



AKKAMAHADEVI WOMEN'S UNIVERSITY, VIJAYAPURA
Department of Studies in Physical Education and Sports Sciences

TWO YEAR'S M.P.Ed., CBCS SEMESTER SCHEME
REGULATIONS

Preamble:

Teacher Education in the country is controlled by many agencies. National Council for Teacher Education (NCTE) one such statutory body of Govt. of India which recommends the norms and standards for teacher Education Institutions. As per the directions of NCTE the duration of one year M.P.Ed., Course was enhanced to two years from the academic year 2011-12. The NCTE in its notification No. F.No. 9-3/2001/NCTE-(Norms and Standard for recognition of teachers education programs) REGULATIONS 2011, made B.P.Ed., as the requirement for admission to M.P.Ed course, it has become necessary to revise the regulations, scheme and syllabi of M.P.Ed., course in order to maintain continuity in academic inputs. Therefore, now as per UGC guidelines Akkamahadevi Women's University has made mandatory the **Choice Based Credit System Semester Scheme (CBCS Scheme)**. Further regulations governing the two year M.P.Ed., degree programme, the scheme of examinations, syllabus were revised during 2017-18 under CBCS Semester Scheme.

M.P.Ed. CHOICE BASED CREDIT SYSTEM SEMESTER SCHEME-2017-18

1. These regulations shall be called as regulations Governing Master of Physical Education (M.P.Ed.) Degree programme under CBCS Semester Scheme 2017-18 onwards.
2. The M.P.Ed., Degree programme shall be offered under the faculty of education.
3. The course shall be residential one.
4. **Duration of Course:** 4 Semester / Two years: Each semester shall extend over a period of eighteen weeks excluding examination days. Maximum duration of the programme shall be four years from the date of admission.
5. **Eligibility for Admission:**
 - a. Minimum Requirement for Admission: Pass in Bachelor of Physical Education (B.P.Ed.) Degree programme of Akkamahadevi Women's University or of any other University considered as equivalent there to, securing at least 50 percent of marks.
 - b. All candidates shall produce a medical fitness certificate issued by a competent medical officer.
6. **SELECTION PROCEDURE** is as shown in Annexure -1

7. **Working Hours :** In each working day there shall be four hours of Practical and three hours of theory:

Semester	Theory	Practical & Dissertation	Total
I	3 Hrs	4 Hrs	7 Hrs
II	3 Hrs	4 Hrs	7 Hrs
III	3 Hrs	4 Hrs	7 Hrs
IV	3 Hrs	4 Hrs	7 Hrs

8. There shall be hard core and soft core subjects theory as well as practical in each semester. There shall be one additional open elective in I and II semesters details of which are given in Annexure – II

9. **Medium of Instruction:** Medium of instruction shall be in English. However, the candidates are permitted to write the examination in English or Kannada.

10. Internal Assessment:

Internal assessment marks shall be awarded on the basis of the following

a) Theory Break up of **30** Sessional marks of theory papers shall be as follows:

- i. Attendance 10 Marks
- ii. Assignment (Two).....05 Marks
- iii. Test (Two)10 Marks
- iv. One Seminar05 Marks

b) **Specialization:** Sessional marks of specialization are awarded on the basis of Regularity, imitative in learning, knowledge of rules, officiating and coaching, demonstration of skills and movements.

c) **Dissertation:** A candidate shall choose area of research of her choice in consultation with the guide and submit the dissertation preferably, experimental/ quasi experimental, further she can make use of the pedagogy to collect the data required. She should submit the dissertation to the Office, before one month prior to the fourth semester examination. There shall be an internal Viva-voce for thirty marks for each to be conducted by the departmental council with one external subject expert.

d) **Pedagogy:** A candidate shall select the area of specialization of his choice keeping in mind the specialization opted in previous semester and shall select the school and preferably teacher training institutions B.P.Ed., to coach and train the skills. Further she has to submit the workbook along with the satisfactory report from the head of the Institution in Coaching; the duration of the pedagogy is as per the NCTE norms.

11. **Attendance:** Each semester will be taken as a unit for the purpose of calculating attendance and the student will be considered to have put in the required attendance for the semester, if she has attendance of not less than 75% of number of working periods (Lecturers, seminars, specialization periods taken together) during each semester.

11.1 A candidate who does not fulfill the requirement of attendance shall not be eligible to take examination of the concerned semester.

11.2 A candidate who fails to satisfy the requirement of the attendance in a semester shall rejoin the same semester in the immediate next academic year.

12. Appearance for the Examination:

Candidates on satisfactorily completing a semester shall apply for examination in all the courses of study papers prescribed for that semester.

13. Scheme of Examination:

There shall be a university examination at the end of each semester. The scheme of examination shall be as follows:

a) **Theory:** Each paper shall be valued by two examiners, one internal and one external. Average marks of the two shall be credited.

b) **Specialization:** Evaluation in specialization shall be done by two examiners, one internal and one external as per the following scheme. The average of the two shall be credited.

i) Demonstration of skills/techniques/Movements	20 Marks
ii) Coaching ability	20 Marks
iii) Specialization Record	15 Marks
iv) Viva-Voce	15 Marks

Total 70 Marks

c) **Dissertation:** Evaluation of dissertation shall be done for 70 marks by two examiners, one internal and one external. Average marks of the two shall be credited.

d) Question Paper pattern should be as per the university norms from time to time.

Note: Whenever assessment is made for two games / activity the 50% of the above Marks shall be divided for the evaluation of the each game / activity.

Practicum/ game specialization/ game coaching/ internship/ Classroom teaching will be the internal evaluation, the Evaluation is purely based on the attendance, ability of the teacher, and competency in handling the classes (Classroom and Field Coaching, Training). It will be evaluated by the Head master of the School for attendance and one faculty member from the University/Department/College. The evaluation will be done immediately after the class by the above said teacher. The assessment will be done for 30 marks, in each semester as per the regulation. Semester end external examination will be conducted and evaluated by internal and external examiners for seventy marks the assessment is based on one lesson only for 70 marks. The average marks of two examiners shall be considered for the purpose of assessment.

14. Classification of Successful candidates:

The results of successful candidates at the end of each semester shall be declared on the basis of Percentage of Aggregate Marks and in terms of Grade Point Average (GPA) and alpha sign grade. The result at the end of the fourth semester shall also be classified on the basis of Percentage of Aggregate Marks and on the basis of the Cumulative Grade Point Average (CGPA) obtained in all the four semesters and the corresponding overall alpha sign grade. An eight pint grading system, alpha sign grade as described below shall be adopted.

First class with Distinction	70% and above (A+,A++ or O)
First Class	60% and above but less than 70% (A)
High Second Class	55% and above but less than 60% (B+)
Second Class	50% and above but less than 55% (B)
Pass Class	40% and above but less than 50% (C)

Eight Point Alpha – Sign Grading Scale:

Grade Point Average	< 4	4 - < 5	5 - < 5.5	5.5 - < 6	6 - < 7	7 - < 8	8 - < 9	9 - 10
Alpha-Sign Grade	D	C	B	B+	A	A+	A++	O

Note:- The Calculation of the Grade Point Average (GPA) in a Semester and the Cumulative Grade Point Average (CGPA) at the end of fourth semester shall be as per the University common guidelines. And for the rest of and other details regarding results will be as per the university regulations.

15. Provision for Repeaters:

A candidate is allowed to carry all the previous uncleared paper and specialization activity to the subsequent semester's. Such of the those candidates who have failed/remaind absent/opt to improve marks in any one or more papers in theory/specialization/dissertation, hence forth called repeaters, shall appear/improve in such paper or papers/specialization/dissertation during the two immediate successive examinations. The repeaters shall take the examinations as per the syllabus and the scheme of examination in force during the subsequent appearances. A repeater will not be eligible for the award of rank.

16. Improvement of Results:

A candidate is allowed to apply for improvement in any theory paper/specialization/dissertation of a particular semester within 30 days from the date of announcement of results of that semester. A candidate who seeks improvement shall surrender the marks card/provisional pass certificate of that semester. However, the marks secured in the previous attempt shall retain if the same is higher. There is no provision for improvement in internal assessment marks. Repeaters shall not be eligible for the award of rank. This provision can be in accordance with the existing university norms from time to time.

17. NCTE norms and Standards:

Norms and standards for recognition of Teacher Education programme issued by National Council for Teacher Education (NCTE) from time to time shall be adopted.

18. Grievance Redressal committee:

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

19. Miscellaneous:

These revised regulations will apply to the candidates admitted for the academic year 2017-18 and onwards. Declaration of rank, gracing make up courses, etc., are as per the existing regulations in the university (replace year by semester). Any other issue, not envisaged above, shall be resolved by the Vice Chancellor in consultation with the appropriate bodies of the university, which shall be final and binding

SELECTION PROCEDURE

Candidates shall be selected on the basis of merit. Merit shall be determined on the basis of candidate's performance in the qualifying examination, entrance test and achievement in sports and games.

The weightage shall be given as follows:

- i) 40% marks obtained in the qualifying examination
- ii) 30% of marks obtained in the entrance test.
- iii) 30 Marks for physical fitness tests performance.

Details of Physical Fitness Tests

- 1. 100 meters Run Max. 6 marks
- 2. Long Jump Max. 6 marks
- 3. High Jump Max. 6 marks
- 4. Shot Put Max. 6 marks
- 5. 400 meters Run Max. 6 marks

Details of Entrance Test:

There shall be Entrance Test Theory examination for 80 Marks all the cognitive subjects of B.P.Ed., degree programme of Akkamahadevi Women's University, there shall be model syllabi for the examination. In addition to that their shall be current sports related questions up to 20 marks all together entrance test shall be of 100 marks, with 1½ hrs duration, of which 30% marks will be considered. The departmental council will set the paper for entrance test.

Merit list will be announced as per above procedure. Seats will be allotted as per university guidelines. The reservation of seats will be as per existing State Government Policy.

**CHOICE BASED CREDIT SYSTEM M.P.Ed., SEMESTER
SCHEME OF EXAMINATION - -2017-18**

I SEMESTER

Paper Code	Instruction hrs/week	Duration of Exam (Hrs)	IA	Theory/ Practical	Total Marks	Credits
MPECC 101	3 hrs	3 hrs	30	70	100	3
MPECC 102	3 hrs	3 hrs	30	70	100	3
MPECC 103	3 hrs	3 hrs	30	70	100	3
MPEEC 101	3 hrs	3 hrs	30	70	100	3
MPEEC102	6 hrs	3 hrs				
MPEOEC 101*	6 hrs	3hrs	30	70	100	3
MPEPC 101	6 hrs	3 hrs	30	70	100	3
MPEPC 102	6 hrs	3 hrs				
MPEPC 103	6 hrs	3 hrs	30	70	100	3
MPEPC 104	6 hrs	3 hrs	30	70	100	3
Grand Total	36 hrs	27 hrs	240	560	800	24

Note:- Total number of hours required to earn 3 credits for each theory course 51 to 60 hrs per Semester whereas 102 to 120 hrs for each practicum course.

*MPEOEC 101 is an open elective to be conducted for other subject PG Students.

II SEMESTER

Paper Code	Instruction hrs/week	Duration of Exam (Hrs)	IA	Theory/ Practical	Total Marks	Credits
MPECC 201	3 hrs	3 hrs	30	70	100	3
MPECC 202	3 hrs	3 hrs	30	70	100	3
MPECC 203	3 hrs	3 hrs	30	70	100	3
MPEEC 201	3 hrs	3 hrs	30	70	100	3
MPEEC202	3 hrs	3 hrs				
MPEOEC 201*	3 hrs	3 hrs	30	70	100	3
MPEPC 201	6 hrs	3 hrs	30	70	100	3
MPEPC 202	6 hrs	3 hrs				
MPEPC 203	6 hrs	3 hrs	30	70	100	3
MPEPC 204	6 hrs	3 hrs	30	70	100	3
Grand Total	36 hrs	27 hrs	240	560	800	24

Note:- Total number of hours required to earn 3 credits for each theory course 51 to 60 hrs per Semester whereas 102 to 120 hrs for each practicum course.

*MPEOEC 101 is an open elective to be conducted for other subject PG Students.

III SEMESTER

Paper Code	Instruction hrs/week	Duration of Exam (Hrs)	IA	Theory/ Practical	Total Marks	Credits
MPECC 301	3 hrs	3 hrs	30	70	100	3
MPECC 302	3 hrs	3 hrs	30	70	100	3
MPECC 303	3 hrs	3 hrs	30	70	100	3
MPEEC 301	3 hrs	3 hrs	30	70	100	3
MPEEC302	6 hrs	3 hrs				
MPEPC 301	6 hrs	3 hrs	30	70	100	3
MPEPC 302	6 hrs	3 hrs				
MPEPC 303	6 hrs	3 hrs	30	70	100	3
MPEPC 304	6 hrs	3 hrs	30	70	100	3
Grand Total	36 hrs	27 hrs	240	560	800	24

Note:- Total number of hours required to earn 3 credits for each theory course 51 to 60 hrs per Semester whereas 102 to 120 hrs for each practicum course.

IV SEMESTER

Paper Code	Instruction hrs/week	Duration of Exam (Hrs)	IA	Theory/ Practical	Total Marks	Credits
MPECC 401	3 hrs	3 hrs	30	70	100	3
MPECC 402	3 hrs	3 hrs	30	70	100	3
MPECC 403	3 hrs	3 hrs	30	70	100	3
MPEEC 401	3 hrs	3 hrs	30	70	100	3
MPEEC402	6 hrs	3 hrs				
MPEPC 401	6 hrs	3 hrs	30	70	100	3
MPEPC 402	6 hrs	3 hrs				
MPEPC 403	6 hrs	3 hrs	30	70	100	3
MPEPC 404	6 hrs	3 hrs	30	70	100	3
Grand Total	36 hrs	27 hrs	240	560	800	24

Note:- Total number of hours required to earn 3 credits for each theory course 51 to 60 hrs per Semester whereas 102 to 120 hrs for each practicum course.

Master of Physical Education Degree Programme - 2017-18

I SEMESTER							
Theory 400							
Paper Code	Papers	Instruction hrs/week	Duration of Exam (Hrs)	IA	Theory/ Practical	Total Marks	Credits
MPECC 101	Research Process in Physical Education & Sports Sciences	3 hrs	3 hrs	30	70	100	3
MPECC 102	Physiology of Exercises	3 hrs	3 hrs	30	70	100	3
	Feminist Jurisprudence (Common Paper)	3 hrs	3 hrs	30	70	100	3
MPEEC 101	Test, Measurement and Evaluation in Physical Education	3 hrs	3 hrs	30	70	100	3
MPEEC102	Sports Technology						
Practicum 400							
MPEPC 101	Track and Field: Sprint, Middle, Long distance Running, Relay and Track Marking/Swimming / Gymnastics (any one)	6 hrs	3 hrs	30	70	100	3
MPEPC 102	Laboratory Practical: Physiology of Exercise and Test, Measurement and Evaluation	6 hrs	3 hrs	30	70	100	3
MPEPC 103	Game Specialization: Kabaddi, Handball and Wrestling (any one)	6 hrs	3 hrs	30	70	100	3
MPEPC 104	Yoga Performance in Asanas and Pranayamas and Aerobics and Adventure Sports (any one)	6 hrs	3 hrs	30	70	100	3
Grand Total		36 hrs	24 hrs	240	560	800	24

II SEMESTER							
Theory 400							
Paper Code	Papers	Instruction hrs/week	Duration of Exam (Hrs)	IA	Theory/ Practical	Total Marks	Credits
MPECC 201	Sports Psychology and Sociology	3 hrs	3 hrs	30	70	100	3
MPECC 202	Sports Management and Curriculum design in Physical Education	3 hrs	3 hrs	30	70	100	3
MPEOEC 201	Yoga Studies (Open Elective)	3 hrs	3 hrs	30	70	100	3
MPEEC 201	Health Education and Sports Nutrition	3 hrs	3 hrs	30	70	100	3
MPEEC202	Athlete care and Rehabilitation						
Practicum 400							
MPEPC 201	Track and Field: Jumping Events and Hurdles /Swimming/Gymnastics (any one).	6 hrs	3 hrs	30	70	100	3
MPEPC 202	Laboratory: Sports Psychology	6 hrs	3 hrs	30	70	100	3
MPEPC203	Game Specialization: Kho-Kho, Table Tennis and Football (any one)	6 hrs	3 hrs	30	70	100	3
MPEPC 204	A. Teaching Lessons of Sports and Games	6 hrs	3 hrs	30	70	100	3
	B. Classroom Teaching on Theories of Different Sports and Games						
Grand Total		36 hrs	24 hrs	240	560	800	24

PL= Particular Outdoor Lessons and CL= Class Room Teaching

III SEMESTER							
Theory 400							
Paper Code	Papers	Instruction hrs/week	Duration of Exam (Hrs)	IA	Theory/ Practical	Total Marks	Credits
MPECC301	Scientific Principles of Sports Training	3 hrs	3 hrs	30	70	100	3
MPECC 302	Sports Bio-Mechanics and Kinesiology	3 hrs	3 hrs	30	70	100	3
MPEOEC301	Health Fitness and Wellness (Open Elective)	3 hrs	3 hrs	30	70	100	3
MPEEC 301	Sports Journalism and Mass Media	3 hrs	3 hrs	30	70	100	3
MPEEC302	Sports Medicine						
Practicum 400							
MPEPC 301	Track and Field: Throwing Events and Combined Events: (Heptathlon Event and Decathlon Event)	6 hrs	3 hrs	30	70	100	3
MPEPC 302	Laboratory Practical: Sports Bio-Mechanics and Kinesiology	6 hrs	3 hrs	30	70	100	3
MPEPC 303	Game Specialization: Volleyball, Hockey and Cricket (any one)	6 hrs	3 hrs	30	70	100	3
MPEPC 304	Intern ship: Pedagogy (CL) A. Coaching Lessons of Track and Field Events	6 hrs	3 hrs	30	70	100	3
	B. Coaching Lessons of Game Specialization						
Grand Total		36 hrs	24 hrs	240	560	800	24

PL= Particular Outdoor Lessons and CL= Class Room Teaching

IV SEMESTER							
Theory 400							
Paper Code	Papers	Instruction hrs/week	Duration of Exam (Hrs)	IA	Theory/ Practical	Total Marks	Credits
MPECC401	Information and Communication Technology in Physical Education (ICT)	3 hrs	3 hrs	30	70	100	3
MPECC 402	Applied Statistics in Physical Education and Sports	3 hrs	3 hrs	30	70	100	3
MPECC 403	Dissertation	3 hrs	3 hrs	30	70	100	3
MPEEC 401	Value and environmental Education	3 hrs	3 hrs	30	70	100	3
MPEEC402	Educational Technology in Physical Education						
Practicum 400							
MPEPC 401	Track and Field: Walk Race, Cross Country Race, Half Marathon, Field Marking and Officiating	6 hrs	3 hrs	30	70	100	3
MPEPC 402	Computer Lab	6 hrs	3 hrs	30	70	100	3
	Personality Development						
MPEPC403	Game Specialization :Basketball, Badminton and Softball (any one)	6 hrs	3 hrs	30	70	100	3
MPEPC 404	Coaching lessons of Track and Field Games Specialization (PL)	6 hrs	3 hrs	30	70	100	3
Grand Total		36 hrs	24 hrs	240	560	800	24

PL= Particular Outdoor Lessons

INTER DISCIPLINARY OPTIONAL SUBJECTS:

- C-1 FEMINIST JURISPRUDENCE
- C-2 WOMEN & HEALTH
- C-3 HUMAN RESOURCE MANAGEMENT
- C-4 COMPUTER APPLICATIONS AND INFORMATION SCIENCE
- C-5 MANAGEMENT OF WELFARE ORGANIZATION (NGO)
- C-6 COMMUNICATIVE ENGLISH
- C-7 VISUAL PROGRAMING
- C-10 WOMEN AND MEDIA
- C-11 VYAVHARIKA KANNADA
- C-12 PROJECT

MPEOEC101 YOGA STUDIES

MPEOEC201 HEALTH FITNESS AND WELLNESS

The candidate has to select any one of the inter disciplinary subject in each semester up to III semester.

Semester I

Theory Courses

MPECC-101 RESEARCH PROCESS IN PHYSICAL EDUCATION AND SPORTS SCIENCES

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

Semester I

Theory Courses

MPECC-102 PHYSIOLOGY OF EXERCISE

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 Phosphate 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, Sympathetic medicaments. Stimulants and sports performance.

Note: Laboratory Practical in Physiology be designed and arranged internally.

REFERENCES:

- Amrit Kumar, R, Moses. (1995). Introduction to Exercise Physiology. Madras: Poompugar Pathipagam.
- Beotra Alka, (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.
- Sandhya Tiwaji. (1999). Exercise Physiology. Sports Publishers.
- Shaver, L. (1981). Essentials of Exercise Physiology. New Delhi: Subject Publications.
- Vincent, T. Murche. (2007). Elementary Physiology. Hyderabad: Sports Publication.
- William, D. Mc Aradle. (1996). Exercise Physiology, Energy, Nutrition and Human Performance. Philadelphia: Lippincott Williams and Wilkins Company.

Semester I

Theory Courses

MPEEC-101-TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION (Elective)

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.

Note: Practical of indoors and out-door tests be designed and arranged internally.

REFERENCES :

- Authors Guide (2013) ACSM's Health Related Physical Fitness Assessment Manual, USA: ACSM Publications
- Collins, R.D., & Hodges P.B. (2001) A Comprehensive Guide to Sports Skills Tests and Measurement (2nd edition) Lanham: Scarecrow Press
- Cureton T.K. (1947) Physical Fitness Appraisal and Guidance, St. Louis: The C. Mosby Company
- Getchell B (1979) Physical Fitness A Way of Life, 2nd Edition New York, John Wiley and Sons, Inc
- 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. Champaign IL: Human Kinetics
- Yobu, A (2010), Test, Measurement and Evaluation in Physical Education in Physical Education and Sports. New Delhi; Friends Publications

Semester I

Theory Courses

MPEEC-102 SPORTS TECHNOLOGY (Elective)

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, nano moulding technology, Nano turf. Foot wear production, Factors and application in sports, constraints. Foams- Polyurethane, Polystyrene, Styrofoam, closed cell and open-cell foams, Neoprene, Foam. Smart Materials – Shape Memory Alloy (SMA), Thermo chromic film, High-density modeling 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.

Note: Students should be encouraged to design and manufacture improvised sports testing equipment in the laboratory/workshop and visit sports technology factory/ sports goods manufacturers.

REFERENCE:

- Charles J.A. Crane, F.A.A. and Furness, J.A.G. (1987) “Selection of Engineering Materials”
- Finn, R.A. and Trojan P.K. (1999) “Engineering Materials and their Applications” UK: Jaico
- John Mongilo, (2001), “Nano Technology 101 “New York: Green wood publishing group.
- Walia, J.S. Principles and Methods of Education (Paul Publishers, Jullandhar), 1999.
- Kochar, S.K. Methods and Techniques of Teaching (New Delhi, Jullandhar, Sterling
- Kozman, Cassidy and Jackson. Methods in Physical Education (W.B. Saunders Company, Philadelphia and London), 1952

Semester II

Theory Courses

MPECC-201 SPORTS PSYCHOLOGY AND SOCIOLOGY

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.

Practicals: *Atleast five experiments related to the topics listed in the Units above should be conducted by the students in laboratory. (Internal Assessment.)*

REFERENCES:

- Authors Guide (2013) National Library of Educational and Psychological Test (NLEPT)
- Catalogue of Tests, New Delhi: National Council of Educational Research and Training Publication.
- Authors Guide (2013) National Library of Educational and Psychological Test (NLEPT)
- Catalogue of Test, New Delhi: National Council of Educational Research and Training Publication.
- Jain. (2002), Sports Sociology, Heal Sahety Kendre Publishers.
- Jay Coakley. (2001) Sports in Society – Issues and Controversies in International Education, Mc-Craw Seventh Ed.
- John D Lauther (2000) Psychology of Coaching. Ner Jersey: 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.
- Robert N. Singer. (1989) The Psychology Domain Movement Behaviour. Philadelphia: Lea and Febiger.
- Thelma Horn. (2002). Advances in Sports Psychology. Human Kinetic.
- Whiting, K, Karman., Hendry L.B & Jones M.G. (1999) Personality and Performance in Physical Education and Sports. London: Hendry Kimpton Publishers.

Semester II

Theory Courses

MPECC-202 - SPORTS MANAGEMENT AND CURRICULUM DESIGN IN PHYSICAL EDUCATION (Elective)

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.
- Arora, G.L. (1984): Reflections on Curriculum, New Delhi: NCERT.
- Bonnie, L. (1991). The Management of Sports. St. Louis: Mosby Publishing Company, Park House.
- Bucher A. Charles, (1993) Management of Physical Education and Sports (10th ed.,) St. Louis: Mobsy Publishing Company.
- Carl, E, Willgoose. (1982. Curriculum in Physical Education, London: Prentice Hall.
- Chakraborty & Samiran. (1998). Sports Management. New Delhi: Sports Publication.
- Charles, A, Bucher & March, L, Krotee. (1993). Management of Physical Education and Sports. St. Louis: Mosby Publishing Company.
- Chelladurai, P. (1999). Human Resources Management in Sports and Recreation. Human Kinetics.
- 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 (2000). National Curriculum Framework for School Education, New Delhi: NCERT.
- NCERT (2005). National Curriculum Framework, New Delhi: NCERT.
- NCERT (2005). National Curriculum Framework-2005, New Delhi: NCERT.
- Williams, J.F. (2003). Principles of Physical Education. Meerut: College Book House.
- Yadvnider Singh. Sports Management, New Delhi: Lakshay Publication.

Semester II

MPEOEC-201 Yoga Studies (Open Elective)

Unit I – Introduction

Meaning and Definition of Yoga. Astanga Yoga: Yama, Niyama, Asana, Pranayama, Pratyahara, 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 – Asanas 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 Chakras- Benefits of clearing and balancing Chakras.

Unit III – Kriyas

Shat Kriyas- Meaning, Techniques and Benefits of Neti – Dharti – Kapalabhati- Trataka – Nauli – Basti, Bandhas: Meaning, Techniques and Benefits of Jalendra Bandha, Jihva Bandha, Uddiyana Bandha, Mula Bandha. Trataka – Procedure and Benefits.

Unit IV – Mudras

Meaning, Techniques and Benefits of Hasta Mudras, Asamyukta hastam, Samyukta hastam , Mana Mudra, Kaya Mudra, Banda Mudra, Adhara Mudra. Meditation: Meaning, Techniques and Benefits of Meditation – Passive and active, Saguna Meditation and Nirguna Meditation.

Unit V – Yoga and Sports

Yoga and Women Health – Yogic Exercises before and during the Menstrual Period. Yoga Practices for Pregnant Women. Balancing the Stress and Tension in day to day life. Difference between Yoga and Physical Exercises. Therapeutical Values of Asanas and Suryanamaskara.

Note: Laboratory Practicals be designed and arranged internally.

REFERENCE:

- George Feuerstein, (1975). Text Book of Yoga. London: Motilal Bansaridass Publishers (P) Ltd.
- Gore, (1990), Anatomy and Physiology of Yogic Practices. Lonavata: Kanchan Prakashan.
- Helen Purperhart (2004), The Yoga Adventure for Children. Netherlands: A Hunter House book.
- Iyengar, B.K.S. (2000), Light on Yoga. New Delhi: Harper Collins Publishers.
- Karbelkar N.V.(1993) Patanjali Yogasutra Bhashya (Marathi Edition) Amravati: Hanuman Vyayam Prasarak Mandal
- Kenghe. C.T. (1976). Yoga as Depth-Psychology and para-Psychology (Vol-I): Historical Background, Varanasi: Bharata Manishai.
- Kuvalyananada Swami & S.L. Vinekar, (1963), Yogic Therapy – Basic Principles and Methods. New Delhi: Govt. of India, Central Health Education and Bureau.
- Moorthy A.M. & Alagesan. S. (2004) Yoga Therapy. Coimbatore: Teachers Publication House.
- Swami Kuvalayanda, (1998), Asanas. Lonavala: Kaivalyadhama.
- Swami Satyananada Sarasvati. (1989), Asana Pranayama Mudra Bandha. Munger: Bihar School of Yoga.
- Swami Satyananda Saraswathi. (1984), Kundalini and Tantra, Bihar: Yoga Publications Trust.
- Swami Sivananda, (1971), The Science of Pranayama. Chennai: A Divine Life Society Publication.
- Thirumalai Kumar. S and Indira. S (2011) Yoga in Your Life, Chennai: The Parkar Publication.
- Tiwari O.P. (1998), Asanas-Why and How. Lonavala: Kaivalyadham.

Semester II

Theory Courses

MPEEC-201 HEALTH EDUCATION AND SPORTS NURTITION

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.
- Turner, C.E. "The School Health and Health Education".
- Moss and et. At. "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.
- Boyd-Eaton S. et al (1989) The Stone Age Health Programme: Diet and Exercise as Nature Intended. Angus and Robertson.
- Terras S. (1994) Stress, How Your Diet can Help: The Practical Guide to Positive Health Using Diet, Vitamins, Minerals, Herbs and Amino Acids, Thorons.

Semester II

Theory Courses

MPEEC-202 ATHLETIC CARE AND REHABILITATION

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 bad 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.

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

REFERENCES:

- Doherty. 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.
- Mc Ooyand 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.I. (1965) Corrective Physical education, London: W.B. Saunders & Co.
- Stafford and Kelly, (1968) Preventive and Corrective Physical Education, New York.

Semester III

Theory Courses

MPECC-301 SCIENTIFIC PRINCIPLES OF SPORTS TRAINING

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

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 :

- Beotra Alka, (2000), Drug Education Handbook on Drug Abuse in Sports. Delhi: Sports Authority of India.
- Bunn, J.N. (1998) Scientific Principles of Coaching, New Jersey Engle Wood Cliffs, Prentice
- 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 Training, St. Luis, Mosby Year Book
- David R. Mottram (1996) Drugs in Sport, School of Pharmacy, Liverpool: John Moore University
- Gary, T. Moran (1997) – Cross Training for Sports, Canada : Human Kinetics
- Hardayal Singh (1991) Science of Sports Training, New Delhi, DVS Publications
- Jensen, C.R. & Fisher A.G. (2000) Scientific Basic of Athletic Conditioning, Philadelphia
- Ronald, P. Pfeiffer (1998) Concepts of Athletics Training 2nd Edition, London: Jones and Bartlett Publications

Semester II

Theory Courses

MPECC-302 - SPORTS BIO - MECHANICS AND KINSESIOLGY

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. Principles 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.

Note: Laboratory practicals should be designed and arranged for students internally.

UNIT V – Movement Analysis

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

REFERENCE:

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

Semester-III

MPEOEC-301 HEALTH, FITNESS AND WELLNESS

Unit I – Introduction

Physical Fitness – Meaning, Definition and importance of Physical Fitness. Components of Physical fitness. Principles of Physical fitness. Factors determining Physical fitness. Wellness- concept of wellness dimensions of wellness. Reaching wellness through life style management. Relationship between Physical fitness and wellness.

Unit II – Health and Weight Management

Meaning and definition of health. Importance of health. Factors influencing Health. Dimensions of Health. Health related fitness components, health benefits of exercises. Weight management- concept of overweight and obesity and their health implications, factors contributing to excess body fat. BMI, management of weight.

Unit III – Nutrition

Basic Concept of nutrition, balanced diet, components of balanced diet and their sources, Mal nutrition, Nutritional guidelines. Importance of Knowing the different food values Food pyramid. Eating disorder, proper hydration.

Unit IV – Aerobic and Anaerobic Exercise

Meaning of aerobic activities. Concept of cardio vascular fitness. Means and methods to develop cardio respiratory fitness; warm up, cool down and stretching exercises, heart rate monitoring during activity. Meaning of anaerobic exercises. Resistance training for muscular strength and endurance; principles of resistance training.

Unit V – Flexibility Exercise

Flexibility: meaning and definition, importance of flexibility in daily lifestyle, types of flexibility, factors determining flexibility. Types of flexibility exercises (dynamic, static). PNF stretching.

Reference:

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

Semester III

Theory Courses

MPEEC-302 SPORTS MEDICINE

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.

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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.

Practicals: Lab. Practical and visit to Physiotherapy Centre to observe treatment procedure of sports injuries; data collection of sports injury incidences, Visit to TV Centre etc. should be planned internally.,

REFERENCES:

- Christopher M. Norris. (1993). Sports Injuries 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: Surjeet
- 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.
- Practical: Anthropometric Measurements,

Semester IV

Theory Courses

MPECC-401 INFORMATION & COMMUNICATION TECHNOLOGY (ICT) IN PHYSICAL EDUCATION

Unit I – Communication & Classroom Interaction

Concept, Elements, Process & Types of Communication
Communication Barriers & Facilitators of communication
Communicative skills of English - Listening, Speaking, Reading & Writing
Concept & 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:

- B. Ram, New Age International Publication, Computer Fundamental, Third Edition-2006
- Brain under IDG Book. India (p) Ltd Teach Yourself Office 2000, Fourth Edition-2001
- Douglas E. Comer, The Internet Book, Purdue University, West Lafayette in 2005
- Heidi Steel Low price Edition, Microsoft Office Word 2003- 2004
- ITL Education Solution Ltd. Introduction to information Technology, Research and Development Wing-2006
- 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

Semester IV

Theory Courses

MPECC-402 APPLIED STATISTICS IN PHYSICAL EDUCATION AND SPORTS

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

UNIT IV – Probability Distributions and Graphs

Normal Curve. Meaning of probability- Principles of normal curve – Properties of normal curve. Divergence from 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.

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

REFERENCE

- Best J. W (1971) Research in Education, New Jersey; Prentice Hall, Inc
- Clark D.H. (1999) Research Problem in Physical Education 2nd edition, Eaglewood Cliffs, Prentice Hall, Inc.
- Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illonosis; Human Kinetics;
- Kamlesh, M. L. (1999) Reserach Methodology in Physical Education and Sports, New Delhi
- Rothstain A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc
- Sivaramakrishnan. S. (2006) Statistics for Physical Education, Delhi; Friends Publication
- Thirumalaisamy (1998), Statistics in Physical Education, Karaikudi, Senthilkumar

Semester IV

Theory Courses

MPECC-403 DISSERTATION

1. A candidate shall have dissertation for M.P.Ed. – IV Semester and must submit 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 her dissertation not less than one week before the beginning of the 4th Semester Theory Examination.
3. The candidate has to face the Viva-Voce conducted by DRC, (Departmental Research Committee).

Semester IV

Theory Courses

MPEEC-401 VALUE AND ENVIRONMENTAL EDUCATION

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.

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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 ecosystem.

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.)
- Townsend C. and others, Essentials of Ecology (Black well Science)
- Heywood, V.H. and Watson V.M., Global biodiversity Assessment (U.K.: Cambridge University Press), 1995.
- Jadhav, H. and Bhosale, V.M. Environmental Protection and Laws (Delhi: Himalaya Pub. House), 1995.
- Mc Kinney, M.L. and Schoel, R.M. Environmental Science System and Solution (Web enhanced Ed.) 1996.
- Miller T.G. Jr., Environmental Science (Wadsworth Publishing Co.)

Semester IV

Theory Courses

MPEEC-402 EDUCATION TECHNOLOGY IN PHYSICAL EDUCATION AND SPORTS

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, pre-production, 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.
- Communication and Education, D. N. Dasgupta, Pointer Publishers
- Education and Communication for development, O. P. Dahama, O. P. Bhatnagar, Oxford
- Page 68 of 71 IBH Publishing company, New Delhi
- Essentials of Educational Technology, Madan Lal, Anmol Publications
- 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 Jackson. Methods in Physical Education (W.B. Saunders Company, Philadelphia and London), 1952.

Semester I

Practicum Course

MPEPC- 101 TRACK AND FIELD I: SPRINT, MIDDLE AND LONG DISTANCE RUNNING, RELAY AND TRACK MARKING / GYMNASTICS/SWIMMING.

Sprints

- Start, Acceleration, Finish, Running styles in sprint,
- Related drills.
- Strategies and Tactics.

Middle Distance and Long Distance Race:

- Start, Acceleration, Finish, Running styles in Middle Distance and Long Distance Race,
- Related drills
- Strategies and Tactics.

Relays

- Baton exchange for different relays.
- Related drills.
- Strategies and Tactics.
-

Rules, Regulations, Officiating and Marking for above Track Events.

SPECIALISATION RECORD

UNIT 1: History and development of the Sprints, Hurdles and Relays.

- Origin of the event
- Growth and development of the event

UNIT 2: Skills and Techniques

- Block start, Sprint technique
- Baton exchange techniques
- Training drills and progression of teaching skills

UNIT 3: Fitness training

- Energy system involved in the event
- Training to develop the fitness parameters involved in the event
- Training plan of six weeks for sprints, hurdles and relays

UNIT 4: Rules and Regulations

- Officials required for the track events
- Rules pertaining to sprints, and relays.

UNIT 5: Layout ,construction and maintenance of track.

- Marking track events.

UNIT 6: Organization, Administration and managerial set up for conducting track events.

UNIT 7: Biomechanical principles of track events

- Block start
- Sprint

UNIT 8: Injuries and Nutrition

- Event related injuries, prevention, treatment and rehabilitation.
- Nutrition specific to the event

*The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded shall be decided in the departmental council meeting.

Gymnastics: Floor Exercise

- Forward Roll, Backward Roll, Sideward Roll, different kinds of scales, Leg Split, Bridge, Dancing steps, Head stand, Jumps-leap, scissors leap.
- Vaulting Horse
- Approach Run, Take off from the beat board, Cat Vault, Squat Vault.

Swimming: Fundamental Skills

- Entry into the pool.
- Developing water balance and confidence
- Water fear removing drills.
- Floating-Mushroom and Jelly fish etc.
- Gliding with and without kickboard.
- Introduction of various strokes
- Body Position, Leg, Kick, Arm pull, Breathing and Co ordination.
- Start and turns of the concerned strokes.
- Introduction of Various Strokes.
- Water Treading and Simple Jumping.

- Starts and turns of concerned strokes.
- Rules of Competitive swimming-officials and their duties, pool specifications, seeding heats and finals, Rules of the races.

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

**MPEPC- 102 LABORATORY PRACTICAL: PHYSIOLOGY OF EXERCISE AND TEST,
MEASUREMENT AND EVALUATION**

LABORATORY- PHYSIOLOGY OF EXERCISE

I. Assessment of Blood Pressure

- Systolic and diastolic blood pressure.
- Hypertension and hypotension.

Assessment of Heart Rate

- Resting Heart Rate, Maximum Heart Rate, Target Heart Rate, Heart Rate Monitoring during the activity
- Manual method of Heart Rate measurement.
- Assessment of Heart Rate through Heart Rate monitor.

II. Assessment of Lung Volumes and Capacities, Spirometer tests.

- Vital capacity (VC)
- Total lung capacity. (TLC)
- Inspiratory capacity (IC)
- Functional residual capacity (FRC)
- Tidal volume (TV)
- Inspiratory reserve volume (IRV)
- Expiratory reserve volume (ERV)
- Residual volume (RV)

III. Metabolic Rate Measurements and Maximum Oxygen Consumption Tests

- Total energy expenditure
- Basal metabolic rate
- Treadmill VO₂ Max. test
- Cyclic Ergometer VO₂ Max. test.
- Lactate threshold assessment

IV. Aerobic Field Tests.

- Beep test
- Cooper's minutes run and walk test
- Harvard step test.
- 1 mile Rockport Fitness Walking Test

V. Anaerobic Field Tests

- Margarita-Kalaman stair climbing test
- Vertical Jump test for vertical power
- Standing broad jump for horizontal power

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

LABORATORY - TEST, MEASUREMENT AND EVALUATION

I. Physical Fitness Tests:

- AAHPERD Youth Fitness Test, Roger's Physical Fitness Test
- **Motor Fitness Tests:** JCR Test, INDIANA Motor Fitness Test
- **Motor Ability Tests:** Barrow motor ability Test, Newton Motor Ability Test
- **Motor Educability Tests:** Johnson Motor Educability Test

II. Muscular Strength Tests:

- Kraus Weber's Minimum muscular Fitness Test, Hand grip Strength Test, Leg and Back Dynamometer Test.
- **Speed:** 30 meter fly, 50 meters dash
- **Cardio Respiratory Fitness Tests:** Harvard Step Test, Cooper's 12 Minutes Run and Walk Test, Multi-Stage Fitness Test (Beep Test)
- **Agility:** 'T' Test, Illinois test, Burpee test.
- **Flexibility Tests:** Sit and Reach Test, Bridge Up Flexibility Test.

III. Skill Tests :

- **Badminton:** Miller Wall Volley Test
- **Basketball:** Johnson Basketball Test
- **Football:** Johnson Soccer test, McDonald Soccer Test
- **Handball:** Carnish Handball Test
- **Hockey:** Freidel Field Hockey Test
- **Tennis:** Dyer Tennis Test
- **Volleyball:** Russel Lange Volleyball Test

IV. Anthropometric Measurements

- Method of Measuring Height: Standing Height, Sitting Height
- Method of Measuring Circumference (Girth): Arm, Chest, Waist, Hip, Thigh, Calf
- Method of Measuring Skin folds: Biceps, Triceps, Chest, Sub scapular, Midaxillary, Suprailiac, Abdominal, Thigh, Calf.

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

MPEPC-103 GAMES SPECIALIZATION- KABADDI, HANDBALL AND WRESTLING

- **Basic skills**
- **Advanced skills**
- **Teaching progression of different skills**
- **Drills for each of the skills**
- **Biomechanical analysis of the skills**
- **Specific fitness drills**

SPECIALISATION RECORD

UNIT 1 : History and development of the Game/Sport

- Origin of the Game
- Growth and development of the Game in India.
- Tournaments and awards

UNIT 2: Skills and Techniques

- Fundamental Skills
- Advanced skills
- Training drills

UNIT 3: Strategies and Tactics

- Training for tactics
- Training plan for a period of six weeks and twelve weeks at different levels (High school, college and university)

UNIT 4: Officiating

- Rules and Regulations
- System of officiating

UNIT 5: Layout and construction and maintenance of playfield/courts

UNIT 6: Organization, Administration and managerial set up for conducting tournament /competition

UNIT 7: Biomechanics and Energy systems

- Biomechanical principles of the game/sport
- Energy systems involved in the games and fitness programme specific to the game

UNIT 8: Injuries and Nutrition

- Game/Sport related injuries – Prevention, treatment and rehabilitation.
- Nutrition related to the game – Off season, and pre, during and post competition

*The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded shall be decided in the departmental council meeting.

**MPEPC- 104 YOGA PERFORMANCE IN ASANAS AND PRANAYAMA/ AEROBICS/
ADVENTURE SPORTS (Any one)**

YOGA PERFORMANCE IN ASANAS AND PRANAYAMA

- Yoga, Asanas prescribed by Maharshi 'Patanjali', Shudhi Kriyas, jalneti, sutraneti, dugdhaneti, kunjaj, Nauli, Bhastika, shatkriya, Pranayams, Anulom-vilom, Kapalbhathi,

AEROBICS

- Rhythmic Aerobics - dance
- Low impact aerobics
- High impact aerobics
- Aerobics kick boxing
- Moves

March single, basics, side to side alternate, turn s/a ,double side to side, step touch, grapevine, knee up, leg curl, kick front, toe touch, kick side, side lunge, over the top,back lunge, straddle, kick front, travel s 11. kick side, corner, heel to reft, shape, 'e' shape, shapew, shape, repeater left mode Warm up and cool down. Being successful in exercise and adaptation to aerobic workout.

ADVENTURE ACTIVITIES:

- Trekking, Wall climbing, River crossing, Mountaineering, etc.

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

Semester II

Practicum Course

MPEPC- 201 TRACK AND FIELD: JUMPING EVENTS AND HURDLES / SWIMMING / GYMNASTICS

Long Jump, Triple Jump, High Jump, Pole Vault and Hurdles

- Run up, Take off, Technique in the air, Landing of long jump, high jump and pole vault.
- Different techniques of Long Jump, High Jump
- Different techniques of Hurdles.
- Teaching stages and specific drills.

SPECIALISATION RECORD

UNIT 1 : History and development of the jumping events and hurdles

- Origin of the event
- Growth and development of the event

UNIT 2: Skills and Techniques

- Skills and techniques of Long jump
- Skills and techniques of High jump
- Skills and techniques of Triple jump
- Skills and techniques of Pole Vault
- Skills and techniques of Hurdles.
- Training drills and progression of teaching skills

UNIT 3: Fitness training

- Energy system involved in the event
- Training to develop the fitness parameters involved in the event
- Training plan of six weeks for jumps

UNIT 4: Rules and Regulations

- Officials required for the jumping events
- Rules pertaining to jumping events.
- Rules pertaining to hurdling events.

UNIT 5: Layout and construction and maintenance of jumping events' arena.

- Method of Marking

UNIT 6: Organization, Administration and managerial set up for conducting jumping events.

UNIT 7: Biomechanical principles of jumping events

- Long jump – Hang style and hitch kick style
- High jump – Straddle style and Fosbury flop style
- Triple jump
- Pole vault
- Hurdling

UNIT 8: Injuries and Nutrition

- Event related injuries, prevention, treatment and rehabilitation.
- Nutrition specific to the event

*The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded shall be decided in the departmental council meeting

HURDLES

- Fundamental skills in Hurdles Events.
- Related Drills.
- Strategies and Tactics.
- Body position at the start- starting technique, change in body position during Hurdles.
- Movements of the arms, stride length and frequency, position of torso while Hurdles and at finish.
- Advanced Skills various techniques of Hurdles Events.

Swimming:

Introduction of water polo game

- Fundamental skills
- Swimming with the ball
- Passing
- Catching
- Shooting
- Goal keeping
- Rules of the games and responsibility of officials

Gymnastics:

- Parallel Bar:
- Mount from one bar
- Straddle walking on parallel bars.
- Single and double step walk
- Perfect swing
- Shoulder stand on one bar and roll forward.
- Roll side
- Shoulder stand
- Front on back vault to the side(dismount)

- Horizontal /Single Bar:
- Grip
- Swings
- Fundamental Elements
- Dismount
- Uneven Parallal Bar:
- Grip
- Swings
- Fundamental Elements
- Dismount

(Course contents in Gymnastics and Swimming should be chalked out internally considering advance level of students and suitable to their age and gender).

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

MPEPC- 202: LABORATORY: SPORTS PSYCHOLOGY

A. SPORTS PSYCHOLOGY:

- I**
1. Aptitude tests
 2. Interest inventories/schedules
 3. Bell Adjustment inventory
 4. Achievement motivation Tests
 5. Personality Tests – self esteem, self confidence, self concept, self and ideal discrepancy.
- II**
1. Stressful life –events scale
 2. Anxiety
 3. Self-esteem
 4. Extraversion and neuroticism personality assessment.
 5. Well-being Questionnaire.
- III**
1. Sociometry
 2. Measuring styles of leadership behaviour
 3. Attitude measurement
 4. Level of aspiration
 5. Emotional Intelligence
- IV**
1. Muller Lyer Illusion
 2. Maze Learning
 3. Self confidence test
 4. Imagery test
 5. Self talk
- V**
1. Psychological reactions to sports injuries
 2. Reaction ability tests
 3. Anxiety tests
 4. Depth perception test
 5. Cognitive ability test

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

MPEPC-204 GAMES SPECIALIZATION- KHO-KHO, TABLE TENNIS AND FOOTBALL

Basic skills

- Advanced skills
- Teaching progression of different skills
- Drills for each of the skills
- Biomechanical analysis of the skills
- Specific fitness drills

SPECIALISATION RECORD

UNIT 1 : History and development of the Game/Sport

- Origin of the Game
- Growth and development of the Game in India.
- Tournaments and awards

UNIT 2: Skills and Techniques

- Fundamental Skills
- Advanced skills
- Training drills

UNIT 3: Strategies and Tactics

- Training for tactics
- Training plan for a period of six weeks and twelve weeks at different levels (High school, college and university)

UNIT 4: Officiating

- Rules and Regulations
- System of officiating

UNIT 5: Layout and construction and maintenance of playfield/courts

UNIT 6: Organization, Administration and managerial set up for conducting tournament /competition

UNIT 7: Biomechanics and Energy systems

- Biomechanical principles of the game/sport
- Energy systems involved in the games and fitness programme specific to the game

UNIT 8: Injuries and Nutrition

- Game/Sport related injuries – Prevention, treatment and rehabilitation.
- Nutrition related to the game – Off season, and pre, during and post competition

MPEPC – 204 TEACHING LESSONS OF SPORTS AND GAMES/ CLASSROOM THEORIES OF DIFFERENT SPORTS GAMES

(A) TEACHING LESSONS OF DIFFERENT SPORTS AND GAMES

The students of M.P.Ed – II Semester need to develop proficiency in taking teaching classes in indigenous activities and sport under school situation. In view of this, the students shall be provided with teaching experience. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class they are going to handle at school and college level.

Each student teacher is expected to take at least ten lessons in PU/Degree/Professional college during the course of the second semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these lessons, all the parts of the lesson covered progressively.

General out-line of the contents of practical teaching of Games and Sports.

- General and specific warming up required for the game/sport.
- Basic skills of the game/sport.
- Advanced skills of the game/sport.

(B) CLASS ROOM TEACHING ON THEORIES OF SPORTS AND GAMES (LESSONS ON THEORY OF DIFFERENT SPORTS & GAMES).

The students of M.P.Ed–II Semester need to develop proficiency in taking teaching lessons as per selected games and sport or game specialization. In view of this, the students shall be provided with selected or specialized game teaching experience. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class time they are going to handle at school and college level.

Each student teacher is expected to take at least five lessons during the course of the second semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these teaching lessons all the parts of the lesson covered progressively.

General out-line of the contents of class room teaching of theory of Games and Sports

- Introduction of the game/sport and historical development with special reference to India.
- Orientation of the students to the play area and equipment used in the game/sport.
- Important tournaments held at National and International levels, Distinguished sports awards and personalities related to the game/sport.
- Theoretical basis of general and specific warming up, importance, uses and applications of various skills (both fundamental and advanced), and lead up activities for those skills.
- Equipment of the game/sport, infrastructure and facilities required for the game etc.
- General rules and their interpretations, Duties of officials, officiating in class competitions and Intramurals, Marking of the play area.

At the end of the practical/class room teaching classes the semester exams in this activity will be held with two examiners of which at least one shall be an external examiner.

Semester III

Practicum Course

MPEPC- 301 TRACK AND FIELD: THROWING EVENTS AND COMBINED EVENTS HEPTATHLON EVENT AND DECATHLON EVENT

THROWING EVENTS:

Styles and Techniques of

- Shot Put
- Discus Throw
- Javelin Throw
- Hammer Throw
- Heptathlon and Decathlon

SPECIALISATION RECORD

UNIT 1: History and development of the throwing events and combined events.

- Origin of the event
- Growth and development of the event

UNIT 2: Skills and Techniques

- Shot Put styles and techniques
- Discus throw styles and techniques
- Javelin throw styles and techniques
- Hammer throw techniques
- Heptathlon and Decathlon techniques
- Teaching progressions of each event and training drills

UNIT 3: Fitness training for each of the skills

- Energy system involved in the skill
- Training to develop the fitness parameters involved in the skill
- Training plan of six weeks for throws
 - Training for tactics

UNIT 4: Rules and Regulations

- Officials required for the throwing events and combined events.
- Rules pertaining to throwing events and each of the throws and combined events.

UNIT 5: Layout and construction and maintenance of throwing arena.

UNIT 6: Organization, Administration and managerial set up for conducting throwing events and combined events.

UNIT 7: Biomechanical principles of the throwing events and combined events.

UNIT 8: Injuries and Nutrition

- Event related injuries, prevention, treatment and rehabilitation.
- Nutrition specific to the event

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

MPEPC – 302 LABORATORY PRACTICAL: SPORTS BIO-MECHANICS AND KINESIOLOGY

Kinesiology

1. Basic Anatomical Position
2. Planes and Axes
3. Fundamental movements at various joints – Neck, Shoulder, Elbow, Wrist, Trunk, Hip, Knee and Ankle.
4. Identification and palpation of muscles – Biceps Brachii, Triceps Brachii, Deltoids, Pectoralis Major, Rectus Abdominus, Latissimus Dorsi, Trapezius, Teres Major, Rotator cuff muscles, Ilio Psoas muscle, Gluteus group, Quadriceps group, Hamstring group, Soleus, Gastrocnemius.
5. Joint movement analysis
6. Muscular analysis of movement

Biomechanics

1. Center of Gravity
2. Goniometer testing – flexibility and ROM.
2. Analysis of Standing, Sitting, walking, running.
3. Analysis of skills of various games.
4. Analysis of Long Jump, High Jump, Sprinting, Race walking, Shot Put, Discus Throw etc.
5. Video analysis of various skills as mentioned above.

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

MPEPC-303 GAMES SPECIALIZATION- VOLLEYBALL, HOCKEY AND CRICKET

- Basic skills
- Advanced skills
- Teaching progression of different skills
- Drills for each of the skills
- Biomechanical analysis of the skills
- Specific fitness drills

SPECIALISATION RECORD

UNIT 1 : History and development of the Game/Sport

- Origin of the Game
- Growth and development of the Game in India.
- Tournaments and awards

UNIT 2: Skills and Techniques

- Fundamental Skills
- Advanced skills
- Training drills

UNIT 3: Strategies and Tactics

- Training for tactics
- Training plan for a period of six weeks and twelve weeks at different levels (High school, college and university)

UNIT 4: Officiating

- Rules and Regulations
- System of officiating

UNIT 5: Layout and construction and maintenance of playfield/courts

UNIT 6: Organization, Administration and managerial set up for conducting tournament /competition

UNIT 7: Biomechanics and Energy systems

- Biomechanical principles of the game/sport
- Energy systems involved in the games and fitness programme specific to the game

UNIT 8: Injuries and Nutrition

- Game/Sport related injuries – Prevention, treatment and rehabilitation.
- Nutrition related to the game – Off season, and pre, during and post competition

*The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded shall be decided in the departmental council meeting.

Semester III

Practicum Course

MPEPC-304 INTRENSHIP- PEDAGOGY (CL)

(A) COACHING LESSONS OF TRACK AND FIELD

The students of M.P.Ed – III Semester need to develop proficiency in taking coaching lesson on above mentioned selected discipline. In view of this, the students shall be provided with advance training and coaching in selected discipline. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class, they are going to handle at school and college level.

Each student teacher is expected to take at least fifteen lessons in track and field for the BPEd students or high school students as decided by the departmental council at the end of which a competition will be conducted among the trainees of the MPed teachers. For this purpose a group of three MPed students in each coaching team may be made to coach track, jumps and throws. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these coaching lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

(B) COACHING LESSONS OF GAME SPECIALISATION

The students of M.P.Ed – III Semester need to be develop proficiency in taking coaching lesson in selected game discipline. In view of this, the students shall be provided with advance training and coaching in selected discipline. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class they are going to handle at school and college level.

Each student teacher is expected to visit the schools and take coaching lessons on games allotted to them for 15 days at the end of which there will be a competition among the participating schools in the respective games. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these coaching lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

Semester IV

Practicum Course

MPEPC- 401 TRACK AND FIELD: RACE WALKING, CROSS COUNTRY RACE, HALF MARATHON, FIELD MARKING AND TRACK AND FIELD OFFICIATING

- Race Walking
- Cross Country
- Half Marathon
- Field Marking and Track and Field Officiating

SPECIALISATION RECORD

- **UNIT 1: History and development of Race Walking, Cross Country, Half Marathon.**
 - Origin of the event
 - Growth and development of the event

UNIT 2: Skills and Techniques

- Skills and techniques of Race walking
- Strategies in Cross Country and Half Marathon

UNIT 3: Fitness training

- Energy system involved in the race walking and cross country
- Training to develop the fitness parameters involved in the events
- Training plan of six weeks for race walking, combined events and cross country

UNIT 4: Rules and Regulations

- Officials required for combined events, cross country and race walking
- Rules pertaining race walking, cross country and Half Marathon

UNIT 5: Layout and construction and maintenance of track and field arena

UNIT 6: Organization, Administration and managerial set up for conducting an Athletic Meet

UNIT 7: Biomechanical principles

- Race walking

UNIT 8: Injuries and Nutrition

- Event related injuries, prevention, treatment and rehabilitation.

- Nutrition specific to the events

*The chapters are indicative. Chapter/s specific to the game/event of specialization can be included or irrelevant chapters excluded in consultation with the guide

Semester IV

Practical Course

MPEPC – 402 LABORATORY PRACTICAL – COMPUTER APPLICATION

I – Microsoft Word

- Using the various options in Microsoft word to create folders, files, saving and their applications in administration of sports events and coaching.

II – Microsoft Excel

- Using Microsoft excels to prepare spreadsheets, insert graphs, Analyze data and to prepare schedules etc.

III – Microsoft PowerPoint

- Prepare Presentations.

IV –creating and using E-Mail:

V –Using search engines

Semester IV

Practicum Course

MPEPC-403 GAMES SPECIALIZATION CRICKET, BASKETBALL, BADMINTON AND TABLE TENNIS

- **Basic skills**
- **Advanced skills**
- **Teaching progression of different skills**
- **Drills for each of the skills**
- **Biomechanical analysis of the skills**
- **Specific fitness drills**

SPECIALISATION RECORD

UNIT 1: History and development of the Game/Sport

- Origin of the Game
- Growth and development of the Game in India.
- Tournaments and awards

UNIT 2: Skills and Techniques

- Fundamental Skills
- Advanced skills
- Training drills

UNIT 3: Strategies and Tactics

- Training for tactics
- Training plan for a period of six weeks and twelve weeks at different levels (High school, college and university)

UNIT 4: Officiating

- Rules and Regulations
- System of officiating

UNIT 5: Layout and construction and maintenance of playfield/courts**UNIT 6: Organization, Administration and managerial set up for conducting
Tournament / competition****UNIT 7: Biomechanics and Energy systems**

- Biomechanical principles of the game/sport
- Energy systems involved in the games and fitness programme specific to the game

UNIT 8: Injuries and Nutrition

- Game/Sport related injuries – Prevention, treatment and rehabilitation.
- Nutrition related to the game – Off season, and pre, during and post competition

The students should prepare a record book containing the above said activities which will be evaluated in the semester exam.

**MPEPC 404 COACHING LESSONS OF TRACK AND FIELD/GAMES SPECIALIZATION (PL)
(Kabaddi/Kho-Kho/Handball/Volleyball/Basketball/Football/Hockey/Cricket/Badminton/Table Tennis)**

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

Note: Where ever details of any activities are not mentioned, it is expected to elaborate skills by the competent bodies of local Universities/ Autonomous Colleges.

Table – 1: Semester wise distribution of hours per week

Semester	Theory	Practicum	Teaching practice	Total
I	12	18	06	36
II	12	12	12	36
III	12	12	12	36
IV	12	12	12	36
Total	48	54	42	144

Minimum of 36 teaching 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	12	09	03	24
II	12	06	06	24
III	12	06	06	24
IV	12	06	06	24
Total	48	27	21	96

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

DEPARTMENT OF STUDIES IN PHYSICAL EDUCATION AND SPORTS SCIENCES
M.P.Ed. MODEL QUESTION PAPER

Time:- 3 hours

Maximum Marks :70

Instructions:

1. Answer any four questions out of six main questions.
2. Questions serial numbers 01 to 06 carry 15 marks (a and b both questions)
3. Question number 07 is compulsory its carry 10 marks.

1. a. $8+7 = 15$

b.

2. a. $8+7 = 15$

b.

3. a. $8+7 = 15$

b.

4. a. $8+7 = 15$

b.

5. a. $8+7 = 15$

b.

6. a. $8+7 = 15$

b.

7. Write shorts on any two of the following. $5 \times 2 = 10$

a.

b.

c.

d.

Semester I

Theory Courses

MPEEC-101 Yogic Sciences

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 – Dharti – Kapalabhati- Trataka – Nauli – Basti, Bandhas: Meaning, Techniques and Benefits of Jalendra Bandha, Jihva Bandha, Uddiyana Bandha, Mula Bandha.

Unit IV – Mudras

Meaning, Techniques and Benefits of Hasta Mudras, Asamyukta hastam, Samyukta hastam , Mana Mudra, Kaya Mudra, Banda Mudra, Adhara Mudra. Meditation: Meaning, Techniques 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 athlete: Mental Wellbeing, Anxiety, Depression Concentration, Self Actualization. Effect of Yoga on Physiological System: Circulatory, Skeletal, Digestive, Nervous, Respiratory, Excretory System.

Note: Laboratory Practicals be designed and arranged internally.

REFERENCE:

- George Feuerstein, (1975). Text Book of Yoga. London: Motilal Bansaridass Publishers (P) Ltd.
- Gore, (1990), Anatomy and Physiology of Yogic Practices. Lonavata: Kanchan Prakashan.
- Helen Purperhart (2004), The Yoga Adventure for Children. Netherlands: A Hunter House book.
- Iyengar, B.K.S. (2000), Light on Yoga. New Delhi: Harper Collins Publishers.
- Karbelkar N.V.(1993) Patanjali Yogasutra Bhashya (Marathi Edition) Amravati: Hanuman Vyayam Prasarak Mandal
- Kenghe. C.T. (1976). Yoga as Depth-Psychology and para-Psychology (Vol-I): Historical Background, Varanasi: Bharata Manishai.
- Kuvalyananada Swami & S.L. Vinekar, (1963), Yogic Therapy – Basic Principles and Methods. New Delhi: Govt. of India, Central Health Education and Bureau.
- Moorthy A.M. & Alagesan. S. (2004) Yoga Therapy. Coimbatore: Teachers Publication House.
- Swami Kuvalayanda, (1998), Asanas. Lonavala: Kaivalyadhama.
- Swami Satyananada Sarasvati. (1989), Asana Pranayama Mudra Bandha. Munger: Bihar School of Yoga.
- Swami Satyananda Saraswathi. (1984), Kundalini and Tantra, Bihar: Yoga Publications Trust.
- Swami Sivananda, (1971), The Science of Pranayama. Chennai: A Divine Life Society Publication.
- Thirumalai Kumar. S and Indira. S (2011) Yoga in Your Life, Chennai: The Parkar Publication.
- Tiwari O.P. (1998), Asanas-Why and How. Lonavala: Kaivalyadham.

Semester II

Theory Courses

MPEEC-201 SPORTS JOURNALISM AND MASS MEDIA (Elective)

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.

Practical assignments to observe the matches and prepare report and news of the same; visit to News Paper office and TV Centre to know various departments and their working. Collection of Album of newspaper cuttings of sports news.

REFERENCE:

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

Semester III

Theory Courses

MPEEC-301 SPORTS ENGINEERING (Elective)

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 moment, 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, refurbish, 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)
- Jenkins M., Editor **Materials in Sports Equipment, Volume I** (Elsevier, 2003)

- Colin White, **Projectile Dynamics in Sport: Principles and Applications**
- Eric C. et al., Editor **Sports Facility Operations Management** (Routledge, 2010)

Inter Disciplinary Optional Subjects

Semester II

Theory Courses

MPEOEC-201 Yogic Sciences

Unit I – Introduction

Meaning and Definition of Yoga. Astanga Yoga: Yama, Niyama, Asana, 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 Chakras- Benefits of clearing and balancing Chakras.

Unit III – Kriyas

Shat Kriyas- Meaning, Techniques and Benefits of Neti – Dharti – Kapalabhati- Trataka – Nauli – Basti, Bandhas: Meaning, Techniques and Benefits of Jalendra Bandha, Jihva Bandha, Uddiyana Bandha, Mula Bandha, Trataka – Procedure and Benefits.

Unit IV – Mudras

Meaning, Techniques and Benefits of Hasta Mudras, Asamyukta hastam, Samyukta hastam , Mana Mudra, Kaya Mudra, Banda Mudra, Adhara Mudra. Meditation: Meaning, Techniques and Benefits of Meditation – Passive and active, Saguna Meditation and Nirguna Meditation.

Unit V – Yoga and Health

Yoga and Women Health – Yogic Exercises before and during the method period. Yoga Practices for Pregnant Women. Balancing the Stress and Tension. Therapeutic Yoga Exercises for Psychosomatic Diseases Hypertension, Diabetes, Migraine, Obesity, Stress etc.

Note: Laboratory Practicals be designed and arranged internally.

REFERENCE:

- George Feuerstein, (1975). Text Book of Yoga. London: Motilal Bansaridass Publishers (P) Ltd.
- Gore, (1990), Anatomy and Physiology of Yogic Practices. Lonavata: Kanchan Prakashan.
- Helen Purperhart (2004), The Yoga Adventure for Children. Netherlands: A Hunter House book.
- Iyengar, B.K.S. (2000), Light on Yoga. New Delhi: Harper Collins Publishers.
- Karbelkar N.V.(1993) Patanjali Yogasutra Bhashya (Marathi Edition) Amravati: Hanuman Vyayam Prasarak Mandal
- Kenghe. C.T. (1976). Yoga as Depth-Psychology and para-Psychology (Vol-I): Historical Background, Varanasi: Bharata Manishai.
- Kuvalyananada Swami & S.L. Vinekar, (1963), Yogic Therapy – Basic Principles and Methods. New Delhi: Govt. of India, Central Health Education and Bureau.
- Moorthy A.M. & Alagesan. S. (2004) Yoga Therapy. Coimbatore: Teachers Publication House.
- Swami Kuvalayanda, (1998), Asanas. Lonavala: Kaivalyadhama.
- Swami Satyananada Sarasvati. (1989), Asana Pranayama Mudra Bandha. Munger: Bihar School of Yoga.
- Swami Satyananda Saraswathi. (1984), Kundalini and Tantra, Bihar: Yoga Publications Trust.
- Swami Sivananda, (1971), The Science of Pranayama. Chennai: A Divine Life Society Publication.
- Thirumalai Kumar. S and Indira. S (2011) Yoga in Your Life, Chennai: The Parkar Publication.
- Tiwari O.P. (1998), Asanas-Why and How. Lonavala: Kaivalyadham.

Semester III

Theory Courses

MPEOEC-301 PHYSICAL FITNESS AND WELLNESS

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