

  
**ANNAMALAI UNIVERSITY**

**DEPARTMENT OF PHYSICAL EDUCATION**

**M.P.Ed Degree Course**

**(Two Years)**

**Choice Based Credit System**

**REVISED REGULATIONS AND SYLLABUS**

**(for the students admitted from 2019 -2020 Onwards)**

**I. 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 Higher Secondary Schools (class XI and XII) as well as Assistant Professor/Directors/Sports Officers in Colleges/Universities and teacher Educators in College of Physical Education.

**II. Eligibility for Admission**

- (1) A candidate for admission to the Master of Physical Education (M.P.Ed) degree programme should have passed B.P.Ed degree examinations of this university and / from any other recognized university as equivalent thereto.
- (2) A candidate shall be eligible for admission to the Master of Physical Education degree course (M.P.Ed) if he / she have received a degree in 10+2+3 pattern.
- (3) They must have represented district / college and participated in the inter district / inter collegiate tournaments in any of the games and sports or track and field events.  
(The candidate has to represent in any one of the following games, such as, badminton, ball badminton, basketball, cricket, football, handball, hockey, kabaddi, kho-kho, tennis, volleyball and weight lifting or any track and field events).
- (4) The candidate should be medically fit and free from physical deformities. They should produce medical certificate before attending the tests.
- (5) Pregnant women are not permitted either for admission or to undergo the course. If violated, they will not be permitted to continue the course.
- (6) The candidates will be selected on the basis of merit following the reservation of seats as prescribed by the Government of Tamilnadu.
- (7) The age limit shall be as follows: OC – 27 years  
BC - 29 years  
MBC – SC/ST – 32 years

(Candidate should not have completed the age as on 1<sup>st</sup> July of the academic year)

**III. Admission Procedure**

Admission shall be made on merit on the basis of marks obtained in the entrance examination (Written test, Skill test, Interview and Percentage in Qualifying Examinations) or any other selection processes as per the policy of the State Government/ University.

Admission is based on the following tests:

- a. Qualifying examination (B.P.Ed) 40 marks

- b. Games and sports proficiency - 60 marks  
 c. Games and sports participation - 20 marks  
 d. Entrance written examination - 30 marks  
 objective -  
 type – multiple choices

Total 150 marks

**Note:** Marks obtained in qualifying degree shall be converted to a maximum of 40 marks. For example if a candidate secured 1900 marks out of 2400 marks, his / her marks for qualifying examinations is  $(1900/2400) \times 40 = 31.67$ .

**Guidelines Followed for Allotting Marks for Games/ Sports Participation Certificates  
 Norms for Sports Certificate**

Sl. No	Sports Achievement	Marks
1	Winning I, II, III place in National/ State/ All India Inter University Tournament	20
2	Winning I, II, III place in South Zone National/ South Zone Inter University Tournament	19
3	Representing South Zone/ All India Inter University Tournament	18
4	Winning I, II, III place in National Sub Jr./ Junior	17
5	Winning I, II, III place in Open Rural National	16
6	Representing State team Jr./ Sr. National	15
7	Winning I, II, III place in Senior State Championship	14
8	Winning I, II, III place in SDAT/ open state Championship	13
9	Winning I, II, III place in Sub Jr./ Junior state Championship	12
10	Representing District in Senior State Championship	11
11	Representing District team Jr. in State Championship	10
12	Winning I, II, III place in open Inter College Tournament	9
13	Winning I, II, III place in Inter Physical Education Tournament	8
14	Winning I, II, III place in Zone/ Inter Division Tournament	7
15	Representing Zone/ Inter Division Tournament	6

**IV. Course of Study**

**(1) Duration of the course**

The M.P.Ed is duration of two academic years, consisting of four semesters. The total working days shall be not less than 200 days in an academic year, each semester consists of not less than 100 days excluding examination days. Each working day shall consist of four hours of practical work (morning and evening two hours each) and three hours of theory in between.

**(2) The CBCS system**

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

**(3) 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 course of study shall consist of three parts i.e. Part – I – Theory, Part – II – Practicum and Part – III – Internship.

**(4) Course of Programme**

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

- Theory
- Core course
- Elective course
- Practicum
- Compulsory course (Track and Field)
- Dissertation
- Teaching/Coaching practices
- Internship

**Note:**

- (1) Part – I consists of fifteen (15) written papers along with a dissertation. Dissertation should be prepared under the guidance of a staff of the department, who shall be the advisor/supervisor. Dissertation is to be completed in the fourth semester and the last date for the submission of four copies (1 copy for the department library, 1 copy for the guide, 1 copy for evaluation and 1 to be retained by the candidate) of dissertations, will be 7 days before the last theory examination paper of fourth semester.
- (2) For the evaluation of dissertation, one external and one internal examiner shall value. Internal examiner should be the candidate’s advisor.
- (3) The student has to select any two different games as the specialization – I (second best) and specialization – II (first best) in I and II years respectively from the following games/sports and also track and field events is compulsory.

<b>GAMES OF SPECIALIZATION</b>			
1	Badminton	8	Kabaddi
2	Ball Badminton	9	Kho-kho
3	Basketball	10	Netball
4	Cricket	11	Tennis
5	Football	12	Volleyball
6	Handball	13	Weight lifting
7	Hockey		

**(5) Semester and Working days**

An academic year is divided in to two semesters. The total working days shall be not less than 200days in an academic year. Each semester consists of not less than 100 days excluding examination days.

Each working day shall consist of four hours of practical work (morning and evening two hours each) and three hours of theory in between.

**(6) Credit**

The term ‘Credit’ refers to a unit by which the programme is measured. It determines the number of hours of instruction required per week. One credit is equivalent to one hour of teaching 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.

**(7) Evaluation**

(a) The performance of the 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.

**(b) Internal Assessment:**

**1. Continuous Internal Assessment (CIA) (10 marks)**

Continuous Internal Assessment will be graded by the subject teachers. Two Continuous Internal Assessment test (CIA1, CIA2) will be conducted for each paper. Each test paper marks will be converted to 5 marks.

**2. Model Examinations (10 marks)**

Model examinations will be held at the end of each semester before the final semester examination covering all portions for 75 marks. Marks awarded in this examination will be converted to 10 marks. In case a student does not appear for an internal test or model examination due to participation in competition and due to genuine reasons, he may be permitted to appear for a special test.

**3. Attendance (5 marks)**

Regularity in attending classes will be graded as per the percentage of attendance.

Continuous Assessment	Internal	10 marks
Model Examination		10 marks
Attendance*		5 marks
Total		25 marks

\* 95% and above – 5 marks, 90 – 94% - 3 marks, 80 – 89% - 2 marks, 75 – 79% - 1 mark

(c) Attendance shall be taken as a component of continuous assessment, although the students should have minimum of 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 and on end-semester practical examination is 25:75. The evaluation of practical work, wherever applicable, will also be based on continuous internal assessment and on an end semester practical examination.

(d) The students with 75% attendance and above are permitted to appear for the University examinations. However, the Vice Chancellor may give a rebate / concession not exceeding 10% in attendance for exceptional cases only on Medical Grounds

(e) If a candidate fails in any paper in any semester he/she shall be permitted to continue the next semester, in which case he/she will reappear in the papers in which he had failed in the previous semesters along with all the papers of the current semester.

(f) If a candidate fails in practical and / specialization examination, he/she will be required to take the same at the time of the examination held for regular students in the subsequent years.

(g) In internship a student (teacher trainee) is undergoing supervised practical training. Internship/teaching/coaching practice includes teaching/coaching & observation in the schools of adjacent areas. The programme includes teaching indigenous activities, basic skills in sports and games giving exposure to teachers in the teaching - learning process.

(h) Students shall complete minimum of 10 teaching and 10 coaching lessons in 10 working days under the supervision of the assigned department physical education staff in various schools/institutions.

- (i) For the practical examination, there would be one external and one internal examiner who is the concerned staff handling the practical class.

**(8) Requirements for Passing**

- (a) No candidate shall be eligible for the award of the M.P.Ed degree unless he/she passed the written examinations (Part-I) and practical (Part-II).
- (b) To pass in an examination a student has to score a minimum of 50% marks in each theory paper in Part – I and Part – II (internal and external) separately.
- (c) To pass in practical internal examination, a student has to score a minimum of 50% marks.

**(9) Grading System**

- (a) The performance of the students in each paper will be evaluated in terms of percentage of marks with provision of converting into grade points.
- (b) The weighted average shall be calculated for each semester as follows:  
The product of marks assigned to each course by number of credits shall be added up. The sum of products (weighted score) will be divided by the total number of credits. For example:

**Table – I : Weighted Average Score**

Sl. No.	Subject Code	Paper Name	Max Marks	Marks Obtained	Credit	Weighted Score
1.	MPEC101	Test. Measurement and Evaluation in Physical Education	100	80	3	80x3
2.	MPEC102	Sports Psychology and Sociology	100	70	3	70x3
3.	MPEC402	Sports Management and curriculum design	100	70	3	70x3

The weighted average score obtained for the above three subject papers shall be summed up and divided by the number of credits. Thus:

$$\begin{aligned}
 &= \frac{(80 \times 3) + (70 \times 3) + (70 \times 3)}{3+3+3} \\
 &= \frac{240+210+210}{9} \\
 &= \frac{660}{9} \\
 &= 73.33
 \end{aligned}$$

Therefore, weighted average mark is 73.33 which is written the range of 70 – 79 i.e. B+ letter grade and graded as excellent (Table – II).

**(10) Grading of the Course**

- (a) A ten (10) point scale is used for the evaluation of the performance of the student to provide letter grade for each course and overall grade for the Master’s programme.
- (b) The total performance within a semester and the continuous performance from the second semester onwards will be indicated by a Grade Point Average (GPA). Cumulative Grade Point Average (CGPA) and respectively. Hence CGPA is the real indicator of one’s performance more than the class.

**Formula:**

$$\text{SGPA} = \frac{\sum_{n_i=j} C_i G_j}{\sum_{n_i=C_i}$$

$$\text{CGPA} = \frac{\sum_{n_i=j} \text{SGPA}_j}{N}$$

Where is  $C_i$  is the Credit earned for the course is 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; units 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.

### Programme Educational Objectives

1. M.P.Ed Teacher Education up to XII standard.
2. Getting advanced sports scientific knowledge.
3. Attaining knowledge in the field of Sports Psychology and sociology, yogic science, Test, Measurement and Evaluation, research process, bio-physiology like anatomy, physiology, exercise physiology, Trauma management, ICT etc.
4. Tournament organization and administration, event management etc.
5. Physical education curriculum development, supervision and field marking.

### M.P.Ed (MASTER OF PHYSICAL EDUCATION) SCHEME OF EXAMINATIONS

Semester - I					Max. Marks		
Part	Paper	Particulars	Hours	Credi	Int	Bxt	Total
<b>Part I</b>	19MPEC 101	Test, Measurement and Evaluation in Physical	4	4	25	75	100
	19MPEC 102	Sports Psychology and Sociology	4	4	25	75	100
	19MPEC 103	Education Technology in Physical Education	4	4	25	75	100
		Elective	4	4	25	75	100
<b>Part II (Practicum)</b>	19MPEP 104	<b>Game of Specialization</b>	6	4	100	-	100
	19MPEP 105	<b>Track &amp; Field Events- I [Practicum]</b> Sprint, Long Jump, Shot put & Discus	6	4	100	-	100
	19MPEP 106	<b>Practical I-</b> [Yogic Practices]- [Practicum] Suryanamaskar, Asanas, Pranayama, Mudras, Kriyas, Bandhas and Meditation.	3	2	50	-	50
	19MPEP 107	<b>Practical II - [Fitness Training and Aerobic ]-[Practicum]</b>  Conditioning Exercises (General & Specific) - 20 marks, Weight Training - 40 marks (Free Weights & Machine Weights), Medicine Ball Training and Stretching Exercises - 20 marks, Aerobics - 20 marks	6	4	100	-	100
<b>Part III (Internship)</b>	19MPEI 108	<b>Practical III [Internship] Classroom Teaching :</b> - 20marks Five lessons - Assignment & Seminar Classes <b>Field / Laboratory Work :</b> - 20 marks Test and Measurement Practical Record, Sports Psychology Lab <b>Participation :</b> - 10 marks Participation in Extramural and Intramural Tournaments	3	2	50	-	50
<b>TOTAL</b>			<b>40</b>	<b>32</b>	<b>500</b>	<b>300</b>	<b>800</b>

SEMESTER - II					Max. Marks		
Part	Paper	Particulars	Hours	Credi	Int	Ext	Total
<b>Part I</b>	19MPEC201	Sports Medicine, Athletic Care and Rehabilitation	4	4	25	75	100
	19MPEC 202	Scientific Principles of Sports Training	4	4	25	75	100
	19MPEC203	Information Communication and Technology in Physical Education	4	4	25	75	100
		Elective	4	4	25	75	100
<b>Part II (Practicum)</b>	19MPEP 204	<b>Game of Specialization - [Second Best]- [Practicum]</b>	3	2	50	-	50
	19MPEP 205	<b>Track &amp; Field Events-II [Practicum]</b> (Middle Distance, Long Distance, High Jump, Triple Jump and Javelin throw)	3	2	50	-	50
	19MPEP 206	<b>Practical I- [Indigenous Activities]&amp;[Computer Lab]- [Practicum]</b> Indigenous Activities- <b>50 marks</b> Computer Lab Participation : - <b>50 marks</b>	6	4	100	-	100
<b>Part III (Internship)</b>	19MPEI 207	<b>Coaching Practice - Game of Specialization - [Second Best]- [Internship]</b>  <i>School/ College/Institutional internship/ Teaching/ Coaching/ Practice and Officiating</i>	6	4	50	50	100
	19MPEI 208	<b>Coaching Practice - Track and Field Events[I &amp; II] - [Internship]</b>	6	4	50	50	100
		<b>TOTAL</b>	<b>40</b>	<b>32</b>	<b>400</b>	<b>400</b>	<b>800</b>



Semester - III					Max. Marks		
Part	Paper	Particulars	Hours	Credi	Int	Bxt	Total
<b>Part I</b>	19MPEC301	Research Process & Statistics in Physical Education	4	4	25	75	100
	19MPEC 302	Physiology of Exercise	4	4	25	75	100
	19MPEC 303	Health Education and Sports Nutrition	4	4	25	75	100
		Elective	4	4	25	75	100
<b>Part II (Practicum)</b>	19MPEP 304	<b>Game of Specialization - [First Best]- [Practicum]</b>	6	4	100	-	100
	19MPEP 305	<b>Track &amp; Field Events- III [Practicum]</b> (Hurdle Race, Relay Race, Hammer Throw, Pole vault)	6	4	100	-	100
	19MPEP 306	<b>Practical I- [Combat &amp; Adventure Sports]- [Practicum]</b> Silambam, Karate, Kayaking, Canoeing & Trekking	3	2	50	-	50
	19MPEP 307	<b>Practical II - [Fitness Training ]- [Practicum]</b> Circuit Training, Plyometric training, Fartlek Training, Super Circuit Training, SAQ Training, Swiss ball Training	6	4	100	-	100
<b>Part III (Internship)</b>	19MPEI 308	<b>Practical III [Internship] Classroom Teaching</b> : - 20 marks Five lessons - Assignment & Seminar Classes <b>Field / Laboratory Work</b> : - 20 marks <i>Physiology Lab, Sports Physiotherapy Lab Sports Training - Treadmill, Bicycle Ergometer, fitness testing, etc.,</i> <b>Participation</b> :- 10 marks <i>Educational Tour, Stadium Visit, Organizing Project Sports Meet</i>	3	2	50	-	50
		<b>TOTAL</b>	<b>40</b>	<b>32</b>	<b>500</b>	<b>300</b>	<b>800</b>

<b>SEMESTER - IV</b>					<b>Max. Marks</b>		
<b>Part</b>	<b>Paper</b>	<b>Particulars</b>	<b>Hours</b>	<b>Credi</b>	<b>Int</b>	<b>Ext</b>	<b>Total</b>
<b>Part I</b>	19MPEC401	Sports Biomechanics and Applied Kinesiology	4	4	25	75	100
	19MPEC 402	Sports Management and Curriculum Design	4	4	25	75	100
	19MPEC 403	Dissertation	4	4	25	75	100
		Elective	4	4	25	75	100
<b>Part II (Practicum)</b>	19MPEP 404	<b>Game of Specialization - [First Best]- [Practicum]</b>	3	2	50	-	50
	19MPEP 405	<b>Track &amp; Field Events-IV [Practicum] - 50 marks</b>  (Race walking and Combined events) Stretching Exercises and Rhythmic Activities - <b>50</b>	3	2	50	-	50
	19MPEP 406	<b>Practical I- [Kinesiology]/[Project Meet]- [Practicum]</b>  Biomechanics Lab	6	4	100	-	100
<b>Part III (Internship)</b>	19MPEI 407	<b>Coaching Practice - Game of Specialization - [First Best]-[Internship]</b>	6	4	50	50	100
	19MPEI 408	<b>Coaching Practice - Track and Field Events[III &amp; IV] - [Internship]</b>	6	4	50	50	100
		<b>TOTAL</b>	<b>40</b>	<b>32</b>	<b>400</b>	<b>400</b>	<b>800</b>

**SUMMARY OF PART WISE SCHEME OF EXAMINATION**

<b>Part</b>	<b>Section</b>	<b>%</b>	<b>Credits</b>	<b>Marks</b>
I	Theory	<b>50</b>	64	1600
II	Practicum	<b>50</b>	44	1100
III	Internship /Teaching Practice		20	500
	<b>Total</b>		<b>128</b>	<b>3200</b>

**PART I - THEORY**

<b>Core</b>	<b>Paper Code</b>	<b>Semester I</b>	<b>MARKS</b>
	19MPEC 101	Test, Measurement and Evaluation in Physical Education	<b>100</b>
	19MPEC 102	Sports Psychology and Sociology	<b>100</b>
	19MPEC 103	Education Technology in Physical Education	<b>100</b>
<b>Elective</b>	19YOGE 107	Yoga for Personality Development	<b>100</b>
<b>Core</b>	<b>Paper Code</b>	<b>Semester II</b>	
	19MPEC201	Sports Medicine, Athletic Care and Rehabilitation	<b>100</b>
	19MPEC 202	Scientific Principles of Sports Training	<b>100</b>
	19MPEC 203	Information Communication and Technology in Physical Education	<b>100</b>
<b>Value Added Course</b>		Value Added Course	<b>100</b>
<b>Core</b>	<b>Paper Code</b>	<b>Semester III</b>	
	19MPEC 301	Research Process & Statistics in Physical Education	<b>100</b>
	19MPEC 302	Physiology of Exercise	<b>100</b>
	19MPEC 303	Health Education and Sports Nutrition	<b>100</b>
<b>Elective</b>		Elective	<b>100</b>
<b>Core</b>	<b>Paper Code</b>	<b>Semester IV</b>	
	19MPEC 401	Sports Biomechanics and Applied Kinesiology	<b>100</b>
	19MPEC 402	Sports Management and Curriculum Design	<b>100</b>
	19MPEC 403	Dissertation	<b>100</b>
<b>Value Added Course</b>		Value Added Course	<b>100</b>
<b>TOTAL</b>			<b>1600</b>

## PART II - PRACTICUM

Participation and learning the skills and techniques and the teaching methods of the activities are as follows:

Paper Code	Activities for Semester I	MARKS
19MPEP 204	Game of Specialization - [Second Best]- [Practicum]	100
19MPEP 105	Track & Field Events- I [Practicum] Sprint, Long Jump, Shot put & Discus throw)	100
19MPEP 106	Practical I- [Yogic Practices]- [Practicum] Suryanamaskar, Asanas, Pranayama, Mudras,	50
19MPEP 107	Practical II - [Fitness Training and Aerobic ]- [Practicum] Fitness Training & Aerobics : Conditioning Exercises (General & Specific) - 20 marks, Weight Training - 40 marks( <i>Free Weights &amp; Machine Weights</i> ), Medicine Ball Training and Stretching Exercises - 20 marks, Aerobics - 20 marks	100
Paper Code	Activities for Semester II	
19MPEP 204	Game of Specialization - [Second Best]- [Practicum]	50
19MPEP 205	Track & Field Events- II [Practicum] (Middle Distance, Long Distance, High Jump, Triple Jump and Javelin throw)	50
19MPEP 206	Practical I- [Indigenous Activities]&[Computer Lab]-[Practicum] Indigenous Activities- 50 marks <i>Computer Lab Participation : - 50 marks</i>	100
Paper Code	Activities for Semester III	
19MPEP 304	Game of Specialization - [First Best]- [Practicum]	100
19MPEP 305	Track & Field Events- III [Practicum] (Hurdle Race, Relay Race, Hammer Throw, Pole vault)	100
19MPEP 306	Practical I- [Combat & Adventure Sports]- [Practicum] Silambam, Karate, Kayaking, Canoeing & Trekking	50
19MPEP 307	Practical II - [Fitness Training ]-[Practicum] Circuit Training, Plyometric training, Fartlek Training, Super Circuit Training, SAQ Training, Swiss ball Training	100
Paper Code	Activities for Semester IV	
19MPEP 404	Game of Specialization - [First Best]- [Practicum]	50
19MPEP 405	Track & Field Events- IV [Practicum] - 50 marks (Race walking and Combined events) Stretching Exercises and Rhythmic Activities - 50 marks	50
19MPEP 406	Practical I- [Kinesiology]/[Project Meet]- [Practicum] Kinesiology Practical, Record, Biomechanics Lab / Project Meet	100
TOTAL		1100

### PART -III INTERNSHIP /TEACHING/ COACHING PRACTICE

In Internship a student (Teacher Trainee) is undergoing supervised practical training. Internship / Teaching Practice includes Teaching 85 Observation in the Department. Intensive Teaching Practice in the neighboring schools. The programme includes teaching indigenous activities, basic skills in sports and games giving exposure to teachers in the teaching-learning process.

Schools for intensive teaching shall be decided by the Staff-in-charge of Teaching Practice and Head of the Department.

A minimum of 30 lessons, students shall complete 15 General and 15 Particular lessons / Coaching Lessons in 15 working days under the supervision of the assigned Department of physical education staff in the schools.

<b>Paper Code</b>	<b>Internship /Teaching/ Coaching Practice for Semester I</b>	<b>MARKS</b>
19MPEI 108	<b>Practical III [Internship] Class room Teaching :</b> - 20marks Five lessons - Assignment & Seminar Classes <b>Field / Laboratory Work :</b> - 20 marks Test and Measurement Practical& Record, Sports Psychology Lab <b>Participation :</b> - 10 marks Participation in Extramural and Intramural Tournaments	<b>50</b>
<b>Paper Code</b>	<b>Internship /Teaching/ Coaching Practice for Semester II</b>	
19MPEI 207	<b>Coaching Practice - Game of Specialization - [Second Best]-[Internship] School/ College/Institutional internship/ Teaching/ Coaching/Practice and Officiating</b>	<b>100</b>
19MPEI 208	<b>Coaching Practice - Track and Field Events[I &amp; II] -[Internship]</b>	<b>100</b>
<b>Paper Code</b>	<b>Internship /Teaching/ Coaching Practice for Semester III</b>	
19MPEI 308	<b>Practical III [Internship] Class room Teaching :</b> - 20 marks Five lessons - Assignment 85 Seminar Classes <b>Field / Laboratory Work :</b> - 20 marks Physiology Lab, Sports Physiotherapy Lab Sports Training -Treadmill, Bicycle Ergometer, fitness testing, etc., <b>Participation :-</b> 10 marks Educational Tour, Stadium Visit, Organizing Project Sports Meet	<b>50</b>
<b>Paper Code</b>	<b>Internship /Teaching/ Coaching Practice for Semester IV</b>	
19MPEI 407	<b>Coaching Practice - Game of Specialization - [First Best]-[Internship]</b>	<b>100</b>
19MPEI 408	<b>Coaching Practice - Track and Field Events[III &amp; IV] -[Internship]</b>	<b>100</b>
<b>TOTAL</b>		<b>500</b>

## Programme Outcomes (POS)

To gain knowledge in the field of physical education and various sports skills in winning ways, the student teacher expected to undergo these skills.

PO 1: To use various techniques in test and measurement of games and sports and apply the evaluation technique on test and measurement.

PO 2: To apply the knowledge of psychology and sociology and imply the motor activities, types of motivation, administering various equipments, applying social stratification and group cohesion.

PO 3: To apply various technological methods such as, instructional design, goal setting, contextual analysis and evaluation techniques and their historical development.

PO 4: To apply the knowledge of sports medicine, athletic care and rehabilitation, health education and nutrition.

PO 5: To implement the practical knowledge on sports biomechanics and kinesiology, including function of the skeleton system, physiological system, forces, levers and law of motion of the body.

PO 6: To insist the knowledge on physiology of exercise and sports nutrition,

PO 7: To set up the knowledge of various types of sports training, various components of physical fitness training, training plan, awareness of doping.

PO 8: To use knowledge of research in physical education and applying various statistical tools in research, selecting the problem, methods of research, experimental research, various sampling technique and writing the research proposal and report.

PO 9: To apply various management skills, like sport management, programme management, designing the curriculum and attaining various curriculum sources.

PO 10: To apply the computer knowledge with fundamentals of computers and MS Office, E-Learning and web based learning

### SEMESTER - I

191MPEC-101	TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION	L	T	P	C
		4	0	0	4

#### COURSE OBJECTIVES:

Student Teacher will be trained on

- To know the need and importance of measurement and evaluation in physical education
- Know the types of motor fitness
- Understand the procedures of physical fitness and motor fitness test
- Know the aerobic and anaerobic fitness test

#### COURSE CONTENT:

##### 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 TEST**

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

### **UNIT IV - AEROBIC - ANAEROBIC AND ANTHROPOMETRIC 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, And Thigh. Method of measuring Skin Folds: Triceps, Sub scapular, Suprailiac.

### **UNIT V - SKILL TESTS**

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

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

### **COURSE OUTCOME:**

After completing the course, the learner will be able to

- CO1**-Understand concept of criteria of selection of test
- CO2**-Understand motor fitness and motor ability test
- CO3**-Understand physical fitness and cardio vascular test
- CO4**-Know the procedures of aerobic, anaerobic and anthropometric test.
- CO5**-Know the sports skill tests

<b>Mapping with Programme Outcomes</b>										
<b>Cos</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>
<b>CO1</b>	<b>3</b>	-	-	-	-	-	-	-	-	-
<b>CO2</b>	<b>3</b>	-	-	-	-	-	-	<b>2</b>	-	-
<b>CO3</b>	<b>3</b>	-	-	-	-	-	-	<b>2</b>	-	-
<b>CO4</b>	<b>3</b>	-	-	-	-	-	-	<b>2</b>	-	-
<b>CO5</b>	<b>3</b>	-	-	-	-	-	-	<b>2</b>	-	-

### **REFERENCE BOOKS:-**

1. Campbell, W.R. & Tucker, N. M. (1967) An Introduction in physical Education.
2. London: G.Bell and Sons Ltd.
3. Clarke H. Harrison & David H. Clarke. (1987) Application of Measurement in Physical Education, New Jersey: Prentice Hall Inc.
4. Donald K. Mathews, "Measurement in Physical Education," London: W. B. Saunders Company, 1978.

5. James S. Bosco and William F. Gustafson. "Measurement and Evaluation in Physical Education". Philadelphia: Lea and Fibiger. 1979.
6. Jenson, Clayne .R & Cynt ha , C. Hirst. (1980). Measurement in Physical Education and Athletics. New York: Macmillan Publishing Co., Inc.
7. Johnson, Barry & Jack, K. Nelson(1982). Practical Measurement for Evaluation in Physical Education New Delhi: Surjeet Publications.
8. Kansal D.K.(1996) " Test and Measurement in Sports and Physical Education. New Delhi ;
9. Sharma Sita Ram, (2005). Test and Measurement in Education. New Delhi: Shri Sai Printographers.
10. Veena Verma. (2003). "Evaluation in Physical Education," New Delhi: Sports publication.
11. Yobu. A (2010), Test, Measurement and Evaluation in Physical Education and Sports, New Delhi: Friends Publications.

### **SEMESTER - I**

<b>19MPEC-102</b>	<b>SPORTS PSYCHOLOGY AND SOCIOLOGY</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

#### **COURSE OBJECTIVES:**

Student Teacher will be trained on

- Know the importance of sports psychology
- Understand the basic considerations in motor learning
- Know the psychological tests and questionnaires
- Know the Current Problems in Sports and Future Directions

#### **COURSE CONTENT:**

##### **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 on sports Performance.

##### **UNIT II - MOTIVATION**

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

##### **UNIT III - GOAL SETTING**

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



Sports Achievement Motivation, Sports Competition Anxiety. Psychological factors, Stress, Anxiety, Tension and Aggression affecting Sports performance.

#### **UNIT IV - SPORTS SOCIOLOGY**

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

#### **UNIT V - GROUP COHESION**

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

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

#### **COURSE OUTCOME:**

After completing the course, the learner will be able to

- CO1**-Understand concept of sports psychology and sociology
- CO2**-understand the types of motivation and impact on sports performance
- CO3**-Analyze the Process of Goal Setting in Physical Education and Sports.
- CO4**-Know the Types of Psychological Test.
- CO5**-Know about Sports Women in our Society

<b>Mapping with Programme Outcomes</b>										
<b>Cos</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>
<b>CO1</b>	<b>2</b>	<b>3</b>	-	-	-	-	-	-	-	-
<b>CO2</b>	-	<b>3</b>	-	-	-	-	-	-	-	-
<b>CO3</b>	-	<b>3</b>	-	-	-	-	-	<b>2</b>	-	-
<b>CO4</b>	-	<b>3</b>	-	-	-	-	-	-	-	-
<b>CO5</b>	-	<b>3</b>	-	-	-	-	-	-	-	-

#### **REFERENCE BOOKS:-**

1. Authors Guide (2013) National Library of Educational and Psychological Test (NLEPT) Catalogue of Tests, New Delhi: National Council of Educational Research and Training Publication.
2. Authors Guide (2013) National Library of Educational and Psychological Test (NLEPT) Catalogue of Tests, New Delhi: National Council of Educational Research and Training Publication.
3. Jain.(2002), Sports Sociology, Heal Sahety Kendre Publishers.
4. Jay Coakley (2001) Sports in Society – Issues and Controversies in International Education, Mc-Craw Seventh Ed.
5. John D Lauther (2000) Psychology of Coaching. New Jersy: Prentice Hall Inc.
6. John D. Lauther (1998) Sports Psychology. Englewood, Prentice Hall Inc.
7. Miroslaw Vauks & Bryant Cratty (1999). Psychology and the Superior Athlete London: The Macmillan Co.
8. Richard, J. Crisp (2000). Essential Social Psychology. Sage Publications.

9. Robert N. Singer (2001). Motor Learning and Human Performance. New York: The Macmillan Co.
10. Robert N. Singer. (1989) The Psychology Domain Movement Behaviour. Philadelphia: Lea and Fibiger.
11. Thelma Horn. (2002). Advances in Sports Psychology. Human Kinetic
12. Whiting, K. Karman... Hendry L.B & Jones M.G (1999) Personality and Performance in Physical Education and Sports. London: Hendry Kimpton Publishers.

### **SEMESTER - I**

<b>19MPEC-103</b>	<b>EDUCATION TECHNOLOGY IN PHYSICAL EDUCATION</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

#### **COURSE OBJECTIVES:**

Student Teacher will be trained on

- To know the necessity of computer application in physical education
- Helps to improve the computer assisted works in sports drawings
- Able to use the sports applications and software in physical education

#### **COURSE CONTENT:**

##### **UNIT - I NATURE AND SCOPE**

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

##### **UNIT II - SYSTEMS APPROACH TO PHYSICAL EDUCATION AND COMMUNICATION**

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

##### **UNIT III - INSTRUCTION DESIGN**

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

##### **UNIT IV - AUDIO VISUAL MEDIA IN PHYSICAL EDUCATION**

Audio-visual media - meaning, importance and various forms Audio/Radio; Broadcast and audio recordings - strengths and

Limitations, Criteria for selection of instructional units, script writing, pre-production, post - production process and practices, Audio Conferencing and Interactive Radio Conference. Video/Educational Television: Telecast and Video recordings Strengths and limitations, Use of Television and CCTV in instruction and Training, Video Conferencing, SITE experiment, countrywide classroom project and Satellite based instructions. Use of animation films in Teaching Physical Activities.

## **UNIT V - NEW HORIZONS OF EDUCATIONAL TECHNOLOGY**

Recent innovations in the area of ET interactive video - Hypertext, video - texts, optical fiber technology - laser disk, computer conferencing. Procedure and organization of Teleconferencing/Interactive video-experiences of institutions, schools and universities. Computer Assisted Instruction / Teaching in Physical Education and Sports.

### **COURSE OUTCOME:**

After completing the course, the learner will be able to

**CO1**-Understand concept of computer application in physical education field

**CO2**-Analyze sporting data of various types via astute use of statistical packages.

**CO3**-Practice mathematics, statistics, information technology in sport technology related problems.

**CO4**-Offer hands on knowledge in computer application and software

**CO5**-knowledge on recent advances in Educational technology

<b>Mapping with Programme Outcomes</b>										
<b>Cos</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>
<b>CO1</b>	-	-	<b>3</b>	-	-	-	-	-	-	-
<b>CO2</b>	-	-	<b>3</b>	-	-	-	-	-	-	-
<b>CO3</b>	-	-	<b>3</b>	-	-	-	-	-	-	-
<b>CO4</b>	-	-	<b>3</b>	-	-	-	-	-	-	<b>2</b>
<b>CO5</b>	-	-	<b>3</b>	-	-	-	-	-	-	<b>2</b>

### **REFERENCE BOOKS:-**

1. Amita Bhardwaj, New Media of Educational Planning.” Sarup of Sons, New Delhi 2003
2. Bhatia and Bhatia. The Principles and Methods of Teaching (New Delhi Doabai House) 1959.
3. Communication and Education, D.N. Dasgupta, Pointer Publishers
4. Education and Communication for development, O.P Dahama, O.P Bhatnagar Oxford & Page 68 of 711BH Publishing company, New Delhi
5. Essentials of Educational Technology, Madan Lal, Anmol Publications
6. K. Sampath, A. Pannirselvam and S. Santhanam. Introduction to Educational Technology (New Delhi: Sterling Publishers Pvt .Ltd):1981.
7. Kochar, S.K. Methods and Techniques of Teaching (New Delhi, Jullandhar, Sterling Publishers Pvt.Ltd)1982.
8. Kozman, Cassidy and k Jackson. Methods in Physical Education (W.B. Saunders Company, Philadelphia and London), 1952.

## SEMESTER - II

<b>19MPEC- 201</b>	<b>SPORTS MEDICINE, ATHLETIC CARE AND REHABILITATION</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

### **COURSE OBJECTIVES:**

Student Teacher will be trained on

- To know the need and importance of sports medicine in physical education
- Know strengthening exercise for head neck, spine
- Know the Principles and techniques of Strapping and Bandages

### **COURSE CONTENT:**

#### **UNIT - I INTRODUCTION ABOUT SPORTS MEDICINE**

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 - 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 III - 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 IV - REHABILITATION EXERCISES**

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

#### **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.

**COURSE OUTCOME:**

After completing the course, the learner will be able to

**CO1-** To Understand various methods of therapeutic exercise in sports medicine

**CO2-**Educate the various spine injury and its anomalies

**CO3-**To Know the various massage manipulation.

**CO4-**To Know the exercises involved in Rehabilitation.

**CO5-** To educate the care and treatment of sports injuries.

<b>Mapping with Programme Outcomes</b>										
<b>Cos</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>
<b>CO1</b>	-	-	-	<b>3</b>	-	-	-	-	-	-
<b>CO2</b>	-	-	-	<b>3</b>	-	-	-	-	-	-
<b>CO3</b>	-	-	-	<b>3</b>	-	-	-	-	<b>2</b>	-
<b>CO4</b>	-	-	-	<b>3</b>	-	-	-	-	<b>2</b>	-
<b>CO5</b>	-	-	-	<b>3</b>	-	-	-	-	<b>2</b>	-

**REFERENCE BOOKS:-**

1. Christopher M. Norris. (1993). Sports Injuries Diagnosis and Management for Physiotherapists. East Kilbride: Thomson Litho Ltd.
2. James, A. Gould & George J. Davies. (1985). Physical Therapy. Toronto: C.V. Mosby Company.
3. Morris B. Million (1984) Sports Injuries and Athletic Problem. New Delhi: Surjeet Publication.
4. Pande. (1998). Sports Medicine. New Delhi: Khel Shitya Kendra The Encyclopedia of Sports Medicine.

**SEMESTER – II**

<b>19MPEC-202</b>	<b>SCIENTIFIC PRINCIPLES OF SPORTS TRAINING</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**COURSE OBJECTIVES:**

Student Teacher will be trained on

- To know the basic principles of sports training in physical education
- Know the types of strength and its types
- Know the factors involved in speed development and endurance training

**COURSE CONTENT:****UNIT-I**

Basic Principles of Training - Specificity, Overload, Reversibility. Basic Physical fitness components - Strength, Speed, Endurance, Mobility. Types of Strength, Strength development training - General exercises, special exercises, competition specific exercises. Training for the development of maximum strength. Elastic Strength, Strength Endurance. Unit Construction for strength development.

## UNIT-II

Speed - Definition, factors influencing speed, Training for speed development, Unit construction - Activity other than running, Speed barrier, Speed endurance. Endurance: Types of Endurance - Types of Endurance Training - Duration, Repetition, Competition and Testing. Short term, Medium Term and Long Term Endurance Training. Factors to be considered for Endurance Training.

## UNIT-III

Mobility - Definition, Classification, Factors Influencing Mobility - Role of Mobility - Training to develop Mobility - Mobility unit Construction, Periodization -Meaning, Single Periodization, Double Periodization. Different seasons - preparatory, pre competition. Competition and Transitional Period.

## UNIT-IV

Meaning of the terms Unit, Session, Micro Cycle, Meso Cycle and Macro Cycle. Warming up - General and Specific - Limbering down - Special type of training -Plyometric Training - Parcourse Training, Mass Practice, Distributed Practice.

## UNIT-V

Ergogenic Aids - Meaning, Effect of Drugs - Alcohol, Caffeine- and Smoking on performance. Blood doping, anabolic steroid, Drug abuses in athletics. Effect of climatic Changes - High altitude Training for Long Distance runner. Effect of aerobic endurance training on Heart rate, Heart size, Blood Pressure, Blood Distribution, Lungs Volume, Respiratory Rate, Maximal Oxygen uptake and Lactic Acid.

### COURSE OUTCOME:

After completing the course, the learner will be able to

- CO1**-Understand concept of specificity, overload and reversibility
- CO2**-Understand the knowledge of various factors of sports training
- CO3**-To Know the concept of periodization.
- CO4**-Understand the micro, meso and macro cycles.
- CO5**-To Know about ergogenic aids and its effects

Mapping with Programme Outcomes										
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	-	2	-	-	-	-	3	1	-	-
CO2	-	2	-	-	-	-	3	1	-	-
CO3	-	2	-	-	-	-	3	-	-	-
CO4	-	-	-	-	-	-	3	2	-	-
CO5	-	-	-	-	-	-	3	2	-	-

## **REFERENCE BOOKS:-**

1. Frank W. Dick, Sports Training Principles, London, Lepus Book Co.,1980.
2. Hardayal Singh, Science of Sports Training, D.V.S Publication, New Delhi. 1995
3. Dietrich Harre, Principles of Sports Training, Berlin Sportverlag, 1982.

### **SEMESTER - II**

<b>19MPEC- 203</b>	<b>INFORMATION COMMUNICATION AND TECHNOLOGY IN PHYSICAL EDUCATION</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

#### **COURSE OBJECTIVES:**

Student Teacher will be trained on

- To know the types of communications, ICT
- To know the characteristics of computers and storage devices
- To know the concepts of e-learning and web based learning

#### **COURSE CONTENT:**

##### **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 of 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: News letter & Brochure. Need and scope of computer education in sports.

##### **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 - Professional communication and sports information through Internet. Web Based Learning - Sports Websites. Visual Classrooms - Use of current software for class room presentation. Sports multimedia packages - Role of Computer Education in Sports.

### COURSE OUTCOME:

After completing the course, the learner will be able to

**CO1**-Understand concept of Communication Barriers & Facilitators of communication

**CO2**-Need and importance of Information, communication and technology

**CO3**-To know the MS office applications

**CO4**-To know the role of computer Education in sports

**CO5**-To educate advance learning methods using computer technology

Mapping with Programme Outcomes										
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	-	-	-	-	-	-	-	-	-	3
CO2	-	-	-	-	-	-	-	-	-	3
CO3	-	-	-	-	-	-	-	-	-	3
CO4	-	-	-	-	-	-	-	-	-	3
CO5	-	-	-	-	-	-	-	-	-	3

### REFERENCE BOOKS:-

1. B. Ram, New Age international Publication, Computer Fundamental, Third Edition 2006
2. Brain Unders IDG Book. India (p) Ltd Teach Yourself Office 2000, Fourth Edition- 2001
3. Douglas E. Comer, The Internet Book, Purdue University, West Lofayette in 2005
4. Heidi Steel Low price Edition, Microsoft Office Word 2003-2004
5. ITL Education Solution Ltd. Introduction to information Technology, Research and Development Wing- 2006
6. Pradeep K. Sinha & Priti; Sinha, Foundations computing BPB Publications – 2006
7. Rebecca Bridges Altman Peachpit Press, Power point for window, 1999
8. Sanjay Saxena, Vikas Publication House, Pvt, Ltd. Microsoft Office for ever one, Second Edition – 2006.

### SEMESTER - III

19MPEC-301	RESEARCH PROCESS AND STATISTICS IN PHYSICAL EDUCATION	L	T	P	C
		4	0	0	4

### COURSE OBJECTIVES:

Student Teacher will be trained on

- To know the steps in historical research
- To understand the experimental design and its types
- To understand the parametric and non parametric statistics



## **COURSE CONTENT:**

### **UNIT - I - INTRODUCTION**

Meaning and Definition of Research - need, nature and Scope of research in Physical Education. Classification of Research, Location of Research Problem, Criteria for selection of a problem, Qualities of a good researcher.

### **UNIT - II - METHODS OF RESEARCH**

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

### **UNIT - III - EXPERIMENTAL RESEARCH 8B SAMPLING**

Experimental Research - Meaning, Nature and Importance, Meaning of variable, Types of Variables. Experimental Design - Single Group Design, Reverse Group Design, Repeated Measure Design, Static Group Comparison Design, Equated Group Design, Factorial Design. Meaning and Definition of Sample and Population. Types of Sampling; Probability Methods; Systematic Sampling, Cluster sampling, Stratified Sampling. Area Sampling - Multistage Sampling. Non-Probability Methods; Convenience Sample, Judgment Sampling, Quota Sampling.

### **UNIT - IV - STATISTICS**

Meaning and Definition of Statistics. Function, need and importance of Statistics. Types of Statistics. Meaning of the terms, Population, Sample, Data, Types of data. Variables: Discrete, Continuous. Parametric and non parametric statistics. Meaning, uses and construction of frequency table. Meaning, Purpose Calculation and advantages of Measures of central tendency - mean, median and mode.

### **UNIT - V MEASURES AND INFERENTIAL AND COMPARATIVE STATISTICS**

Meaning, Purpose, Calculation and advances of Range, Quartile, Deviation, Mean Deviation, Standard Deviation, Probable Error. Meaning, Purpose, Calculation and advantages of Scoring scales; Sigma scale, Z Scale, Hull scale. Tests of significance: Independent "t" test, Dependent "t" test - chi - square test, level of confidence and interpretation of data. Meaning of correlation -co - efficient of correlation - calculation of co-efficient of correlation by the product moment method and rank difference method. Concept of ANOVA and ANCOVA.

**COURSE OUTCOME:**

After completing the course, the learner will be able to

**CO1** :Classifications of research and location of research

**CO2** :To know Methods of research.

**CO3** : know the about experimental design

**CO4** : know the Advantages and disadvantages of measures of central tendency.

**CO4** :To know the concept of ANOVA and ANCOVA

<b>Mapping with Programme Outcomes</b>										
<b>Cos</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>
<b>CO1</b>	<b>2</b>	-	-	-	-	-	-	<b>3</b>	-	-
<b>CO2</b>	<b>2</b>	-	-	-	-	-	-	<b>3</b>	-	-
<b>CO3</b>	<b>2</b>	-	-	-	-	-	-	<b>3</b>	-	-
<b>CO4</b>	<b>2</b>	-	-	-	-	-	-	<b>3</b>	-	-
<b>CO5</b>	<b>2</b>	-	-	-	-	-	-	<b>3</b>	-	-

**REFERENCE BOOKS:-**

1. Best J.W (1971) research in Education, new jersey: Prentice Hall, Inc
2. Clark D.H (1999) Research Problem in Physical Education 2<sup>nd</sup> edition, Eaglewood Cliffs, Prentice Hall, Inc.
3. Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities. Illonosis; Human Kinetics;
4. Kamlesh, M.L. (1999) Research Methodology in Physical Education and Sports. New Delhi.
5. Rothstain, A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc.
6. Sivaramakrishnan S (2006) Statistics for Physical Education, Delhi; Friends Publication
7. Thiurumalaisamy (1998), Statistics in Physical Education, Karaikkudi, Senthilkumar Publications.

**SEMESTER - III**

<b>19MPEC-302</b>	<b>PHYSIOLOGY OF EXERCISE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**COURSE OBJECTIVES:**

Student Teacher will be trained

- To know the structure and function of skeletal muscle
- To know the effects of different systems of body
- To know anaerobic and aerobic metabolism

**COURSE CONTENT:****UNIT - I**

Structure and Function of the Skeletal Muscle: Structure of the Skeletal Muscle -Chemical Composition - Microscopic structure of the myofibril

contractile mechanism -Molecular basis of muscular contraction - Sliding filament theory. Fuel / Energy for muscular contraction.

**UNIT - II**

Neuron - Muscular Junction and Co-ordination of Muscular Activity: Neuron and Motor Unit - Bio-Electrical Potential - Neuro - muscular junction and transmission of nerve impulse - Effect of exercise on different systems of the body : Effect of Exercise on Circulatory system - Respiratory system - Oxygen debt, forced expiratory volume, Breathing capacity, Vital Capacity, Recovery and second wind, Endocrine system (Insulin).

**UNIT - III**

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 - 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**

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.

**COURSE OUTCOME:**

After completing the course, the learner will be able to

- CO1**-Understand structure and function of skeletal muscles
- CO2**-Know the Effect of Exercise on Circulatory system
- CO3**-To understand the Physiology and mechanism of breathing .
- CO4**-Understand the aerobic and anaerobic metabolism.
- CO5**-Know the sports performance in hot climate and cold climate

<b>Mapping with Programme Outcomes</b>										
<b>Cos</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>
<b>CO1</b>	-	-	-	-	<b>3</b>	<b>2</b>	-	-	-	-
<b>CO2</b>	-	-	-	-	<b>2</b>	<b>3</b>	-	-	-	-
<b>CO3</b>	-	-	-	-	<b>2</b>	<b>3</b>	-	-	-	-
<b>CO4</b>	-	-	-	-	<b>2</b>	<b>3</b>	-	-	-	-
<b>CO5</b>	-	-	-	-	<b>1</b>	<b>3</b>	<b>2</b>	-	-	-

## **REFERENCE BOOKS:-**

1. Edward Far, Richard Bowers and Merle Foss, The Physiological Basis for Exercise and Sports, New York : Brown & Benchmark, 1993.
2. Jack H. Wilmore and David L. Costill, Physiology of Sports and Exercise, USA : Human Kinetics, 1994.
3. Thibodean and Patton, "Structure and Function of the Body", St. Louis Philadelphia: Lea & Febiger.

## **SEMESTER – III**

<b>19MPEC-303</b>	<b>HEALTH EDUCATION AND SPORTS NUTRITION</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

### **COURSE OBJECTIVES:**

Student Teacher will be trained on

- To know the concept of spectrum and determinants of health
- To know the health problems in India
- To know the types of hygiene

### **COURSE CONTENT:**

#### **UNIT - I HEALTH EDUCATION**

Concept, Dimensions, Spectrum and Determinants of Health - Definition of Health, Health Education, Health Instruction, Health Supervision, Aim, objective and Principles of Health Education - Health Service and guidance instruction in personal hygiene

#### **UNIT - II HEALTH PROBLEMS IN INDIA**

Communicable and Non Communicable Diseases: Obesity, Malnutrition, Adulteration in food, Environmental sanitation, Explosive, Population. Personal and Environmental Hygiene for Schools - Objective of school health service, Role of health education in schools. Health Services - Care of skin, Nails, Eye health service, Nutritional service, Health appraisal, Health record, Healthful school environment first - aid and emergency care etc.

#### **UNIT III - HYGIENE AND HEALTH**

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

#### **UNIT -IV - INTRODUCTION OF SPORTS NUTRITION**

Meaning and Definition of Sports Nutrition, Role of nutrition in sports, basic Nutrition guidelines, Nutrients: Ingestion to energy metabolism

(Carbohydrate, Protein and Fat), Role of carbohydrates, Fat and protein during exercise

**UNIT - V NUTRITION AND WEIGHT MANAGEMENT**

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

**COURSE OUTCOME:**

After completing the course, the learner will be able to

**CO1**-Understand the Concept of health education, health supervision, and health instruction

**CO2**-Illustrate the common communicable and non-communicable diseases

**CO3**-Procedure to Manage the hypertension and maintain health hygiene

**CO4**-To know the role of nutrition in sports

**CO5**-To know Weight management program for sporty child

<b>Mapping with Programme Outcomes</b>										
<b>Cos</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>
<b>CO1</b>	-	-	-	<b>3</b>	-	-	-	-	-	-
<b>CO2</b>	-	-	-	<b>3</b>	-	<b>2</b>	-	-	-	-
<b>CO3</b>	-	-	-	<b>3</b>	-	<b>2</b>	-	<b>1</b>	-	-
<b>CO4</b>	-	-	-	<b>3</b>	-	<b>2</b>	-	<b>1</b>	-	-
<b>CO5</b>	-	-	-	<b>3</b>	-	<b>2</b>	-	<b>1</b>	-	-

**REFERENCE BOOKS:-**

1. Bucher A. Charles (1993) “Administration of Health and Physical Education Programme”
2. Delbert, Oberteuffer, et. A.I “The School Health Education”
3. Ghosh, B.N “Treaties of Hygiene and Public Health”
4. Hanlon, John J. “Principles of Public Health Administration” 2003.
5. Turner, C.E “The School Health and Health Education”.
6. Moss and et. At “Health Education” (Harber and Brothers, New York)
7. Nemir A. ‘ The School Health Education” (Harber and Brothers, New York)
8. Nutrition Encyclopedia, edited by Delores C.S James, The Gale Group, Inc.
9. Boyd-Eaton S. et al (1989) The Stone Age Health Programme: Diet and Exercise as nature Intended. Angus and Robertson.
10. Terras S. (1994) Stress, How Your Diet can Help: The Practical Guide to Positive Health Using Diet, Vitamins, Minerals, Herbs and Amino Acids, Thorsons.

**SEMESTER - IV**

<b>19MPEC-401</b>	<b>SPORTS BIOMECHANICS AND APPLIED KINESIOLOGY</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**COURSE OBJECTIVES:**

Student Teacher will be trained on

- To know concepts of biomechanics and kinetics
- Know the newton laws of motion
- Know the origin and insertion of muscles

**COURSE CONTENT:**

**UNIT - I**

Biomechanics : Meaning - Definition - function. Linear Kinematics - Distance and Displacement - Speed and Velocity - Acceleration - Angular Kinematics – Angular Speed and Velocity - Linear and Angular Kinematics, Need and Importance of Biomechanics in Sports

**UNIT - II**

Linear Kinetics: Meaning and Definition - Inertia - Mass force - Internal and External factors of force - Newton's law of motion - Law of Gravitation - Momentum -Work - Power - Energy - Stability - Various Degrees of Stability - Angular Kinetics -Levers - Centre of Gravity. Special factors affecting Sports Performance. Analysis of Skills and Techniques.

**UNIT- III**

Meaning and definition of Kinesiology. Role of Kinesiology in physical education and sports. Functions of the Skeleton - Bones of the Body - Classification of Joints and Its structure - Kinds of joint movement and range of motion

**UNIT -IV**

Muscles: Types of Muscles - Role of Muscles - Kinds of Muscle Actions - Mechanics of muscles- Co-ordinated action of Muscles - Muscles function in relation to Posture.

**UNIT - V**

Origin, Insertion and action of the following muscles ; Trapezius - Deltoid - Biceps -Triceps - Pectoralis major - Pectoralis minor - Rectus abdominis - Rectus femoris -Sartorius - Quadriceps group of muscles - Latissimus dorsi - Gluteus maximus -Hamstring group of muscles – Gastronomies.

## COURSE OUTCOME:

After completing the course, the learner will be able to

**CO1**-Understand the need and importance of biomechanics

**CO2**-Illustrate the concept of kinetics and kinematics

**CO3**-To Know the Role of Kinesiology in physical education and sports

**CO4**- To understand the muscle action in relation to posture

**CO5**- To Know the Anatomy of Muscle

<b>Mapping with Programme Outcomes</b>										
<b>Cos</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>
<b>CO1</b>	-	-	-	-	<b>3</b>	-	-	-	-	-
<b>CO2</b>	-	-	-	-	<b>3</b>	-	-	-	-	-
<b>CO3</b>	-	-	-	-	<b>3</b>	-	-	-	-	-
<b>CO4</b>	-	-	-	-	<b>3</b>	-	-	-	-	-
<b>CO5</b>	-	-	-	-	<b>3</b>	-	-	-	-	-

## REFERENCE BOOKS:-

1. Luttgens and Wells. Kinesiology, "Scientific Basis of Human Motion", Philadelphia: Saunders College Publishing Co., 1991.
2. Jenson, R. "Applied Kinesiology and Biomechanics" New York : McGraw Hill Book Co. 1987.
3. Johnson R. and Schulky, W. "Applied Kinesiology". Philadelphia: Saunders College Publication Co., 1989.
4. James G Hay. The Biomechanics of Sports Techniques. New Jersey : Prentice Hall Inc. 1985.
5. John W Bunn, Scientific Principles of Coaching. New Jersey : Prentice Hall Inc., 1985.
6. Kreighbawn, E and Barthels, K.M. Biomechanics : "A Quantitative Approach for Studying Human Movement", Minneapolis : Burgess Publishing Co., 1981.

## SEMESTER - IV

<b>19MPEC-402</b>	<b>SPORTS MANAGEMENT AND CURRICULUM DESIGN</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

## COURSE OBJECTIVES:

Student Teacher will be trained

- To know principles and procedures of sports management
- To know the Guidelines for selection of Equipments and Supplies
- To know the Theories of curriculum development

## COURSE CONTENT:

### UNIT I - Introduction to Sports Management

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





### **REFERENCE BOOKS:-**

1. Aggarwal, J.C (1990). Curriculum Reform in India – World overviews, Doaba World Education Series – 3 Delhi: Doaba House, Book seller and Publisher.
2. Arora, G.L. (1984): Reflections on Curriculum, New Delhi: NCERT.
3. Bonnie, L. (1991). The Management of Sports. St. Louis: Mosby Publishing Company, Park House.
4. Bucher A. Charles, (1993) Management of Physical Education and Sports (10th ed.,) St. Louis: Mobsy Publishing Company.
5. Carl, E, Willgoose. (1982. Curriculum in Physical Education, London: Prentice Hall.
6. Chakraborty & Samiran. (1998). Sports Management. New Delhi: Sports Publication.
7. Charles, A, Bucher & March, L, Krotee. (1993). Management of Physical Education and Sports. St. Louis: Mosby Publishing Company.
8. Chelladurai, P. (1999). Human Resources Management in Sports and Recreation. Human Kinetics.
9. John, E, Nixon & Ann, E, Jewett. (1964). Physical Education Curriculum, New York: The Ronald Press Company.
10. McKernan, James (2007) Curriculum and Imagination: Process, Theory, Pedagogy and Action Research,. U.K.
11. Routledge NCERT (2000). National Curriculum Framework for School Education, New Delhi: NCERT.
12. NCERT (2000). National Curriculum Framework for School Education, New Delhi: NCERT.
13. NCERT (2005). National Curriculum Framework, New Delhi: NCERT. NCERT (2005).
14. National Curriculum Framework-2005, New Delhi: NCERT.
15. Williams, J.F. (2003). Principles of Physical Education. Meerut: College Book House. Yadvnider Singh. Sports Management, New Delhi: Laksha y Publication.

### **SEMESTER - IV**

<b>MPEC-403</b>	<b>DISSERTATION</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

The facility of dissertation provides for student's interest in doing research on a topic of his/her choice. The topic and the plan of the dissertation is decided in consultation with the Faculty member and is executed on approval by the Departmental committee