

# **Allahabad State University**

Allahabad

Syllabus of  
Physical Education

Proposed by:

NCTE

M.P.Ed Two Year Four Semester

Prepared by:

Board of Study Members

**Minutes of the meeting in Board of Studies in Physical Education in Conference Room,  
Vice Chancellor's office, Allahabad State University on 11<sup>th</sup> June 2017, at 11:00 am.**

**Members Present**

Prof. Sushma Ghildyal (External Member)  
Prof. B.B.Singh (External Member)  
Prof.Archana Chahal (External Member)  
Prof.S.K.Gautam (External Member)  
Dr.Ish Naryan Upadhya (Internal Member)  
Dr.P.K.Pachaury (Internal Member)  
Dr. S.D. Maurya (Convenor)

In the **First meeting** of Board of Studies in Physical education for the year 2017, the Convener welcomed all the member of the Board of Studies.

**Agenda 1:** To finalize the Syllabus of B.P.Ed, M.P.Ed. Professional Courses and BA/BSc. and MA/MSc in Physical Education (non .Professional Courses).

**Resolution 1:** The members discussed the Syllabus of B.P.Ed and M.P.Ed as prescribed by NCTE curriculum framework 2014. The Board Members resolved that the Syllabus be approved with minor modifications as per the administrative feasibility of Allahabad State University, Allahabad. The modification discussed were:

- I. Distribution of marks for theory and practical both will be 60% external evaluation and 40% internal evaluation.
- II. The Syllabus on B.Sc. (Agriculture) First Semester was also discussed and was resolved that:
  - a. Copy of Syllabus of B.A. in Physical Education which is already received in Allahabad State University, Allahabad be approved with minor modifications.
  - b. The committee members unanimously resolved that Prof. Archana Chahal be authorized to prepare draft syllabus of M.A./M.Sc. in Physical Education, which will be circulated among the boards members and after incorporating their suggestions (if any) shall be treated as approved.
  - c. The committee members resolved that Dr. Pawan Kumar Pachaury be authorized to prepare draft syllabus of B.Sc. (Ag.) Physical Education (First Semester), which will be circulated among the board members and after incorporating their suggestions (if any) shall be treated as approved.

The meeting ended with thanks to Chair/Convenor.

  
(Prof. Sushma Ghildyal)  
External Member

  
(Prof. B.B.Singh)  
External Member

  
(Prof. Archana Chahal)  
External Member

  
(Prof.S.K.Gautam)  
External Member

  
(Dr.Ish Naryan Upadhya)  
Internal Member

  
(Dr.P.K.Pachaury)  
Internal Member

  
(Dr.S.D. Maurya)  
Convenor

**CURRICULUM STRUCTURE FOR TWO-YEAR  
M.P.ED. PROGRAMME**

**FOLLOWING  
NCTE REGULATIONS, 2014**

**Prepared by the Curriculum Committee  
Constituted by the**

**ALLAHABAD STATE UNIVERSITY,  
ALLAHABAD-211001 [U.P.]**

**REGULATIONS RELATING TO CONDUCT OF EXAMINATION OF MASTER OF PHYSICAL EDUCATION (M.P.ED) PROGRAMME UNDER SEMESTER SYSTEM (I+I+I+I) WITH EFFECT FROM 2017 – 2018 SESSION**

1. In all there shall be 17 (Seventeen) theoretical papers of which 04 (Four) papers will be evaluated in each semester I, II & III but in Semester – IV where 5 (Five) papers will be evaluated. Total distribution of marks for M.P.Ed. course under four semester will be as follows:

Semester	Theory Course	Practical Course/Internship	Teaching/Coaching Practice
I	04 Papers = 400 marks	150 marks	----
II	04 Papers = 400 marks	50 marks	50 marks
III	04 Papers = 400 marks	150 marks	----
IV	05 Papers = 400 marks	100 marks	----
Total	17 Papers = 1600 marks	450 marks	50 marks

The candidates will be evaluated out of 2100 mark (Semester I, II, III and IV) including theory course, practical course and internship.

2. Each candidate appearing in the M.P.Ed. Examination shall submit the examination form duly filled in along with the prescribed fees within stipulated time period before each semester.
3. **Condonation:** Student must have 75% of attendance in Theory and 80% attendance in practicum in each course for appearing the examination. Students who have 70% to 60% of attendance shall apply for Condonation in the prescribed form with the prescribed fee. Students who have 60% to 50% of attendance shall apply for Condonation in prescribed form with the prescribed fee along with the Medical Certificate/ any other certificate with reasonable ground. Students who have below 50% of attendance are not eligible to appear for the examination.
  - In addition to the above clause, for m.P.Ed., to be eligible for filling up forms of 4<sup>th</sup> semester examination candidate should complete 16 weeks of internship programme (School & Internal).
  - Submission of all the components of internal assessment (assignments, projects etc.) is the essential precondition for appearing semester end examinations under normal circumstances.

**4. Examinations:**

- i. There shall be examinations at the end of each semester, for first semester in the month of November /December: for second semester in the month of May / June. A candidate who does not obtain pass marks in the examination in any course(s) shall be permitted to appear in such failed course(s) in the subsequent examinations to be held in December or June.
- ii. A candidate should get enrolled /registered for the first semester examination. If enrollment/registration is not possible owing to shortage of attendance beyond condonation limit / rules prescribed OR belated joining OR on medical grounds, such candidates will not

be permitted to proceed to the next semester. Such candidates shall redo the semester in the subsequent term of that semester as a regular student; however, a student of first semester shall be admitted in the second semester, if he/she has successfully kept the term in first semester.

5. A candidate shall be allowed to write in Hindi or in English language in the University examination either.
6. If a candidate after completion of regular course of study in any of the semester fails to enroll as a candidate to present him/her in the examination or appears but fails to complete the respective semester examination due to any reason, he/she will have a chance to appear in the same examination in the following semester.
7. To pass a particular semester examination a candidate must secure at least 40% marks in the theory course for CIA and external examination and 50% marks for the practical courses.
8. If a candidate fails to secure 40% marks in any of the theory course or 50% marks in any of the practical course in a semester he/she will have to appear in the respective theory and practical course alongwith the following semester examination.
9. If a candidate fails to secure 50% marks in teaching practice he/she will have one chance to qualify the same.
10. Questions are to be set in English & Hindi both version only.
11. A candidate shall be permitted to complete the programme requirements within a maximum of three years from the date of admission to the programme.
12. A candidate of either semester shall be allowed to attend classes of following semester if he/she does not have two back papers either in theory, practical course or teaching practice.
13. Format of question papers for four units: Each question paper shall have four questions and the patterns are as follows:

Question No.	Description	Marks
1	Answer in detail (Long question) Or Answer in detail (Long question) (from Unit 1)	12
2	Answer in detail (Long question) Or Answer in detail (Long question) (from Unit 2)	12
3	Answer in detail (Long question) Or Answer in detail (Long question) (from Unit 3)	12
4	Write short notes: Any two out of four (From Unit 4)	12
5	M.C.Q type questions (10 out of 12 questions) (Three questions from each unit)	12
	Total	60

14. (a) Each theory paper will be set by two examiners and one of them will act as an examiner
  - (b) For evaluation of practical course and teaching practice the external examiner be appointed in such a way that he/she does not represent the home college or department.
  - (c) Re assessment system of answer scripts to be exercised by the university.
  - (d) For each theory, practical and teaching practice 30% marks are assigned for CIA and 60% marks for term end examination.

15. Spot evaluation procedures to be followed for examining the theory course in respective semester and the result for each semester to be published before commencement of following semester.
16. Provision of awarding two (+02) grace mark for securing 1<sup>st</sup> class in the final end semester examination be rest upon the discretionary authority of the Hon'ble Vice Chancellor.
17. A Board of Studies for M.P.Ed. course shall be formed with 07 (Seven) members (As per provision of the University Statuette). The B.O.S. shall recommend the panel of paper setters, examiners, moderators and head examiners and shall forward the same to the Hon'ble Vice Chancellor for approval.
18. The proposed curriculum of M.P.Ed. programme as per NCTE Regulations, 2014 shall replace the existing content and structure of M.P.Ed. course.
19. Notwithstanding anything covered in the above regulations, Hon'ble Vice Chancellor shall have the authority to exercise his discretionary power from time to time.

## **M. P. ED. PROGRAMME**

### **Preamble**

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

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

### **Intake, Eligibility and Admission Procedure**

The Intake, Eligibility and Admission Procedure is as per the NCTE norms and standards.

### **Duration**

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

### **Course**

The term course usually referred to, as 'papers' is a component of a programme. All courses need not carry the same weight. The courses should define learning objectives and learning outcomes. A course may be designed to comprise Lectures/ Tutorials/Laboratory Work/ Field Work/ Outreach Activities/ Project Work/ Vocational Training/VIVA/ Seminars/ Term Papers/Assignments/ Presentations/ Self-Study etc. or a combination of some of these.

## **Courses of Programme**

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

- Theory
  - Core Course
  
- Practicum
  - Compulsory Course (Track and Field)
  - Games Specialization
  - Internship
  - The M.P.Ed. Programme consist of two academic year.

## **Semesters**

An academic year is divided into two semesters. Each semester will consist of 17-20 weeks of academic work equivalent to 100 actual teaching days. The institution shall work for a minimum of 36 working hours in a week (five or six days a week).

## **Working Days**

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

## **Evaluation**

The performance of a student in each course is evaluated in terms of percentage of marks Evaluation for each course shall be done by a continuous internal assessment (CIA) by the concerned course teacher as well as by end semester examination and will be consolidated at the end of course. The components for continuous internal assessment are;

<b>One Test</b>	<b>20 Marks</b>
<b>Assignments / Lab Practical</b>	<b>15 Marks</b>
<b>Attendance</b>	<b>5 Marks</b>
<b>Total</b>	<b>40 Marks</b>

Attendance shall be taken as a component of continuous assessment, although the students should have minimum 75% attendance in theory and 80% attendance in practicum in each course. In addition to continuous evaluation component, the end semester examination, which will be written type examination of at least 3 hours durations for full paper Of 100 marks and 2 hours for half paper of 50 marks, would also form an integral component of the evaluation. The ratio of marks to be allotted to continuous internal assessment and to end semester examination is 40:60. In case of practical activity evaluation will be made by the internal and external examiners equally and the ratio will be fixed at 50:50 i.e. for an activity of 50 marks Internal: 25 marks and External: 25 marks. The evaluation of practical work, wherever applicable, will also be based on continuous internal assessment and on an end-semester practical examination.

### Classification of Final Results

For the purpose of declaring a candidate to have qualified for the Degree of Master of Physical Education in grades, the marks criterion. It is further provided that the candidate should score grades separately in both the grand total and end Semester (External) examinations.

### Grievance Redressal Committee

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

### Revision of Syllabi:

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

### COURSE STRUCTURE FOR MASTER OF PHYSICAL EDUCATION (M.P.ED.) PROGRAMME

SEMESTER – I		
<b>Objectives:</b> To enhance the basic knowledge on functioning of human body, health, fitness and wellness and to make them aware about research process, measurement and evaluation and concept on yoga. To orient about laboratory works, and make them specialized in games and sports.		
<b>PART - A</b>	<b>THEORY PAPERS</b>	
<b>COURSE</b>	<b>SUBJECT</b>	<b>MARKS</b>
MPCC-101	Physical Fitness, Health and Wellness	100
MPCC-102	Physiology of Exercise	100
MPCC-103	Research Methodology in Physical Education & Sports Sciences	100
MPCC-104	Test, Measurement and Evaluation in Physical	100
	Education	
<b>PART - B</b>	<b>PRACTICUM PAPERS</b>	
MPPC-101	Track and Field (Running Events, 50 Swimming/Gymnastics (Any One)	
MPPC-102	Combative Sports	50
MPPC-103	Adventure Activities	50
Practicum/Student Activity/Seminar Assignment/Project File/Workshop/Volunteering, etc.		



In addition to the number of hours mentioned in the table above, time has to be provided for Library Work, Self Study, Planning, Field Visits, Taking Up add on Courses (Vocational Sports Education) and so on.

**SEMESTER – II**

**OBJECTIVES:** To impart knowledge on application of statistics, biomechanics, sports medicine, nutritive values and management. To aware about rehabilitative measures for athletic injuries.

<b>PART - A</b>		
<b>THEORY PAPERS</b>		
<b>COURSE</b>	<b>SUBJECT</b>	<b>MARKS</b>
MPCC - 201	Applied Statistics in Physical Education and Sports	100
MPCC - 202	Sports Biomechanics and Kinesiology	100
MPCC - 203	Sports Medicine, Nutrition, Athletic Care and Rehabilitation	100
MPCC - 204	Sports Management and Yoga Education	100
<b>PART - B</b>		
<b>PRACTICUM PAPERS</b>		
MPPC-201	Track and Field II (Jumping Events + Hurdles, Gymnastics/Swimming (Any One))	50
MPPC-202	Internship (Field Engagement during Semester Break)	50

Practicum/Student Activity/Seminar Assignment/Project File/Workshop/Volunteering, etc.

In addition to the number of hours mentioned in the table above, time has to be provided for Library Work, Self Study, Planning, Field Visits, Taking Up add on Courses (Vocational Sports Education) and so on.

**SEMESTER – III**

**OBJECTIVES:** To enhance knowledge on scientific principles of Sports training. To enhance knowledge on application of engineering in the field of sports and concept on sports journalism and role of mass media. To gain practical knowledge on research.

<b>PART - A</b>		
<b>THEORY PAPERS</b>		
<b>COURSE</b>	<b>SUBJECT</b>	<b>MARKS</b>
MPCC - 301	Scientific Principles of Sports Training	100
MPCC - 302	Sports Journalism and Mass Media	100
MPCC - 303	Sports Engineering and Technology	100
MPCC - 304	Dissertation – I	100
<b>PART - B</b>		
<b>PRACTICUM PAPERS</b>		
MPPC - 301	Track and Field III (Throwing Events + Introduction of Heptathlon Events, Gymnastics/Swimming (Any One))	50
MPPC - 302	Games Specialization – I	50

MPPC - 303	Games Specialization – II	50
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Practicum/Student Activity/Seminar Assignment/Project File/Workshop/Volunteering, etc.

Theory and Practical Assessment Weightage shall be detailed in the syllabus.

In addition to the number of hours mentioned in the table above, time has to be provided for Library Work, Self Study, Planning, Field Visits, Taking Up add on Courses (Vocational Sports Education) and so on.

**SEMESTER – IV**

**OBJECTIVES:** To increase specialized knowledge on information and communication technology, sports psychology and educational technology. To impart knowledge on application of statistics and research.

<b>PART – A</b>		<b>THEORY PAPERS</b>	
<b>COURSE</b>		<b>SUBJECT</b>	
MPCC – 401		ICT in Physical Education & Sports	100
MPCC – 402		Sports Psychology	100
MPCC – 403		Dissertation – II Writing Research Report	100
MPCC – 404		Gender Studies in Physical Education & Sports	50
MPCC – 405		Disability/Inclusive Sports Education	50
<b>PART - B</b>		<b>PRACTICUM PAPERS</b>	
MPPC – 401		Track and Field IV (Introduction of Decathlon Events, Gymnastics/Swimming Practical Skills (Any One)	50
MPPC – 402		Combative Sports (Any One)	50

Practicum/Student Activity/Seminar Assignment/Project File/Workshop/Volunteering, etc.

Theory and Practical Assessment Weightage shall be detailed in the syllabus. Practicum assessment on field: 12 credits and Game/Activity Theory: 4 credits

In addition to the number of hours mentioned in the table above, time has to be provided for Library Work, Self Study, Planning, Field Visits, Taking Up add on Courses (Vocational Sports Education) and so on.

**NUMBER OF HOURS TO BE PROVIDED**

Part - A	Marks	Class Teaching Hours	Internship / Practical	Total Teaching Hours	Internal Assessment Weightage	External Assessment Weightage
<b>SEMESTER – I</b>						
<b>COURSE</b>	<b>THEORY</b>					
MPCC-101	100	32	2C-64	96	30	60
MPCC-102	100	48	1C-32	80	30	60
MPCC-103	100	64		64	30	60
MPCC-104	100	48	1C-32	80	30	60
<b>PART - B</b>	<b>PRACTICAL</b>					
MPPC-101	50	16	1C-32	48	25	25

MPPC-102	50	16	1C-32	48	25	25
MPPC-103	50	16	1C-32	48	25	25
	550	240	7	464	195	355

SEMESTER – II						
COURSE	THEORY					
MPCC-201	100	48	1C-32	80	30	60
MPCC-202	100	48	1C-32	80	30	60
MPCC-203	100	48	1C-32	80	30	60
MPCC-204	100	48	1C-32	80	30	60

PART - B	PRACTICAL					
MPPC-201	50	16	1C-32	48	25	25
MPPC-202	50		2C-64	64	25	25
	500	208	7	432	170	330

SEMESTER – III						
COURSE	THEORY					
MPCC-301	100	48	1C-32	80	30	60
MPCC-302	100	48	1C-32	80	30	60
MPCC-303	100	48	1C-32	80	30	60
MPCC-304	100	16	3C-48	64	30	60
PART - B	PRACTICAL					
MPPC-301	50	16	1C-32	48	25	25
MPPC-302	50	16	1C-32	48	25	25
MPPC-303	50	16	1C-32	48	25	25
	550	208	9	448	195	355

SEMESTER – IV						
COURSE	THEORY					
MPCC-401	100	32	2C-64	96	40	60
MPCC-402	100	48	1C-32	80	40	60
MPCC-403	100	16	3C-96	112	40	60
MPCC-404	50	32		32	15	35
MPCC-405	50	32		32	15	35
PART - B	PRACTICAL					
MPPC-401	50	16	1C-32	48	25	25
MPPC-402	50	16	1C-32	48	25	25
	500	192	8	448	170	330

**N.B.** Internship (3<sup>rd</sup> Semester onwards) and field engagement in all semesters are to be done/conducted where credits have been allotted. Practicum/Student activity/Seminar assignment/Project File/Work Shop /volunteering, etc. Theory & Practical Assessment Weightage shall detailed be in the syllabus.

**ELIGIBILITY CRITERIA:**

As per with the NCTE norms and regulations which has been notified in the Gazette.

**ADMISSION PROCEDURE:**

1. Physical Fitness Test – {Minimum 4 Four test items} 10 X 4 = 40 marks  
(To be selected from AAHPERD Youth Fitness Test)
2. Knowledge Test–(Covering the syllabus of Physical Education) = 15 marks
  - (c) Multiple Choice Questions: 10 marks
  - (d) Small Answer Type : 05 marks  
(Maximum 100 words)
3. Viva Voce - = 05 marks  
(Knowledge about recent and past of the Country/State, Vocabulary and Expression)

**SEMESTER – I****PAPER – I                      PHYSICAL FITNESS, HEALTH AND WELLNESS****Course Code: MPCC-101****Unit I –Physical Fitness**

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

**Unit II – Concept of Health and Health Problems**

Concept, Dimensions, Spectrum and Determinants of Health, Definition of Health, Health Education, Health Instruction, Health Supervision, Aims and objectives, Principles of Health Education, Health Service and guidance instruction in personal hygiene.

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, Types of Hygiene, Dental Hygiene. Effect of Alcohol on Health. Effect of Tobacco on Health, Life Style Management of Hypertension, Obesity and Stress

**Unit IV– Climatic conditions and sports performance and ergogenic aids**

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

performance. Narcotic, Stimulants: Amphetamines, Caffeine, Ephedrine, Sympathomimetic amines. Stimulants and sports performance.

#### **REFERENCES:**

- 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
- 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.

#### **PAPER – II                    PHYSIOLOGY OF EXERCISE**

**Course Code: MPCC-102**

##### **UNIT I – Skeletal Muscles and Exercise**

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

##### **UNIT II – Cardiovascular System and Exercise**

Heart Valves and Direction of the Blood Flow – Conduction System of the Heart – Blood Supply to the Heart – Cardiac Cycle – Stroke Volume – Cardiac Output – Heart Rate –

Factors Affecting Heart Rate – Cardiac Hypertrophy – Effect of exercises and training on the Cardio vascular system.

### **UNIT III – Respiratory System and Exercise**

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

### **UNIT IV – Metabolism and Energy Transfer**

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

*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.

### **PAPER – III RESEARCH METHODOLOGY IN PHYSICAL EDUCATION AND SPORTS SCIENCES**

**Course Code: MPCC-103**

**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.

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 III – 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 Sampling, Judgement Sampling, Quota Sampling.

**UNIT IV – 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, London; Routledge Press

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

Kamlesh, M. L. (1999) Research Methodology in Physical Education and Sports, New Delhi  
Moses, A. K. (1995) Thesis Writing Format, Chennai; Poompugar Pathippagam

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

Subramanian, R, Thirumalai Kumar S & Arumugam C (2010) Research Methods in Health,

Physical Education and Sports, New Delhi; Friends Publication Moorthy A. M. Research Processes in Physical Education (2010); Friend Publication, New Delhi.

**PAPER – IV TEST, MEASUREMENT  
AND EVALUATION IN PHYSICAL EDUCATION Course Code: MPCC-104**

**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 –Physical Fitness and Motor 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)

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 -- 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 IV – 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 (2<sup>nd</sup> 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*, 2<sup>nd</sup> 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*, 3<sup>rd</sup> Edition, Dallas TX: The Cooper Institute for Aerobics Research

Wilmore JH and Costill DL. (2005) *Physiology of Sport and Exercise*: 3<sup>rd</sup> 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**

#### **PRACTICUM**

#### **MPPC- 101 TRACK AND FIELD I: RUNNING EVENTS / GYMNASTICS/ SWIMMING (ANY ONE)**

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

#### **MPPC- 102 COMBATIVE SPORTS (ANY ONE)**

#### **BOXING/ KARATE/TAEKWONDO/ JUDO/ WRESTLING/ FENCING/ LATHI**

Course contents in Boxing/Karate/Taekwondo/Judo/Wrestling/Fencing/Lathi should be chalked out internally considering advance level of students and suitable to their age and gender

#### **MPPC-103 ADVENTURE ACTIVITIES**

Trekking, Wall climbing, River crossing, Mountaineering, etc

#### **SEMESTER – II**

### **PAPER – V APPLIED STATISTICS IN PHYSICAL EDUCATION AND SPORTS**

**Course Code: MPCC-201**

#### **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.

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 III– 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 IV – 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.**

### **REFERENCES**

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

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

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

Kamlesh, M. L. (1999) 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, SenthilkumarPublications.

## **PAPER -VI SPORTS BIOMECHANICS AND KINESIOLOGY**

**Course Code: MPCC-202**

### **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.

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

### **UNIT IV – Movement Analysis**

Analysis of Movement: Types of analysis: Kinesiological, Biomechanical.

Cinematographic. Methods of analysis – Qualitative, Quantitative, Predictive

Note: Laboratory practical's should be designed and arranged for students internally.

### **REFERENCES**

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.

Shukla D. and Patchuri P.K. : Sports Bio-Mechanic.

## **PAPER -VII SPORTS MEDICINE, NUTRITION, ATHLETIC CARE & REHABILITATION**

**Course Code: MPCC-203**

### **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 - Nutrition and Weight Management**

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.

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.

### **UNIT III – Common Sports Injuries, Care and Rehabilitation**

Sprain, Strain, Dislocation, and fracture at different joints and muscles.

Basic Rehabilitation: Strapping/Tapping: Definition, Principles of Precautions, Contraindications.

Proprioceptive neuromuscular facilitation: Definition of - hold, relax, repeated contractions. Show reversal technique. Exercises: Isotonic, Isokinetic, isometric stretching- Definition, Types of stretching, Advantages, dangers of stretching, Manual of muscle grading.

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. 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 under consideration 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.

### **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.
- 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. Rathborne, J.I.

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

## **PAPER-VIII SPORTS MANAGEMENT AND YOGA EDUCATION**

**Course Code: MPCC-204**

### **UNIT I – Introduction**

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 – Introduction to Yoga and Yoga Philosophies**

Introduction to Yoga: Concept and Principles; Ancient systems of Yoga, Classical approach to yoga practices: Yama, Niyama, Asana, Pranayam, Kriya, Bandha, Mudra & Dhyana; General and Specific guidelines to yogic practices; Historical aspects of yoga philosophy; Modern trends in Yoga; Yoga and Sports.

Need of Yoga for a positive health for modern man; Concept of health and disease: Medical and Yogic perspectives; Concept of Pancha Kosha for integrated and positive health; Yoga and Modern age; Stress in yogic perspectives; Yoga as a way of life to cope up stress; Yoga and self development, Yoga for the children and human excellence.

Effect of specific yogic practices on different muscles, Functional improvement through specific yogic practices, Mechanical analysis of asanas, Yoga competitions and its rules.

### **REFERENCES**

- Brown, F. Y.(2000). How to use yoga. Delhi:Sports Publication.  
Gharote, M. L. & Ganguly, H. (1988). Teaching methods for yogic practices. Lonavla: Kaivalyadhama.  
Rajjan, S. M. (1985). Yoga strengthening of relaxation for sports man. New Delhi:Allied Publishers.  
Shankar, G.(1998). Holistic approach of yoga. New Delhi:Aditya Publishers.

- Shekar, K. C. (2003). Yoga for health. Delhi: Khel Sahitya Kendra.  
 Gharote, M.L. Applied Yoga, Lonavla, Kaivalyadhama  
 Swami Kuvalananda, Asanas Kaivalyadhama, Lonavla, Maharashtra  
 Bonnie, L. (1991). The Management of Sports. St. Louis: Mosby Publishing Company, Park House.  
 Bucher A. Charles, (1993) Management of Physical Education and Sports (10<sup>th</sup> ed.,) St. Louis: Moby Publishing Company.  
 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. Williams, J.F. (2003). Principles of Physical Education. Meerut: College Book House. Yadvnider Singh. Sports Management, New Delhi: Lakshay Publication.  
 Patchuri P.K. and Shukla D.

## **SEMESTER - II**

### **PRACTICUM**

#### **MPPC- 201 TRACK AND FIELD: JUMPING EVENTS & HURDLES / GYMNASTICS/ SWIMMING (ANY ONE)**

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

#### **MPPC- 202 INTERNSHIP**

Field engagement during Semester Break

## **SEMESTER – III**

### **PAPER – IX SCIENTIFIC PRINCIPLES OF SPORTS TRAINING**

**Course Code: MPCC-301**

#### **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  
 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 III – 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 IV – Doping**

Definition of Doping – Side effects of drugs – Dietary supplements – IOC list of doping  
substances 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 Hall Inc.  
Cart, E. Klafs & Daniel, D. Arnheim (1999) Modern Principles of Athletic Training St. Louis C. V.  
Mosphy Company  
Daniel, D. Arnheim (1991) Principles of Athletic 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 2<sup>nd</sup> Edition, London: Jones and  
Bartlett Publications  
Yograj Thani (2003), Sports Training, Delhi : Sports Publications

### **PAPER – X**

### **SPORTS JOURNALISM AND MASS MEDIA**

**Course Code: MPCC-302**

#### **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 experts' comments. Role of Advertisement in Journalism. Sports Photography: Equipment- Editing – Publishing.

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.

### **REFERENCES**

Ahiya B.N. (1988) Theory and Practice of Journalism: Set to Indian context 3<sup>rd</sup> Ed. 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

Khera Shiv (2002), You Can Win, New Delhi: Macmillan India Limited.

Varma,A.K. (1993) Journalism in India from Earliest Times to the Present Period. Sterling publication Pvt. Ltd.

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

## **PAPER – XI SPORTS ENGINEERING AND TECHNOLOGY**

**Course Code: MPCC-303**

### **UNIT I – Introduction**

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

### **UNIT II - Mechanics of Engineering Materials**

Concept of internal force, axial force, shear force, bending movement, torsion, energy expenditure 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.



Introduction to Dynamics, Kinematics of particles – rectilinear plane and curvilinear motion  
Coordinate system. Kinetics of particles – Newton's laws of Motion. Work, Energy,  
Impulse and momentum.

### **UNIT III – Infrastructural Development:**

Sports Infrastructure- Gymnasium, Pavilion, Swimming Pool, Indoor Stadium, Out-door  
Stadium, Play Park, Academic Block, Administrative Block, Research Block, Library,  
Sports Hostel, 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 performed activity, Corridors and Gates for free movement of people,  
Emergency provisions of lighting, fire and exits, Eco-friendly outer surrounding.  
Maintenance staff, financial consideration.

### **UNIT IV – Maintenance:**

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.

### **REFERENCES**

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)

### **PAPER – XII**

### **DISSERTATION - I**

### **Course Code: MPCC-304**

Students will be encouraged to select problems out of the Library and other resources  
and review them extensively. They will also be informed to collect data by using related  
instruments in the sphere of Physiological, Psychological, Anthropometrical and other  
inter-disciplinary areas. Pilot studies will be encouraged on different experimental and  
survey studies.

### **SEMESTER - III**

### **PRACTICUM**

**MPPC- 301 TRACK AND FIELD: THROWING AND HEPTATHLON  
EVENTS / GYMNASTICS/SWIMMING (ANY ONE)**

Course contents in Throwing and Heptathlon events, Gymnastics and Swimming should be chalked out internally considering advance level of students and suitable to their age and gender.

#### **MPPC- 302 GAMES SPECIALIZATION - I**

The Candidate has the choice to select any one of the following games as the Games Specialization– I from Athletics/Gymnastics/Swimming

#### **MPPC- 303 GAMES SPECIALIZATION - II**

The Candidate has choice to select any one of the following games as the Games Specialization – II from the following:

(Kabaddi/Kho-kho/Badminton/Table Tennis/Tennis/Yoga/ Volleyball/ Basketball/ Cricket/ Football/ Handball/ Hockey)

### **SEMESTER – IV**

#### **PAPER – XIII**

#### **ICT IN PHYSICAL EDUCATION AND SPORTS**

**Course Code: MPCC-401**

#### **UNIT I – Communication & Classroom Interaction**

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

Communicative Skills in 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, E-Learning & Web Based Learning**

Approaches to Integrating ICT in Teaching Learning Process, Project Based Learning (PBL), Co-Operative Learning, Collaborative Learning, ICT and Constructivism: A Pedagogical Dimension, 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

## **PAPER – XIV      SPORTS PSYCHOLOGY**

**Course Code: MPCC-402**

### **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, Definition and 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 and Personality**

Meaning and Definition, Process of Goal Setting in Physical Education and Sports.  
Relaxation: Meaning and Definition, types and methods of psychological relaxation,  
Personality: Influence of Sports on Personality development, Personality and Temperament,  
Personality of elite sports persons, Sublimization of emotions.

### **UNIT IV – 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.

Practicals: *Atleast five experiments related to the topics listed in the Units above shouldbe  
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 Jersy: 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.
- Shukla D and Patchuri P.K. - Psychology of Physical Education.

#### **PAPER – XV DISSERTATION - II**

##### **Course Code: MPCC-403 Writing a research report.**

Students will work on the problem which has already been selected in Semester - III. After completion of the dissertation they will submit to the authority for evaluation.

#### **PAPER – XVI GENDER STUDIES IN PHYSICAL EDUCATION AND SPORTS**

##### **PAPER – XVI**

##### **Course Code: MPCC-404**

Meaning of Gender, Transgender and third Gender, The role of Physical Education and Sports in addressing Gender issues: Women's an Girl's health and wellbeing, Self esteem, Self empowerment; Social inclusion and social integration of Women and Girls.

##### **UNIT II– Gender Identity and Gender Issues in Curriculum and Physical Education**

Gender Identities and Socialisation Practices in family, schools, other formal and informal institutions, Physical Education curriculum and the gender question,

##### **UNIT III – Construction of Gender in Curriculum in Physical Education**

Construction of gender in curriculum framework since Independence, Attitude of Women toward Physical Education and Sports, Teacher as an agent of change, Challenging and transforming Gender norms.

##### **UNIT IV – Gender Equity**

Promoting Gender equity through Physical Education and Sports: Claiming space, access to resources, structures and leadership. Choice of Sports, Traditional Games and Competitions, Incentives, Women in sports and media (print and electronic), Review of researches on Gender studies in Physical Education and Sports.

#### REFERENCES

- Basu, R. & Chakraborty, B. (2011). *Prasanga: Manabividyā*. Kolkata : Urbi Prakashan.
- Bandarage, A. (1997). *Women Population and Global Crisis: A Political Economic Analysis*. London : Zed Books.
- Maguise, P. (1987). *Doing Participatory Research: A Feminist Approach*, Amherst, M.A.
- Boserup, E. (1970). *Women's Role in Economic Development*. New York : St. Martins Press.
- Brock-Utne, B. (1985). *Educating for peace: A Feminist Perspective*, New York.
- Ruddick, S. (1989). *Maternal Thinking: Towards a Politics of Peace*, London.
- Di Stefano, C. (1983). "Masculinity as ideology in political theory: Hobbesian man considered ", *Women's Studies International Forum*, Vol. 6.
- Elshtain, J. B. (1981). *Public man, private woman: woman in social and political thought*, princeton.
- Grant, R. & Newland, K. (Eds.). (1991). *Gender and International Relations*. London.
- Harshman, M. (1995). *Women and Development: A Critique*. In Marchand, M and Parpart, J. (Eds.). *Feminism, Post Modernism, Development*. London : Routledge.
- Viswanathan, Nalini. (1997). *Women, Gender and Development Reader*. London : Zed Publication.
- Sidhu, L.S. et al (1987). *Sports Sciences: Health, Fitness and Performance*, Patiala: IASSPE Publication.
- Sidhu, L.S. et al (1988). *Trends in Sports Sciences: Health, Fitness and Performance*, Patiala: IASSPE Publication.
- Frederic, D (2010). *Strength Training Anatomy, Human Kinetics*; 1<sup>st</sup> edition, www.amazon.com
- Chrissie Wellington, (2013). *A Life without Limits: A World Champion's Journey*, Center Street, Amazon Publication/www.amazon.com

#### PAPER – XVII

#### DISABILITY/INCLUSIVE SPORT EDUCATION

**Course Code: MPCC-405**

#### UNIT I - Introduction

Meaning of Disability and Inclusive Sports Education, Objectives, Important considerations, Types of impairment, Causes, Social recognition, Issues related to the behaviour of Disabled, Major considerations of Disability, Role of common people for the Disabled.

#### UNIT II – Assessment and Inclusion of Sports for Disability

Understanding the problem of the disabled, Assessment procedures, Tests related to assessment of disability, Need for inclusion of Sports, Types of activities to be included to educate the disabled, Assessment of disability of the child in the school and remedial measures.

### **UNIT III – Task Ability**

The Movement Form, The Environment, Equipment, Rules and Instructions. Creating quality through teaching and communicating for inclusive Physical Education and Sports.

### **UNIT III – Sports for the Disable Persons**

Inclusion of physical education and sports in educational curriculum, Sports for different type of disability, Exercises as remedial measure for various type of disability, Modified sports for the disabled, Competitions for the disabled, Types of competitions and their participation, Fitness Counseling. Review of researches on Disability and Sport Education.

### **REFERENCES**

- Kirk, S.A., (1970). Educating Exceptional Children. Oxford & IBH Publishing Company, New Delhi.
- Clarke, H.H. and Clarke D.H., ((1963). Developmental and Adapted Physical Education. Prentice Hall, Inc. Englewood Cliffs, N.J.
- Lowman, C.L., Colestock, C. and Cooper, H. (1928). Corrective Physical Education for Groups: A Text Book of Organization, Theory and Practice. A.S. Barnes and Company, New York
- Bancroft, Jessie, H. Posture and School Children. New York: Macmillan Co.
- Bucholz, C.H. Therapeutic Exercise and Massage. Philadelphia: Lea and Phebiger
- Clarke, H.H. (1960). Development of Volitional Muscle Strength as Related to Fitness. Exercise and Fitness, Chicago: Athlete Institute.
- Stanley, Seward C. (1953) Physical Exercise Programmes. St. Luis: C.V. Mosby Company
- Rosecrance, Francis C. and Velna D. Heyden. School Guidance and Personnel Service. Boston:
- Allyn and Bacon Inc. Professional Preparation for Teachers of Ex-Exceptional Children: An Overview. U.S. Office of Education, Bulletin, 1959, No.6. Washinton: Government Printing Office, 1960.
- Misra Arvind and Kadhiravan, Vasanthi, Sharirik Shiksha Unnayan Sansthan, Allahabad.

## **SEMESTER - IV**

### **PRACTICUM**

#### **MPPC- 401 TRACK AND FIELD: DECATHLON EVENTS / GYMNASTICS/ SWIMMING (ANY ONE)**

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

### **MPPC- 402 COMBATIVE SPORTS (ANY ONE)**

The Candidate has the choice to select any one of the following combative sports:  
Boxing/Fencing/Judo/Karate/Wrestling/Taekwondo/Lathi.

### **ACADEMIC CALENDAR FOR M.P.ED. PROGRAMME**

The Board of Studies shall prepare the Academic Calendar for the course for the entire session of the two year programme. This will include Academic Activities (Teaching Learning), Internal and External Examinations (Practical) for each semester, Internship and Final Theory Examination for the semester concerned.

Any change in the said programme shall be brought to the notice of the Chairperson of the Board of Studies of the concerned University for necessary action.

Necessary regulations for conducting M.P.Ed. Examination under semester system shall be followed by the respective University of the state. The University authority shall formulate guidelines in this respective Department or Institute offering M.P.Ed. programme before the commencement of the session.