

REGULATIONS AND SYLLABUS STRUCTURE FOR TWO YEARS MASTER OF PHYSICAL EDUCATION (M. P. Ed.) PROGRAMME (FOUR SEMESTERS) (CBCS)

Preamble:

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

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

R.M.P.Ed.1.Intake, Eligibility and Admission Procedure:

The Intake, Eligibility and Admission Procedure is as per the NCTE norms and standards. A candidate who (a) after taking a Bachelor's degree in Physical Education of this University or of an Indian University recognized by the Academic Council or (b) after obtaining a post-graduate Diploma in Physical Education of at least one year's duration awarded by an Indian University or a Board appointed by the Education Department of a State or (c) after obtaining Indian or Foreign qualification recognized as equivalent to those mentioned in (a) or (b) above by the Jai Narain Vyas University or (d) has completed a regular course of study for the semester shall be admitted according to the Semester examination passed in the degree of Master of Physical Education; subject to being selected on the basis of Admission entrance Test prevailing in the year when admission is sought in the University.

A Candidate who, After passing the First , Second and Third Semester Examinations of this University has completed a regular course of study for one semester, shall be admitted to the Second, Third and Fourth Semester examination, respectively, for the degree of Mater of Physical Education.

However, a candidate failing in not more than two papers in any semester shall be permitted to join the next semester, in which case he shall have to appear in the papers in which he had failed in the immediately previous semester alongwith the papers for the current semester. No candidate shall be allowed to join the next semester if he has not passed in all the papers of the semester proceeding the immediately previous semester for e.g candidate not be admitted to the Third semester unless he has passed in all the papers of the First semester. Similarly, no

candidate shall be admitted to the Fourth Semester unless he has passed in all the papers of the Second Semester.

Seasonal marks obtained by a candidate shall be carried over if a candidate fails in the final examination in any or all papers of any semester and appears as an ex-student. If the candidate seeks readmission as a regular student, the seasonal marks previously obtained for those papers shall stand cancelled.

When a candidate has failed in the examination but he has obtained pass marks in the thesis, the thesis marks may be carried forward to the prescribed limits of 5 years as specified above. If candidate fails in thesis but secures pass marks in written papers, the candidate shall be permitted to complete his requirement for thesis within the required period of five years. If a candidate seeks fresh assignment of thesis, his seasonal marks previously obtained shall stand cancelled. The Guide for the thesis shall be the internal examiner for the thesis. If reassessment is sought, the Guide may be changed, if needed. The candidates of M.P.Ed IV Semester shall submit three copies of thesis on or before the commencement of final examination failing which he shall be declared failed in thesis and such candidates shall have to submit the thesis in the next examination as an ex-student.

A candidate failing in any paper, if eligible to repeat the paper, may offer the same in the very next semester, whether that paper is offered for regular students or not. He shall be awarded the degree in the year in which he has actually passes.

The candidates who secure minimum 65% in the M.P.Ed First year (I & II Semester) examination and do not have A.T.K.T. in the preceding examination will be eligible to opt for thesis.

A special examination will be arranged along with ATKT examination for those students missing semester examination due to Inter-University or National Sports competitions recognized by university with prior permission from the HOD. They will be allowed to join the next higher semester of the class subject on the condition they appear and pass in those missed papers/subjects in the special examination.

R. M.P.Ed. 2. 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 Five years from the date of admission to the programme.

R. M.P.Ed. 3. The CBCS System:

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

R. M.P.Ed. 4. 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.

The medium of instruction shall be English & Hindi.

R. M.P.Ed. 5. 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 (Part 'A')**
 - **Core Course**
 - **Elective Course**
- **Practicum (Part 'B')**
 - Core (Compulsory) Course**
 - Track & Field, Gymnastics/Swimming
 - Yoga & Physical Fitness
 - Adventure/Leadership Training, Seminar, Internship & Project
 - Teaching/Coaching/Officiating Practices
 - Elective Course**
 - Sports & Games
 - Indigenous/Aerobics/Self Defence Activities

The examination for Master of Physical Education shall consist of 16 Theory papers (i.e.3 core & 01 Elective in each semester). Four papers shall be offered in each of the four semesters. Besides the University examination, seasonal (internal) grades will be added to each paper separately. A candidate must obtain for passing at least 40% marks in each written paper in the university examination and also obtain atleast 40% marks in the aggregate marks of the paper including the seasonal marks in each paper of each semester. No minimum pass percentage is prescribes for the seasonal (internal) theory & Practical.

In M.P.Ed I, II ,III & IV semester there shall be a final examination in part-B (Practicum) to be conducted by Internal and External examiner and each candidate must obtain for passing at least 45% marks in each examination. In order to pass Master of Physical Education Examination, M.P.Ed examination part-B (Practicum each) shall be considered to be equivalent to one Theory paper for A.T.K.T. purpose similarly pass marks in each of part-II shall be considered 45% at par with Theory papers.

The University examination in Dissertation/Thesis for Semester IV shall be evaluated by external examiner appointed by the university and internal examiner who shall value the thesis out of a maximum of 70 marks by the external and 30 marks by the internal. There shall be viva-voice examination evaluated by the external examiner.

Games Specialization: Track & Field and *Gymnastics/ Swimming (*any one) Skills to be performed as per the syllabus prescribed. Course contents in gymnastics/swimming should be chalked out internally considering the level of students and suitable to their age and gender. Skill Performance of Any Two Events/Apparatus of each games (Track and Field & Gymnastics/ Swimming) for internal assessment, one from each game for external assessment. Five Lessons of Teaching, Coaching, Marking & Officiating of each games (4 Internal & 1 External) 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 / college level.

Sports and Games: In Games & Sports Individual Skill, Game Situation, Officiating, Lead-Up games are to be practiced and evaluated internally. Course contents should be chalked out internally considering the level of students and suitable to their age and gender. As far as possible, available standardized Practical skill test to be conducted in order get evaluated by the external.

Classroom Teaching: In order to develop proficiency in taking teaching lessons in classrooms as per the selected topics are to be prepared and presented in a prescribe format. The topics shall be from the graduate level theory subject course contents. Each student teacher is expected to take at least five lessons during the semester out of which four will evaluated by the internal and one will be by the external examiner. 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 / college level.

Laboratory Practical: standardized laboratories tests related to sports psychology, physiology of exercise, sports biomechanics & kinesiology are to be practiced. The evaluation by internal & external will be on the basis of knowledge about the conduct of test, its norms, handling of apparatus/tools and self performance.

Seminar will be organized by the department and every student has to present paper or article on topics of sports, yoga, wellness, health & fitness their research findings, survey of literature, development, historical or current issues. Topics will be approved by the department and evaluated by the external examiner.

Project: Model(working or simple, preparation of informative chart or flex board) related to Physical Education, sport, health, wellness, yoga & fitness (allotted in groups or individually)

by the Head) has to be prepare under Project work which will be evaluated by the external.

Adventure/Leadership Camp/Tour/Training from government approved agencies is compulsory to attend in order to get the degree. Internal Assessment is based on leadership quality, active participation, sincerity and discipline. All the expenses will be borne by the student.

Thesis (Dissertation): In place of Theory Paper, Thesis (Dissertation) of 70 Marks to be awarded by the external examiners after Viva-voice held at department and 30 marks will be given by the guide or supervisor. The topic of the thesis shall be approved by the research committee constituted by the Head of the department.

Internship (Professional Training): On the basis of Daily Diary preparation, regularity, teaching quality, sincerity, class control and job execution (Report given by concern institute or school principal/Head will be taken into consideration) internal Marks will be awarded by the H.O.D. Every student has to serve honorary in the institution/ School/fitness centers allotted by the department. He has to report regularly & serve for the period of one month.

Physical Fitness Test: In every semester following Modified physical Test is to be practiced and organised by the department as a regular feature. It has to be evaluated by the internal & external examiner appointed by the University as per the norms/scores prepared by the department.

R. M.P.Ed. 6. Semesters:

An academic year is divided into two semesters. Each semester will consist of 15-17 weeks of academic work equivalent to 90 actual teaching days. The odd semester may be scheduled from May/June to November/December and even semester from November / December to May/June. The Department/institution shall work for a minimum of 36 working hours in a week (five or six days a week).

R. M.P.Ed. 7. Working days:

There shall be at least 180 working days per year exclusive of admission and examination processes etc.

R. M.P.Ed. 8. Credits:

The term 'Credit' refers to a unit by which the programme is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or one and half / two hours of practical work/field work per week. The term 'Credit' refers to the weight given to a course, usually in relation to the instructional hours assigned to it. The total minimum credits, required for completing M.P.Ed. programme is 90 credits and for each semester 20 credits.

Provision of Bonus Credits Maximum 06 Credits in each Semester

Sr. No.	Special Credits forte Extra Co-curricular Activities	Credit
1.	a) Sports Achievement at State level Competition (Medal Winner) Sports b)	1
	b) Achievement National level Competition (Medal Winner) Sports	2
	c) Participation International level Competition	4
2.	Inter Uni. Participation (Any one game)	2
3.	Inter College Participation (min. two games)	1
4.	National Cadet Corps / National Service Scheme	2
5.	Blood donation / Cleanliness drive / Community services	2
6.	Mountaineering – Basic Camp, Advance Camp / Adventure Activities	2
7.	News Reporting / Article Writing / book writing / progress report writing	1

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

R. M.P.Ed. 9. Evaluation:

The performance of a student in each course is evaluated in terms of percentage of marks with a provision for conversion to grade point. 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;

One Test	15 Marks
Assignments / Lab Practical	10 Marks
Attendance	5 Marks
Total	30 Marks

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

R. M.P.Ed 10. Grading:

Once the marks of the CIA (Continues Internal Assessment) and SEA (Semester End Assessment) for each of the courses are available, both (CIA and SEA) will be added. The marks thus obtained for each of the courses will then be graded as per details provided in R. M.P.Ed. 12 from the first semester onwards the average performance within any semester from the first semester is indicated by Semester Grade Point Average (SGPA) while continuous performance (including the performance of the previous semesters also) starting from the first semester is indicated by Cumulative Grade Point Average (CGPA). These two are calculated by the following formula:

$$???? = \frac{\sum_{??} ?_? ?_?}{\sum_{??} ?_?}$$

$$CGPA = \frac{\sum_{i=1}^n C_i G_i}{n}$$

Where C_i is the Credit earned for the course in any semester; G_i is the Grade point obtained by the student for the course and n number of courses obtained in that semester; is SGPA of semester j and N number of semester. Thus CGPA is average of SGPA of all the semesters starting from the first semester to the current semester.

R. M.P.Ed. 11. Classification of Final Results:

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

R. M.P.Ed.12. Letter Grades and Grade Points:

- 1) Two methods-relative grading or absolute grading- have been in vogue for awarding grades in a course. The relative grading is based on the distribution (usually normal distribution) of marks obtained by all the students in the course and the grades are awarded based on a cut-off mark or percentile. Under the absolute grading, the marks are converted to grades based on pre-determined class intervals. To implement the following grading system, the colleges and universities can use any one of the above methods.
- 2) The grades for each course would be decided on the basis of the percentage marks obtained at the end-semester external and internal examinations as per following table:

Percentage	Grade Point	Latter Grade	Description	Classification of final result
85 & Above	8.5-10.0	O	Outstanding	First class with Distinction
70-84.99	7.0-8.49	A+	Excellent	
60-69.99	6.0-6.99	A	Very Good	First Class
55-59.99	5.5-5.99	B+	Good	Higher Second Class
50-54.99	5.0-5.49	B	Above Average	Second Class
40-49.99	4.0-4.99	C	Average	Pass Class
Below 40	0.0	F	Fail/ Dropped	Dropped
	0	AB	Absent	

R. M.P.Ed.13. Grade Point Calculation:

Calculation of Semester **Grade Point Average (SGPA)** and **Credit Grade Point (CGP)** and declaration of class for M. P. Ed. Programme.

The credit grade points are to be calculated on the following basis:

$$CGP = \frac{\sum_{i=1}^n C_i G_i}{\sum_{i=1}^n C_i}$$

Example - I

Marks obtained by Student in course MPCC101 = 65/100
 Percentage of marks = 65 %
 Grade from the conversion table is = A
 Grade Point = 6.0 + 5 (0.99/9.99)

$$= 6.0 + 5 \times 0.1$$

$$= 6.0 + 0.5$$

$$= 6.5$$

The Course Credits = 03

$$\text{Credits Grade Point (CGP)} = 6.5 \times 03 = 19.5$$

The semester grade point average (SGPA) will be calculated as a weighted average of all the grade point of the semester courses. That is Semester grade point average (SGPA) = (sum of grade points of all eight courses of the semester) / total credit of the semester as per example given below:

SEMESTER-1

Courses Code.	Credit	Marks out of 100 (%)	Grade	Grade Point	Credit Grade point
MPCC-101	3	65	A	6.5	19.5
MPCC-102	3	60	A	6	18
MPCC-103	3	62	A	6.2	18.6
MPEC-101/ MPEC-102	3	57	B+	5.7	17.1
MPPC-101	3	55	B+	5.5	16.5
MPPC-102	3	72	A+	7.2	21.6
MPPC-103	3	66	A	6.6	19.8
MPPC-104	3	72	A+	7.2	21.6
	24				152.7

Examples: Conversion of marks into grade points

$$\text{MPCC-101 } 65 = 60 + 5 = 6.0 + 5 \times (0.99 / 9.99) = 6.0 + 5 \times 0.1 = 6.0 + 0.5 = 6.5$$

$$\text{MPCC-102 } 60 = 6.0$$

$$\text{MPCC-103 } 62 = 60 + 2 = 6.0 + 2 \times (0.99 / 9.99) = 6.0 + 2 \times 0.1 = 6.0 + 0.2 = 6.2$$

$$\text{MPEC-101/MPEC-102 } 57 = 55 + 2 = 5.5 + 2 \times (0.49 / 4.99) = 5.5 + 2 \times 0.1 = 5.5 + 0.2 = 5.7$$

$$\text{MPPC-101 } 55 = 5.5$$

$$\text{MPPC-102 } 72 = 70 + 2 = 7.0 + 2 \times (1.49 / 14.99) = 7.0 + 2 \times 0.1 = 7.0 + 0.2 = 7.2$$

$$\text{MPPC-103 } 66 = 60 + 6 = 6.0 + 6 \times (0.99 / 9.99) = 6.0 + 6 \times 0.1 = 6.0 + 0.6 = 6.6$$

$$\text{MPPC - 104 } 72 = 70 + 2 = 7.0 + 2 \times (1.49 / 14.99) = 7.0 + 2 \times 0.1 = 7.0 + 0.2 = 7.2$$

$$\text{SEMESTER GRADE POINT AVERAGE (SGPA)} = \text{Total Credit Grade Points} \\ = 152.7 / 24 = 6.3625$$

$$\text{SGPA Sem. I} = 6.3625$$

At the end of Semester-1

$$\text{Total SGPA} = 6.3625$$

$$\text{Cumulative Grade Point Average (CGPA)} = 6.3625 / 1 = 6.3625$$

$$\text{CGPA} = 6.66875, \text{Grade} = \text{A}, \text{Class} = \text{First Class}$$

SEMESTER-2

Courses Code.	Credit	Marks out of 100 (%)	Grade	Grade Point	Credit Grade point
MPCC-201	3	76	A+	7.6	22.8
MPCC-202	3	64	A	6.4	19.2
MPCC-203	3	59	B+	5.9	17.7
MPEC-201/ MPEC-202	3	80	A+	8	24
MPPC-201	3	49	C	4.9	14.7
MPPC-202	3	64	A	6.4	19.2
MPPC-203	3	55	B+	5.5	16.5
MPPC-204	3	72	A+	7.2	21.6
	24				155.7

SGPA Sem. II = 6.4875

At the end of Semester-2

Total SGPA for two Semesters = 12.85

Cumulative Grade Point Average (CGPA) = $12.85/2 = 6.425$

CGPA = 6.66875, Grade = A, Class = First Class

SEMESTER-3

Courses Code.	Credit	Marks out of 100 (%)	Grade	Grade Point	Credit Grade point
MPCC-301	3	64	A	6.4	19.2
MPCC-302	3	64	A	6.4	19.2
MPCC-303	3	59	B+	5.9	17.7
MPEC-301/ MPEC-302	3	81	A+	8.1	24.3
MPPC-301	3	49	C	4.9	14.7
MPPC-302	3	64	A	6.4	19.2
MPPC-303	3	68	A	6.8	20.4
MPPC-304	3	75	A+	7.5	22.5
	24				157.2

SGPA Sem. III = 6.55

At the end of Semester-3

Total SGPA for three Semesters = 19.4

Cumulative Grade Point Average (CGPA) = $19.4/3 = 6.466667$

CGPA = 6.66875, Grade = A, Class = First Class

SEMESTER-4

Courses Code.	Credit	Marks out of 100 (%)	Grade	Grade Point	Credit Grade point
MPCC-401	3	83	A+	8.3	24.9
MPCC-402	3	76	A+	7.6	22.8
MPCC-403	3	59	B+	5.9	17.7
MPEC-401/ MPEC-402	3	81	A+	8.1	24.3
MPPC-401	3	49	C	4.9	14.7
MPPC-402	3	78	A+	7.8	23.4
MPPC-403	3	81	A+	8.1	24.3
MPPC-404	3	75	A+	7.5	22.5
	24				174.6

SGPA Sem. IV = 7.275

At the end of Semester-4

Total SGPA for all the four semesters = 26.675

Cumulative Grade Point Average (CGPA) = $26.675 / 4 = 6.66875$

CGPA = 6.66875, Grade = A, Class = First Class

Note:

- 1) SGPA is calculated only if the candidate passes in all the courses i.e. get minimum C grade in all the courses.
- 2) CGPA is calculated only when the candidate passes in all the courses of all the previous and current semesters.
- 3) The cumulative grade point average will be calculated as the average of the SGPA of all the semesters continuously, as shown above.
- 4) For the award of the class, CGPA shall be calculated on the basis of:

- (a) Marks of each Semester End Assessment And
- (b) Marks of each Semester Continuous Internal Assessment for each course. The final Class for M.P.Ed Degree shall be awarded on the basis of last CGPA (grade) from one to four semester examinations.

R. M.P.Ed.14. 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.

R. M.P.Ed.15. Revision of Syllabi:

- 1) Syllabi of every course should be revised according to the NCTE.
- 2) Revised Syllabi of each semester should be implemented in a sequential way.
- 3) 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.
- 4) 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.
- 5) During every revision, up to twenty percent of the syllabi of each course should be changed so as to ensure the appearance of the students who have studied the old (unrevised) syllabi without any difficulties in the examinations of revised syllabi.
- 6) In case, the syllabus of any course is carried forward without any revision, it shall also be counted as revised in the revised syllabi.

SUBJECTS, CREDIT SYSTEM & SCHEME OF EXAMINATION**Semester-I**

Part A : Theoretical Course(400 Marks)						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
MPCC-101	Research Process & Statistics in Physical Education & Sports Sciences	3	3	30	70	100
MPCC 102	Physiology of Exercise	3	3	30	70	100
MPCC-103	Tests, Measurement and Evaluation in Physical Education	3	3	30	70	100
Elective Course (Anyone)						
MPEC-101	Yogic Sciences	3	3	30	70	100
MPEC-102	Sports Technology					
Part-B Practical Course(400 Marks)						
MPPC-101	Games Specialization –I (Performance of Any Two Events/ Apparatus of each game & Five Lessons of Teaching, Coaching & Officiating of each game (4 Internal & 1 External) 1.Track and Field: Running, Walking , Hurdle & Relay Events * 2. Gymnastics/ Swimming (*Any one)	6	3	30	70	100
MPPC-102	Laboratory Practical Sports Psychology, Physiology of Exercise, Sports Biomechanics and Kinesiology (Two practical for each subject)	6	3	30	70	100
MPPC-103	Sports and Games -I 1.Yoga(Performance of Asanas, Kriyas, Bandhas & Pranayama) *2. (Any one activity of Indigenous/ Aerobics/Self Defence Technique-Martial Arts, Taekwondo/ Karate/ Wushu (Any one activity + Yoga)	6	3	30	70	100
MPPC-104	Physical Fitness Test(NPFP 'A')	6	3	30	70	100
Total		36	24	240	560	800

Note: Total number of hours required to earn 3 credits for each theory course are 45-51 hours per semester whereas 90-102 hours for each practicum course.

Semester-II

Part A : Theoretical Course(400 Marks)						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
MPCC-201	Professional Preparation and Curriculum Designs in Physical Education	3	3	30	70	100
MPCC 202	Sports Biomechanics & Kinesiology	3	3	30	70	100
MPCC-203	Athletic Care and Rehabilitation	3	3	30	70	100
Elective Course (Anyone)						
MPEC-201	Sports Journalism and Mass Media	3	3	30	70	100
MPEC-202	Sports Management					
Part-B Practical Course(400 Marks)						
MPPC-201	Games Specialization – II (Performance of Any Two Events/ Apparatus of each game & Five Lessons of Teaching, Coaching & Officiating of each game 1.Track and Field: Jumping events *2. Gymnastics/ Swimming (*Any one)	6	3	30	70	100
MPPC-202	Sports and Games -II (Any Two games Individual Skill, Game Situation, Officiating, Lead-Up games) Cricket/Volleyball/Basketball/ Football/Handball/ Hockey/ Netball	6	3	30	70	100
MPPC-203	Adventure or leadership Camp/Tour/ training for internal marks & Seminar (4 Internal & 1 External) (Topics on sports, yoga, wellness, health & fitness their research findings, survey of literature, development, historical or current issues.	6	3	30	70	100
MPPC-204	Physical Fitness Test(NPFP 'B')	6	3	30	70	100
Total		36	24	240	560	800

Note: Total number of hours required to earn 3 credits for each theory course are 45-51 hours per semester whereas 90-102 hours for each practicum course.

Semester-III

Part A : Theoretical Course(400 Marks)						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
MPCC-301	Scientific Principles of Sports Training	3	3	30	70	100
MPCC 302	Sports Medicine	3	3	30	70	100
MPCC-303	Health Education and Sports Nutrition	3	3	30	70	100
Elective Course (Anyone)						
MPEC-301	Sports Engineering	3	3	30	70	100
MPEC-302	Physical Fitness and Wellness					
Part-B Practical Course(400 Marks)						
MPPC-301	Games Specialization - III (Performance of Any Two Events/Apparatus of each game & Five Lessons of Teaching, Coaching & Officiating of each game 1.Track and Field: Throwing Events *2. Gymnastics /Swimming (*Any one)	6	3	30	70	100
MPPC-302	Sports and Games - III (Any Two games Individual Skill, Game Situation, Officiating, Lead-Up games) Kabaddi/Kho-Kho/ Boxing/ Judo/Wrestling/ Baseball / Softball	6	3	30	70	100
MPPC-303	Internship(Internal) & Project	6	3	30	70	100
MPPC-304	Physical Fitness Test(Canadian)	6	3	30	70	100
Total		36	24	240	560	800

Note: Total number of hours required to earn 3 credits for each theory course are 45-51 hours per semester whereas 90-102 hours for each practicum course.

Semester-IV

Part A : Theoretical Course(400 Marks)						
Course Code	Title of the Papers	Total Hours	Credit	Internal Marks	External Marks	Total Marks
Core Course						
MPCC-401	Information & Communication Technology (ICT) in Physical Education	3	3	30	70	100
MPCC 402	Sports Psychology	3	3	30	70	100
MPCC-403	Sports Sociology	3	3	30	70	100
Elective Course (Anyone)						
MPEC-401	Adapted Physical Education	3	3	30	70	100
MPEC-402	Dissertation					
Part-B Practical Course(400 Marks)						
MPPC-401	Games Specialization - IV (Performance of Any Two Events/Apparatus of each game & Five Lessons of Teaching, Coaching & Officiating of each game 1.Track and Field: Heptathlon & Decathlon *2. Gymnastics / Swimming (*Any one)	6	3	30	70	100
MPPC-402	Sports and Games - IV (Any Two games Individual Skill, Game Situation, Officiating, Lead-Up games) Badminton/ T.T/ Tennis/ Squash/ Shooting/ Archery/ Fencing	6	3	30	70	100
MPPC-403	Classroom Teaching lessons on Theory Subjects(Topics) of Graduation Level (4 Internal & 1 External)	6	3	30	70	100
MPPC-404	Physical Fitness Test(Cooper)	6	3	30	70	100
Total		36	24	240	560	800
		144	96	960	2240	3200

Note: Total number of hours required to earn 3 credits for each theory course are 45-51 hours per semester whereas 90-102 hours for each practicum course.

**Semester I
Theory Courses**

MPCC-101 RESEARCH AND STATISTICS IN PHYSICAL EDUCATION & SPORTS

Unit I- Introduction:

Meaning of Research, Need and Importance and its scope in Physical Education, Type of Research, Survey of Related Literature: Need to Library Search & Sources, Formulation and Development of Research Problem: Location of Research Problem, Criterion in Selecting the Research problem, Hypothesis.

Unit II- Methods of Research:

Historical Research: Scope of Historical Research in Physical Education, Historical evidence, Validity of Historical data. Survey Studies: Place of Survey Research in Physical education. Tools of Survey Research, Questionnaire and interviews. Case Studies: Definition of case Studies Importance of case studies, Characteristics of case Studies. Data Collection in case studies, Experimental Research: Meaning, Scope and nature, Control of Experimental Factors, Experimental Designs.

Unit III-Research Proposal and Report:

Characterization of Thesis/Dissertation, Front Materials, Body of Thesis-Back Materials, Research Proposal, Writing Abstract and Full Paper for Presenting in Conference and to Publish in Journals, Mechanics of Writing Research Report, Footnote and Bibliography Writing.

Unit IV- Statistics Introduction:

Definition , its uses in Physical Education & Sports Research. Central tendency: Mean (AM & HM), Median. Dispersion: Standard Deviation and Coefficient of Variation, Skewness, Kurtosis, Bivariate Data. Correlation: Product moment correlation coefficient and rank correlation coefficient .

Unit V- Inferential Statistics:

Elementary idea of probability, random variable, Binomial and Normal distribution. Sampling: Random and stratified sampling. Type I and Type II error. Testing various Hypothesis with the help of Z, χ^2 , t and F Sampling distributions.

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.
 Garret, Harry E. and Goodworth R.S(1958) Statistics in Psychology and Dolucation, Bombay: Allied Pacific Private Ltd.
 Guilford, J.P: Fundamental Statistics in Psychology Education(1956) New York: Megraw Hill Book Co. Inc.
 Hubbard W. Allred(1979) Research Methods in Health Physical Education and recreation, 3rd Revised Edn. Washnigton : D.C.: Americas Association of Health Physical Education and Recreation.
 Kamlesh,M.L(1999)Research Methodology in physical education & sports, New Delhi, Metropolitan,
 Moorthy, A.M(2010) Research Methods in Physical Education, New Delhi, Friends publication.
 Moses A.K(1995) Thesis writing Format, Chennai,Poompugar Pathippagam.
 Rai, P. N(2001)Anusandhan Parichaya, Agra: Lakshmi Narayan Agarwal,

**Semester I
Theory Courses**

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

UNIT V – Climatic conditions and sports performance and ergogenic aids

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

Note: Laboratory Practicals 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**

MPCC-103 TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

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: Practicals 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 Publication.

**Semester I
Theory Courses**

MPEC-101 Yogic Sciences (Elective)

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 – Kapalapathi- 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: 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)
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.
Patanjal Yogasutra Bhashya (Marathi Edition) Amravati: Hanuman Vyayam Prasarak Mandal
Swami Kuvalayanda, (1998), Asanas. Lonavala: Kaivalyadhama.
Swami Satyananada Sarasvati. (1989), Asana Pranayama Mudra Bandha. Munger: Bihar School of Yoga.
Swami Satyananda Sarasvathi. (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: Kaivalyadhama.

**Semester I
Theory Courses**

MPEC-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, closedcell and open-cell foams, Neoprene, Foam. Smart Materials – Shape Memory Alloy (SMA), Thermo chromic film, High-density modelling foam.

UNIT III – Surfaces of Playfields

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

UNIT IV – Modern equipment

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

UNIT V – Training Gadgets

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

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" UK: Butterworth Heiremann.
- Finn, R.A. and Trojan P.K. (1999) "Engineering Materials and their Applications" UK: Jaico Publisher.
- John Mongilo, (2001), "Nano Technology 101 "New York: Green wood publishing group.
- Kochar, S.K. (1982) Methods and Techniques of Teaching (New Delhi, Jullandhar, Sterling Publishers Pvt. Ltd.)
- Kozman, Cassidy and Jackson. (1952) Methods in Physical Education (W.B. Saunders Company, Philadelphia and London)
- Walia, J.S. (1999) Principles and Methods of Education (Paul Publishers, Jullandhar)

Semester II Theory Courses

MPCC-201 PROFESSIONAL PREPARATION & CURRICULUM DESIGN IN PHYSICAL EDUCATION

UNIT I- Features of Indian Democracy with regards to Contribution of Physical Education & sports. Historical review of Professional preparations in India. Role of the Government & non-official agencies in Accreditation / Certification, preparation and in improving professional preparation. Aim & purposes in professional Preparation, Basic principles of curriculum construction, Organization in general education, Preparation of General Education, allied and foundational subject.

UNIT II- Physical Education Graduate & Post-graduate level Professional preparation Areas, Purposes, admissions, Curriculum, Laboratory experience, Field Experiences, Teaching Practice, area of specialization and concentration on core areas, Research requirement, Methods of instruction, Professional competencies, facilities and special resources for Library, Laboratory, Staff placement and follow-up.

UNIT III- Importance of Curriculum Development, factors affecting curriculum, changing needs of student, National and professional policies. The role of teacher in curriculum Development. Principles of planning Professional preparation, Evaluation and follow-up. Selecting material for instruction-Characteristics of activities in Physical Education, Cultural influence in the in the choice of activities and flexibility of programme material.

UNIT IV- Selecting methods of teaching-Grouping of students for instruction, Lectures, Projects activities, demonstration, block of period, total time allotment for a given activity, teaching aids, conditioning special gadgets to concentrate on development of particular skills, bring up pre-requisites for learning a given skill or activity, provision for individual differences. Development programme suitability of activities for different age groups and sexes, for different levels of education-Kindergarten elementary school, middle school, 10 + 2 school, college and university, special institution (Technical school, orphan hostel & for challenged people) special days and national days etc.

UNIT V- Co-education in Physical Education - Integrating the programmes for boys and girls, activities suitable for co-education needs, level at which co-education is desirable, special provision for development of girls programme. Committee recommendation - NCTE, NCERT, CBSE, UGC recommendations on curriculum for school and colleges curriculum followed in colleges of physical education CPed,DPed,BPE,B.Sc, BPed,MPE,MPed and M. Phil.

REFERENCES:

- 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
- Gattu, J. Rryant,(1971) Career Potentials Physical Activity. New Jersey: Englewood Chiffs, Prentice Hall Inc.
- Jrwin,W.Lestia(1984)Curriculum in Health & Physical Edu, St.Louis:The C.V.Mosby Company.
- Pyke, Frank,S(1980) Towards better coaching. Australian Govt. Publishing Service Canberra.
- Willgoose, E. Carl(1982) The curriculum in Physical Education, Edition 3,New Jersey : Englewood Cliffs, Prentice Hall Inc.

**Semester II
Theory Courses**

MPCC-202 SPORTS BIOMECHANICS 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. Principals related to the law of Inertia, Law of acceleration, and law of counter force. Meaning and definition of force- Sources of force -Force components .Force applied at an angle - pressure -friction -Buoyancy, Spin - Centripetal force - Centrifugal force.

UNIT IV – Projectile and Lever

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

Note: Laboratory Practicals be designed and arranged internally.

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 Jersery: Prentice hall.
- Thomas. (2001). Manual of structural Kinesiology, New York: Me Graw Hill.
- Uppal A.K. Lawrence Mamta MP (2004) Kinesiology. Delhi, Friends Publication .
- Uppal, A K. (2004), Kinesiology in Physical Education and Exercise Science, Delhi, Friends publications.
- Williams M (1982) Biomechanics of Human Motion, Philadelphia; Saunders Co.

**Semester II
Theory Courses**

MPCC-203 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 II
Theory Courses**

MPEC-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.
- 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. 43

**Semester II
Theory Courses**

MPEC-202 SPORTS MANAGEMENT (Elective)

UNIT I- Management:

Meaning and Functions, The skills of management, the universal nature of the management process, Management and Administration, Principles and Theories of Management.

UNIT II- Organisation:

Classical Principles, Bureaucracy; Bureaucracy in Democracy and in sports organizations. Open systems perspectives. The constitution of a national sports organization, office holders of an organization and their functional meetings.

UNIT III- Human resource management:

Definition & Aspect of HRM, Job analysis and its process. Human resource planning, Recruitments, Manpower Planning, Personal Management and its principles, Appraisals & Public Relation in physical education.

UNIT IV- Management of performance:

Evaluation and its techniques in physical education. Sports competition and its system, Training structure & performance. Injury management, Ethics of sports.

UNIT V- Management of finance, Facilities and material:

Financial administration in sports and physical education, Sources of funds in sports. Budgeting in sports and games, purpose and principles of budgeting.

Material Management: Improvisation and Standardization of Sports equipments and materials. Scientific purchasing, Storekeeping, inventory control and value analysis.

Facility (outdoor and indoor) Planning, Construction and maintenance of sports facilities.

REFERENCE:

Bucher Carles, A. (1987) Administration of Physical Education and Athletic programs. London, The C.V. Mosby Co.

Chelladurai P. (1985) Sports Management Macro perspective. Canada Sports Dynamics

Earle F. Zeigler & Gary W. Bowie(1993): Management competency Development in sports and physical education Philadelphia: W. Leo and Febiger.

heph Bucher and Earnest Koerigeberg(1968): Scientific Inventory Management . New Delhi: Prentice Hall of India Pvt. Ltd.,

Morson James G and Jimpaul (1988) Modern Sports Administration. Englewood Cliffs, New Jersey: Prentice Hall, Inc.

Scholar Rondoll S and Nicholas. J(1983) Personal Management. New York, West Publishing company.

Vanderwag Harold. J(1984) Sports Management (New York: Mac Millon publishing company.

**Semester III
Theory Courses**

MPCC-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 Hall Inc.
- Cart, E. Klafs & Daniel, D. Arnheim (1999) Modern Principles of Athletic Training St. Louis C. V. Mosphe 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
- Yograj Thani (2003), Sports Training, Delhi : Sports Publications

**Semester III
Theory Courses**

MPCC-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.

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 injuries.

Practicals: Lab. Practicals and visit to Physiotherapy Centre to observe treatment procedure of sports injuries; data collection of sports injury incidences 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 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 III
Theory Courses**

MPCC-303 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- Sports Nutrition

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- Weight Control 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:

- Boyd-Eaton S. et al (1989) The Stone Age Health Programme: Diet and Exercise as Nature Intended. Angus and Robertson.
- Bucher, Charles A. "Administration of Health and Physical Education Programme".
- Delbert, Oberteuffer, et. al." The School Health Education".
- Ghosh, B.N. "Treaties of Hygiene and Public Health".
- Hanlon, John J. "Principles of Public Health Administration" 2003.
- Moss 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.
- Terras S. (1994) Stress, How Your Diet can Help: The Practical Guide to Positive Health Using Diet, Vitamins, Minerals, Herbs and Amino Acids, Thorons.
- Turner, C.E. "The School Health and Health Education".

**Semester III
Theory Courses**

MPEC-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 movement, torsion, energy method to find displacement of structure, strain energy. Biomechanics of daily and common activities –Gait, Posture, Body levers, ergonomics, Mechanical principles in movements such as lifting, walking, running, throwing, jumping, pulling, pushing etc.

UNIT- III Sports Dynamics

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

UNIT- IV Building and Maintenance:

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

Building process:- design phase (including brief documentation), construction phase functional (occupational) life, Re-evaluation, 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:

- Colin White, Projectile Dynamics in Sport: Principles and Applications
 Eric C. et al., Editor Sports Facility Operations Management (Routledge, 2010)
 Franz K. F. et. al., Editor The Impact of Technology on Sports II (CRC Press, 2007)
 Franz K. F. et. al., Editor, Routledge Handbook of Sports Technology and Engineering (Routledge, 2013)
 Helge N., Sports Aerodynamics (Springer Science & Business Media, 2009)
 Jenkins M., Editor Materials in Sports Equipment, Volume I (Elsevier, 2003)
 Steve Hake, Editor, The Engineering of Sport (CRC Press, 1996)
 Youlin Hong, Editor Routledge Handbook of Ergonomics in Sport and Exercise (Routledge, 2013)

**Semester III
Theory Courses**

MPEC-302 PHYSICAL FITNESS AND WELLNESS (Elective)

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.
 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
 Warner W.K. Oeger & Sharon A.Hoeger, Fitness and Wellness, Morton Publishing Company, 1990.

**Semester IV
Theory Courses**

**MPCC-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**

MPCC-402 SPORTS PSYCHOLOGY

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 & Mental State

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. 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 - Psychological aspects of Competition:

Defining competition, determinants of competitive behavior, psychological characteristics of pre-competition, during competition and post competition. Selected psycho regulative techniques technique for relaxation and activation. Psychological aspects of long term and short term preparation for competition, Psychological care of injuries, sports person, responses to injuries, prevention and coping techniques.

UNIT V - Psycho-Social Facilitation:

Presence of others, co action effect and audience effect in sports. Factors mediating social facilitations. **Volitional regulation actions in sports:** Meaning, Characteristics and Factors affecting volitional regulated behavior. Development of volitional qualities.

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.
- 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 IV
Theory Courses**

MPCC-403 SPORT SOCIOLOGY

UNIT I- Introduction:

Meaning, Nature, Scope and Method of Sports Sociology, Sports as a social phenomenon, Element of culture

UNIT II- Sociological Analysis of Sports:

Sociological description (Concepts and classification), sociological discovery (Proposition and procedures), sociological explanation (theories and paradigms)

UNIT III- Sport Group and Sport Organization:

Group: Definition and Meaning, Group Size, Groups on Composition, Group Cohesion, Group Interaction, Group Dynamics.

Sports and socializing Institutions -Role of family and educational system in sport, role of socialization, socialization via games & Sport.

Regulative Institutions of Society -Interaction between sports and (a) Economic system, (b) Politics and (c) Religion.

UNIT IV- Sport and Social Stratification:

Extent and effect of racial and ethnic, gender, age & socioeconomic stratifications on participation and achievement in sport. Democratization in Sport

Social Dimensions of Physical Activity -Appearance, sociality competitiveness and cooperation, anxiety, audience, aspiration level.

UNIT V- Trends and Issues concerning Sport in Society -

Current Problems in Sports and Future Directions - Sports Social Crisis Management.

Group leadership and Organization leadership- composition and structure, process and performance.

Sport and aggression, violence in sport, professional sport, women and children in sport.

REFERENCE:

Ball and Loy- Sport and Social Order.

Coakley J.J. - Sport in Society.

Cratty B.J.- Social Dimensions Physical Activity.

Edwards - Sociology of Sports.

Loy and Kenyon- Sport Culture and Society.

Loy, Mepherston & Kenyon- Sport and Social Systems.

**Semester IV
Theory Courses**

MPEC-401 ADAPTED PHYSICAL EDUCATION (Elective)

UNIT I- Introduction:

Meaning, Definitions, Aims, goals & objective
Need & importance of adapted Physical education
Historical review of adapted Physical education

UNIT II- Classification of Disability:

(a) Physical disabilities (b) Mental Retardation (c) Visual Impairment (d) Hearing Impairment
Their Causes, Characteristics and Functional Limitations.

UNIT III- Adapted Physical Education Programme:

Guiding principles for adapted physical education programme (AAPHERD Principle)
Physical Education program for disabled of Elementary school, Middle School, High School, College & University Level.

UNIT IV- Co-curricular Activities for disabled:

Outdoor, Rhythm and Dance activities.
Nature of Aquatic activity programme for Disabled: Importance of aquatics for the disabled,
Nature of aquatic activity programme based on types of various disabilities and Rehabilitative role and importance of aquatic activity.

UNIT V- Rehabilitations:

Aims and objectives of rehabilitations council of India
Meaning of functional and occupational rehabilitation.
Importance of Adapted programme in Rehabilitation and Functional Rehabilitation
Psychological Rehabilitation - Adjust mental, Environmental and Personality Development.
Government welfare Programme.

Note: Each student shall submit record of attending the clinic or centers observing the cases of disabled and their treatment procedure. (To be assessed internally)

REFERENCES :

- Anoop Jain, Adapted Physical Education, Sports Publication, Ashok Vihar delhi. 52
Arther G. Miller & James, Teaching Physical Activities to impaired youth, John Wilag & Sons Inc. Canada.
Arthur S. Daniels & Euilya, Adapted Physical Education, Harpet & Row Publisher - New York.
Auxter, Byler, Howtting, Adapted Physical Education and reactions. Morbey- St. Laus Mirrauri.
K. Park, Preventive & Social Medicine, Banaridas Bhanot Publishers Prem Nagar Jabalpur.
Ronald W. French, & Paul J. Special Physical Education. Charies E. Merrics Publishing Co. Edinburgh, Ohio.
Shekar KC, Adapted Physical Education (Khel Sahitya Kendra: New Delhi.)
Winnick JP, Adapted Physical Education and sport Human Kinetics USA, 2005

**Semester IV
Theory Courses**

MPEC-402 DISSERTATION (Elective)

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

**Semester I
Practicum Course**

MPPC- 101 GAMES SPECIALIZATION: TRACK & FIELD / GYMNASTICS/ SWIMMING.

Running, Walking, Hurdle & Relay Events

- Fundamental skills –
 - Use of Starting blocks- stance on the blocks.
 - Body position at the start, Hurdle & Relay Events- starting technique, change in body position during running, movements of the arms, stride length and frequency, position of torso while running/walking/ clearing hurdle/baton exchange and at finish.
- Advanced Skills/Correction of faults: various techniques of sprint start: Bullet start, standing start, Walking, Hurdle & Relay Events
- Active game practice

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

**Semester I
Practicum Course**

MPPC- 102 Laboratory Practical in Anthropometric Measurement, Sports Psychology, Physiology of Exercise, Biomechanics and Kinesiology (Two standardized tests practical from each subject)

**Semester I
Practicum Course**

MPPC- 103 SPORTS AND GAMES: YOGA & INDIGENOUS ACTIVITIES (Lezium, Dumb-Bell, Umbrella, Tipri, Wands, Hoops/Malkhambh) /**AEROBICS/SELF DEFENCE TECHNIQUE-Martial Arts, Taekwondo/Karate/ Wushu** (Yoga + Any one activity)

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

INDIGENIOUS & MASS DEMONSTRATION ACTIVITIES: The students of M.P.Ed – I Semester need to develop proficiency in taking teaching classes in indigenous activities and Mass demonstration 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 five lessons during the course of the first 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, the duration should slowly increase and all the parts of the lesson covered progressively. Students are expected to learn and organize mass drill in school Situation on following aspects:

- Apparatus/ Light apparatus Grip
- Attention with apparatus/ Light apparatus
- Stand - at - ease with apparatus/ light apparatus
- Exercise with verbal command, drum, whistle and music - Two count, Four count, Eight count and Sixteen count.
- Standing Exercise
- Jumping Exercise
- Moving Exercise
- Combination of above all

MALKHAMB: Table of Exercises on Malkhamb should be prepared internally for teaching.

General out-line of the contents of 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. Warming-up- General free hand exercises, specific work out using equipment. Fundamental skills, Lead up activities, General rules and their interpretations, Duties of officials, officiating in class competitions and Intramurals, Marking of the play area.

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.

Semester I
Practicum Course
MPPC-104 PHYSICAL FITNESS TEST:

National physical fitness proficiency Modified Test (NPPF 'A') is to be practiced and organised as per the norms/scores prepared by the department presented below.

Semester -I : National Physical Fitness Proficiency Test Modified Norms (Battery 'A')

S. No.	Events	Sex	Performance Scores					
			14 Marks	12 Marks	10 Marks	08 Marks	07 Marks	06 Marks
1.	100 M run (Sec.)	Men	Below 12.0	12.0-12.9	13.0-13.9	14.0-14.9	15.0-15.9	16.0 & Above
		Women	Below 14.0	14.0-14.9	15.0-15.9	16.0-16.9	17.0-17.9	18.0 & Above
2.	Long Jump (Mtr.)	Men	Above 5.25	5.25-4.74	4.75-4.24	4.25-3.74	3.75-3.26	3.25 & Below
		Women	Above 4.00	4.00-3.75	3.50-4.26	3.25-3.01	3.00-2.76	2.75 & Below
3.	Shot Put (Mtr.)	Men	Above 8.00	8.0-7.51	7.50-6.51	6.50-5.51	5.50-4.51	4.50 & Below
		Women	Above 7.00	7.0-6.51	6.50-5.51	5.50-4.51	4.50-3.51	3.50 & Below
4.	High Jump (Mtr.)	Men	Above 1.50	1.50-1.46	1.45-1.30	1.30-1.16	1.15-1.01	1.00 & Below
		Women	Above 1.26	1.25-1.06	1.05-0.96	0.95-0.86	0.85-0.76	0.75 & Below
5.	800 M run (Min.)	Men	Below 2:25	2:25-2:34	2:35-2:44	2:45-2:69	2:75-2:99	3:00 & Below
	200 M run (Min.)	Women	Below 30.0	30.0-32.4	32.5-34.9	35.0-37.4	37.5-39.9	40.0 & Above

Semester II
Practicum Course
MPPC- 201 GAMES SPECIALIZATION: TRACK & FIELD / GYMNASTICS/ SWIMMING.

Jumping Events: Long Jump, Triple Jump, High Jump, Pole Vault.

- Fundamental skills -
 - Body position at the start, Use of runway, Running, Take off & Landing- starting technique, change in body position during running, movements of the arms, stride length and frequency, position of torso.
- Advanced Skills/Correction of faults: various techniques of start, Running, Take off & Landing.
- Active game practice

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

Semester II
Practicum Course
MPPC-202 SPORTS AND GAMES: The Candidate has choice to select any two of the following games in 2nd Semester(Cricket/Volleyball/Basketball/ Football/Handball/ Hockey/ Netball)

Note: Course contents in game or sport should be chalked out internally considering advance level of students (Teaching & Officiating) and suitable to their age and gender. Practical skill test- any one of each.

Semester II
Practicum Course
MPPC-203 ADVENTURE or LEADERSHIP CAMP/TOUR/TRAINING & SEMINAR
ADVENTURE ACTIVITIES: Trekking, Wall climbing, River crossing, Mountaineering, etc
SEMINAR: Presentation on topics of sports, yoga, wellness, health & fitness their research findings, survey of literature, development, historical or current issues.

Semester II
Practicum Course
MPPC-204 PHYSICAL FITNESS TEST:

Modified National physical fitness proficiency Test (NPPF 'B') is to be practiced and organised as per the norms/scores prepared by the department presented below.

Semester -II : National Physical Fitness Proficiency Test Modified Norms (Battery 'B')

S. No.	Events	Sex	Performance Scores					
			14 Marks	12 Marks	10 Marks	08 Marks	07 Marks	06 Marks
1.	100 M run (Sec.)	Men	Below12.0	12.0-12.9	13.0-13.9	14.0-14.9	15.0-15.9	16.0 & Above
		Women	Below14.0	14.0-14.9	15.0-15.9	16.0-16.9	17.0-17.9	18.0 & Above
2.	Long Jump (Mtr.)	Men	Above 5.25	5.25-4.74	4.75-4.24	4.25-3.74	3.75-3.26	3.25 & Below
		Women	Above 4.00	4.00-3.75	3.50-4.26	3.25-3.01	3.00-2.76	2.75 & Below
3.	12 Min.Run /Walk (Mtr.)	Men	Above 2601	2600-2301	2300-2001	2000-1601	1600-1201	1200 & Below
		Women	Above 1701	1700-1501	1500-1301	1300-1101	1100-901	900 & Below
4.	Puss ups Dand Style (Nos)	Men	Above 35	35-30	29-25	24-15	15-06	05 & Below
		Women	Above 35	35-30	29-25	24-15	15-06	05 & Below
5.	Cricket Ball Throw (Mtr.)	Men	Above 65	35-56	55-46	45-36	35-26	25 & Below
		Women	Above 25	25-21	20-16	15-11	10-06	05 & Above

Semester III
Practicum Course
MPPC- 301 GAMES SPECIALIZATION: TRACK & FIELD /SWIMMING/ GYMNASTICS

Throwing Events: Shot put, Discus throw, Javelin throw, Hammer throw

- Fundamental skills -
 - Use of Throwing Arena/runway.
 - Body position at the start, Grip, rotation & release- preliminary swing, change in body position during running/rotating, movements of the arms, stride length and frequency, follow throw.
- Advanced Skills/Correction of faults: Various techniques of Start, Rotation/Carry, Release & Reverse.
- Active game practice

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

Semester III
Practicum Course

MPPC-302 SPORTS AND GAMES: The Candidate has choice to select any two of the following games in 3rd Semester. (**Kabaddi/Kho-Kho/ Boxing/ Judo/Wrestling/ Baseball/ Softball**)

Note: Course contents in game or sport should be chalked out internally considering advance level of students (Teaching & Officiating) and suitable to their age and gender. Practical skill test- any one of each.

Semester III
Practicum Course

MPPC-303 INTERNSHIP& PROJECT

INTERNSHIP: Every student has to serve honorary in the institution/ School/fitness centers.

Evaluated on the basis of Daily Diary preparation, regularity, teaching quality, sincerity, class control and job execution.

Criteria for evaluating Internship Programme:

- A Student will be required to join any school/organization in any one of the following areas:
 - Gym and Health Club management.
 - Aerobics/Mass Demonstration.
 - Training of Life guard for water sports.
 - Sports Management/Journalism.
 - Teaching Physical Education in Schools/Institutions/Centers.
- A student is required to bring a certificate on letter head of the Institute form the Head of the Organization., specifying that he/she has imparted instruction/training/teaching in that organization w.e.f.to..... and his/her work has been excellent/very good/good/satisfactory/poor (The administrator may tick any one of the five alternatives).

PROJECT: Informative model (working or simple, preparation of informative chart or flex board) related to Physical Education, sport, health, wellness, yoga & fitness to be prepared individually or in group.

**Semester III
Practicum Course
MPPC-304 PHYSICAL FITNESS TEST**

Modified Canadian fitness Test is to be practiced and organised as per the norms/scores prepared by the department presented below.

Canadian Fitness Test Marking Norms

S.No	Events	Sex	Performance Scores					
			70Marks	65Marks	60Marks	55Marks	50Marks	45Marks
1	Canadian Test (Sec.)	Men	28 & Below	29-34	35-39	40-44	45-49	50 & Above
		Women	34 & Below	35-39	40-44	45-49	50-54	55 & Above

**Semester IV
Practicum Course
MPPC- 401 GAMES SPECIALIZATION: TRACK & FIELD /SWIMMING/ GYMNASTICS**

Combined Events: Decathlon & Heptathlon

- Fundamental skills -
 - Decathlon & Heptathlon events.
 - Use of scoring system
- Advanced Skills/Correction of faults:
- Active game practice

TEACHING/COACHING/OFFICIATING LESSONS OF TRACK & FIELD/GYMNASTICS/SWIMMING:

The students of M.P.Ed -IV Semester need to develop proficiency in taking Teaching/ Coaching/ Officiating 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 five lessons during the course of the forth 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/ Coaching/ Officiating lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

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

Semester IV

Practicum Course

MPPC-402 SPORTS AND GAMES: The Candidate has choice to select any two of the following games in 4th Semester(**Badminton/ T.T/ Tennis/ Squash/ Shooting/ Archery/ Fencing**)

Note: Course contents in game or sport should be chalked out internally considering advance level of students (Teaching & Officiating) and suitable to their age and gender. Practical skill test- any one of each.

Semester IV

Practicum Course

MPPC-403 CLASS ROOM TEACHING (LESSONS ON THEORY SUBJECTS)

The students of M.P.Ed-IV Semester need to develop proficiency in taking teaching lessons as per selected subjects/Topics of BPed level. In view of this, the students shall be provided with selected or specialized subject 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 forth 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, the duration should slowly increase and all the parts of the lesson covered progressively.

Semester IV

Practicum Course

MPPC-304 PHYSICAL FITNESS TEST

Modified Copper fitness Test is to be practiced and organised as per the norms/scores prepared by the department presented below.

Semester - IV:Cooper Fitness Test Modified Marking Norms

S.No	Events	Sex	Performance Scores					
			70Marks	65 Marks	60 Marks	55 Marks	50 Marks	45Marks
1	12 Min run/ Walk (Mtr.)	Men	Above 2800	2800-2501	2500-2201	2200-1801	1800-1401	1400 & Below
	09 Min run/ Walk (Mtr.)	Women	Above 1800	1800-1601	1600-1401	1400-1201	1200-1001	1000 & Below