HNBGU, Srinagar Garhwal (Uttarakhand)



ORDINANCE

(Revised on 25.05.2024)

Master of Physical Education

(M.P.Ed.)

(Two Year Programme)

DEPARTMENT OF PHYSICAL EDUCATION

SCHOOL OF EDUCATION CURRICULUM FRAMEWORK

GUIDELINES OF REGULATIONS AND SYLLABUS STRUCTURE FOR M.P. ED. TWO YEARS PROGRAMME (FOUR SEMESTERS) CHOICE BASED CREDIT SYSTEM (CBCS)

Preamble: The Master of Physical Education (M.P.Ed.) two years (Four Semesters, Choice Based Credit System) programme is a professional programme meant for preparing Physical Education Teachers for senior secondary (Class XI and XII) level as well as Assistant Professor/Directors/Sports Officers in Colleges/Universities and teacher educators in College of Physical Education.

The M.P.Ed. programme is designed to integrate the study of childhood, social context of Physical Education, subject knowledge, pedagogical knowledge, aim of Physical Education and communication skills. The programme comprise of compulsory and optional theory as well as practical courses and compulsory school internship in School / College / Sports Organizations / Sports Academy / Sports Club.

Intake, Eligibility and Admission Procedure: The Intake and Eligibility are as per the latest NCTE norms and standards. (The reservation in seats and relaxation in the qualifying marks for SC/ST/OBC and other categories shall be as per the rules of the Central Government/State Government, whichever is applicable.)

Age: For General category candidates the upper age limit is 35 years as on 1st July of the academic year. Age relaxation for SC, ST and OBC candidate will be given according to the rules and regulation of GOI.

Number of seats: 62* (Sixty Two) seats are approved by NCTE New Delhi for M.P.Ed. course.

Note:-

- * At present 50 seats have been increased to 62 seats for the admission after implementation of 10% reservation quota for EWS category as per the direction of Govt. of India.
- *Married girl is eligible for admission to M.P.Ed. programme. But, it is also compulsory for her to sign an undertaking that she will discontinue the programme at once for at least one academic year, if she gets pregnant during the course of study. She can join back afresh from the beginning of the semester keeping the guidelines pertaining to the maximum duration of the course in mind. *No differently-abled candidate is eligible for the admission in M.P.Ed. programme.

Admission procedure: Admission shall be made on merit on the basis of marks obtained in the entrance examination consisting of 100 marks based on the following.

a-	Written test	50 marks
b-	Physical Fitness test	40 marks
c-	Sports achievement weightage	10 marks

The total entrance test will be conducted in two days and could be extended, if needed and it will be conducted at BCC campus Srinagar.

- (A) Written Test: Theory Paper comprising of 50 multiple-choice questions of one hour duration carrying 50 marks. Questions shall be based on B.P.Ed. course taught in the HNBGU Srinagar Garhwal.
- **(B) Physical Fitness test**: There shall be **Physical Fitness test** of 40 marks will be conducted by Internal Examiners of Department of Physical Education, HNBGU at Srinagar Garhwal. Following events will be conducted in the fitness test:-

Men's	Women's
1. 50 Meter Dash	50 Meter Dash
2. Bent knee sit-up (1 minute)	Bent knee sit-up (1 minute)
3. Medicine ball throw (5 kg)	Medicine ball throw (3 kg)
4. Standing broad jump	Standing broad jump
5. 800 meter run/walk	600 meter run/walk

(C) Sports achievement Weightage:- In Sports Participation Weightage, candidate shall be given of maximum 10 marks weightage on the basis of their sports participation in any one of the following level:

Participation		Marks
International	:	10
Senior National championshi	ip/National Games:	
1st Place	:	10
2nd Place	:	09
3rd Place	:	08
Participation	:	07

All India Inter-Zonal Inter University Competitions/Khelo India Inter University/Youth Games (U-21):

1st Place	:	08
2nd Place	:	07
3rd Place	:	06
Participation	:	05

Zonal Inter University/Junior National/School National competition/Khelo India Youth Games (U-17):

1st Place:072nd Place:063rd Place:05Participation:04

Senior State Championship/Rural national games/Woman Festival:

1st Place:042nd Place:033rd Place:02Participation:01

Note:-

*The marks will be given in only those games/sports, which are in the competition list of Association of Indian Universities (AIU) /IOA/ and/or School Games Federation of India (SGFI).

*The school state championship and inter collegiate championship participation shall be considered for eligibility criteria only; the candidate shall not get any marks for sports weightage.

*Sports participation marks shall be given on producing valid supporting certificate only. The highest possible weightage shall be given to the applicant in one category only, If he/she has participated in more than one category.

Medical examination: Qualified candidates will have to submit medical certificate by CMO and blood group certificate to the concern office.

Course fee: The total course fee is Rs 40,000/- shall be deposited in the online mode in favour of the **Finance Officer**, **HNBGU Srinagar Garhwal**, **Uttarakhand**. Rs 20,000/- shall be deposited in the beginning of each session.

Duration: The M.P.Ed programme shall be of duration of two academic years, that is, four semesters. However, the students shall be permitted to complete the programme requirements within a maximum of three years from the date of admission to the programme.

The student, who discontinue the programme after one year or more semesters due to extraordinary circumstances, are allowed to continue and complete the programme with due approval from the registrar.

The CBCS System: M.P.Ed Programmes shall run on Choice Based Credit System (CBCS). It is an instructional package developed to suit the needs of students, to keep pace with the developments in higher education and the quality assurance expected of it in the light of liberalization and globalization in higher education.

^{*}The participation must be of last seven academic sessions.

Course: The term course usually referred to, as 'papers' is a component of a M.P.Ed. programme. All courses need not carry the same weight. The courses should define learning objectives and learning outcomes. A course may be designed to comprise Lectures/ tutorials/laboratory work/ field work/ outreach activities/ project work/ vocational training/viva/ seminars/ term papers/assignments/ presentations/ self-study etc. or a combination of some of these.

Courses of Programme: The M.P.Ed. Programme consists of a number of courses, the term 'Course' applied to indicate a logical part of subject matter of the programme and is invariably equivalent to the subject matter of a "paper" in the conventional sense. The following are the various categories of courses suggested for the M.P.Ed. Programme.

Theory: Core Course & Elective Course Practicum
Teaching Practices

Semesters: An academic year is divided into two semesters. Each semester will consist of 17-20 weeks of academic work equivalent to 100 actual teaching days. The odd semester may be scheduled from May/June to November/December and even semester from November / December to May/June. The institution shall work for a minimum of 36 working hours in a week (five or six days a week).

Working days: There shall be at least **200** working days per year exclusive of admission and examination processes etc.

Credits: The term 'Credit' refers to a unit by which the programme is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or one and half hours of practical work/field work per week. The term 'Credit' refers to the weight given to a course, usually in relation to the instructional hours assigned to it. The total minimum credits, required for completing a M.P.Ed. Programme is 90 credits and for each semester 20 credits. Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

Condonation: Student must have 75% of attendance in each course for appearing the examination. Students who have 74% to 65% of attendance shall apply for condonation in the prescribed form along with the Medical Certificate or proof of participation in intercollege or inter university competitions. Students who have 64% to 50% of attendance shall apply for condonation in prescribed form along with the Medical Certificate. Students who have below 50% of attendance are not eligible to appear for the examination.

Provision of Bonus Credits Maximum 06 Credits in each Semester

S. No.	Special Credits for Extra Co-curricular Activities	Credit
1.	Sports Achievement at Stale level Competition (Medal Winner)	1
	Sports Achievement National level Competition (Medal Winner)	2
	Sports participation International level Competition	4
2.	Inter Uni. Participation (Any one game)	2
3.	Inter College Participation (min. two game)	1
4.	National Cadet Corps / National Service Scheme	2
. 5.	Blood donation / Cleanliness drive / Community services	2
6.	Mountaineering – Basic Camp, Advance Camp / Adventure Activities	2
7.	Organization / Officiating – State / National level in any two game	2
8.	News Reposting / Article Writing / book writing / progress report writing	1
9.	Research Project	4

Students can earn maximum **06 Bonus credits** in each semester by his/her participation in the above mentioned activities duly certified by the Head of the institution / Department. This Bonus credit will be used only to compensate loss of credits in academic activities.

Examinations:

- i. There shall be examinations at the end of each semester, for first semester in the month of November /December: for second semester in the month of May / June. A candidate who does not pass the examination in any course(s) shall be permitted to appear in such failed course(s) in the subsequent examinations to be held in November/December or May / June.
- ii. If the student again fails in the supplementary examination, he/she will not be allowed to continue the programme.
- iii. A candidate should get enrolled /registered for the first semester examination. If enrollment/registration is not possible owing to shortage of attendance beyond condonation limit / rules prescribed OR belated joining OR on medical grounds, such candidates are not permitted to proceed to the next semester. Such candidates shall redo the semester in the subsequent term of that semester as a regular student; however, a student of first semester shall be admitted in the second semester, if he/she has successfully kept the term in first semester.

Pattern of Question Papers: Question Papers shall have five questions corresponding to five units of each theory course. M.P.Ed.: Format of Question Paper for 5 Units. Each question paper shall have five questions. The pattern will be as follows:

Question No.	Description	Marks
	(From Unit 1)	
	Answer in detail (Long Question) Or	
1.	Answer in detail (Long Question)	14
	(From Unit 2)	
	Answer in detail (Long Question) Or	
2.	Answer in detail (Long Question)	14
	(From Unit 3)	
	Answer in detail (Long Question) Or	
3.	Answer in detail (Long Question)	14
	(From Unit 4)	
	Answer in detail (Long Question) Or	·
4.	Answer in detail (Long Question)	14
	(From Unit 5)	
	Answer in detail (Long Question) Or	
5.	Answer in detail (Long Question)	· 14
	Total	70

Examiners: There will be one internal and one external examiner based on the Game specialization that is from **Athletics**, **Badminton**, **Basketball**, **Cricket**, **Football**, **Handball**, **Hockey**, **Kabaddi**, **Kho-Kho**, **Table-tennis**, **Volleyball and Yoga** for all the four semesters in practical and teaching practice.

Evaluation: The performance of a student in each course is evaluated through continuous internal assessment (CIA), one test of 20 marks and of one to two hours duration is to be conducted around 10-14 weeks of academic work from the start of each semester; evaluation is to be done in terms of percentage of marks with a provision for conversion to grade point. If, any student is not able to give the internal test due to medical reason or participation in intercollege or inter university competitions, the concerned course teacher must conduct the student examination as soon as possible (there is no provision for seeking improvement of internal assessment). The marks obtain in CIA is added with end semester examination and will be consolidated at the end of course. The components for continuous internal assessment are;

One Test	20 Marks
Assignments	05 Marks
Viva -Voce / presentations	05 Marks
Total	30 Marks

Attendance shall be taken as a component of continuous assessment, although the students should have minimum 75% attendance in each course. In addition to continuous evaluation component, the end semester examination, which will be written type examination of at least 3 hours duration, would also form an integral component of the evaluation. The ratio of marks to be allotted to continuous internal assessment and to end semester examination is 30:70. The evaluation of practical work, wherever applicable, will also be based on continuous internal assessment and on an end-semester practical examination.

Minimum Passing Standard: The minimum passing standard for CIA (Continuous Internal Assessment) and External Examinations shall be 40%, i.e. 12 marks out of 30 marks and 28 marks out of 70 marks respectively for theory courses. The minimum passing for both CIA & external examination shall be 50%, i.e. 15 marks out of 30 and 35 marks out of 70 marks for the teaching practice and practical courses.

Educational Tour/Camp: In addition to the above rules the student must fulfill the following requirements to acquire the degree which is mandatory. **Educational Tour** or Leadership Camp organized by the Department of Physical Education of at least 05 days. The students shall contribute separately for these activities.

The student will have to attend Educational tour or Leadership camp in II semester, if any student due to extraordinary circumstances not able to attend tour/camp, are allowed to attend in IV semester with the permission of Head of the department. The students will have to submit tour/camp report within ten days after arrival from tour/camp compulsorily in the Department of Physical Education, H.N.B.G.U. failing which the result will not be declared.

Grading: Once the marks of the CIA (Continues Internal Assessment) and SEA (Semester End Assessment) for each of the courses are available, both (CIA and SEA) will be added. The marks thus obtained for each of the courses will then be graded as per details provided in Letter Grades and Grade Points from the first semester onwards the average performance within any semester from the first semester is indicated by Semester Grade Point Average (SGPA) while continuous performance (including the performance of the previous semesters also) starting from the first semester is indicated by Cumulative Grade Point Average (CGPA). These two are calculated by the following formula:

(i) SGPA(Si) Si= $\sum (\text{Ci x Gi})/\sum (\text{Ci x Gi})$

where Ci is the number of credits of the ith course and Gi is the grade point scored by the student in the ith course.

(ii) The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e. $CGPA = \sum (Ci \ xSi) / \sum Ci$ Where Si is the SGPA of the ith semester and Ci is the total number of credits in that semester.

(iii) The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcript or certificate or marksheet.

Classification of Final Results: For the purpose of declaring a candidate to have qualified for the Degree of Master of Physical Education in the First class / Second class / Pass class or First class with Distinction, the marks and the corresponding CGPA earned by the candidate in Core Courses will be the criterion. It is further provided that the candidate should have scored the First / Second Class separately in both the grand total and end Semester (External) examinations.

Award of the M.P.Ed. Degree: A candidate shall be eligible for the award of the degree of the M.P.Ed. only if he/she has earned the minimum required credit including Bonus Credits of the programme prescribed above.

Letter Grades and Grade Points:

i. Two methods-relative grading or absolute grading—have been in vogue for awarding grades in a course. The relative grading is based on the distribution (usually normal distribution) of marks obtained by all the students in the course and the grades are awarded based on a cut-off mark or percentile. Under the absolute grading, the marks are converted to grades based on pre-determined class intervals. To implement the following grading system, the colleges and universities can use any one of the above methods.

Note:

- 1. CGPA is calculated only when the candidate passes in all the courses of all the previous and current semesters.
- 2. The cumulative grade point average will be calculated as the average of the SGPA of all the semesters continuously, as shown above.
- 3. For the award of the class, CGPA shall be calculated on the basis of:
 - i) Marks of each Semester End Assessment and
 - ii) Marks of each Semester Continuous Internal Assessment for each course.
- 4. The final Class for M.P.Ed. Degree shall be awarded on the basis of last CGPA (grade) from all the one to four semester examinations.

Grievance Redressal Committee: The college/department shall form a Grievance Redressal Committee for each course in each college/department with the course teacher / Principal / Director and the HOD of the faculty as the members. This Committee shall solve all grievances of the students.

Revision of Syllabi: Syllabi of every course should be revised according to the NCTE.

- Revised Syllabi of each semester should be implemented in a sequential way.
- In courses, where units / topics related to governmental provisions, regulations or laws, that change to accommodate the latest developments, changes or corrections are to be made consequentially as recommended by the Academic Council.
- All formalities for revisions in the syllabi should be completed before the end of the semester for implementation of the revised syllabi in the next academic year.
- During every revision, up to twenty percent of the syllabi of each course should be

- changed so as to ensure the appearance of the students who have studied the old (unrevised) syllabi without any difficulties in the examinations of revised syllabi.
- In case, the syllabus of any course is carried forward without any revision, it shall also be counted as revised in the revised syllabi.

Miscellaneous:

- 1. The procedural details may be given by the university from time to time.
- 2. Any unforeseen problems/difficulties may be resolved by Vice Chancellor, whose decision in the matter shall be final.
- 3. The provision of any order, rules or regulation in force shall be inapplicable to the extent of its inconsistency with these regulations.

The key program outcomes (POs) and program specific outcomes (PSOs) for the Bachelor of Physical Education (M.P.Ed.) program are as under:

Program Outcomes-

- The M.P.Ed. program aims to produce well-rounded physical education professionals with strong content knowledge, pedagogical skills, and the ability to support students' holistic development through sports and physical activity.
- After completion of the Program the student become eligible for Post Graduate teachers in Physical education subject.
- The Student Demonstrates firm work/professional ethics and cultivate solidarity by working and dealing with colleagues, parents, and the community to support students' growth and well-being.

Program Specific Outcomes-

- The student will be able to apply the knowledge of basic sciences that may be relevant and appropriate to physical education and sports sciences leading to effective teaching and practice.
- The students should demonstrate the ability to identify, define the actual requirements, formulate, research literature, and analyze complex physical education and sports sciences related problems to reaching substantiated conclusions.
- He/ She should be able to design, implement, and evaluate process or program to meet desired needs in the field of physical education and sport sciences.
- Individual and Team Work: Ability to work effectively in teams and as individuals to achieve goals and objectives in physical education and sports sciences.
- Research and Development: Ability to design and conduct research in physical education and sports sciences, analyze data, and draw conclusions to inform practice and policy.
- The student will reflect the ability to communicate effectively with diverse audiences, including students, colleagues, and the broader community, to promote physical education and sports sciences.
- The student will show the ability to lead and manage physical education and sports sciences programs, teams, and events, ensuring effective planning, organization, and execution.
- The student will adapt to changing circumstances and continuously update knowledge and skills in physical education and sports sciences to stay current and effective.
- The student will be Able to incorporate effectively integrate Science/Technology/IT-based solutions to applications in physical education and sports sciences.

Semester-I

Part- A Theoretical Course						
Course Code	Title of the papers	Total	Credits	Internal	External	Total
		Hours		Marks	marks	
	Core (Course				
SOE/PE/C-501	Research Process in	4	4	30	70	100
	Physical Education					
SOE/PE/C -502	Physiology of Exercise	4	4	30	70	100
SOE/PE/C -503	Evaluation in Physical	4	4	30	70	100
	Education					
	Elective cour	rse (Anyo	ne)			
SOE/PE/E-501	Yogic Science					
SOE/PE/E -502	Sports Technology	4	4	30	70	100
	Part – B Practical Course					
SOE/PE/P -501	Game Specialization- Basic	6	4	30	70	100
	Skill Proficiency					
SOE/PE/P -502	Game Specialization Theory	6	4	30	70	100
	(History, Organizational set					
	up Terminologies & Skills					
	of the game)					
SOE/PE/P -503	Lab Practical (Sports	6	4	30	70	100
	Psychology, Sports Medicine,					
	Test & Measurement,					
	Biomechanics)					
	Part – C Teach	ning Pract	tices			
SOE/PE/T -501	Game Specialization	6	4	30	70	100
	Teaching Lesson (5					
	Lessons)					
	Total	40	32	240	560	800

Semester-II

	Part- A Theor	retical Co	urse					
Course Code	Title of the papers	Total	Credits	Internal	External	Total		
		Hours		Marks	marks			
	Core Course							
SOE/PE/C -601	Applied Statistics in Physical Education	4	4	30	70	100		
SOE/PE/C -602	Sports Biomechanics and Kinesiology	4	4	30	70	100		
SOE/PE/C-603	Athletic care and Rehabilitation	4	4	30	70	100		
	Elective cour	rse (Anyo	ne)					
SOE/PE/E-601	Sports Journalism and Mass							
	Media	4	4	30	70	100		
SOE/PE/E -602	Sports Management and Curriculum							
	design in Physical Education							
	Part – B Pra	ctical Cou	ırse					
SOE/PE/P -601	Game Specialization –	6	4	30	70	100		
	Proficiency in Advance							
	Skills)							
SOE/PE/P -602	Games Specialization	6	4	30	70	100		
	Theory (layout, ground							
	marking, Awards, Major							
	Tournaments & Personalities.							
	Part – C Teaching Pract	tices (Coa	ching Les	son)		ı		
SOE/PE/T -601	Game Specialization							
	Training Lesson (5 Lessons)	6	4	30	70	100		
SOE/PE/T -602	Class Room Theory teaching	6	4	30	70	100		
	on subjects of I st & II nd							
	Semester and Game							
	Specialization topics.							
		40	32	240	560	800		
	Total							

Semester-III

Part- A Theoretical Course							
Course Code	Title of the papers	Total	Credits	Internal	External	Total	
		Hours		Marks	marks		
	Core C	ourse					
SOE/PE/C-701	Scientific Principles of Sports						
	Training	4	4	30	70	100	
SOE/PE/C -702	Sports Medicine	4	4	30	70	100	
SOE/PE/C -703	Health Education and Sports	4	4	30	70	100	
	Nutrition						
	Elective Cour	se (Anyon	ie)				
SOE/PE/E-701	Sports Engineering						
SOE/PE/E-702	Physical Fitness and Wellness	4	4	30	70	100	
	Part – B Practical Course						
SOE/PE/P -701	Game Specialization	6	4	30	70	100	
	- Technique and Tactical						
	Efficiency (Game Situation)						
SOE/PE/P-702	Game Specialization Theory	6	4	30	70	100	
	(Officiating, Rules &						
	Regulations of the Game-						
	Interpretation & latest changes						
SOE/PE/P -703	Game Specialization (Project	6	4	30	70	100	
	Report on the Major						
	Tournament held during the						
	session)						
	Part – C Teach	ing Pract	tices				
SOE/PE/T -701	Game Specialization						
	- Coaching Lesson Plans	6	4	30	70	100	
	(5 Lessons)						
		40	32	240	560	800	
	Total						

Semester-IV

Part- A Theoretical Course							
Course	Title of the papers	Total	Credits	Internal	External	Total	
Code		Hours		Marks	marks		
	(Core Cou	rse				
SOE/PE/	Information and Communication	4	4	30	70	100	
C-801	Technology in Physical Education						
SOE/PE/		4	4	30	70	100	
C-802	Sports Psychology						
SOE/PE/	Education Technology in	4	4	30	70	100	
C-803	Physical Education						
	Electiv	e Course	(Anyone)				
SOE/PE/							
E-801	Dissertation	4	4	30	70	100	
SOE/PE/	Value and Environment						
E-802	Education						
	Part – F	Practic	al Course				
SOE/PE/	Game Specialization- Skill						
P -801	Proficiency in Competition	6	4	30	70	100	
	situation						
SOE/PE/	Games Specialization Theory						
P -802	(Training Methods)	6	4	30	70	100	
	Part – C Teaching	Practice	s (Coachir	ng Lesson)			
SOE/PE/	Game Specialization	6	4	30	70	100	
T-801	Coaching Lesson (Advance						
	Skills)						
SOE/PE/	Class Room Theory Teaching	6	4	30	70	100	
T-802	on subjects of III rd & IV th						
	Semester and Game						
	Specialization topics						
	(5 Lessons)						
		40	32	240	560	800	
	Total						

Note: -

1. Games specialization will be given in one of the following Games and sports:

Athletics, Badminton, Basketball, Cricket, Football, Handball, Hockey, Kabaddi, Kho-Kho, Table-Tennis, Volleyball and Yoga. Student will select one Game specialization for four semesters and complete the mandate course designed for it.

2. The Games specialization in a particular games and sports discipline will run by the Department only if at least 3 students opt for a particular games and sports and availability of teacher of Games specialization.

Scheme of Examination

Semester-I

	Theory (400)			
Paper	Subjects	Internal Marks	External marks	Total
SOE/PE/C-501	Research Process in Physical Education	30	70	100
SOE/PE/C -502	Physiology of Exercise	30	70	100
SOE/PE/C -503	Evaluation in Physical Education	30	70	100
SOE/PE/E-501/502	Yogic Science / Sports technology	30	70	100
	Practical (400)			
SOE/PE/P -501	Game Specialization- Basic Skill Proficiency	30	70	100
SOE/PE/P -502	Games Specialization -Theory	30	70	100
SOE/PE/P -503	Lab Practical	30	70	100
SOE/PE/T -501	Game Specialization - Teaching Lesson Plan	30	70	100
	Total	240	560	800

Semester-II

	Theory (400)			
Paper	Subjects	Internal	External	Total
		Marks	Marks	
SOE/PE/C -601	Applied Statistics in Physical Education	30	70	100
SOE/PE/C -602	Sports Biomechanics and Kinesiology	30	70	100
SOE/PE/C-603	Athletic care and Rehabilitation	30	70	100
SOE/PE/E-	Sports Journalism and Mass Media / Sports	20	70	100
601/602	Management and Curriculum design in Physical education	30	70	
	Practical (400)			
SOE/PE/P -601	Game Specialization - Proficiency in Advance skill	30	70	100
SOE/PE/P -602	Games Specialization - Theory	30	70	100
SOE/PE/T -601	Game Specialization - Training Lesson	30	70	100
SOE/PE/T -602	Class room Theory Teaching	30	70	100
	Total	240	560	800

Semester-III

	Theory (400)			
Paper	Subjects	Internal	External	Total
		Marks	Marks	
SOE/PE/C-701	Scientific Principles of Sports Training	30	70	100
SOE/PE/C -702	Sports Medicine	30	70	100
SOE/PE/C -703	Health Education and Sports Nutrition	30	70	100
SOE/PE/E-701/702	Sports Engineering /Physical Fitness and	30	70	100
	Wellness			
	Practical (400)			
SOE/PE/P -701	Game Specialization - Technique and	30	70	100
	Tactical Efficiency			
SOE/PE/P-702	Games Specialization -Theory	30	70	100
SOE/PE/P -703	Game Specialization (Project Report)	30	70	100
SOE/PE/T -701	Game Specialization - Coaching Lesson	30	70	100
	Plans			
	Total	240	560	800

Semester-IV

	Theory (400)			
Paper	Subjects	Internal	External	Total
		Marks	Marks	
SOE/PE/C-801	Information and communication technology in physical education	30	70	100
SOE/PE/C-802	Sports psychology	30	70	100
SOE/PE/C-803	Education technology in physical education	30	70	100
SOE/PE/E-801/802	Dissertation/ Value and Environment Education	30	70	100
	Practical (400)			
SOE/PE/P -801	Game Specialization- Skill proficiency in competition situation.	30	70	100
SOE/PE/P -802	Games Specialization Theory (Training Methods)	30	70	100
SOE/PE/T-801	Game Specialization Coaching Lesson (Advance Skills)	30	70	100
SOE/PE/T-802	Class Room Theory teaching (5 Lessons)	30	70	100
	Total	240	560	800

Table-1: Semester wise Distribution of Hours per Week

Semester	Theory	Practicum	Teaching Practice	Total
I	16	18	06	40
II	16	12	12	40
III	16	18	06	40
IV	16	12	12	40
TOTAL	64	72	24	160

Minimum of 36 hours per week is required in five or six days in a week

Table-2: Number of Credits per Semester

Semester	Theory	Practicum	Teaching Practice	Total
I	16	12	04	32
II	16	08	08	32
III	16	12	04	32
IV	16	08	08	32
TOTAL	64	48	16	128

SEMESTER I THEORY COURSES SOE/PE/C-501 RESEARCH PROCESS IN PHYSICAL EDUCATION

Course Outcome:

- The students will learn about the meaning, types and scope of Research in Physical Education.
- The students will understand about formulation of Hypothesis and further actions in Research.
- The students will explained about various types of Research Methods prevalent in Physical Education.
- The students will know about How to write Research Proposal and Research Report.

Course Specific Outcome:

The course will provide opportunities to the students to learn about nuances of Research and basic steps in location and formulation of a Research Problem. They will also get the idea of various types of Researches and their methodological implications.

UNIT I – Introduction

Meaning and Definition of Research – Need, Nature and Scope of research in Physical Education. Classification of Research, Location of Research Problem, Criteria for selection of a problem, Qualities of a good researcher.

UNIT II – Methods of Research

Descriptive Methods of Research; Survey Study, Case study, Introduction of Historical Research, Steps in Historical Research, Sources of Historical Research: Primary Data and Secondary Data, Historical Criticism: Internal Criticism and External Criticism.

UNIT III – Experimental Research

Experimental Research – Meaning, Nature and Importance, Meaning of Variable, Types of Variables. Experimental Design - Single Group Design, Reverse Group Design, Repeated Measure Design, Static Group Comparison Design, Equated Group Design, Factorial Design.

UNIT IV – Sampling

Meaning and Definition of Sample and Population. Types of Sampling; Probability Methods; Systematic Sampling, Cluster sampling, Stratified Sampling. Area Sampling – Multistage Sampling. Non- Probability Methods; Convenience Sample, Judgement Sampling, Quota Sampling.

UNIT V – Research Proposal and Report

Chapterization of Thesis / Dissertation, Front Materials, Body of Thesis – Back materials. Method of Writing Research proposal, Thesis / Dissertation; Method of writing abstract and full paper for presenting in a conference and to publish in journals ,Mechanics of writing Research Report, Footnote and Bibliography writing.

Reference:

Best J. W (1971) Research in Education, New Jersey; Prentice Hall, Inc Clarke David. H & Clarke H, Harrison (1984) Research processes in Physical Education, New Jersey; Prentice Hall Inc.

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

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

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SOE/PE/C -502 PHYSIOLOGY OF EXERCISE

Course Outcome:

- The students will know about the meaning and significance of exercise physiology to Physical Education Teacher.
- The students will learn about the structural and functional unit of Skeletal Muscle and Sliding Filament Theory.
- The students will understand the process of energy liberation and its utilization in physical exercise in Human body.
- The students will be able to learn functioning of heart and important related terms like: Cardiac Output, Stroke Volume, Cardiac Hypertrophy etc.
- The students will learn about the impact of climatic conditions on Human body and its performance and effects of Ergogenic aids.

Course Specific Outcome:

The Course will enable the students to know about Human Physiology implications and impact of exercises/ training programs upon it.

UNIT I – Skeletal Muscles and Exercise

Macro & Micro Structure of the Skeletal Muscle, Chemical Composition. Sliding Filament theory of Muscular Contraction. Types of Muscle fibre.Muscle Tone, Chemistry of Muscular Contraction – Heat Production in the Muscle, Effect of exercises and training on the muscular system.

UNIT II – Cardiovascular System and Exercise

Heart Valves and Direction of the Blood Flow – Conduction System of the Heart – Blood Supply to the Heart – Cardiac Cycle – Stroke Volume – Cardiac Output – Heart Rate – Factors Affecting Heart Rate – Cardiac Hypertrophy – Effect of exercises and training on the Cardio vascular system.

UNIT III – Respiratory System and Exercise

Mechanics of Breathing – Respiratory Muscles, Minute Ventilation – Ventilation at Rest and During Exercise.Diffusion of Gases – Exchange of Gases in the Lungs –Exchange of Gases in the Tissues – Control of Ventilation – Ventilation and the Anaerobic Threshold.Oxygen Debt – Lung Volumes and Capacities – Effect of exercises and training on the respiratory system.

UNIT IV – Metabolism and Energy Transfer

Metabolism – ATP – PC or Phosphagen System – Anaerobic Metabolism – Aerobic Metabolism – Aerobic and Anaerobic Systems during Rest and Exercise. Short Duration High Intensity Exercises – High Intensity Exercise Lasting Several Minutes – Long Duration Exercises.

UNIT V - Climatic conditions and sports performance and ergogenic aids

Variation in Temperature and Humidity – Thermoregulation – Sports performance in hot climate, Cool Climate, high altitude. Influence of: Amphetamine, Anabolic steroids, Androstenedione, Beta Blocker, Choline, Creatine, Human growth hormone on sports performance. Narcotic, Stimulants: Amphetamines, Caffeine, Ephedrine, Sympathomimetic amines. Stimulants and sports performance.

Reference:

Amrit Kumar, R, Moses. (1995). Introduction to Exercise Physiology. Madras: PoompugarPathipagam.

BeotraAlka, (2000) Drug Education Handbook on Drug Abuse in Sports: Sports Authority of India Delhi.

Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs.

David, L Costill. (2004). Physiology of Sports and Exercise. Human Kinetics.

Fox, E.L., and Mathews, D.K. (1981). The Physiological Basis of Physical Education and Athletics. Philadelphia: Sanders College Publishing.

Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sanders co. Richard, W. Bowers. (1989). Sports Physiology. WMC: Brown Publishers.

SOE/PE/C-503 EVALUATION IN PHYSICAL EDUCATION

Course Outcome:

- The students will learn about meaning and significance of Test, Measurement and Evaluation in Physical Education.
- The students will know about various technical aspects of Test like: Reliability, Validity, Objectivity and Norms.
- The students will be able to understand about the procedure of various motor fitness tests.
- The students will be able to know about Anthropometric and Aerobic-Anaerobic tests and their procedures.
- The students will know about the procedure and application of various skill tests related to popular sports.

Course Specific Outcome:

The students will learn about various types of tests like: Motor Fitness, Anthropometric and Skill tests prevalent in the field of Physical Education and their significance.

UNIT I – Introduction

Meaning and Definition of Test, Measurement and Evaluation. Need and Importance of Measurement and Evaluation. Criteria for Test Selection – Scientific Authenticity. Meaning, definition and establishing Validity, Reliability, Objectivity. Norms – Administrative Considerations.

UNIT II – Motor Fitness Tests

Meaning and Definition of Motor Fitness. Test for Motor Fitness; Indiana Motor Fitness Test (for elementary and high school boys, girls and College Men) Oregon Motor Fitness Test (Separately for boys and girls) - JCR test. Motor Ability; Barrow Motor Ability Test – Newton Motor Ability Test – Muscular Fitness – Kraus Weber Minimum Muscular Fitness Test.

UNIT III – Physical Fitness Tests

Physical Fitness Test: AAHPERD Health Related Fitness Battery (revised in 1984), ACSM Health Related Physical Fitness Test, Roger's physical fitness Index. Cardio vascular test; Harvard step test, 12 minutes run / walk test, Multi-stage fitness test (Beep test)

UNIT IV – Anthropometric and Aerobic-Anaerobic Tests

Physiological Testing: Aerobic Capacity: The Bruce Treadmill Test Protocol, 1.5 Mile Run test for college age males and females. Anaerobic Capacity: Margaria-Kalamen test, Wingate Anaerobic Test, Anthropometric Measurements: Method of Measuring Height: Standing Height, Sitting Height. Method of measuring Circumference: Arm, Waist, Hip, Thigh. Method of Measuring Skin folds: Triceps, Sub scapular, Suprailiac.

UNIT V - Skill Tests

Specific Spots Skill Test: Badminton: Miller Wall Volley Test. Basketball: Johnson Basketball Test, Harrison Basketball Ability Test. Cricket: Sutcliff Cricket test. Hockey: Friendel Field Hockey Test, Harban's Hockey Test, Volleyball, Russel Lange Volleyball Test, Brady Volleyball Test. Football: Mor-Christian General Soccer Ability Skill Test Battery, Johnson Soccer Test, Mc-Donald Volley Soccer Test. Tennis: Dyer Tennis Test.

References:

Cureton T.K. (1947) Physical Fitness Appraisal and Guidance, St. Louis: The C. Mosby Company Jenson, Clayne R and Cynt ha, C. Hirst (1980) Measurement in Physical Education and Athletics, New York, Macmillan Publishing Co. Inc

Kansal D.K. (1996), "Test and Measurement in Sports and Physical Education, New Delhi: DVS Publications

Krishnamurthy (2007) Evaluation in Physical Education and Sports, New Delhi; Ajay Verma Publication

Vivian H. Heyward (2005) Advance Fitness Assessment and Exercise Prescription, 3rd Edition, Dallas TX: The Cooper Institute for Aerobics Research

Wilmore JH and Costill DL. (2005) Physiology of Sport and Exercise: 3rd Edition. Champaigm IL: Human Kinetic

SOE/PE/E-501 Yogic Sciences

Course Outcome:

- The students will learn about Yoga, its parts, indications and contra indications of various Yogic practices.
- The students will know about the correct procedure of doing various Asanas and Pranayams.
- The students will be able to understand the techniques and benefits of various Kriyas.
- The students will know about various types of Mudras and their benefits.
- The students will be able to understand the significance of Yogic practice to the Sports.

Course Specific Outcome:

The students will be able to know about the Role and Significance of Yogic practice to various systems of Human body and Sports performance.

Unit I – Introduction

Meaning and Definition of Yoga. Astanga Yoga: Yama, Niyama, Aasna, Pranayama, Prathyahara, Dharana, Dhyana, Samadhi, Concept of Yogic Practices; Principles of Breathing—Awareness—Relaxation, Sequence—Counter pose—Time—Place—Clothes—Bathing—Emptying the bowels—Stomach—Diet—No Straining—Age—Contra-Indication—Inverted asana—Sunbathing.

Unit II – Aasanas and Pranayam

Loosening exercise: Techniques and benefits. Asanas: Types- Techniques and Benefits, Surya Namaskar: Methods and benefits. Pranayama: Types- Methods and benefits. Nadis: Meaning, methods and benefits, Chakras: Major Chakaras- Benefits of clearing and balancing Chakras.

Unit III - Kriyas

Shat Kriyas- Meaning, Techniques and Benefits of Neti – Dhati – Kapalapathi- Trataka – Nauli – Basti, Bandhas: Meaning, Techniques and Benefits of JalendraBandha, JihvaBandha, UddiyanaBandha, MulaBandha.

Unit IV – Mudras

Meaning, Techniques and Benefits of Hasta Mudras, Asamyuktahastam, Samyuktahastam, Mana Mudra, Kaya Mudra, Banda Mudra, Adhara Mudra. Meditation: Meaning, Techiques and Benefits of Meditation – Passive and active, Saguna Meditation and Nirguna Meditation.

Unit V – Yoga and Sports

Yoga Supplemental Exercise – Yoga Compensation Exercise – Yoga Regeneration Exercise-Power Yoga. Role of Yoga in Psychological Preparation of athelete: Mental Welbeing, Anxiety, Depression Concentration, Self Actualization. Effect of Yoga on Physiological System: Circulatory, Skeletal, Digestive, Nervous, Respiratory, Excretory Syste.

Reference:

Gore, (1990), Anatomy and Physiology of Yogac Practices.Lonavata: Kanchan Iyengar, B.K.S. (2000), Light on Yoga. New Delhi: Harper Collins Publishers.

Karbelkar N.V.(1993) PatanjalYogasutraBhashya (Marathi Edition) Amravati: Hanuman VyayamPrasarakMandal

Kenghe.C.T. (1976). Yoga as Depth-Psychology and para-Psychology (Vol-I): Historical Background, Varanasi: BharataManishai.

Kuvalyananada Swami & S.L. Vinekar, (1963), Yogic Therapy – Basic Principles and Methods. New Delhi: Govt. of India, Central Health Education and Bureau.

Swami Kuvalayanda, (1998), Asanas. Lonavala: Kaivalyadhama.

Swami SatyananadaSarasvati. (1989), Asana Pranayama Mudra Bandha.Munger: Bihar School of Yoga.

SOE/PE/E/502 SPORTS TECHNOLOGY

Course Outcome:

- The students will be able to know about meaning and application of Technology to Sports world.
- The students will learn about various terms related to science and technology like: Nanotechnology.
- The students will understand about the use of various types of technology to playfields and equipment in Sports.
- The students will know about latest training gadgets and their impact on Sports performance.

Course Specific Outcome:

The students will be provided an opportunity to get acquaint with scientific terms and technologies being the part of Sports equipments, apparel and playfield and how it is improving the qualities of products of modern world and human performance.

Unit I – Sports Technology

Meaning, definition, purpose, advantages and applications, General Principles and purpose of instrumentation in sports, Workflow of instrumentation and business aspects, Technological impacts on sports.

Unit II – Science of Sports Materials

Adhesives- Nano glue, nanomoulding technology, Nano turf.Foot wear production, Factors and application in sports, constraints. Foams- Polyurethane, Polystyrene, Styrofoam, closed-cell and opencell foams, Neoprene, Foam. Smart Materials – Shape Memory Alloy (SMA), Thermo chromic film, High-density modelling foam.

Unit III – Surfaces of Playfields

Modern surfaces for playfields, construction and installation of sports surfaces. Types of materials – synthetic, wood, polyurethane Artificial turf. Modern technology in the construction of indoor and outdoor facilities. Technology in manufacture of modern play equipments. Use of computer and software in Match Analysis and Coaching.

Unit IV – Modern equipment

Playing Equipments: Balls: Types, Materials and Advantages, Bat/Stick/ Racquets: Types, Materials and Advantages. Clothing and shoes: Types, Materials and Advantages. Measuring equipments: Throwing and Jumping Events. Protective equipments: Types, Materials and Advantages. Sports equipment with nano technology, Advantages.

Unit V – Training Gadgets

Basketball: Ball Feeder, Mechanism and Advantages. Cricket: Bowling Machine, Mechanism and Advantages, Tennis: Serving Machine, Mechanism and Advantages, Volleyball: Serving Machine Mechanism and Advantages. Lighting Facilities: Method of erecting Flood Light and measuring luminous. Video Coverage: Types, Size, Capacity, Place and Position of Camera in Live coverage of sporting events.

References:

Charles J.A. Crane, F.A.A. and Furness, J.A.G. (1987) "Selection of Engineering Materials" UK: Butterworth Heiremann.

Finn, R.A. and Trojan P.K. (1999) "Engineering Materials and their Applications" UK: Jaico Publisher.

John Mongilo, (2001) "Nano Technology 101 "New York: Green wood publishing.

Walia, J.S. Principles and Methods of Education (Paul Publishers, Jullandhar), 1999.

Kochar, S.K. Methods and Techniques of Teaching (New Delhi, Jullandhar, Sterling Publishers Pvt. Ltd.), 1982

SEMESTER II

SOE/PE/C-601 APPLIED STATICTICS IN PHYSICAL EDUCATION

Course Outcome:

- The students will know about meaning, application and significance of Statistics in Physical Education Teaching and Research.
- The students will understand about the use and types of data and various descriptive statistical techniques like: Measure of Central Tendencies and Measure of Variabilities.
- The students will be explained about Probability Distributions and various types of Graphs and their use in Physical Education.
- The students will learn about Inferential Statistics techniques like: 't' test, chi square test, ANOVA, ANCOVA.

Course Specific Outcome:

The students will enable to understand about use of Data, its statistical treatment and interpretation as per the need of the study in the field of Physical Education.

UNIT I – Introduction

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

UNIT II - Data Classification, Tabulation and Measures of Central Tendency

Meaning, uses and construction of frequency table. Meaning, Purpose, Calculation and advantages of Measures of central tendency – Mean, median and mode.

UNIT III – Measures of Dispersions and Scales

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

UNIT IV – Probability Distributions and Graphs

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

UNIT V – Inferential and Comparative Statistics

Tests of significance; Independent "t" test, Dependent "t" test – chi – square test, level of confidence and interpretation of data. Meaning of correlation – co-efficient of correlation – calculation of co-efficient of correlation by the product moment method and rank difference method. Concept of ANOVA and ANCOVA.

References:

Best J. W (1971) Research in Education, New Jersey; Prentice Hall, Inc

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

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

Kamlesh, M. L. (1999) Research Methodology in Physical Education and Sports, New Delhi Rothstain A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs:Prentice Hall, Inc

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

SOE/PE/C-602 SPORTS BIOMECHANICS AND KINSESIOLOGY

Course Outcome:

- The students will be able to know about meaning and concept of Biomechanics and its importance in movement analysis.
- The student will understand about origin and insertion of important skeletal muscles and their movement pattern.
- The student will acquire knowledge about Motion-Cause and descriptions and factors affecting it.
- The student will get understanding of levers and projectile and their application in Physical Education and Sports.
- The student will enable to analyze various types of movements by adopting different method of analysis.

Course Specific Outcome:

The students will learn about the application of Kinesiological and Biomechanical knowledge and principles to sports setting and achieve the positive result out of it.

UNIT I – Introduction

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

UNIT II – Muscle Action

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

UNIT III – Motion and Force

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

UNIT IV – Projectile and Lever

Freely falling bodies - Projectiles -Equation of projectiles stability Factors influencing equilibrium - Guiding principles for stability -static and dynamic stability. Meaning of work, power, energy, kinetic energy and potential energy. Leverage -classes of lever - practical application. Water resistance - Air resistance - Aerodynamics.

UNIT V – Movement Analysis

Analysis of Movement: Types of analysis: Kinesiological, Biomechanical. Cinematographic. Methods of analysis – Qualitative, Quantitative, Predictive

References:

Deshpande S.H. (2002). ManavKriyaVigyan – Kinesiology (Hindi Edition) Amravati

: Hanuman Vyayam Prasarak Mandal.

Hoffman S.J. Introduction to Kinesiology (Human Kinesiology publication Inc. 2005

Thomas. (2001). Manual of structural Kinesiology, New York: McGraw Hill.

Uppal, A (2004), Kinesiology in Physical Education and Exercise Science, Delhi Friends publications.

Williams M (1982) Biomechanics of Human Motion, Philadelphia; Saunders Co.

SOE/PE/C-603 ATHLETIC CARE AND REHABILITATION

Course Outcome:

- The students will understand the meaning and use of corrective Physical Education.
- The student will be explained about Posture (Good and Bad), Posture Deformities, its adverse effects and remedial measures.
- The students will know about history and types of Massage, various massage strokes and their benefits.
- The students will be enabled to get knowledge of common sports injuries, its treatment and rehabilitation program.

Course specific Outcome:

The students will be provided the knowledge of corrective Physical Education and Rehabilitation program to make Sports person more productive and injury free career.

Unit I – Corrective Physical Education

Definition and objectives of corrective physical Education. Posture and body mechanics, Standards of Standing Posture. Value of good posture, Drawbacks and causes of bed posture. Posture test – Examination of the spine.

Unit II – Posture

Normal curve of the spine and its utility, Deviations in posture: Kyphosis, lordosis, flat back, Scoliosis, round shoulders, Knock Knee, Bow leg, Flat foot. Causes for deviations and treatment including exercises.

Unit III – Rehabilitation Exercises

Passive, Active, Assisted Resisted exercise for Rehabilitation Stretching, PNF techniques and principles.

Unit IV – Massage

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

Unit V – Sports Injuries Care, Treatment and Support

Principles pertaining to the prevention of Sports injuries – care and treatment of exposed and unexposed injuries in sports – Principles of apply cold and heat, infrared rays – Ultrasonic, Therapy – Short wave diathermy therapy. Principles and techniques of Strapping and Bandages.

References:

Dohenty. J. Meno. Wetb, Moder D (2000) Track & Field, Englewood Cliffs, Prentice Hal Inc.

Lace, M. V. (1951) Massage and Medical Gymnastics, London: J & A Churchill Ltd. McOoyand Young (1954) Tests and Measurement, New York: Appleton Century. Naro, C. L. (1967) Manual of Massage and, Movement, London: Febra and Febra Ltd. Rathbome, J.l. (1965) Corrective Physical education, London: W.B. Saunders & Co. Stafford and Kelly, (1968) Preventive and Corrective Physical Education, New York.

SOE/PE/E-601 SPORTS JOURNALISM AND MASS MEDIA

Course Outcome:

- The students will understand about Meaning and Significance of Journalism in the Field of Sports.
- The students will be able to know about Role of Journalism in the field of Physical Education.
- The students will be explained about concept of Sports Bulletin and Sports Education.
- The students will know about Reporting of Sports Events, Publication of Sports Meet and organizing Press Meet.

Course specific Outcome:

The students will acquire knowledge about scope of Journalism in Sports world and Physical Education qualities and qualifications for Professional Sports Journalist.

UNIT I Introduction

Meaning and Definition of Journalism, Ethics of Journalism – Canons of journalism- Sports Ethics and Sportsmanship – Reporting Sports Events. National and International Sports News Agencies.

UNIT II Sports Bulletin

Concept of Sports Bulletin: Journalism and sports education – Structure of sports bulletin – Compiling a bulletin – Types of bulletin – Role of Journalism in the Field of Physical Education: Sports as an integral part of Physical Education – Sports organization and sports journalism – General news reporting and sports reporting.

UNIT III Mass Media

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

UNIT IV Report Writing on Sports

Brief review of Olympic Games, Asian Games, Common Wealth Games World Cup, National Games and Indian Traditional Games. Preparing report of an Annual Sports Meet for Publication in Newspaper. Organization of Press Meet.

UNIT -V Journalism

Sports organization and Sports Journalism – General news reporting and sports reporting. Methods of editing a Sports report. Evaluation of Reported News.Interview with and elite Player and Coach.

Reference:

Ahiya B.N. (1988) Theory and Practice of Journalism: Set to Indian context Ed3. Delhi :Surjeet Publications

Ahiya B.N. Chobra S.S.A. (1990) Concise Course in Reporting. New Delhi: Surject Publication Bhatt S.C. (1993) Broadcast Journalism Basic Principles. New Delhi. Haranand Publication Dhananjay Joshi (2010) Value Education in Global Perspective. New Delhi: Lotus Press. MohitChakrabarti (2008): Value Education: Changing Perspective, New Delhi: Kanishka Publication.

SOE/PE/E-602 SPORTS MANAGEMENT AND CURRICULUM DESIGN IN PHYSICAL EDUCATION

Course Outcome:

- The students will know about the concept of Sports Management, its principles and functions in Physical Education.
- The students will be able to learn about Program development colleges Sports program and community based Physical Education.
- The students will be explained about Curriculum, its principles, theories of Curriculum Development.
- The students will know about factors affecting Curriculum. Sources of Curriculum materials and latest avenues of information in the field of Physical Education.

Course specific Outcome:

The students will learn about the Management; Sports Management, Office Management, Personnel Management and Program Management, which will allow them to become a successful Professional in the field of Physical Education.

UNIT I – Introduction to Sports Management

Definition, Importance.Basic Principles and Procedures of Sports Management.Functions of Sports Management. Personal Management: Objectives of Personal Management, Personal Policies, Role of Personal Manager in an organization, Personnel recruitment and selection.

UNIT II – Program Management

Importance of Programme development and the role of management, Factors influencing programme development. Steps in programme development, Competitive Sports Programs, Benefits, Management Guidelines for School, Colleges Sports Programs, Management Problems in instruction programme, Community Based Physical Education and Sports program.

UNIT III – Equipments and Public Relation

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

UNIT IV - Curriculum

Meaning and Definition of Curriculum. Principles of Curriculum Construction: Students centred, Activity centred, Community centred, Forward looking principle, Principles of integration, Theories of curriculum development, Conservative (Preservation of Culture), Relevance, flexibility, quality, contextually and plurality. Approaches to Curriculum; Subject centred, Learner centred and Community centred, Curriculum Framework.

UNIT V – Curriculum Sources

Factors that affecting curriculum: Sources of Curriculum materials – text books – Journals – Dictionaries, Encyclopaedias, Magazines, Internet.Integration of Physical Education with other Sports Sciences – Curriculum research, Objectives of Curriculum research – Importance of Curriculum research.Evaluation of Curriculum, Methods of evaluation.

Reference:

Aggarwal, J.C (1990). Curriculum Reform in India – World overviews, Doaba World Education Series – 3 Delhi: Doaba House, Book seller and Publisher.

Carl, E, Willgoose. (1982. Curriculum in Physical Education, London: Prentice Hall. Chakraborthy & Samiran. (1998) .Sports Management. New Delhi: Sports Publication.

John, E, Nixon & Ann, E, Jewett. (1964). Physical Education Curriculum, New York: The Ronald Press Company.

McKernan, James (2007) Curriculum and Imagination: Process, Theory, Pedagogy and Action Research, U.K. Routledge

NCERT (2000). National Curriculum Framework for School Education, New Delhi: NCERT.

NCERT (2005). National Curriculum Framework-2005, New Delhi: NCERT.

Williams, J.F. (2003). Principles of Physical Education. Meerut: College Book House.

SEMESTER III

SOE/PE/C-701 SCIENTIFIC PRINCIPLES OF SPORTS TRAINING

Course Outcome:

- The students will learn about Meaning and Principles of Sports Training.
- The students will know about various important terms of Sports Training like: Load, Adaptation, Supercompensation and Overload to make it more effective and meaningful.
- The students will be explained about various training methods for improving Motor abilities of Sportspersons.
- The students will acquire knowledge of Training plans and principles of Periodization for achieving Top form for an athlete.

Course specific Outcome:

The students will be able to get knowledge about scientific method of Sports Training and other relevant issue pertaining to it. They will be explained about various methods of Doping and its ill effects to Sportsperson's health.

UNIT I – Introduction

Sports training: Definition – Aim, Characteristics, Principles of Sports Training, Over Load: Definition, Causes of Over Load, Symptoms of Overload, Remedial Measures – Super Compensation – Altitude Training – Cross Training

UNIT II – Components of Physical Fitness

Strength: Methods to improve Strength: Weight Training, Isometric, Isotonic, Circuit Training, Speed: Methods to Develop Speed: Repetition Method, Downhill Run, Parachute Running, Wind Sprints, Endurance, Methods to Improve Endurance: Continuous Method, Interval Method, Repetition Method, Cross Country, Fartlek Training

UNIT III – Flexibility and Coordinative abilities

Flexibility: Methods to Improve the Flexibility- Stretch and Hold Method, Ballistic Method, Special Type Training: Plyometric Training. Training for Coordinative abilities: Methods to improve Coordinative abilities: Sensory Method, Variation in Movement Execution Method, Variation in External Condition Method, Combination of Movement Method, Types of Stretching Exercises.

UNIT IV – Training Plan

Training Plan: Macro Cycle, Meso-Cycle. Short Term Plan and Long Term Plans - Periodisation: Meaning, Single, Double and Multiple Periodisation, Preparatory Period, Competition Period and Transition Period.

UNIT V - Doping

Definition of Doping – Side effects of drugs – Dietary supplements – IOC list of doping classes and methods. Blood Doping – The use of erythropoietin in blood boosting – Blood doping control – The testing programmes – Problems in drug detection – Blood testing in doping control – Problems with the supply of medicines Subject to IOC regulations: over-the- counter drugs (OTC) – prescription only medicines (POMs) – Controlled drugs (CDs). Reporting test results – Education

References:

Bunn, J.N. (1998) Scientific Principles of Coaching, New Jersey Engle Wood Cliffs, Prentice Hall Inc. Cart, E. Klafs&Daniel, D. Arnheim (1999) Modern Principles of Athletic Training St. Louis C. V. Mosphy Company

Daniel, D. Arnheim (1991) Principles of Athletic Traning, St. Luis, Mosby Year Book David R. Mottram (1996) Drugs in Sport, School of Pharmacy, Liverpool: John Moore University Hardayal Singh (1991) Science of Sports Training, New Delhi, DVS Publications Jensen, C.R. & Fisher A.G. (2000) Scientific Basic of Athletic Conditioning, Philadelphia

SOE/PE/C-702 SPORTS MEDICINE

Course Outcome:

- The students will know about the meaning and importance of Sports Medicine for Physical Education field.
- The students will understand about various types of Therapeutic exercises, their procedures and advantages.
- The students will be explained about proper Rehabilitation program for Sportsperson.
- The students will acquire the knowledge about injuries common to lower and upper extremities of human body and its treatment.
- The students will learn about tapping and strapping of injured body part.

Course specific Outcome:

The students will know about the use of Sports Medicine for Injury free Sports participation and Rehabilitation program for recovery from any Sports Injury.

UNIT I – Introduction

Meaning, definition and importance of Sports Medicine, Definition and Principles of therapeutic exercises. Coordination exercise, Balance training exercise, Strengthening exercise, Mobilization exercise, Gait training, Gym ball exercise Injuries: acute, sub-acute, chronic. Advantages and Disadvantages of PRICE, PRINCE therapy, Aquatic therapy.

UNIT II – Basic Rehabilitation

Basic Rehabilitation: Strapping/Tapping: Definition, Principles Precautions Contraindications. Proprioceptive neuromuscular facilitation: Definition hold, relax, repeated contractions. Show reversal technique exercises. Isotonic, Isokinetic, isometric stretching. Definition. Types of stretching, Advantages, dangers of stretching, Manual muscle grading.

UNIT III – Spine Injuries and Exercise

Head, Neck and Spine injuries: Causes, Presentational of Spinal anomalies, Flexion, Compression, Hyperextension, Rotation injuries. Spinal range of motion. Free hand exercises, stretching and strengthening exercise for head neck, spine. Supporting and aiding techniques and equipment for Head, Neck and Spine injuries.

UNIT IV – Upper Extremity Injuries and Exercise

Upper Limb and Thorax Injuries: Shoulder: Sprain, Strain, Dislocation, and Strapping. Elbow: Sprain, Strain, Strapping. Wrist and Fingers: Sprain Strain, Strapping. Thorax, Rib fracture. Breathing exercises, Relaxation techniques, Free hand exercise, Stretching and strengthening exercise for shoulder, Elbow, Wrist and Hand. Supporting and aiding techniques and equipment for Upper Limb and Thorax Injuries.

UNIT V – Lower Extremity Injuries and Exercise

Lower Limb and Abdomen Injuries: Hip: Adductor strain, Dislocation, Strapping. Knee: Sprain, Strain, Strain, Strapping. Ankle: Sprain, Strain, Strapping. Abdomen: Abdominal wall, Contusion, Abdominal muscle strain. Free exercises – Stretching and strengthening exercise for Hip, knee, ankle and Foot. Supporting and aiding techniques and equipment for Lower limb and Abdomen injures.

References:

Christopher M. Norris. (1993). Sports Injures Diagnosis and Management for Physiotherapists. East Kilbride: Thomson Litho Ltd.

James, A. Gould & George J. Davies.(1985). Physical Physical Therapy. Toronto: C.V. Mosby Company.

Morris B. Million (1984) Sports Injuries and Athletic Problem. New Delhi: Surject Publication.

Pande.(1998). Sports Medicine. New Delhi: Khel Shitya Kendra

The Encyclopedia of Sports Medicine. (1998). The Olympic Book of Sports Medicine, Australia: Tittel Blackwell Scientific publications.

SOE/PE/C-703 HEALTH EDUCATION AND SPORTS NUTRITION

Course Outcome:

- The students will know about the concept, Dimensions and Spectrum of Health.
- The students will be able to understand about principles of Health Education and various School Health Services.
- The students will be explained about meaning and Significance of Hygiene for Healthy life.
- The students will know about Sports Nutrition and its impact on Human Performance.
- The students will be able to learn about Obesity and its hazards and weight management plans.

Course specific Outcome:

The students will know about Health Education and its application for better quality of Human life and performance through Nutritious and Balance Diet.

Unit - I Health Education

Concept, Dimensions, Spectrum and Determinants of Health

Definition of Health, Health Education, Health Instruction, Health Supervision, Aim, objective and Principles of Health Education

Health Service and guidance instruction in personal hygiene

Unit - II Health Problems in India

Communicable and Non Communicable Diseases

Obesity, Malnutrition, Adulteration in food, Environmental sanitation, Explosive, Population,

Personal and Environmental Hygiene for schools

Objective of school health service, Role of health education in schools

Health Services - Care of skin, Nails, Eye health service, Nutritional service, Health appraisal, Health record, Healthful school environment, first- aid and emergency care etc.

Unit- III – Hygiene and Health

Meaning of Hygiene, Type of Hygiene, dental Hygiene, Effect of Alcohol on Health, Effect of Tobacco on Health, Life Style Management, Management of Hypertension, Management of Obesity, Management of Stress

Unit – IV- Introduction to Sports Nutrition

Meaning and Definition of Sports Nutrition, Role of nutrition in sports, Basic Nutrition guidelines, Nutrients: Ingestion to energy metabolism (Carbohydrate, Protein and Fat), Role of carbohydrates, Fat and protein during exercise.

Unit – V Nutrition and Weight Management

Concept of BMI (Body mass index), Obesity and its hazard, Dieting versus exercise for weight control Maintaining a Healthy Lifestyle, Weight management program for sporty child, Role of diet and exercise in weight management, Design diet plan and exercise schedule for weight gain and loss.

References:

Bucher, Charles A. "Administration of Health and Physical Education Programme". Delbert, Oberteuffer, et. al." The School Health Education".

Ghosh, B.N. "Treaties of Hygiene and Public Health".

Hanlon, John J. "Principles of Public Health Administration" 2003.

Moss "Health Education" (National Education Association of U.T.A.)Nemir A. 'The School Health Education" (Harber and Brothers, New York). Nutrition Encyclopedia, edited by Delores C.S. James, The Gale Group, Inc.

SOE/PE/E-701 SPORTS ENGINEERING

Course Outcome:

- The students will be able to know about meaning of Sports Engineering and its applications.
- The students will be explained about mechanics of engineering materials.
- The students will learn about Dynamics and its use in Sports.
- The students will acquire knowledge of science related to Sports Infrastructure.
- The students will learn about maintenance of various Infrastructural facilities in Sports and Physical Education.

Course specific Outcome:

The student will be enabled to get knowledge of various scientific terms and principles involved in Engineering for construction and maintenance of Sports facilities.

Unit - I Introduction to sports engineering and Technology

Meaning of sports engineering, human motion detection and recording, human performance, assessment, equipment and facility designing and sports related instrumentation and measurement.

Unit - II Mechanics of engineering materials

Concept of internal force, axial force, shear force, bending movement, torsion, energy method to find displacement of structure, strain energy. Biomechanics of daily and common activities —Gait, Posture, Body levers, ergonomics, Mechanical principles in movements such as lifting, walking, running, throwing, jumping, pulling, pushing etc

Unit- III Sports Dynamics

Introduction to Dynamics, Kinematics to particles – rectilinear and plane curvilinear motion coordinate system.

Kinetics of particles – Newton's laws of Motion, Work, Energy, Impulse and momentum.

Unit- IV Building and Maintenance:

Sports Infrastructure- Gymnasium, Pavilion, Swimming Pool, Indoor Stadium, Out-door Stadium, Play Park, Academic Block, Administrative Block, Research Block, Library, Sports Hostels, etc. Requirements: Air ventilation, Day light, Lighting arrangement, Galleries, Store rooms, Office, Toilet Blocks (M/F), Drinking Water, Sewage and Waste Water disposal system, Changing Rooms (M/F), Sound System (echo-free), Internal arrangement according to need and nature of activity to be performed, Corridors and Gates for free movement of people, Emergency provisions of lighting, fire and exits, Eco-friendly outer surrounding. Maintenance staff, financial consideration. Building process:- design phase (including brief documentation), construction phase functional (occupational) life, Re-evaluation, refurnish, demolish.

Maintenance policy, preventive maintenance, corrective maintenance, record and register for maintenance.

Unit – V Facility life cycle costing

Basics of theoretical analysis of cost

Total life cost concepts, maintenance costs, energy cost, capital cost and taxation

Reference:

Franz K. F. et. al., Editor, Routledge Handbook of Sports Technology and Engineering (Routledge, 2013).

Steve Hake, Editor, The Engineering of Sport (CRC Press, 1996)

Franz K. F. et. al., Editor The Impact of Technology on Sports II (CRC Press, 2007)

Helge N., Sports Aerodynamics (Springer Science & Business Media, 2009)

Youlin Hong, Editor Routledge Handbook of Ergonomics in Sport and Exercise (Routledge, 2013)

Eric C. et al., Editor Sports Facility Operations Management (Routledge, 2010)

SOE/PE/E-702 PHYSICAL FITNESS AND WELLNESS

Course Outcome:

- The students will be able to learn about the concept of Physical Fitness and its principles involved in human movement.
- The students will know about Food sources and choices and food values.
- The students will be explained about various cardio respiratory activities and their benefits.
- The students will be able to learn about various types of Flexibility exercises, Pilates and Yoga.

Course specific Outcome:

Program content will be enabled to know about meaning and concept of Physical Fitness and Wellness for Physical Education Teachers and Coaches.

Unit I – Introduction

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

Leisure time physical activity and identify opportunities in the community to participate in this activity. Current trends in fitness and conditioning, components of total health fitness and the relationship between physical activity and lifelong wellness.

Unit II – Nutrition

Nutrients; Nutrition labelling information, Food Choices, Food Guide Pyramid, Influences on food choices-social, economic, cultural, food sources, Comparison of food values. Weight Management-proper practices to maintain, lose and gain. Eating Disorders, Proper hydration, the effects of performance enhancement drugs

Unit III – Aerobic Exercise

Cardio respiratory Endurance Training; proper movement forms, i.e., correct stride, arm movements, body alignment; proper warm-up, cool down, and stretching, monitoring heart rates during activity. Assessment of cardio respiratory fitness and set goals to maintain or improve fitness levels. Cardio respiratory activities including i.e. power walking, pacer test, interval training, incline running, distance running, aerobics and circuits.

Unit IV - Anaerobic Exercise

Resistance Training for Muscular Strength and Endurance; principles of resistance training, Safety techniques (spotting, proper body alignment, lifting techniques, spatial, awareness. and proper breathing techniques). Weight training principles and concepts; basic resistance exercises (including free hand exercise, free weight exercise, weight machines, exercise bands and tubing. medicine balls, fit balls) Advanced techniques of weight training

Unit V – Flexibility Exercise

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

Reference:

David K. Miller & T. Earl Allen, Fitness, A life time commitment, Surject Publication Delhi 1989. Dificore Judy, the complete guide to the postnatal fitness, A & C Black Publishers Ltd. 35 Bedford row, London 1998.

Warner W.K. Oeger& Sharon A. Hoeger, Fitness and Wellness, Morton Publishing Company, 1990. Elizabeth & Ken day, Sports fitness for women, B.T. Batsford Ltd, London, 1986.

Emily R. Foster, KarynHartiger& Katherine A. Smith, Fitness Fun, Human Kinetics Publishers 2002. Lawrence, Debbie, Exercise to Music. A & C Black Publishers Ltd. 37, Sohe Square, London 1999.

SEMESTER IV

SOE/PE/C-801 INFORMATION AND COMMUNICATION TECHNOLOGY IN PHYSICAL EDUCATION

Course Outcome:

- The students will learn about the concept, elements, process and types of communication.
- The students will be able to understand the need and importance of ICT in Education and Physical Education
- The students will be explained about MS Word, MS Excel, MS Power Point, its application in Physical Education.
- The students will acquire knowledge about E-learning and its significance in Physical Education.

Course specific Outcome:

The students will be able to get knowledge of various ICT tools like MS Word, MS Excel, MS Power Point, their application for more meaningful and productive teaching.

Unit I – Communication & Classroom Interaction

Concept, Elements, Process & Types of Communication, Communication Barriers & Facilitators of communication

Importance of ICT Need of ICT in Education

Scope of ICT: Teaching Learning Process, Publication Evaluation, Research and Administration, Challenges in Integrating ICT in Physical Education

Unit II – Fundamentals of Computers

Characteristics, Types & Applications of Computers Hardware of Computer: Input, Output & Storage Devices Software of Computer: Concept & Types

Computer Memory: Concept & Types Viruses & its Management

Concept, Types & Functions of Computer Networks Internet and its Applications Web Browsers & Search Engines Legal & Ethical Issues

Unit III – MS Office Applications

MS Word: Main Features & its Uses in Physical Education

MS Excel: Main Features & its Applications in Physical Education MS Access: Creating a Database,

Creating a Table, Queries, Forms & Reports on Tables and its Uses in Physical Education

MS Power Point: Preparation of Slides with Multimedia Effects MS Publisher: Newsletter & Brochure

Unit IV – ICT Integration in Teaching Learning Process

Approaches to Integrating ICT in Teaching Learning Process

Project Based Learning (PBL)

Co-Operative Learning

Collaborative Learning

ICT and Constructivism: A Pedagogical Dimension

Unit V – E-Learning & Web Based Learning

E-Learning

Web Based Learning

Visual Classroom

References:

Douglas E. Comer, The Internet Book, Purdue University, West Lafayette in 2005.

Heidi Steel Low price Edition, Microsoft Office Word 2003-2004.

Pradeep K. Sinha&Priti; Sinha, Foundations computing BPB Publications -2006. Rebecca Bridges Altman Peach pit Press, Power point for window, 1999.

Sanjay Saxena, Vikas Publication House, Pvt. Ltd. Microsoft Office for ever one, Second Edition-2006.

SOE/PE/C-802 SPORTS PSYCHOLOGY

Course Outcome:

- The students will be able to know about need and importance of Sports Psychology for Physical Education teachers and Coaches.
- The students will learn about Motor Learning and Perceptual Mechanism and its significance in Sports Activities.
- The students will understand meaning, theories, types and application of Motivation in Sports and Physical Education.
- The students will be explained about different Relaxation techniques and procedures for Stress reduction in Sports.
- The students will know about Sports as Socialization tool and role of various Social Institutes.

Course specific Outcome:

The students will learn about Practical application of psychological principles and techniques to making teaching learning more meaningful. They will also understand the significance of Sports as Socializing act in the human society.

UNIT I - Introduction

Meaning, Definition, History, Need and Importance of Sports Psychology. Present Status of Sports Psychology in India. Motor Learning: Basic Considerations in Motor Learning—Motor Perception — Factors Affecting Perception — Perceptual Mechanism. Personality: Meaning, Definition, Structure — Measuring Personality Traits. Effects of Personality on Sports Performance.

UNIT II - Motivation

Meaning and Definition, Types of Motivation: Intrinsic, Extrinsic. Achievement Motivation: Meaning, Measuring of Achievement Motivation. Anxiety: Meaning and Definition, Nature, Causes, Method of Measuring Anxiety. Competitive Anxiety and Sports Performance. Stress: Meaning and Definition, Causes. Stress and Sports Performance. Aggression: Meaning and Definition, Method of Measurement. Aggression and Sports Performance. Self-Concept: Meaning and Definition, Method of Measurement.

UNIT III – Goal Setting

Meaning and Definition, Process of Goal Setting in Physical Education and Sports. Relaxation: Meaning and Definition, types and methods of psychological relaxation. Psychological Tests: Types of Psychological Test: Instrument based tests: Pass-along test – Tachistoscope – Reaction timer – Finger dexterity board – Depth perception box – Kinesthesiometer board. Questionnaire: Sports Achievement Motivation, Sports Competition Anxiety.

UNIT IV – Sports Sociology

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

UNIT V – Group Cohesion

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

References:

Jain. (2002), Sports Sociology, Heal SahetyKendre Publishers.

Jay Coakley. (2001) Sports in Society – Issues and Controversies in International Education, Mc-Craw Seventh Edn.

John D Lauther (2000) Psychology of Coaching. NerJersy: Prenticce Hall Inc.

John D. Lauther (1998) Sports Psychology. Englewood, Prentice Hall Inc.

Miroslaw Vauks & Bryant Cratty (1999). Psychology and the Superior Athlete. London: The Macmillan Co.

Richard, J. Crisp. (2000). Essential Social Psychology. Sage Publications.

Robert N. Singer (2001). Motor Learning and Human Performance. New York: The Macmillan Co

SOE/PE/C-803 EDUCATION TECHNOLOGY IN PHYSICAL EDUCATION

Course Outcome:

- The students will learn about the Nature and Scope of Education Technology in Physical Education.
- The students will be able to understand about task analysis, content analysis, and context analysis and its relevance in Physical Education teaching.
- The students will be explained about various forms of Audio-Visual media and their utilization/application in the field of Physical Education.
- The students will acquire knowledge about recent innovations in the area of Education Technology and its significance in Learning.

Course specific Outcome:

The students will be able to know about the scope and applications of various Education Technology tools for innovative learning in Physical Education curriculum.

Unit I – Nature and Scope

Educational technology-concept, Nature and Scope. Forms of educational technology: teaching technology, instructional technology, and behaviour technology; Transactional usage of educational technology: integrated, complementary, supplementary stand-alone (independent); programmed learning stage; media application stage and computer application stage.

Unit II – Systems Approach to Physical Education and Communication

Systems Approach to Education and its Components: Goal Setting, Task Analysis, Content Analysis, Context Analysis and Evaluation Strategies; Instructional Strategies and Media for Instruction. Effectiveness of Communication in instructional system; Communication - Modes, Barriers and Process of Communication.

Unit III- Instructional Design

Instructional Design: Concept, Views. Process and stages of Development of Instructional Design. Overview of Models of Instructional Design; Instructional Design for Competency Based Teaching: Models for Development of Self Learning Material.

Unit IV - Audio Visual Media in Physical Education

Audio-visual media - meaning, importance and various forms Audio/Radio: Broadcast and audio recordings - strengths and Limitations, criteria for selection of instructional units, script writing, preproduction, post-production process and practices, Audio Conferencing and Interactive Radio Conference. Video/Educational Television: Telecast and Video recordings Strengths and limitations, Use of Television and CCTV in instruction and Training, Video Conferencing, SITE experiment, countrywide classroom project and Satellite based instructions. Use of animation films for the development of children's imagination.

Unit V – New Horizons of Educational Technology

Recent innovations in the area of ET interactive video - Hypertext, video-texts, optical fiber technology - laser disk, computer conferencing.etc. Procedure and organization of Teleconferencing/Interactive video-experiences of institutions, schools and universities. Recent experiments in the third world countries and pointers for, India with reference to Physical education. Recent trends of Research in Educational Technology and its future with reference to education.

Reference:

Amita Bhardwaj, New Media of Educational Planning". Sarup of Sons, New Delhi-2003 Bhatia and Bhatia. The Principles and Methods of Teaching (New Delhi: Doaba House), 1959.

K. Sampath, A. Pannirselvam and S. Santhanam. Introduction to Educational Technology (New Delhi: Sterling Publishers Pvt. Ltd.): 1981.

Kochar, S.K. Methods and Techniques of Teaching (New Delhi, Jalandhar, Sterling Publishers Pvt. Ltd.), 1982

Kozman, Cassidy and kJackson. Methods in Physical Education (W.B. Saunders Company, Philadelphia and London), 1952.

SOE/PE/E-801 DISSERTATION

Course Outcome:

- The students will learn to prepare the Research Proposal by application of selection of a Research Program.
- The students will understand about various steps used in conducting a Research study.
- The students will learn to conduct a study by following Research Methodology in the field of Physical Education.

Course specific Outcome:

The students will learn about research work to be done systematically by application of standard procedure laid down for it.

- 1. A candidate shall have dissertation for M.P.Ed. IV Semester and must submit his/her Synopsis and get it approved by the Head of Department on the recommendation of D.R.C. (Departmental Research Committee).
- 2. A candidate selecting dissertation must submit his/her dissertation not less than one week before the beginning of the IVth Semester Examination.
- 3. The candidate has to face the Viva-Voce conducted by DRC.

SOE/PE/E-802 VALUE AND ENVIRONMENTAL EDUCATION

Course Outcome:

- The students will know about the meaning and concepts of Value Education and its significance in Modern Education System.
- The students will acquire knowledge about need and importance of Environmental Education.
- The students will be able to understand the issues of rural health problems, its causes and sanitation.
- The students will know about various natural resources and effect of pollution on it.

Course specific Outcome:

Course will allow the students to have understanding of Value and Environmental Education to modern day youth and preventive measure to curtail the hazards of various types of pollution.

UNIT I – Introduction to Value Education.

Values: Meaning, Definition, Concepts of Values. Value Education: Need, Importance and Objectives. Moral Values: Need and Theories of Values. Classification of Values: Basic Values of Religion, Classification of Values.

UNIT II – Value Systems

Meaning and Definition, Personal and Communal Values, Consistency, Internally consistent, internally inconsistent, Judging Value System, Commitment, Commitment to values.

Unit- III – Environmental Education

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

Unit - IV Rural Sanitation and Urban Health

Rural Health Problems, Causes of Rural Health Problems, Points to be kept in Mind for improvement of Rural Sanitation, Urban Health Problems, Process of Urban Health, Services of Urban Area, Suggested Education Activity, Services on Urban Slum Area, Sanitation at Fairs & Festivals, Mass Education.

Unit - V Natural Resources and related environmental issues:

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

Reference:

Miller T.G. Jr., Environmental Science (Wadsworth Publishing Co.) Odum, E.P. Fundamentals of Ecology (U.S.A.: W.B. Saunders Co.) 1971.

Rao, M.N. & Datta, A.K. Waste Water Treatment (Oxford & IBH Publication Co. Pvt. Ltd.) 1987.

Townsend C. and others, Essentials of Ecology (Black well Science).

Miller T.G. Jr., Environmental Science (Wadsworth Publishing Co.).

SOE/PE/P-502/602/702 GAMES SPECIALIZATION THEORY

(History, Terminology, Skill, Officiating, marking, Rules, Tournaments & Awards)

Course Outcome:

- The students will learn about the historical development important tournaments and awards at National and International level in their Game Specialisation.
- The students will be explained about organisational set-up at National and International level of their Game Specialisation.
- The students will be able to know about important Rules and their interpretation (as per game situation) in their Game Specialisation.
- The students will acquire knowledge of basic and advance skills of their Game Specialisation and methods of training for it.

Course specific Outcome:

The students will understand in detail about historical evolution, Governing bodies, important tournaments and rules-regulations of their Game Specialisation. It will enable them to do their training and officiating in their respective game.

TRACK & FIELD

Unit-I

- Introduction of Track & Field Athletics and Historical Development of events with special reference to India.
- Important Tournaments held at National and International Levels.
- Arjuna and Dhronacharya Awardees related to the game.

Unit-II

- Organizational set-up at national and International level (governing Bodies)
- Measurement and Markings of 400m standard track and different events.
- Facilities and Equipment of different events

Unit-III

- Rules and their interpretation of different events.
- Duties and responsibilities of the Technical Officials

Unit-IV

Track Event

- Starting Techniques
- Standing Start, Crouch Start and its variations.
- Finishing Techniques
- Run Through, Shoulder Shrug, Forward Lunge (Dip).
- Technique of Relay Race
- Various methods of baton exchange

Field Events

- Technique of Long Jump (Sail Technique, Hang Technique)
- Technique of Shop Put (O' Brien Technique)
- Technique of Discus Throw
- Technique of High Jump (Straddle Roll)

Unit-V

Fundamental Skills

- Technique of Hurdle events.
- Technique of Race Walking.
- Technique of Triple Jump
- Technique of Javelin Throw
- Technique of Hammer Throw

- ❖ Bosen, K.O. Track and Field Fundamental Technique (Patiala: N.I.S. Publication).
- ❖ Brar T.S., Track and Field (New Delhi: Friends Publications) 2004.
- ❖ Daniel, Arnhiem, William and Frentice Athletic training (Boston: McGraw Hill) 2000.
- Doderty, J. Memmeth, Modern Track and Field (Englewood Cliffs: N.J. Prentice Hall, Inc.)
- Dybon, Geoffrey, G.H., The Mechanics of Athletics, (London: University of London Press Ltd.) 1962.

FOOTBALL

Unit-I

- Introduction of Football and Historical Development of the game with special reference to India.
- Important Tournaments held at National and International Levels.
- Arjuna and Dhronacharya Awardees related to the game.

Unit-II

- Organizational set-up at national and International level (governing Bodies)
- Measurement and Markings of the field
- Facilities and Equipment

Unit-III

- Rules and their interpretation of the Game.
- Duties and responsibilities of the Technical Officials

Unit-IV

Fundamental Skills

- Kicks-Kicking with the outer instep of the foot Lofted kick
- Trapping-Trapping rolling ball-with the inside, sole and instep of the foot. Trapping bouncing ball with the sole
- Dribbling- With combination of inner instep & outer instep
- Heading
- Throw-in
- Feinting- With the upper part of the body
- Tackling-Slide tackling
- Goal Keeping-Collection of balls, Ball clearance Kicking, throwing and deflecting

Unit-V

- Advanced Kicks Chip, In-swing and out-swing, Volley (low drive & high drive) & Half Volley
- Ball reception and control-Receiving rolling ball with inside and outside of the foot and changing direction, Trapping the bouncing ball with the abdomen, Receiving the bouncing ball with the inside and outside of the foot and changing direction, Receiving a arial ball with inside, instep thigh, chest and head.
- Dribbling-Controlled dribbling, Dribbling around/between obstacle.

- ❖ Allen Wade (1967), The F.A. Guide to Training and Coaching, ISBN: 0434835501.
- ❖ Árpàd Csanàdi (1972) Soccer: Technique, Tactics, Coaching, Corvina Press.
- ♦ Bill Beswick (2010) Focused for Soccer, 2nd Edition Human Kinetics, ISBN-13: 9780736090261.
- ♦ Bobby Moffat (1985) The Basic Soccer Guide, Collier Books, ISBN-13: 978-0020287803.
- ❖ Thomas Reilly and A. Mark Williams (2003) Science and Soccer, Routledge London, ISBN: 0-203-41755-0.

VOLLEYBALL

Unit-I

- Introduction of Volleyball and Historical Development of the game with special reference to India.
- Important Tournaments held at National and International Levels.
- Arjuna and Dhronacharya Awardees related to the game.

Unit-II

- Organizational set-up at national and International level (governing Bodies)
- Measurement and Markings of Court
- Facilities and Equipment

Unit-III

- Rules and their interpretation of the Game.
- Duties and responsibilities of the Technical Officials

Unit-IV

Fundamental Skills

- Player's stance- Receiving the ball & passing to the team mates.
- The Volley (Over head pass)-The Dig (Under hand pass).
- Service-Under Arm Service & Tennis Service.
- Spike-Straight Arm Spike& Round Arm Spike.
- Block-Single & Double Block.
- Straight Arm Spike-Forward Dive, Side Word Roll Block & Correction of Faults

Unit-V

Advanced Skills-

- Pass- Back Pass, Back Roll Volley, Back Roll Dig, Jump and Pass, Side Roll Dig.
- Service-Side Arm Floater, Overhead Floater,
- Spike-Spiking cross court & Spiking down the line.
- Block-Double Block & Triple Block
- Dive- Dive combined with dig (Two handed &one Handed)

- Anthony, Don. Success in Volleyball. London: John Murary Publishers Ltd. 1978.
- Leveag, Robert E. How to Improve your Volleyball Chicago: The Athletic Institute, 1968.
- Ranganathan P.P. Volleyball (Friends Publications Delhi 2000.
- Saggar S.K. Play Better Volleyball (Delhi: Lokesh Thani Sports Publication)1994.
- Soudhu, G.S. Volleyball, Basic & Advanced. The Sports. People, Chandigarh.

CRICKET

Unit-I

- Introduction of Cricket and Historical Development of the game with special reference to India & world.
- Important Tournaments held at National and International Levels.
- Arjuna and Dhronacharya Awardees related to the game.

Unit-II

- Organizational set-up at National and International level (governing Bodies)
- Measurement and Markings of Field.
- Facilities and Equipment

Unit-III

- Laws of Cricket and their interpretations.
- Duties and responsibilities of the technical Officials

Unit-IV

- Batting skills and techniques-Basics of Batting, Grip, Stance, Taking guard & Back lift
- Vertical Bat Strokes-Front foot defense, Back foot defense, Cover drive, Off drive & On drive
- Horizontal Bat Strokes- Pull shot, Square cut, Sweep shot
- Fielding -Fielding positions, attacking fielding & Defensive fielding
- Running between the Wickets-Calling & Running

Unit-V

- Bowling Skills and Techniques
- Essentials of Bowling-Grip, Run-up, Delivery, Follow through
- Medium Pace and Fast Bowling- Outswing bowling & Inswing bowling
- Spin Bowling –Leg spin, Off spin & their variation.
- Catching and Throwing Techniques: Catching, Close catching & Deep catching
- Throwing-Over arm throw, Under arm throw, Crow hop and throw

- Aneja, O.P. How to Play Cricket, Prerna Prakashan, 2012.
- Arora, Monika. Cricket Coaching Manual, Sports Publication, 2005.
- ❖ Bharadwaj, Arun. Coaching Batting Skills, Royal Colour Cartons, 2008.
- Kutty, Suresh. Fielding Drills in Cricket, Sports Publication, 2003.
- * Rachna. Play Better Cricket, Sports Publication, 2001.
- Srivastava, Vijay Kumar. Analysis of Cricket Skills, Sports Publication, 2007.

HOCKEY

Unit-I

- Introduction of Hockey and Historical Development of the game with special reference to India.
- Important Tournaments held at National and International Levels.
- Arjuna and Dhronacharya Awardees related to the game.

Unit-II

- Organizational set-up at National and International level (governing Bodies)
- Measurement and Markings of Field.
- Facilities and Equipment

Unit-III

- Rules of the game and their interpretations.
- Duties and responsibilities of the Technical Officials

UNIT-IV

- Grips and shifting of grip.
- Skills Rolling, Push, Stop, Hit, Flick, Scoop, Dribble.
- Definition of Pass, Types and Maxims of Passing.
- Shooting- shot and its variations

UNIT-V

- Steps of Skill Training.
- Ball reception and control-Receiving rolling ball and changing direction. Stopping the ball, Receiving the ball, Receiving a arial ball.
- Dribbling-Controlled dribbling, Dribbling around/between obstacle
- Defense -Individual defense, Guarding the man with the ball & Guarding the man without the ball

- Ahmed Khan, Eraj, Hockey for Boys and Girls, Scientific Book Company, Patna, 1976.
- ❖ D. Jain, Hockey Skills & Rules Khel Sahitya Kendra, 2003.
- Dilip K. Dureha & Akhil Mehrotra, Teaching and Coaching Hockey, Janvani Prakashan (P) Ltd., 2003.
- Flint, Rachael, H. Women's Hockey London: Pelham Books Ltd., 1976.
- ❖ Ian Taylor with David V., Taylor on Hockey, Macdonald Queen Anne press, 1988.

BASKETBALL

Unit-I

- Introduction of Basketball and Historical Development of the game with special reference to India.
- Important Tournaments held at National and International Levels.
- Arjuna and Dhronacharya Awardees related to the game.

Unit-II

- Organizational set-up at National and International level (governing Bodies)
- Measurement and Markings of the Court.
- Facilities and Equipment

Unit-III

- Rules of the game and their interpretations.
- Duties and responsibilities of the Technical Officials

Unit-IV

Fundamental skills:

- Players stance and ball handling
- Passing techniques-Two hand chest pass, Two hand bounce pass & One hand base ball pass
- Receiving techniques-Two hand receiving, One hand receiving & Receiving in stationary position
- Dribbling-How to start dribble, How to stop dribble & Low dribble & High dribble
- Shooting-Lay-up shot and its variations, One hand set shot, One hand jump shot
- Rebounding-Defensive rebound &Offensive rebound
- Defense -Individual defense, Guarding the man with the ball & Guarding the man without the ball

Unit-V

Fundamental skills:

- Passing techniques-Side arms pass & Overhead pass
- Receiving techniques-Receiving while running, Receiving while jumping, Receiving throw in
- Dribbling techniques-Cross-over dribble, Reverse dribble & Rolling dribble
- Shooting techniques-Hook shot, Free throw, There point shot
- Rebounding techniques-Box out, Rebound organization, Pivoting
- Screen & Roll-Side screen. Back screen & Front screen

- Abraham C.C., Basketball for Men and Women, Madras, Y.M.C.A. Publishing House, 1956.
- Cotherk A.L., Modern Basketball A Fundamental Analysis of Skills and Tactics. London: Nicholas Kaya, 1966.
- ❖ Jeery V. Krasue, Ed. D., Basketball Skills and Drills, The Marine Sports Publishing Division 2000.
- ❖ Julian, Alvin F., Bread & Butter Basketball, London Prentice Hall, Inc., 1960.

KHO-KHO

Unit-I

- Introduction of Kho-Kho and Historical Development of the game with special reference to India.
- Important Tournaments held at National and International Levels.
- Arjuna and Dhronacharya Awardees related to the game.

Unit-II

- Organizational set-up at National and International level (governing Bodies)
- Measurement and Markings of the Court.
- Facilities and Equipment

Unit-III

- Rules of the game and their interpretations.
- Duties and responsibilities of the Technical Officials

Unit-IV

Fundamental Skills

- Offensive skills- Sitting in the square, giving Kho (Simple, Judgment, Late, Advance, Proximal and Cross Step method Kho),
- Turning at the pole, Tapping, Covering (Biped and Quadruped method),
- Dive (Sitting, Running, Pole and Side dive).

Unit-V

- Defensive Skills-Entering the field of play,
- Positioning on the post,
- Running skills (Single chain, Double chain and Three six-up),
- Ring (Short Medium and Long Ring).

- Gouric Kho-Kho AVALOKAN (New Delhi Khel Sahitya Kendra) 2005.
- * Kho-Kho, The game of chase and Trill, Bombay Maharashtra Kho-Kho Association.
- Yogesh Yadav. Kho-Kho, Maharashtra Kho-Kho Association, 1969.

KABADDI

Unit-I

- Introduction of Kabaddi and Historical Development of the game with special reference to India.
- Important Tournaments held at National and International Levels.
- Arjuna and Dhronacharya Awardees related to the game.

Unit-II

- Organizational set-up at National and International level (governing Bodies)
- Measurement and Markings of Court.
- Facilities and Equipment

Unit-III

- Rules of the game and their interpretations.
- Duties and responsibilities of the technical Officials

Unit-IV

Fundamental Skills

- Skills in raiding-Touching with hand.
- Various kicks.
- Crossing of Baulk line.
- Crossing of Bonus line.
- Luring the opponent to Catch.
- Skills of holding the raider- Various formations, Catching from particular position,
- Different catches.

Unit-V

Additional skills in raiding-

- Bringing the Antis in to particular position.
- Escaping from various holds.
- Techniques of escaping from chain formation.
- Combined formations in offence.
- Combined formations in defence.

- ❖ E. Prasad Rao, Modern Coaches in Kabaddi, D.V.S. Publications (New Delhi)-1994
- Meenu Syal, Teach yourself Kabadi, Prema Prakashan-2004
- Rao, C. V. Kabaddi, Patials, N.I.S. Publications, 1971.
- Reddy, B. A. Scientific Kabaddi, Madrad; Raman's Printing Press, 1974.

TABLE TENNIS

Unit-I

- Introduction of Table- Tennis and Historical Development of the game with special reference to India.
- Important Tournaments held at National and International Levels.
- Arjuna and Dhronacharya Awardees related to the game.

Unit-II

- Organizational set-up at National and International level (governing Bodies)
- Measurement and Markings of the table tennis.
- Facilities and Equipment

Unit-III

- Rules of the game and their interpretations.
- Duties and responsibilities of the Technical Officials

Unit-IV

Fundamental Skills:

- Basic Techniques: Grip, Stance (offensive & defensive), Push, Counter Attack, Service & Receive, Drive, Block, Chop,
- The Grip- Hammer Grip, Shake hand Grip & Pen hold grip
- Stance and Ready position and foot work.
- Service -Fore hand (Counter & Back Spin), Back hand (Counter & Back Spin) & Side Spin (Forehand & Backhand)

Unit-V

Advanced techniques:

- Footwork, Service Variations, Drive Variations, Flick, Smash.
- Strokes (From both forehand and backhand)
- Push, Counter, Drive (with top spin), Smash, Flat and Loop drive

- ❖ A. Kumar, DPH Sports Series Table Tennis, Discovery Publishing House, N.D. 1999.
- ❖ D.Jain, Table Tennis Skills & Rules, Khel Sahitya Kendra, New Delhi, 2003.
- ♦ Donal Parker & David Hewitt, Play the Game Table Tennis, Blandford, 2003.
- ❖ Earna Victor, Your Book of Table Tennis, London: Faber and Faber Ltd. 3, Queen Square, 1971.
- Leslie Woallard, Table Tennis, Foyles Handbooks London.

BADMINTON

Unit-I

- Introduction of Badminton and Historical Development of the game with special reference to India.
- Important Tournaments held at National and International Levels.
- Arjuna and Dhronacharya Awardees related to the game.

Unit-II

- Organizational set-up at National and International level (governing Bodies)
- Measurement and Markings of the Court.
- Facilities and Equipment

Unit-III

- Rules of the game and their interpretations.
- Duties and responsibilities of the Technical Officials

UNIT-IV

Fundamental Techniques

- Grips (Forehand, Backhand, Multipurpose, Pan Handle, Short and Long), shuttle grips
- Services (Short, Long or High Service, Drive and Flick Service)

Unit-V

Advance skills

- Strokes- Underhand (clear& drop), Forehand, Backhand,
- Overhead (clear, drop & smash), Over-arm, Round the head,
- Foot work

- Downey, Jake & Brodie, D, (1980) Get Fit For Badminton A Practical Guide to Training for Players and Coaches
- Downey, Jake (1993) Winning Badminton Doubles How to coach BADMINTON Published by Jake Downey © Jake Downey 1990
- ♦ Downey, Jake (1982) "Better Badminton for All'. Pelham Books .
- Downey, Jake (1993) Excelling at Badminton (Beyond the Basics) Teach Yourself Books.
- ❖ Downey, Jake (2007) 'Tactics in Badminton Singles, ebook,

Yoga

Unit-I

- Introduction of Yoga and Historical Development of the Yoga with special reference to India.
- Important competition held at National and International Levels.
- Famous personalities related to Yoga.

Unit-II

- Organizational set-up at National and International level (governing Bodies)
- Facilities and Equipment

Unit-III

- Rules of the Yoga and their interpretations.
- Duties and responsibilities of the Technical Officials

Unit-IV

Asanas

- Surya Namaskar
- Meditative: Sukhasan, Swastikasan, Padmasan, Vajrasan and Siddhasan etc.
- Cultural:Bhujangasan,Ardha-Shalabhasana,Dhanurasana,Naukasana,Padhastasana, Halasan, Naukasan, Matsyasan, Vakrasan, Chakrasan, Lateral bend Tadasan, Utkatasana, Vrikshasan, Parvatasan, Shavasan, Makrasan.

Unit-V

- Pranayam: Anuloma- Viloma and Ujjai (both without Kumbhak).
- Bandha: Uddiyan, Agnisar
- Mudra: Viparutakarani
- Kriya: Kapalabhati, Jala Neti, Sutra Neti.

- ❖ B.K.S. Yengar, "Light and Yog. Yoga Deepika", George Allen of Unwin Ltd., London, 1981.
- ❖ Braj Bilari Nigam, Yoga Power "The path of personal achievement" Domen and Publishers, New Delhi, 2001.
- ❖ Goswami, S.S. Hathayoga, Fowler, London.
- ♣ Indira Devi, "Yoga for You", Gibbs, Smith Publishers, Salt Lake City, Domen and Publishers, New Delhi 2001.
- ❖ Jack Peter, "Yoga Master the Yogic Powers", Abhishek Publications, Chandigarh, 2004.

SOE/PE/P-802 GAMES SPECIALIZATION THEORY

(TRAINING METHODS)

Course Outcome:

- •The students will learn about the principles of sports training and its application in their Game Specialization.
- •The students will be explained about Training Load, Adaptation and recovery means to be used in their Game Specialisation.
- •The students will be able to know about different Planning Training cycles and their practical execution in their Game Specialisation.
- •The students will acquire knowledge of Technique, Strategies and Tactics.

Course specific Outcome:

The students will understand in detail about the scientific application of training means and methods in their Game Specialisation. It will enable them to do their training systematically and achieve better performance in their respective game.

Unit-I

- Training load, Overload, Adaptation,
- Training volume, Frequency, intensity and super-compensation
- Means and Methods of development of motor abilities with reference to games specialization.

Unit-II

- Systematization of training process for performance of sports persons at beginner, intermediate and high performance level.
- Basic concepts of preparation of training schedules

Unit-III

- Planning- Short term and long term training plan.
- Periodization-(Preparatory, competition and transition)
- Coaching camp and build up competition

Unit-IV

- Tactics- Description of tactics and strategy
- Different tactical concepts- Offensive, defensive, Individual and team.

Unit-V

- Tactical drills (with passive opponent and active opponent)
- System of play and its developments
- Tactical training- Individual and Group

REFERENCES

Books related to specific games and sports specialization will be suggested by teacher incharge.

HANDBALL

Unit-I

- Introduction of Handball and Historical Development of the game with special reference to India.
- Important Tournaments held at National and International Levels.
- Awardees related to the game.

Unit-II

- Organizational set-up at National and International level (governing Bodies)
- Measurement and Markings of the Court.
- Facilities and Equipment

Unit-III

- Rules of the game and their interpretations.
- Duties and responsibilities of the Technical Officials

Unit-IV

Fundamental Skills-

- Passing techniques- over head pass, under hand pass, side arm pass, vertical jump pass, Catching, Throwing, Ball Control, Goal Throws.
- Dribbling-How to start dribble, How to stop dribble & Low dribble & High dribble
- Shooting- Jump Shot, Centre Shot, Dive Shot, Reverse Shot,
- Attack and Counter Attack, Simple Counter Attack, Counter Attack from two wings and centre, Blocking, Goal keeping,
- Receiving techniques-Two hand receiving, One hand receiving & Receiving in stationary position

Unit-V

Fundamental skills:

- A Players Movement in Offence and Defence- Individual defence elements, Individual defence
- Technical elements, Screening the Opponent without a Ball, Screening with a Ball Defense players stance and ball handling
- Goalkeeper- posture and footwork, defending with legs and hands, passing to initiate fast attack, speed of reaction

- www.ihf.info/upload/pdf-download/rules_english.pdf
- belook.eurohandball.com/BasicHandball1/html/13.html

SOE/PE/P-503 LAB PRACTICALS

Course Outcome:

- •The students will learn about determination of C.G. correct Anatomical and Fundamental Standing position.
- •The students will be explained about various plans and axis and movements taking place around them.
- •The students will be able to learn about various types of measurement techniques fo data collection in Physical Education.
- •The students will understand to use various skill test for selection and evaluation of subject on performance.
- •The students will be able to learn about application of various Psychological questionnaires for collection of Data.
- •The students will be able to understand the process of developing questionnaire as per requirement of the study.

Course specific Outcome:

- •The Program will enable the students to get knowledge collection of about various types of data used for education and research purpose in the field of physical education and sports.
- •The students will be enabled to apply the knowledge of different allied fields of knowledge to practical settings for getting better human performance.

Biomechanics

- > Determination of Centre of Gravity by Joint Point method.
- ➤ Determination of Centre of Gravity by Main Point method.
- > Development of Velocity time graph.
- Anthropometric measurement: Height, Weight Ratio, Body Circumferences and BMI.

Sports Psychology

To administer the following tests, process and interpret their data.

- > personality questionnaire
- > Sport competitive anxiety test
- > Inventory for factors influencing sports.
- > Emotional Intelligence Inventory.
- ➤ Wellbeing scale

Measurement and Evaluation

- Assessment of endurance through-twelve minute run/walk test; six hundred yards run walk test; Harvard step test.
- Assessment of resting physiological parameters- Heart rate, respiratory rate, Blood Pressure, Spirometer, Peak Flow Meter, Lactic Acid Test, Glucose Test, and Blood Sugar Test.
- Assessment of Strength through Grip, Leg and Back Dynamometer.
- > Somatotyping & indices

Sports Medicine

- > Paraffin bath
- ➤ Contrast bath
- > Infrared
- ➤ Hot pack
- > Cryotherapy