimensions of the play court.
3. Students would be able to organize the concerned sports event and officiate in it.
4. Students would be oriented in the art of coaching the sports team.
5. Students shall also be able to organize and officiate in yogic events.

Unit-I

Introduction of Officiating and coaching

- 1.1 Concept of officiating and coaching
- 1.2 Principles of officiating & Coaching
- 1.3 Importance of officiating and coaching.
- 1.4 Qualifications for Officials conducting various tournaments.

Unit-II

Rules and Layout:

- 2.1 Dimensions, layouts and marking of fields of chosen Ball Game –I
- 2.2 Rules and their interpretations of chosen Ball Game –I
- 2.3 Qualification and number of officials in the chosen Ball Game –I
- 2.4 Coaching in the chosen Ball Game –I

Unit-III:

Duties of Official:

- 3.1 Dimensions, layouts and marking of fields of chosen Ball Game –II
- 3.2 Rules and their interpretations of chosen Ball Game –II
- 3.3 Qualification and number of officials in the chosen Ball Game –II
- 3.4 Coaching in the chosen Ball Game –II

Unit-IV

Qualities and Qualifications of Coach and Official:

- 4.1 Layout, dimensions and markings of Track
- 4.2 Rules and their interpretations of running events in Track.
- 4.3 Yoga and its rules
- 4.4 Coaching in Athletics and Yoga

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tutorials (www.spoken-tutorial.org), National Digital Library (www.ndl.iitkgp.ac.in), electronic journals (www.ess.infn.net.ac.in) etc. are to be used. . Courses may also integrate DVD videos as part of the training process. Students may examine current topics in the field through the use of e-textbooks and e-physical education journals. Students can complete some portion of the education at approved testing sites for the practical components wherever necessary.

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

Reference Books:

1. Bunn, J. W. (1968). *The art of officiating sports*. Englewood cliffs N.J. Prentice
2. Hall. Bunn, J. W. (1972). *Scientific principles of coaching*.
3. Englewood cliffs N. J. Prentice Hall. Dyson, G. H. (1963). *The mechanics of athletics*. London: University of London Press Ltd.
4. Dyson, G. H. (1963). *The mechanics of Athletics*. London: University of London Press Ltd. Lawther, J.D. (1965).
5. *Psychology of coaching*. New York: Pre. Hall.
6. Singer, R. N. (1972). *Coaching, athletic & psychology*. New York: M.C. Grew Hill.
7. Official Rule Book / Handbook of the concerned federation of sports.

Practical

1. Major Ball Game which should be from the list of SGFI/AIU/IOA)

Credit: 02

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

1. History and Development of the game at International and National level.
2. Dimensions and marking of playing area.
3. Basic requirements of the playing area.
4. Fundamental skills of the game.
5. Skill tests, scoring and arrangement of the skill tests.
6. National and international organizations / federations of the game.
7. Rules of the game with their interpretations.
8. Team selection and coaching in that game.
9. Officiating & Referee / Umpire /scorer /curatorship for self-employment.

Sports simulation laboratory- Sports simulation laboratory is to be established to provide the students with a feasible environment where they will learn and practice sports skills using animated videos with continuous rectification of errors till exact simulation of skill is attained. Help may be taken from Youtube Streaming, Swayam Platform (www.swayam.gov.in), SwayamPrabha (www.swayamprabha.gov.in) (available on Doordarshan(free dish TV), E-Yantra (www.e-yantra.org)).

2. Track &Field: Running and Jumping event

Credit: 02

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

1. History and Development of the Track and field at International and National level.
2. Basics of Athletic Track (200 & 400 Mt Track).
3. Preparation of Track area.n
4. Marking of Track, various zones, starting points etc.
5. Running Events, their process, timing and scorings.
6. Fundamental skills related to running in track. .
7. Running tests (for speed and endurance) and their administration.
8. National and international organizations / federations of the Athletics.
9. Rules and their interpretations in relation to running events.
10. Team selection, and coaching in running events.
11. Officiating & Referee / Umpire /scorer /curatorship for self-employment.

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Semester-IInd

Paper I

Title: Exercises Physiology

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning Outcomes:

1. The student would be empowered with the applicable knowledge of physiology in physical activity and sports.
2. The learner would be able to incorporate this knowledge in the training and coaching programme for the betterment of his trainee's performance.

Unit-I

Functional Adaptations to Exercise

- 1.1 Hormonal control during exercise
- 1.2 Exercise and neuromuscular system
- 1.3 Metabolic adaptations to exercise
- 1.4 Cardio-respiratory changes
- 1.5 Effects of exercise and training on health and fitness

Unit-II

Energy Continuum and Recovery Process

- 2.1 Metabolism and exercise
- 2.2 Recovery from exercise
- 2.3 Replenishment of energy stores during recovery process
- 2.4 Removal of excess lactic acid produced during exercise
- 2.5 Restoration of myoglobin oxygen stores

Unit-III

Exercise in hot and cold environment

- 3.1 Body temperature regulations
- 3.2 Physiological responses to exercise in the heat
- 3.3 Acclimatization to exercise in heat
- 3.4 Physiological responses to exercise in cold
- 3.5 Health risks during exercise in the cold

Unit-IV

Altitude and physiology

- 4.1 Exercise performance at altitude
- 4.2 Physiological responses to acute altitude exposure
- 4.3 Chronic altitude exposure and acclimatization

Aging process and Ergogenics

- 4.4 Age related changes and exercise
- 4.5 Ergogenic aids and physical activity

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

References:

1. W. Larry Kenney, Jack H. Wilmore, David L. Costill, 2012, Physiology of Sports and Exercises.
2. Robert A. Robergs, Scott O. Roberts, 2000, Fundamental Principles of Exercise Physiology for Fitness, Performance, and Health.
3. Larry G. Shaver, 1982, Essentials of Exercise Physiology.
4. Dr. Sandhya Tiwari, 2006, Exercise Physiology.
5. M. Dena Gardiner, 1985, The Principles of Exercise Therapy.
6. Edward L. Fox, Richard W. Bowers, Merle L. Foss, 1981, The Physiological Basis of Physical Education and Athletics.
7. Michael S. Bahrke, Charles E. Yesalis, 2002, Performance – Enhancing Substances in Sport and Exercises.

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Semester-IInd

Paper-II

Title: English

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes:

1. The course will develop fundamental knowledge of English Language.
2. The literary texts shall enable students to inculcate creative & aesthetic sensitivity and critically comprehend, appreciate and analyze it.
3. The students will be familiarized with the basics of language and its structure.

Unit-I

Vocabulary

Use of Dictionary, Use of Words: Diminutives, Homonyms & Homophones

Unit-II

Essentials of Grammar – I

1. Articles
2. Parts of Speech
3. Tenses

Unit-III

Essentials of Grammar – II

1. Sentence Structure
2. Subject -Verb agreement
3. Punctuation

Unit-IV

Spoken English Communication, Short Stories

1. Speech Drills
2. Pronunciation and Accent
3. Stress and Intonation
4. The Necklace, by Guy de Maupassant,
5. A Shadow, by R.K. Narayan,
6. The Luncheon, by Somerset Maugham

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

Text:

Ramon & Prakash, Business Communication, Oxford.

Sydney Greenbaum Oxford English Grammar, Oxford.

Successful Communications, Malra Treece (Allyn and Bacon)

Effective Technical Communication, M. Ashraf Rizvi.

Reference:

1. Guffey, Ellen Mary, Business Communication, Thomson (South Western)
2. Dale Carnegie: Quick and Easy way of Public Speaking.

Additional Reading:

Newspapers and Journals

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

**B.A./ B.Sc. HONOURS IN PHYSICAL, HEALTH AND SPORTS
EDUCATION**

Semester-IInd

Paper-III

Title: Environmental Science (EVS)

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes:

1. The course shall develop in student the scientific background needed to understand how the earth works and how we, as human beings, fit into that.
2. At the end of the course, it is expected that students will be able to identify and analyze environmental problems as well as the risks associated with these problems.

Unit-I

Multidisciplinary Nature of Environmental studies

Descriptors/Topics

1. Introduction to environmental studies with their importance.
2. Need for public awareness.
3. Sensitization and participation.
4. Swatch Bharat Abhiyan.

Unit-II

Natural Resources

Descriptors/Topics

1. Types of natural resources and their importance.
2. Food resources: World food problems and related aspects.
3. Land resources, Water resources, Forest resources- use and overuse
4. Minerals and Energy resources- importance of renewable and sustainable energy.
5. Equitable use of resources for sustainable lifestyles
6. Role of an individual in conservation of natural resources

Unit-III

Ecosystems

Descriptors/Topics

1. Concept of an ecosystem,
2. Types of ecosystem,
3. Structure and function of an ecosystem, Producers, consumers and decomposers.
4. Energy flow in the ecosystem, Food chains, food webs and ecological pyramids.
5. Ecological succession.
6. Introduction, types, characteristic features, structure and function of Forest ecosystem, Grassland ecosystem and Desert ecosystem, Aquatic ecosystems (ponds, streams, lakes, rivers, ocean estuaries)

Unit-IV

Biodiversity

Descriptors/Topics

1. Introduction - Definition: genetic, species and ecosystem diversity
2. Bio-geographical classification of India

3. Value of biodiversity: consumptive use, productive use, social, ethical aesthetic and option values
4. Bio-diversity at global, national and local levels, India as a megadiversity nation
5. Hot-spots of biodiversity,
6. Threats to biodiversity: habitat loss, poaching of wildlife, man wildlife conflicts
7. Endangered and endemic species of India
8. Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity

Teaching Learning Strategies: The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

Virtual instructional platforms such as **online lectures**, webcast etc. are to be used. Students can participate in coursework through instant messages, emails and video conferencing. Google class room, Cisco WebeX Meeting, OERS, Swayam Platform (www.swayam.gov.in), SwayamPrabha (www.swayamprabha.gov.in) (available on Doordarshan (free dish TV), E-Yantra (www.e-yantra.org), Virtual Labs (www.vlabs.co.in), FOSSEE (www.fossee.in), application of spoken tutorials (www.spoken-tutorial.org), National Digital Library (www.ndl.iitkgp.ac.in), electronic journals (www.ess.infn.net.ac.in) etc. are to be used. . Courses may also integrate DVD videos as part of the training process

Initiating Brain based learning- A stress free environment will be created. Constant feedback regarding their performance will be given to initiate learning from mistakes. Creative thinking for new ideas and innovations will be encouraged. Break in learning will be filled with recreational and constructive activities for boosting cognitive functions.

Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

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”

**BACHELOR OF PHYSICAL EDUCATION AND SPORTS (B.P.E.S.)/
B.A./ B.Sc. HONOURS IN PHYSICAL, HEALTH AND SPORTS
EDUCATION**

Semester-IInd

Paper-IV

Title: Officiating and Coaching-II

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes

1. The pass out would be oriented with the rules regulations of the chosen game.
2. The pass out would be able to lay-out and mark the dimensions of the court.
3. Students would be able to organize the concerned sports event and officiate in it.
4. Students would be oriented in the art of coaching the sports team.
5. Students shall also be able to organize and officiate in yogic events.

Unit-I

Officiating and coaching in Chosen ball game -III

- 1.1 Dimensions, layouts and marking of fields of chosen Ball Game –III
- 1.2 Rules and their interpretations of chosen Ball Game –III
- 1.3 Qualification and number of officials in the chosen Ball Game –III
- 1.4 Coaching in the chosen Ball Game –III

Unit-II

Officiating and coaching in Chosen ball game -IV

- 2.1 Dimensions, layouts and marking of fields of chosen Ball Game –IV
- 2.2 Rules and their interpretations of chosen Ball Game –IV
- 2.3 Qualification and number of officials in the chosen Ball Game –IV
- 2.4 Coaching in the chosen Ball Game –IV

Unit- III

Officiating and coaching in Athletics & Yoga

- 3.1 Layout, dimensions and marking in Field Events of Athletics.
- 3.2 Rules and their interpretations in Field Events of Athletics.
- 3.3 Yoga- Pranayama and Meditation.
- 3.4 Coaching in Field events of Athletics and Practice of-Pranayama & Meditation

Unit-IV

Major tournaments of Athletics:

- 4.1 Major tournaments / Trophies of chosen Ball Game –III
- 4.2 Major tournaments / Trophies of chosen Ball Game –IV
- 4.3 Major tournaments / Competitions of Athletics
- 4.4 Yoga and its tournament.

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tutorials (www.spoken-tutorial.org), National Digital Library (www.ndl.iitkgp.ac.in), electronic journals (www.ess.infibnet.ac.in) etc. are to be used. . Courses may also integrate DVD videos as part of the training process

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

Reference Books:

1. Bunn, J. W. (1968). *The art of officiating sports*. Englewood cliffs N.J. Prentice
2. Hall. Bunn, J. W. (1972). *Scientific principles of coaching*.
3. Englewood cliffs N. J. Prentice Hall. Dyson, G. H. (1963). *The mechanics of athletics*. London: University of London Press Ltd.
4. Dyson, G. H. (1963). *The mechanics of Athletics*. London: University of London Press Ltd. Lawther, J.D. (1965).
5. *Psychology of coaching*. New York: Pre. Hall.
6. Singer, R. N. (1972). *Coaching, athletic & psychology*. New York: M.C. Graw Hill.
7. Official Rule Book / Handbook of the concerned federation of sports.

Practical

1. Major Ball Game which should be from the list of SGFI/AIU/IOA)

Credit: 02

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

1. History and Development of the game at International and National level.
2. Dimensions and marking of playing area.
3. Basic requirements of the playing area.
4. Fundamental skills of the game.
5. Skill tests, scoring and arrangement of the skill tests.
6. National and international organizations / federations of the game.
7. Rules and their interpretations of the game.
8. Team selection and coaching in that game.
9. Officiating & Referee / Umpire /scorer /curatorship for self-employment.

Sports simulation laboratory - Sports simulation laboratory is to be established to provide the students with a feasible environment where they will learn and practice sports skills using animated videos with continuous rectification of errors till exact simulation of skill is attained. Help may be taken from Youtube Streaming, Swayam Platform (www.swayam.gov.in), SwayamPrabha (www.swayamprabha.gov.in) (available on Doordarshan(free dish TV), E-Yantra (www.e-yantra.org)).

2. Track & Field: Running and Throwing

Credit: 02

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

1. Basics of jumping events in Athletics.
2. Long jump- Basics, jumping pit, take of board, approach run and skills.
3. Triple jump- Basics, jumping pit, take of board, approach run and skills.
4. High jump -Basics of high jump, jumping pit, approach run and skills /styles.
5. Pole vault -Basics, jumping pit, equipment, approach run and skills.
6. Marking of jumping arena.
7. Jumping tests and their arrangements.
8. Rules, scoring and their interpretations in relation to all jumping events.
9. Team selection and coaching in jumping events.
10. Officiating & Referee / Umpire /scorer /curatorship for self-employment.

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Semester-IIIrd

Paper-I

Title: Kinesiology & Sports Biomechanics

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes

11. The student would be Oriented with the skeletal structure of human body by identifying the origin and insertion of various muscles.
12. Orient the students in basic structure and functions of primary joints of the body.
13. Relate and interpret the role of various mechanical principles in human movement.

Unit-I

Introduction to Kinesiology and Sports Biomechanics

- 1.1 Meaning and Definition of Kinesiology and Sports Biomechanics
- 1.2 Importance of Kinesiology and Biomechanics in sports and physical activities
- 1.3 Origin and Insertion on bones and Action of major Muscles
- 1.4 Types of joints with their structure and functions

Unit-II

Mechanical Concepts

- 2.1 Speed/ Velocity/ Acceleration
 - 2.1.1 Velocity as a Vector Quantity
 - 2.1.2 Determining the Direction of the Velocity Vector
 - 2.1.3 Calculating Average Speed, Average Velocity and average Acceleration
 - 2.1.4 Average Speed versus Instantaneous Speed
- 2.2 Distance, Displacement (Calculating average distance and displacement)
 - 1. Fundamental concepts of following terms –
 - 2.3.1 Fluid résistance
 - 2.3.2 Buoyancy
- 2.4 Newton's Laws of Motion – and their application to sports activities.

Unit-III

Kinetic/Kinematics Concept for Analysis Human Motion

- 3.1 Fundamental concepts of following terms –
- 3.2 Axes and Planes
 - 1. Centre of Gravity
 - 2. Equilibrium
 - 3. Line of Gravity
- 3.3 Basic Concept related to kinetics
 - 3.3.1 Inertia
 - 3.3.2 Mass
 - 3.3.3 Force
 - 3.3.4 Centre of Gravity
 - 3.3.5 Pressure
 - 3.3.6 Density
 - 3.3.7 Torque
 - 3.3.8 Impulse

3.3 The Biomechanics of the Human Upper Extremity.

3.4 The Biomechanics of the Human Lower Extremity.

Unit-IV

Qualitative/ Quantitative Analysis

4.1 Angular Kinematics of Human Movement.

4.2 Linear Kinetics of Human Movement

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

References:

1. Anthony J. Blazeovich (2017). Sports Biomechanics: The Basics: Optimising Human Performance: bloomsburry
2. By Peter M. (2013), Biomechanics of Sport and Exercise: Human Kinetics

3. Amrit Kumar, R, Moses. (1995). Introduction to Exercise Physiology. Madras: Poompugar Pathipagam.
4. BeotraAlka, (2000) Drug Education Handbook on Drug Abuse in Sports: SportsAuthority of India Delhi.
5. Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs.
6. David, L Costill. (2004). Physiology of Sports and Exercise. Human Kinetics.
7. Fox, E.L., and Mathews, D.K. (1981).The Physiological Basis of Physical Education and Athletics. Philadelphia: Sanders College Publishing.
8. Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sanders co.
9. Richard, W. Bowers.(1989). Sports Physiology. WMC: Brown Publishers.
10. Sandhya Tiwaji. (1999). Exercise Physiology.Sports Publishers.
11. Shaver, L. (1981).Essentials of Exercise Physiology. New Delhi: Subject Publications.
12. Vincent, T. Murche. (2007). Elementary Physiology. Hyderabad: Sports Publication.
13. William, D. McAradle. (1996). Exercise Physiology, Energy, Nutrition and Human
14. Performance. Philadelphia: Lippincott Williams and Wilkins Company.

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Semester-IIIrd

Paper-II

Title: Sports Psychology

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes:

1. The study would orient the student in basic concepts of psychology.
2. The student would be oriented in identifying factors determining one's overall personality.
3. He would understand various laws of learning and their relevance in teaching learning process.
4. The study would orient him in getting through with the psychology of sports person.

Unit-I

Introduction of Sports Psychology:

- 1.1 Meaning and nature of Sports Psychology.
- 1.2 Historical Evolution of Sports Psychology
- 1.3 Relevance of Sports Psychology in Physical Education and coaching.
- 1.4 Psychological factors affecting sports performances.

Unit-II

Personality and Sports:

- 2.1 Meaning and nature of Personality.
- 2.2 Theories of personality in sports
- 2.3 Dimensions of personality and development of personality

Motivation

- 2.4 Types of motivation and condition of developing achievement motivation.

Unit-III

Learning

- 2.1 Meaning nature and principles of Learning, Types of Learning.
- 2.2 Laws of learning, Transfer of learning
- 2.3 Factors affecting learning
- 2.4 Learning curve, Plateau

Unit-IV

Sports Sociology and Leadership:

- 4.1 Nature of Sports Sociology.
- 4.2 Importance of Sports Sociology in Physical Education.
- 4.3 Socialization and value education through Physical Education.
- 4.4 Impact of society on sports and vice versa

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room, Cisco WebeX Meeting, OERS, Swayam Platform (www.swayam.gov.in), SwayamPrabha (www.swayamprabha.gov.in) (available on Doordarshan (free dish TV), E-Yantra (www.e-yantra.org), Virtual Labs (www.vlabs.co.in), FOSSEE (www.fossee.in), application of spoken tutorials (www.spoken-tutorial.org), National Digital Library (www.ndl.iitkgp.ac.in), electronic journals (www.ess.infibnet.ac.in) etc. are to be used. Courses may also integrate DVD videos as part of the training process

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

References:

1. Alison and Robinson. (2018), Excelling in Sport Psychology: Planning, Preparing, and Executing Applied Work, Sean Fitzpatrick
2. Taylor, Jim, (2018), Assessment in Applied Sport Psychology, Human kinetics
3. Coumbe-Lilley , (2018), Complex Cases in Sport Psychology, Routledge
4. Ball, D. W. & Loy, J. W. (1975). Sport and social order; Contribution to the sociology of sport. London: Addison Wesley Publishing Co., Inc.
5. Kamlesh, M.L. (1998). Psychology in physical education and sport. New Delhi: Metropolitan Book Co.
6. Loy, J. W., Kenyon, G. S. & McPherson, B. D. (1978). Sport and social system. London: Addison Wesley Publishing Company Inc.
7. Loy, J. W., Kenyon, G. S. & McPherson, B. D. (1981). Sports culture and society. Philadelphia: Lea &Febiger.
8. Skinner, C. E., (1984.). Education psychology. New Delhi: Prentice Hall of India.

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Semester-IIIrd

Paper-III

Title: Sports Training

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning Outcomes:

1. The learners will be able to identify the fundamental concepts, theories and principles of human body training related to sports performance.
2. The learners will be able to demonstrate the skills to train different fitness components and related planning.
3. The learners will be able to understand the organization to achieve high performance in sports.

Unit-I

Introduction to Sports Training

- 1.1 Meaning and nature of Sports Training
- 1.2 Aim and Objective of Sports Training
- 1.3 Principles of Sports Training
- 1.4 Characteristics of Sports Training

Unit-II

Training Components

- 2.1 Strength: its type and means methods employed for developing them
- 2.2 Speed: its type and means methods employed for developing them
- 2.3 Endurance: its type and means methods employed for developing them
- 2.4 Flexibility: its type and means methods employed for developing them
- 2.5 Coordinative abilities: means methods employed for developing them

Unit-III

Load

- 3.1 Principles of load and its components
- 3.2 Determination of Optimum load,
- 3.3 Overload its causes and identification
- 3.4 Tackling Over Load.

Unit-IV

Training programming and planning

- 4.1 Periodization and its types of Periodization.
- 4.2 Aim and Content of Periods–Preparatory, Competition, Transitional period.
- 4.3 Planning: Meaning and types.
- 4.4 Principles of Planning.

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room, Cisco WebEx Meeting, OERS, Swayam Platform (www.swayam.gov.in), Swayam Prabha(www.swayamprabha.gov.in) (available on Doordarshan(free dish TV), E-Yantra (www.e-yantra.org), Virtual Labs (www.vlabs.co.in), FOSSEE (www.fossee.in), application of spoken tutorials (www.spoken-tutorial.org), National Digital Library (www.ndl.iitkgp.ac.in), electronic journals (www.ess.infibnet.ac.in) etc. are to be used. . Courses may also integrate DVD videos as part of the training process

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

Reference:

1. Dick, W. F. (1980).Sports training principles. London: Lepus
2. Books. Harre, D.(1982).Principles of sports training. Berlin: Speculated.
3. Jensen, R. C.& Fisher, A.G. (1979). Scientific basis of athletic conditioning. Philadelphia: Lea and Fibiger, 2ndEdn.
4. Mathyew, L.P. (1981).Fundamental of sports training. Moscow: Progress Publishers.
5. Singh, H. (1984).Sports training, general theory and methods. Patiala: NSNIS.
6. Uppal, A.K., (1999).Science of Sports Training. New Delhi: Friends Publication.
7. SchlichMonfred(2003), Circuit Training for all sports, sports book publisher Toronto.
8. Dr. Sharad Chandra Mishra 92006), Sports Training, Sports Publication.

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Semester-IIIrd

Paper-IV

Title: Officiating and Coaching-III

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes

1. The pass out would be oriented with the rules regulations of the chosen game
2. The pass out would be able to lay out and mark the dimensions of the court
3. He would be able to organize the concerned sports event and officiate in it
4. He would be oriented in the art of coaching the sports team
5. He shall also be able to organize and officiate in yogic events

Unit-I

Officiating and coaching in chosen Racket game- I

- 1.1 Dimensions, layouts and marking of fields of chosen Racket Game –I
- 1.2 Rules and their interpretations of chosen Racket Game –I
- 1.3 Qualification and number of officials in the chosen Racket Game –I
- 1.4 Coaching in the chosen Racket Game –I

Unit-II

Officiating and coaching in chosen Racket game- II

- 2.1 Dimensions, layouts and marking of fields of chosen Racket Game –II
- 2.2 Rules and their interpretations of chosen Racket Game –II
- 2.3 Qualification and number of officials in the chosen Racket Game –II
- 2.4 Coaching in the chosen Racket Game –II

Unit-III

Indigenous Activities:

- 3.1 Concept of Indigenous activities.
- 3.2 History of Indigenous activities.
- 3.3 Principles and Importance of indigenous activities.
- 3.4 Various types of activities with different equipment.

Unit-IV

Swimming Activities:

- 4.1 Swimming activities and its outcome.
- 4.2 Swimming pools, their dimensions and rules of swimming.
- 4.3 Maintenance of swimming pools.
- 4.4 Coaching and training in swimming.

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

Reference Books:

1. Bunn, J. W. (1968). *The art of officiating sports*. Englewood cliffs N.J. Prentice
2. Hall. Bunn, J. W. (1972). *Scientific principles of coaching*.
3. Englewood cliffs N. J. Prentice Hall. Dyson, G. H. (1963). *The mechanics of athletics*. London: University of London Press Ltd.
4. Dyson, G. H. (1963). *The mechanics of Athletics*. London: University of London Press Ltd. Lawther, J.D. (1965).
5. *Psychology of coaching*. New York: Pre. Hall.
6. Singer, R. N. (1972). *Coaching, athletic & psychology*. New York: M.C. Graw Hill.
7. Official Rule Book / Handbook of the concerned federation of sports.

Practical

1. Racket Game which should be from the list of SGFI/AIU/IOA)

Credit: 02

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

1. History and Development of the game at International and National level.
2. Dimensions and marking of playing area.
3. Basic requirements of the playing area.
4. Fundamental skills of the game.
5. Skill tests, scoring and arrangement of the skill tests.
6. National and international organisations / federations of the game.
7. Rules and their interpretations of the game.
8. Team selection and coaching in that game.
9. Officiating & Referee / Umpire /scorer /curatorship for self-employment.

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2. Indigenous Activities (OR) Yoga

Credit: 02

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

1. History and Development of the indigenous activities in the country.
2. Aim, Objectives and Principles of Indigenous activities.
3. Individual, group and team indigenous activities.
4. Marking in Indigenous activities.
5. Indigenous activities with equipment.
6. National organisations / federations of the Indigenous games.
7. Rules and their interpretations of the activities.
8. Team selection and coaching for indigenous activities.
9. Officiating & Referee / Umpire /scorer /curatorship for self-employment.
1. Indigenous activities for Mass Demonstrations.
2. Indigenous activities for National Events- Republic day, Independence day etc.
3. Indigenous activities for developing coordination and movements in young's.
4. Preparing Cheer leaders through Indigenous activities.
5. Inculcating improvisations in Indigenous activities/mass demonstrations.
6. Rules and their interpretations of the activities.
7. Team/group selection and coaching for indigenous activities.
8. Officiating & Referee / Umpire /scorer /team leaders for self-employment.

(OR)

Yoga

1. Meaning and concept of Yoga
2. History and Development of the Yoga in India and abroad
3. Various Asanas in sitting position and their advantages
4. Various Asanas in standing position and their
5. Various Asanas in lying position and their advantages Suryanamaskar and its benefits.
6. Yogasana for treating various body ailments.

1. Suryanamaskar- Practice and advantages.
2. Meaning and concept of Pranayama.
3. Various types of Pranayama, their principles and practice. Effect of Pranayama on body and their role in correcting health disorders.
4. Meditation – Types and techniques.
5. Officiating and scoring in Yoga competitions.
6. Coaching and career opportunities in Yoga.

Yoga simulation laboratory –Yoga simulation laboratory is to be established to provide the students with a feasible environment where they will learn and practice yogic asanas and kriyas using animated videos with continuous rectification of errors till exact simulation of skill is attained. Help may be taken from Youtube Streaming, Swayam Platform (www.swayam.gov.in), SwayamPrabha (www.swayamprabha.gov.in) (available on Doordarshan(free dish TV), E-Yantra (www.e-yantra.org).

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Semester-IVth

Paper-I

Title: Health Education

Credits: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning Outcome:

1. The student will be able to identify and synthesize the factors that influence health
2. The student will be able to recognize the health related challenges in current time and able to apply the preventive measures.
3. The student will be able to identify the role of peers, community and media in health promotion and protection.
4. The student will be able to demonstrate the expertise in above stated domains in a school setup.
5. The student will be able to value the knowledge and skills required to preserve community health and well-being.

Unit – I

Health Education and Services

- 1.1 Concept, Dimensions, Spectrum and determinants of Health
- 1.2 Health Education and Principles of Health Education
- 1.3 Nature and Scope of Health Education in Physical Education
- 1.4 Health Services in India

Unit – II

Global Health Issues

- 2.1 Communicable, Non-Communicable disease and their prevention
- 2.2 Malnutrition, Food Adulteration, Environmental Pollution and Sanitation, Population and their management.
- 2.3 Physical Activity and Nutrition, Overweight and Obesity, Mental Health
- 2.4 Prime causes of death: cardiovascular disease, chronic respiratory disease, Diabetes, Mental Disorders, Nutritional Deficiencies and their prevention through physical activity

Unit – III

Health Education in Schools

- 3.1 Need and scope of health education in schools
- 3.2 Preventing alcohol, tobacco and other drugs abuses in schools
- 3.3 Personal Health and Wellness: Healthy eating, Mental and Emotional health, and Violence prevention
- 3.4 Physical activity, Safety, First Aid and Emergency procedures

Unit – IV

Health Supervision and Evaluation in Schools

- 4.1 Health Instruction and Health Supervision
- 4.2 Assessing personal and peers health risk taking
- 4.3 Analyzing the influence of family, peers, culture and media on health behavior
- 4.4 Consumer Health and Comprehensive Health Education

Teaching Learning Strategies: The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

Virtual instructional platforms such as **online lectures**, webcast etc. are to be used. Students can participate in coursework through instant messages, emails and video conferencing. Google class room, Cisco WebeX Meeting, OERS, Swayam Platform (www.swayam.gov.in), SwayamPrabha (www.swayamprabha.gov.in) (available on Doordarshan(free dish TV), E-Yantra (www.e-yantra.org), Virtual Labs (www.vlabs.co.in), FOSSEE (www.fossee.in), application of spoken tutorials (www.spoken-tutorial.org), National Digital Library (www.ndl.iitkgp.ac.in), electronic journals (www.ess.infibnet.ac.in) etc. are to be used. . Courses may also integrate DVD videos as part of the training process

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

References:

1. Agrawal, K.C. (2001). Environmental biology. Bikaner: Nidhi publishers Ltd.
2. Bensley, R. J. and Fisher, J. B (2009). Community Health Education Methods. Massachusetts: Jones and Bartlett Publishers.
3. Edward, J. T. (2006). Health and Disease, New Delhi: Sports Publication.
4. Anspaugh, D. J. and Ezell, G. (2003). Teaching today's Health. USA: Allyn& Bacon.
5. McKenzie, J. F. and Smeltzer, J. L (2001). Planning, Implementing, and Evaluating Health Promotion Programs: A Primer, USA: Allyn& Bacon.

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Semester-IVth

Paper-II

Title: Test & Measurement

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes:

1. The students will be able to recognize and relate the concept of test, measurement and evaluation in the context of Physical Education.
2. The students will be able to construct and conduct the physical fitness and sports skill test.
3. The students will be able to implement the criteria of test selection.

The syllabus would orient the students in the art of applications of test, measurement and evaluation in physical and sports activities with simultaneous development of practical competency in conducting physical fitness and sports skill tests.

Unit-I

Introduction to Test & Measurement & Evaluation

- 1.1 Meaning of Test, Measurement & Evaluation in Physical Education.
- 1.2 Importance of Test, Measurement & Evaluation in Physical Education.
- 1.3 Criteria of selecting an appropriate test.
- 1.4 Type and classification of test

Unit-II

Construction and Administration of Test

- 2.1 Administration of testing programme.
- 2.2 Construction of Physical Fitness / Efficiency Test
- 2.3 General types of sports skill test items
- 2.4 Construction of sports skill test

Unit-III

Physical Fitness Tests

- 3.1 Youth Physical Fitness Test.
- 3.2 Tuttle Pulse Ratio Test
- 3.3 Newton Motor Ability Test
- 3.4 Phillips JCR Test

Unit-IV

Sports Skill Tests

- 4.1 Lockhart and McPherson Badminton test
- 4.2 Johnson Basketball test
- 4.3 McDonald soccer test
- 4.4 S.A.I Hockey test

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yantra.org), Virtual Labs (www.vlabs.co.in), FOSSEE (www.fossee.in), application of spoken tutorials (www.spoken-tutorial.org), National Digital Library (www.ndl.iitkgp.ac.in), electronic journals (www.ess.infibnet.ac.in) etc. are to be used. . Courses may also integrate DVD videos as part of the training process

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

References:

1. Bangsbo, J. (1994). *Fitness training in football: A scientific approach*. Bagsvaerd, Denmark:Ho+Storm.
2. Barron, H. M., &Mcchee, R. (1997). *A practical approach to measurement in physical education*.Philadelphia: Lea and Febiger.
3. Barron, H.M. &Mcchee, R. (1997). *A Practical approach to measurement in physical education*.Philadelphia: Lea and Febiger.
4. Kansal, D.K. (1996). *Test and measurement in sports and physical education*. New Delhi:D.V.S. Publications.

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Semester-IVth

Paper-III

Title: Adapted Physical Education

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes:

1. The knowledge would enable the students to understand the activity requirements of various levels of physically challenged persons.
2. The knowledge would thus enable the students to prepare and organize worthwhile activity programs for various levels of physically challenged persons.

Unit-I

Introduction

1. Meaning, Definition and Importance of Adapted Physical Education and Sports
2. Purpose, Aims and Objectives of Adapted Physical Education and Sports
3. Program organization of Adapted Physical Education and Sports
4. Organizations addressing and giving opportunities to people with disabilities.
5. Adapted Sports- Para Olympics and other Opportunities

Unit-II

Development of Individual Education Program (IEP)

- 2.1 The student with a disability
- 2.2 Components and Development of IEP.

2.3 Principles of Adapted Physical Education and Sports

2.4 Role of Physical Education teacher

Unit-III

Developmental Considerations of an Individual

3.1 Motor development

3.2 Perceptual Motor development

3.3 Early childhood and Adapted Physical Education

3.4 Teaching style, method and approach in teaching Adapted Physical Education

Unit-IV

Individual with unique need and activities

4.1 Behavioral and Special learning disability

4.2 Visual Impaired and Deafness

4.3 Health Impaired students and Physical Education

4.4 HRPF and its development for Individual with unique need

4.5 Role of games and sports in Adapted Physical Education

Teaching Learning Strategies: The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

Virtual instructional platforms such as **online lectures**, webcast etc. are to be used. Students can participate in coursework through instant messages, emails and video conferencing. Google class room, Cisco WebeX Meeting, OERS, Swayam Platform (www.swayam.gov.in), SwayamPrabha (www.swayamprabha.gov.in) (available on Doordarshan(free dish TV), E-Yantra (www.e-yantra.org), Virtual Labs (www.vlabs.co.in), FOSSEE (www.fossee.in), application of spoken tutorials (www.spoken-tutorial.org), National Digital Library (www.ndl.iitkgp.ac.in), electronic

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

Reference

1. Beverly, N. (1986). Moving and Learning. Times Mirror/Mosby College Publishing.
2. Cratty, B.J. Adapted Physical Education in the Mainstream. (4th Edition) Love Publishing Company.
3. Houner, L.D. Integrated Physical Education- A guide for the elementary classroom teacher.
4. Winnick, J. P. (2005). Adapted Physical Education and Sports. Human Kinetics (4th Edition).
5. Pangrazi, R.P. and Dauer, V. P. Dynamics Physical

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Semester-IVth

Paper IV

Title: Officiating and Coaching-IV

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes

1. The pass out would be oriented with the rules regulations of the indigenous game and Gymnastics.
2. The pass out would be able to lay out and mark the dimensions of the court.
3. He would be able to organize the concerned sports event and officiate in it.
4. He would be oriented in the art of coaching the sports team.

Unit-I

Officiating and coaching in Chosen Combative Sports- I

- 1.1 Dimensions, layouts and marking of fields of Chosen Combative Sports- I
- 1.2 Rules and their interpretations of Chosen Combative Sports- I
- 1.3 Qualification and number of officials in the Chosen Combative Sports- I
- 1.4 Coaching in the Chosen Combative Sports- I

Unit-II

Officiating and coaching in Chosen Combative Sports- II

- 2.1 Dimensions, layouts and marking of fields of Chosen Combative Sports –II
- 2.2 Rules and their interpretations of Chosen Combative Sports –II
- 2.3 Qualification and number of officials in the Chosen Combative Sports-II
- 2.4 Coaching in the chosen Combative Sports –II

Unit- III

Indigenous Activities:

- 3.1 Indigenous activities for developing motor abilities.
- 3.2 Markings of Indigenous activities.
- 3.3 Indigenous activities for special occasions.
- 3.4 Outcomes and benefits of indigenous activities.

Unit-IV

Gymnastics Activities:

- 4.1 Introduction to Gymnastics..
- 4.2 Various Gymnastic activities and their Equipment.
- 4.3 Qualification, duties of officials and scoring in gymnastics.
- 4.4 Coaching and training in Gymnastics.

Teaching Learning Strategies: The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

Virtual instructional platforms such as **online lectures**, webcast etc. are to be used. Students can participate in coursework through instant messages, emails and video conferencing. Google class room, Cisco WebeX Meeting, OERS, Swayam Platform (www.swayam.gov.in),

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

Reference Books:

1. Bunn, J. W. (1968). *The art of officiating sports*. Englewood cliffs N.J. Prentice
2. Hall. Bunn, J. W. (1972). *Scientific principles of coaching*.
3. Englewood cliffs N. J. Prentice Hall. Dyson, G. H. (1963). *The mechanics of athletics*. London: University of London Press Ltd.
4. Dyson, G. H. (1963). *The mechanics of Athletics*. London: University of London Press Ltd. Lawther, J.D. (1965).
5. *Psychology of coaching*. New York: Pre. Hall.
6. Singer, R. N. (1972). *Coaching, athletic & psychology*. New York: M.C. Graw Hill.
7. Official Rule Book / Handbook of the concerned federation of sports.

Practical

1. Combative Game which should be from the list of SGFI/AIU/IOA)

Credit: 02

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

1. History and Development of the game at International and National level.
2. Dimensions and marking of playing area.
3. Basic requirements/ equipment of the game.
4. Fundamental skills of the game.
5. Skill tests, scoring and arrangement of the skill tests.
6. National and international organisations / federations of the game.
7. Rules and their interpretations of the game.
8. Team selection and coaching in that game.
9. Officiating & Referee / Umpire /scorer for self-employment.

Sports simulation laboratory - Sports simulation laboratory is to be established to provide the students with a feasible environment where they will learn and practice sports skills using animated videos with continuous rectification of errors till exact simulation of skill is attained. Help may be taken from Youtube Streaming, Swayam Platform (www.swayam.gov.in), SwayamPrabha (www.swayamprabha.gov.in) (available on Doordarshan(free dish TV), E-Yantra (www.e-yantra.org)).

2. Gymnastics (OR)Swimming

Credit: 02

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Gymnastics

1. History and Development of the Gymnastics at International and National level.
2. Various forms / types of gymnastic activities.
3. Basic requirements/ equipment for the gymnastics.
4. Fundamental skills/movements in the gymnastics.
5. National and international organisations / federations of gymnastics.
6. Rules, scoring and their interpretations in gymnastic competitions.
7. Team selection and coaching in gymnastics.
8. Officiating & Referee / Umpire /scorer for self-employment.

OR

Swimming

1. History and Development of the swimming at International and National level.
2. Dimensions and other aspects of swimming pools.
3. Basic swimming skills/ styles..
4. Swimming tests, scoring and arrangement of the skill tests.
5. National and international organisations / federations of swimming.
6. Rules and their interpretations of the swimming events and competitions.
7. Team selection and coaching in swimming.
8. Officiating & Referee / Umpire /scorer / life guards training for self-employment.

Sports simulation laboratory - Sports simulation laboratory is to be established to provide the students with a feasible environment where they will learn and practice sports skills using animated videos with continuous rectification of errors till exact simulation of skill is attained. Help may be taken from Youtube Streaming, Swayam Platform (www.swayam.gov.in), SwayamPrabha (www.swayamprabha.gov.in) (available on Doordarshan(free dish TV), E-Yantra (www.e-yantra.org)).

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Semester-Vth

Paper-I

Title: Sports Management

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes:

1. The student would understand the importance of management of Physical Education.
2. He shall gain knowledge regarding management of Physical Education and Sports at different level.
3. He will be able to organize various Physical Education program.
4. He would know about various schemes and policies of State & Central Government.
5. He would know about planning of facility and financial management.

Unit-I

The Management Process:

1. Definition, Principles, Nature and Concept of Sports Management.
2. Progressive concept of Sports management.
3. The purpose and scope of Sports Management.
4. Essential skills of Sports Management.
5. Qualities and competencies required for the Sports Manager.
6. Event Management in physical education and sports.

Unit-II

Leadership in Sports Management Process:

- 2.1 Meaning and Definition of leadership.
- 2.2 Leadership style and method.

- 2.3 Elements of leadership.
- 2.4 Forms of Leadership.
 - 2.4.1 Autocratic
 - 2.4.2 Laissez-faire
 - 2.4.3 Democratic
 - 2.4.4 Benevolent Dictator
- 2.5 Qualities of administrative leader.
- 2.6 Preparation of administrative leader.
- 2.7 Leadership and Organizational performance.

Unit-III

Planning and Management of sports at Institutional level:

- 3.1 Sports Management in Schools, colleges and Universities.
- 3.2 Factors affecting planning
- 3.3 Planning a school or college sports programme.
- 3.4 Directing of school or college sports programme.
- 3.5 Controlling a school, college and university sports programme.
 - 3.5.1 Developing performance standard
 - 3.5.2 Establishing a reporting system
 - 3.5.3 Evaluation
 - 3.5.4 The reward/punishment system

Unit-IV

Financial Management in Sports:

- 4.1 Financial management in Physical Education & sports in schools, Colleges and Universities.
- 4.2 Objectives and scope of financial planning.

4.3 Management of Infrastructure, finance and personal

4.4 Mechanics of purchase and audit.

Course Learning Outcomes:

1. Understanding of the theoretical concept of sports management.
2. Understanding of the practical & theoretical implications of financial planning and personnel management
3. Knowledge of sport event management and their Evaluation process.
4. Understanding of the competencies and skill of sport manager.

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

References:

1. Bucher, C.A.(2002). Management of Physical Educational and Sports.(12th Ed.). USA :McGarw Hill Co.
2. Chakraborti, S.(2007). Sports Management. New Delhi: Friends Publication.
3. Frosdick, S., &Walley, L. (2003). Sports and Safety Management. USA: A division of Reed Education and Professional Publishing Ltd.
4. Govindrajulu, .N. (2005). Management of Physical Education and Sports Programme. New Delhi : Friends Publication.
5. Kamlesh, M. L. (2000). Management Concepts in Physical Education and Sports. New Delhi : B.V. Gupta Publication.
6. Mastoralexis, L.P., & Barr, C.A. (1998). Principles and Practice of Sports Management. Maryland: Aspen Publication.
7. Roy, S. S. (2002). Sports Management. New Delhi: Friends publication.
8. Horine., Larry. (1985). Administration of Physical Education and Sports Programmes. New York :Saundress college publication.

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Semester-Vth

Paper-II

Title: Sports Journalism

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes:-

1. The students will be oriented in basic art of mass communication and reporting of sports events through various mediums.

Unit-I

Introduction

1. Meaning and Definition of Journalism
2. Ethics of Journalism
3. Sports Ethics and Sportsmanship
4. Reporting Sports Events
5. National and International Sports News Agencies.

Unit-II

Sports Bulletin

- 2.1 Concept of Sports Bulletin
- 2.2 Types of bulletin
- 2.3 Journalism and sports education

- 2.4 Structure of sports bulletin – Compiling a bulletin
- 2.5 General news reporting and sports reporting.

Unit-III

Mass Media

- 3.1 Mass Media in Journalism: Radio and T.V.
- 3.2 Commentary – Running commentary on the radio – Sports expert's comments.
- 3.3 Role of Advertisement in Journalism.
- 3.4 Sports Photography
- 3.5 Editing and Publishing.

Unit-IV

Report Writing on Sports

- 4.1 Brief review of Olympic Games, Asian Games, Common Wealth Games World Cup, National Games and Indian Traditional Games.
- 4.2 Preparing report of an Annual Sports Meet for Publication in Newspaper.
- 4.3 Organization of Press Meet.
- 4.4 Practical assignments to observe the matches and prepare report and news of the same.
- 4.5 Visit to News Paper office and TV Centre to know various departments and their working

Teaching Learning Strategies: The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

Reference:

1. Ahiya B.N. (1988) Theory and Practice of Journalism: Set to Indian context Ed3. Delhi: Surjeet Publications
2. Ahiya B.N. Chobra S.S.A. (1990) Concise Course in Reporting. New Delhi: Surjeet Publication
3. Bhatt S.C. (1993) Broadcast Journalism Basic Principles. New Delhi. Haranand Publication
4. Dhananjay Joshi (2010) Value Education in Global Perspective. New Delhi: Lotus Press.
5. Kannan K (2009) Soft Skills, Madurai: Madurai: Yadava College Publication
6. MohitChakrabarti (2008): Value Education: Changing Perspective, New Delhi: KanishkaPublication,.
7. Padmanabhan. A &Perumal A (2009), Science and Art of Living, Madurai: Pakavathi Publication
8. Shiv Khera (2002), You Can Win, New Delhi: Macmillan India Limited.
9. Varma A.K. (1993) Journalism in India from Earliest Times to the Present Period. Sterling publication Pvt. Ltd.
10. Venkataiah. N (2009) Value Education,- New Delhi: APH Publishing Corporation. 43

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Semester-Vth

Paper-III

Title: Fitness Training and Nutrition

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes:

1. Will develop skills to establish daily caloric requirement and to design the diet plan.
2. Will acquaint student with principles of sports nutrition.
3. Will orient the student to the role of food on Physical performance.
4. Would make the student understand and prepare weight management plans.

Unit-I

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.

Course Learning Outcomes:

- 5. Understanding of the theoretical and practical concept of sport nutrition and weight management.
- 6. Understanding towards the theoretical and practical concept of obesity and desirable body weight for physical fitness.
- 7. Understanding of the modern development in area of sport nutrition and weight management.

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Self-Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

References:

1. Bessesen, D. H. (2008). Update on obesity. *J ClinEndocrinolMetab*.93(6), 2027-2034.
2. Butryn, M.L., Phelan, S., & Hill, J. O.(2007). Consistent self-monitoring of weight: a key component of successful weight loss maintenance. *Obesity(Silver Spring)*. 15(12), 3091-3096.
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Semester-Vth

Paper-IV

Title: Athletic Care and Rehabilitation

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes:

1. He would understand the Prevention, Treatment and Rehabilitation of Athletic Injuries.

Unit-I

Corrective Physical Education:

- 1.1 Definition and Objectives of Corrective Physical Education.
- 1.2 Posture and Body Mechanics, Standards of Standing Posture.
- 1.3 Value of Good Posture, Drawbacks and Causes of Bad Posture.
- 1.4 Posture Test – Examination of the Spine.

Unit-II

Posture and Rehabilitation Exercises:

- 2.1 Normal Curve of the Spine and its Utility.
- 2.2 Deviations in Posture- Kyphosis, Lordosis, Flat Back, Scoliosis, Round Shoulders, Knock Knee, Bow Leg, Flat Foot.

- 2.3 Causes for Deviations and Treatment Including Exercises.
- 2.4 Passive, Active, Assisted, Resisted Exercise for Rehabilitation.

Unit-III

Massage:

- 3.1 Brief History of Massage, Massage as an Aid for Relaxation, Points to be Considered in giving Massage
- 3.2 Physiological, Chemical, Psychological Effects of Massage, Indication /Contra Indication of Massage
- 3.3 Classification of the Manipulation used Massage and their Specific Uses in the Human Body.
- 3.4 Stroking Manipulation, Effleurage, Pressure Manipulation, Percussion Manipulation, Cupping, Poking, Shaking Manipulation, Deep Massage.

Unit-IV

Sports Injuries Care, Treatment and Support:

- 4.1 Principles Pertaining to the Prevention of Sports Injuries.
- 4.2 Care and Treatment of Exposed and Unexposed Injuries in Sports.
- 4.3 Principles of apply Cold and Heat, Infrared Rays, Ultrasonic Therapy, Short-wave Diathermy Therapy.
- 4.4 Principles and Techniques of Strapping and Bandages.

Note: Each student shall submit Physiotherapy record of attending the Clinic and observing the cases of athletic injuries and their treatment procedure.(To be assessed internally)

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room, Cisco WebeX Meeting, OERS, Swayam Platform (www.swayam.gov.in), SwayamPrabha(www.swayamprabha.gov.in) (available on Doordarshan(free dish TV), E-Yantra (www.e-yantra.org), Virtual Labs (www.vlabs.co.in), FOSSEE (www.fossee.in), application of spoken tutorials (www.spoken-tutorial.org), National Digital Library (www.ndl.iitkgp.ac.in), electronic journals (www.ess.infibnet.ac.in) etc. are to be used. . Courses may also integrate DVD videos as part of the training process

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

References:

1. Dohenty. J. Meno.Wetb, Moder D (2000) Track & Field, Englewood Cliffs, Prentice Hal Inc.
2. Lace, M. V. (1951) Massage and Medical Gymnastics, London: J & A Churchill Ltd.
3. Mc Ooyand Young (1954) Tests and Measurement, New York: Appleton Century.
4. Naro, C. L. (1967) Manual of Massage and, Movement, London: Febra and Febra Ltd.
5. Rathbome, J.I. (1965) Corrective Physical education, London: W.B. Saunders & Co.
6. Stafford and Kelly, (1968) Preventive and Corrective Physical Education, New York.

Practical

1. Game of Specialization which should be from the list of SGFI/AIU/IOA)

Credit: 02

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

1. Basic skills of the game.
2. Dimensions and preparation of playing area.
3. Drills for skill development.
4. Skill tests, their administration and scoring.
5. Rules of the game and their interpretations.
6. Officiating and coaching in the game.
7. Maintenance of equipment of the game.

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2. Aerobics (OR)Weight lifting

Credit: 02

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Aerobics

1. Introduction of Aerobics.
2. Aerobics activities without music and equipment.
3. Aerobics for fitness and health.
4. Aerobics for mass demonstration.
5. Aerobics with equipment and music.
6. Judging and scoring in aerobics.
7. Coaching, officiating and starting careers in aerobics.
8. Skill Practice of the Aerobics.
9. Skill lessons of Aerobics.
10. Coaching lessons of Aerobics.
11. Advance coaching and training of Aerobics (try for certification of coaching from district/state/national federation/online).
12. Officiating of Aerobics (Try for certification from concerned district/state/national federation for self employment)

OR

Weight lifting

1. History and Development of the weight lifting
2. Fundamental principles and procedures of weight lifting.
3. Weight lifting for competition purpose and general purpose.
4. Team selection and coaching in gymnastics.

5. Gym management and maintenance of equipment.
6. Officiating & Referee / Umpire /scorer for self-employment.
7. Starting own gym for self-employment.
8. Skill Practice of the Weight lifting.
9. Skill lessons of Weight lifting.
10. Coaching lessons of Weight lifting.
11. Advance coaching and training of Weight lifting(try for certification of coaching from district/state/national federation/online).
12. Officiating of Weight lifting (Try for certification from concerned district/state/national federation for self employment)

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Semester-VIth

Paper-I

Title: Counseling in Sports

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes:

1. The student would be able to Counsel athletes in matters of handling success and failure. He would also be able to orient the athletes in future opportunities.

Unit-I

Counselling in Physical Education and Sports

- 1.1 Meaning, definition and scope of Counselling in sports.
- 1.2 Aims and Objective of Counselling in sports.
- 1.3 Principles of Counselling
- 1.4 Need and importance of Counselling.

Unit-II

Stress & Anxiety in Sports

- 2.1 Meaning and definition of stress and anxiety.
- 2.2 Types of stress and anxiety.
- 2.3 Symptoms and effects of stress, anxiety and competition anxiety.
- 2.4 Management of stress and anxiety.

Unit-III

Motivation and Sports Performance

- 3.1 Meaning and definition of Motivation.
- 3.2 Types and techniques of motivation
- 3.3 Principles and Importance of motivation
- 3.4 Role of coach / teacher /government in motivation

Unit-IV

Counselling to Athletes

- 4.1 Counselling on injuries and rehabilitation..
- 4.2 Counselling on handling success and failure in sports.
- 4.3 Counselling on drugs in sports.
- 4.4 Counselling on job opportunities and life after retirement from sports.

Teaching Learning Strategies: The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

Reference:

1. Rechar Nelson-Jones, Basic Counselling Skills, Sage Publication, New Delhi.
2. Dr. M L Kamlesh, Psychology in Physical Education and Sports, Educational Publishers and Distributors.
3. An Introduction to Counselling- McGraw-Hill Education.
4. Understanding Psychology- McGraw Hill Book.

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Semester-VIth

Paper-II

Title: Exercise Prescription / Therapeutic Exercise

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes:

1. The student would be able to understand the type of exercise requirement for different groups of people as per their needs.
2. Students would be able to devise effective exercise program as per the need of the individual.

Unit-I

Exercises and their Types

1. Meaning and definition of exercise
2. Types of exercises- Aerobics, Anaerobic and Conditioning
3. Importance of warming up, cooling down and stretching
4. Therapeutic exercises and their principles.

Unit-II

Weight management & Gym Exercises

- 2.1 Understanding body weight, components of body weight and ideal weight.

- 2.2 Fat burning exercises and their variations.
- 2.3 Gym training exercises for weight loss and strengthening
- 2.4 Dance, Aerobics, cycling and swimming for weight loss.

Unit-III

Exercises and Elderly People

- 3.1 Understanding aging and characteristics
- 3.2 Need and importance of exercises in aged people.
- 3.3 Principles and precautions while giving exercises to elderly people.
- 3.4 Type of exercises and recreational activities for elderly people.

Unit-IV

Exercises for special needs

- 4.1 Exercises for rehabilitations after injuries.
- 4.2 Exercise for diabetics, Exercises during & after Pregnancy
- 4.3 Exercises for casuals and weekenders.
- 4.4 Exercises for recreations and kids.

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References :-

1. Robert A. Robergs, Steven J. Keteyian (2003), Fundamentals of Exercise Physiology: For Fitness, Performance, and Health, Volume 1- McGraw-Hill
2. Dymrna Pearson (2012), Weight Management: A Practitioner's Guide, ISBN- 1405185597
3. ASCM and Arnold Schwarzenegger (2003), ASCM Fitness Book
4. David Nordmark (2015), Workout Routines- Exercise workout routines.
5. Frederic Delavier (2010), Strength Training Anatomy
6. Jenny Allan (2013), The Ultimate Body building Diet, Nutrition and Workout Plan for Men and Women.
7. JosephKandel and ChritineAAdamec (2003), TheEncyclopaedia of Senior Health and Wellbeing.

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Semester-VIth

Paper-III

Title: Talent Identification

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes:

1. The student would be oriented with the inherited signs and symptoms that make one adept for excellence in a particular sports.
2. The student would be able to quantify those signs and symptoms through specific tools and techniques and thus guide the individual to that sports activity for which his/her physique is best suited.

Unit-I

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.

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Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

Reference:-

1. Russell K. Athletic talent: from detection to perfection. *Sci Period Res Technol Sport* 1989; 9 (1): 1–6Google Scholar
2. Williams AM, Reilly T. Talent identification and development in soccer. *J Sport Sci* 2000; 18 (9): 657–67
3. Bartmus U, Neumann E, de Marées H. The talent problem in sports. *Int J Sports Med* 1987; 8 (6): 415–6
4. Barron, H.M. &Mcchee, R. (1997). *A Practical approach to measurement in physical education*. Philadelphia: Lea and Febiger.
5. Kansal, D.K. (1996). *Test and measurement in sports and physical education*. New Delhi:D.V.S. Publications

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Semester-VIth

Paper-IV

Title: Sports Entrepreneurship

Credit: 04

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Learning outcomes:

1. The knowledge would enable students to set up their own enterprise, catering to various demands of sports industry.

Unit-I

1. Meaning and Definition of Entrepreneurship
2. Concept and characteristics Entrepreneurship.
3. Need and Importance of entrepreneurship in sports
4. Understanding Sports Business industry.

Unit-II

1. Understanding the entrepreneurial process.
2. Types of Entrepreneurs.
3. Risk and Rewards in entrepreneurship.
4. Leading sports companies and media channels.

Unit-III

1. Identifying the areas of business.
2. Understanding financial aspects of the business.
3. Government and private Organizations supporting entrepreneurs in India
4. Generating / arranging funds for the business.

Unit-IV

- 4.1 Entrepreneurship in the sports Goods / Equipment.
- 4.2 Entrepreneurship in Sports wears.
- 4.3 Entrepreneurship in Sports management / Event management.
- 4.4 Entrepreneurship in Sports software/fitness / Nutrition.

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Activities: Lecture/ Project Work/ Seminars/ Term Papers/Assignments/ Presentations/ Study etc.

Assessment Rubric: Classroom Test, Project Work, Assignments, Presentations

Reference:-

1. Peter Thiel, Zero to One: Notes on Start Ups, or How to Build the Future, 0804139296 (ISBN13: 9780804139298)
2. Guy Kawasaki (2004), The Art of the Start: The Time-Tested, Battle-Hardened Guide for Anyone Starting Anything, 1591840562 (ISBN13: 9781591840565)
3. Roger Cowdrey, Creating an Entrepreneurial Mindset-Failure IS an Option!

Practical

1. Game of Specialization –I

Credit: 02

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

1. Skill Practice of the game.
2. Skill lessons of the game.
3. Coaching lessons of the game.
4. Advance coaching and training of the game (try for certification of coaching from district/state/national federation/online).
5. Officiating of the game (Try for certification from concerned district/state/national federation for self-employment)

Sports simulation laboratory - Sports simulation laboratory is to be established to provide the students with a feasible environment where they will learn and practice sports skills using animated videos with continuous rectification of errors till exact simulation of skill is attained. Help may be taken from Youtube Streaming, Swayam Platform (www.swayam.gov.in), SwayamPrabha (www.swayamprabha.gov.in) (available on Doordarshan(free dish TV), E-Yantra (www.e-yantra.org)).

2. Power Lifting (OR) Physique Training

Credit: 02

Max. Marks: 100

Sessional Marks: 30

End semester exam marks: 70

Power Lifting

1. History and Development of the power lifting.
2. Power lifting for competition purpose and general purpose.
3. Fundamental principles and procedure for power lifting.
4. Team selection and coaching in gymnastics.
5. Gym management and maintenance of equipment.
6. Officiating & Referee / Umpire /scorer for self-employment.
7. Starting own gym for self-employment.

OR

Physique Training

1. Skill Practice of the power lifting and Physique.
2. Skill lessons of power lifting and Physique.
3. Coaching lessons of power lifting and Physique.
4. Advance coaching and training of power lifting and Physique (try for certification of coaching from district/state/national federation/online).
5. Officiating of power lifting and Physique (Try for certification from concerned district/state/national federation for self employment)

Sports simulation laboratory - Sports simulation laboratory is to be established to provide the students with a feasible environment where they will learn and practice sports skills using animated videos with continuous rectification of errors till exact simulation of skill is attained. Help may be taken from Youtube Streaming, Swayam Platform

(www.swayam.gov.in), SwayamPrabha (www.swayamprabha.gov.in) (available on Doordarshan(free dish TV), E-Yantra (www.e-yantra.org)).

State Level Study (Semester-III)

04 Credits

Marks 100

Project Report: 70 marks

Viva-Voce: 30 marks

Students will visit the **districts** of the state to do survey on availability of sports infra-structure in concerned schools, and submit an individual project report of 02 credits and will be assessed by a viva voce of 02 credits.

National Level Study (Semester-VI)

04 Credits

Marks 100

Project Report: 70 marks

Viva-Voce: 30 marks

Students will visit a few **Universities/Institutions** of the different states of the country to do survey on availability of sports infra-structure in concerned universities/institutions, and submit an individual project report of 02 credits and will be assessed by a viva voce of 02 credits.

Key Words

Physical education

Sports

Anatomy

Physiology

Kinesiology

Officiating & coaching

Test & measurement

Nutrition

Rehabilitation

Psychology

Sports training

Sports biomechanics

Coaches

Game officials

Gym trainers

Personal trainers

Entrepreneurs

Fitness

Recreation

Adventure sports

Camping

Event management