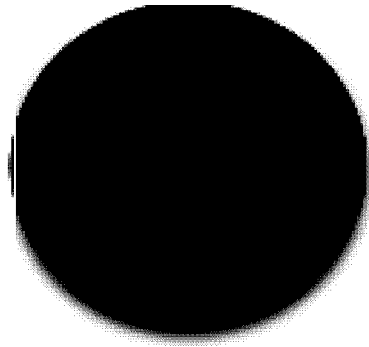


**CURRICULUM FRAMEWORK**  
**MASTER OF PHYSICAL EDUCATION (M.P.Ed.)**  
**TWO-YEAR - PROGRAMME**



**Common Core Syllabus 2015-16**

Approved by  
Telangana State Council of Higher Education

As per the guidelines of the  
**NATIONAL COUNCIL FOR TEACHER EDUCATION**

Organized by  
**UNIVERSITY COLLEGE OF PHYSICAL EDUCATION**  
**OSMANIA UNIVERSITY-HYDERABAD**

**REGULATIONS, SCHEME AND SYLLABUS FOR MASTER OF PHYSICAL  
EDUCATION (M.P.Ed.)**

**Two Year Programme (four semesters)**

**(Choice Based Credit System)**

**Important Note:**

- a. *If the University or affiliating body is following Choice Based Credit System, (CBCS) as approved and circulated by the UGC, the credit hours given in the following curriculum framework need to be considered along with the hours of teaching mentioned for each paper/ activity / course.*
- b. *If the University or affiliating bodies have yet to adopt CBCS, only the hours of teaching mentioned for each paper/ activity / course will be considered, the credit in teaching hours may be ignored.*

**Preamble:**

The Master of Physical Education (M.P.Ed.) two year (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.

**1. Intake, Eligibility and Admission Procedure:**

The Intake, Eligibility and Admission Procedure as per the NCTE norms and standards / University common admission procedure given below.

## **SELECTION PROCEDURE**

- ❖ Admission shall be made into M.P.Ed course on the basis of marks obtained in the entrance examination (Theory) conducted by the University and the achievement in sports during their study at Degree (Graduation) / Post Graduation / BPEd level.
- ❖ The entrance examination (Theory) will be conducted by the University for 100 marks and weightage of marks for sports achievement will be for 100 marks.
- ❖ The Entrance examination will be conducted on the syllabus of B.P.Ed. course. The question paper shall be set with 100 questions, either multiple choice questions, match the following, fill up the blanks and one word answers. Each question carries one mark.
- ❖ The criteria for awarding marks for sports achievement is furnished below.
- ❖ The sports and games achievement certificates (original) will be verified and the marks will be awarded accordingly. Hence, the candidates should bring their original sports and games achievement certificates along with evidence documents like Form I for Internationals, Form II for Nationals and Form III for Inter-university participants etc., on the day of entrance examination.
- ❖ The merit list will be prepared basing on the aggregate of 200 marks.
- ❖ If there is a tie, the tie will be resolved by giving weightage to the percentage of marks secured in B.P.Ed. Course. If tie persists, persons securing highest marks in the sports achievements is preferred. If the tie still persists, age will be considered for the merit and the elder person will be awarded better rank.
- ❖ There shall be reservation of seats for SC/ST/BC, CAP, NCC, Women, etc. as per the rules of the University/State Government.
- ❖ As the course demands vigorous physical activity, pregnant women candidates are not eligible for admission. The pregnant women candidates are not eligible to continue the course.
- ❖ In-service candidates shall produce Relieving Certificate from the concerned Head of Institution along with the Permission Certificate from the concerned Authorities.
- ❖ Student should produce Physical Fitness Certificate from Civil Surgeon or Assistant Surgeon (Govt. Doctor) to get eligibility for admission and to pursue the study.

**The Pattern of M.P.Ed. Entrance Test Examination from the year 2015-2016.**

The M.P.Ed. Entrance Test for 75 Marks for Written and 25 Marks for awarding the marks of the Sports Achievements for Admission into M.P.Ed. Course. The Result of M.P.Ed. Entrance Test will be declared after adding the Sports Achievement Incentive Marks.

The following are the Sports Achievements Incentive Marks.

S. No	Sports Distinction/Participation	Certificate Issuing Authority	Incentive Marks
1.	Gold Medal in Olympics, World, Asian and Other International Tournaments (Not in Invitation and Open Tournaments)	International Sports Federation/National Sports Federation	25
2.	Silver Medal in Olympics, World, Asian and Other International Tournaments (Not in Invitation and Open Tournaments)	International Sports Federation/National Sports Federation	24
3.	Bronze Medal in Olympics, World, Asian and Other International Tournaments (Not in Invitation and Open Tournaments)	International Sports Federation/National Sports Federation	23
4.	Participation in Olympics, World, Asian and Other International Tournaments (Not in Invitation and Open Tournaments)	International Sports Federation/National Sports Federation	22
5.	Gold Medal in the Senior National Championships/National Games	National Sports Federation	21
6.	Silver Medal in the Senior National Championships/National Games	National Sports Federation	20
7.	Bronze Medal in the Senior National Championships/National Games	National Sports Federation	19
8.	Participation in the Senior National Championships/National Games	National Sports Federation	18
9.	Gold Medal in the All India Inter University sports and Games.	University Sports Board	17
10.	Silver Medal in the All India Inter University sports and Games.	University Sports Board	16
11.	Bronze Medal in the All India Inter University sports and Games.	University Sports Board	15
12.	Participation in the All India Inter University Sports and Games.	University Sports Board	14
13.	Gold Medal in the South Zone/Central Inter University sports and Games and South Zone National Events in Mens Section	University Sports Board National Sports Federation/State Sports Federation	13
14.	Silver Medal in the South Zone/Central Inter University sports and Games and South Zone National Events in Mens Section	University Sports Board National Sports Federation/State Sports Federation	12
15.	Bronze Medal in the South Zone/Central Inter University sports and Games and South Zone National Events in Mens Section	University Sports Board National Sports Federation/State Sports Federation	11
16.	Participation in the South Zone/Central Inter University sports and Games and South Zone National Events in Mens Section	University Sports Board National Sports Federation/State Sports Federation	10
17.	Gold Medal in the Junior Nationals and South Zone National Events in Junior Sections	National Sports Federation/State Sports Federation	09
18.	Silver Medal in the Junior Nationals and South Zone National Events in Junior Sections	National Sports Federation/State Sports Federation	08
19.	Bronze Medal in the Junior Nationals and South Zone National Events in Junior Sections	National Sports Federation/State Sports Federation	07
20.	Participation in the Junior Nationals and South Zone National Events in Junior Sections	National Sports Federation/State Sports Federation	05

**NOTE:**

1. Only the games and sports events, which are included in the latest Sports calendar of Association of Indian Universities, will be considered for awarding incentive marks.
2. Candidate's merit certificates of highest level of participation / achievement will be considered to place them in any of the above categories. Candidate will not be considered for more than one category for award of incentive marks.
3. Candidate's merit certificate of highest level of participation / achievement in sports and games only preceding three academic year performance will be considered.
4. National level meets include National games, Senior Nationals, Junior Nationals.

## 2. Duration

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

## 3. Medium of Instruction

The medium of instruction is English and the student has to write the examination only in English.

## 4. 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.

## 5. 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.

## 6. 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.

• <b>Theory</b>	
	• Core Course
	• Elective Course
	• Choice Based Course from Outside the Department (Open Elective / Non Core).
• <b>Practicum</b>	
	• Compulsory Course (Track and Field)
	• Elective Course
	• Teaching/Coaching Practices
	• Internship

## 7. Semesters

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

## 8. Working days

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

## 9. 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

Sl. No.	Special Credits for Extra Co-curricular Activities	Credit
1	Sports Achievement at State level Competition (Medal Winner)	1
	Sports Achievement National level Competition (Medal Winner)	2
	Sports participation International level Competition	4
2	Inter Uni. Participation (Any one game)	2
3	Inter College Participation (min. two 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.

## **10. Examinations**

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

## **11. Condonation**

Student must have 75% of attendance in each course for appearing the examination. Students who have 74% to 65% of attendance shall apply for condonation in the prescribed form with the prescribed fee. Students who have 64% to 50% of attendance shall apply for condonation in prescribed form with the prescribed fee along with the Medical Certificate. Students who have below 50% of attendance are not eligible to appear for the examination.

**(OR)**

As per the University Rules

**12. Pattern of Question paper:** Question papers shall have five questions corresponding to five units of each theory paper.

M.P.Ed. format of Question Paper for 5 Units. Each question paper shall have six questions. The pattern will be as follows:

Question No.	Description	Marks
1	Answer in detail (Long Question) Or Answer in detail (Long Question) (From Unit 1)	10
2	Answer in detail (Long Question) Or Answer in detail (Long Question) (From Unit 2)	10
3	Answer in detail (Long Question) Or Answer in detail (Long Question) (From Unit 3)	10
4	Write short notes: any two out of four (From Unit 4)	10
5	Write short notes: any two out of four (From Unit 5)	10
6	Write short notes: Any four out of six questions. Five questions from five units and Extra one question from any unit	20
<b>Total</b>		<b>70</b>

### 13. Evaluation

#### i. Theory: Internal assessment:

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
Seminar / Quiz	5 Marks
Assignments	5 Marks
Attendance	5 Marks
Total	30 Marks

**(OR)**

As per the University Rules.



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.

- ii. Evaluation of theory paper for 70 Marks:**All university examination theory papers shall be evaluated by two evaluators (internal and external) appointed by the university from the panel of external examiners.
- iii. Practicum Internal evaluation:** The internal assessment shall be done for 30 marks in each practicum. If more than one event/game is present under the same practicum, each event/game shall be evaluated separately for 30 marks by the concerned teacher dealt with the event/ game. The average of the awarded marks of all the teachers shall be taken.
- iv. Practicum External evaluation:** The External assessment shall be done for 70 marks in each practicum. If more than one event/game is present under the same practicum, each event/game shall be evaluated separately for 70 marks by the external examiner nominated by the university. The average of the awarded marks of all the events/games of that practicum shall be for 70 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.

#### **14. Minimum Passing Standards**

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

### 15. 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:

$$1111 = \frac{\sum_{111}^1 111}{\sum_{111} 111}$$

$$1111 = \frac{\sum_{111}^{1111} 1}{1}$$

Where  $C_i$  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;  $1111_j$  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.

### 16. Classification of Final Results

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

### 17. Award of the M.P.Ed. Degree

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

### 18. Revaluation, Betterment and Reappearance

As per the University Rules

## 19. Letter Grades and Grade Points

- i. Two methods-relative grading or absolute grading– have been in vogue for awarding grades in a course. The relative grading is based on the distribution (usually normal distribution) of marks obtained by all the students in the course and the grades are awarded based on a cut-off mark or percentile. Under the absolute grading, the marks are converted to grades based on pre-determined class intervals. To implement the following grading system, the colleges and universities can use any one of the above methods.
- ii. 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	Out standing	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	5.0-5.99	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	

## 20. 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:

### 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 + 5x0.1

= 6.0+ 0.5

=6.5

The Course Credits = 03

Credits Grade Point (CGP) = 6.5 × 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 - I

Course 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-111 MPEC-112	3	57	B+	5.7	17.1
MPPC-121	3	55	B+	5.5	16.5
MPPC-122	3	72	A+	7.2	21.6
MPPC-123	3	66	A	6.6	19.8
MPPC-124	3	72	A+	7.2	21.6
	24				152.7

#### Examples: Conversion of marks into grade points

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

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

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

$$\text{MPEC-111/MPEC-112 } 57 = 55 + 2 = 5.5 + 2 \times (0.49 / 4.99) = 5.5 + 2 \times 0.1 = 5.5 + 0.2 = 5.7$$

$$\text{MPPC-121 } 55 = 5.5$$

$$\text{MPPC-122 } 72 = 70 + 2 = 7.0 + 2 \times (1.49 / 14.99) = 7.0 + 2 \times 0.1 = 7.0 + 0.2 = 7.2$$

$$\text{MPPC-123 } 66 = 60 + 6 = 6.0 + 6 \times (0.99 / 9.99) = 6.0 + 6 \times 0.1 = 6.0 + 0.6 = 6.6$$

$$\text{MPPC-124 } 72 = 70 + 2 = 7.0 + 2 \times (1.49 / 14.99) = 7.0 + 2 \times 0.1 = 7.0 + 0.2 = 7.2$$

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

$$= 152.7 / 24 = 6.3625$$

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

At the end of Semester-1

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

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

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

**SEMESTER- II**

Course 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-211	3	80	A+	8	24
MPEC-212					
MPPC-221	3	49	C	4.9	14.7
MPPC-222	3	64	A	6.4	19.2
MPPC-223	3	55	B+	5.5	16.5
MPPC-224	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- III**

Course 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-311	3	81	A+	8.1	24.3
MPEC-312					
MPPC-321	3	49	C	4.9	14.7
MPPC-322	3	64	A	6.4	19.2
MPPC-323	3	68	A	6.8	20.4
MPPC-324	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- IV**

<b>Course Code</b>	<b>Credit</b>	<b>Marks out of 100 (%)</b>	<b>Grade</b>	<b>Grade Point</b>	<b>Credit Grade Point</b>
<b>MPCC-401</b>	3	83	A+	8.3	24.9
<b>MPCC-402</b>	3	76	A+	7.6	22.8
<b>MPCC-403</b>	3	59	B+	5.9	17.7
<b>MPEC-411</b>	3	81	A+	8.1	24.3
<b>MPPC-421</b>	3	49	C	4.9	14.7
<b>MPPC-422</b>	3	78	A+	7.8	23.4
<b>MPPC-423</b>	3	81	A+	8.1	24.3
<b>MPPC-424</b>	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.

**19. 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.

**20. Revision of Syllabi**

Syllabus will be revised from time to time according to the National Council for Teacher Education / University norms.

**SEMESTER – I**

<b>Part A :Theoretical Course</b>						
<b>Course Code</b>	<b>Title of the Papers</b>	<b>Total Hours</b>	<b>Credit</b>	<b>Internal Marks</b>	<b>External Marks</b>	<b>Total Marks</b>
<b>Core Course</b>						
<b>MPCC-101</b>	Research Process in Physical Education & Sports Sciences	3	3	30	70	100
<b>MPCC-102</b>	Physiology of Exercise	3	3	30	70	100
<b>MPCC-103</b>	Applied Statistics in Physical Education & Sports	3	3	30	70	100
<b>Elective Course (Anyone)</b>						
<b>MPEC-111</b>	Fitness and Life Style Management	3	3	30	70	100
<b>MPEC-112</b>	Education Technology in Physical Education					
<b>Part- B Practical Course</b>						
<b>MPPC-121</b>	Track and Field Running Events (compulsory)  Any one of the following i.e. Gymnastics/ Swimming / Yoga	6	3	30	70	100
<b>MPPC-122</b>	Games Specialization – Badminton /Baseball/ Cricket/ Football/Handball /Hockey/ Kabaddi /Kho-kho / Netball/ Softball/ Table Tennis / Tennis/ Volleyball. (Any two games – One Indigenous & one ball game)	6	3	30	70	100
<b>MPPC-123</b>	Teaching Lessons: Coaching lessons in the events of MPPC- 121 and 122.	6	3	30	70	100
<b>MPPC-124</b>	Class room Teaching Lessons on theory of different Sports & Games	6	3	30	70	100
<b>Total</b>		<b>36</b>	<b>24</b>	<b>240</b>	<b>560</b>	<b>800</b>

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



**SEMESTER -II**

<b>Part A :Theoretical Course</b>						
<b>Course Code</b>	<b>Title of the Papers</b>	<b>Total Hours</b>	<b>Credit</b>	<b>Internal Marks</b>	<b>External Marks</b>	<b>Total Marks</b>
<b>Core Course</b>						
<b>MPCC-201</b>	Yogic Sciences	3	3	30	70	100
<b>MPCC-202</b>	Sports Biomechanics and Kinesiology	3	3	30	70	100
<b>MPCC-203</b>	Tests, Measurement and Evaluation in Physical Education	3	3	30	70	100
<b>Elective Course (Any one)</b>						
<b>MPEC-211</b>	Sports Management	3	3	30	70	100
<b>MPEC - 212</b>	Sports Journalism and Mass Media					
<b>Part- B Practical Course</b>						
<b>MPPC-221</b>	Track and Field Jumping and hurdle Events (compulsory)  Any one of the following i.e. Gymnastics/ Swimming / Yoga	6	3	30	70	100
<b>MPPC-222</b>	Laboratory Practicals in Physiology of Exercise and Bio Mechanics & Kinesiology (Two practical in each subject)	6	3	30	70	100
<b>MPPC-223</b>	Any two of the following activities: Aerobics / Self Defensive Techniques – Taekwondo / Shooting / Archery.	6	3	30	70	100
<b>MPPC-224</b>	Adventure Activities / Mass demonstration Activities	6	3	30	70	100
<b>Total</b>		<b>36</b>	<b>24</b>	<b>240</b>	<b>560</b>	<b>800</b>

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

**SEMESTER - III**

<b>Part A :Theoretical Course</b>						
<b>Course Code</b>	<b>Title of the Papers</b>	<b>Total Hours</b>	<b>Credit</b>	<b>Internal Marks</b>	<b>External Marks</b>	<b>Total Marks</b>
<b>Core Course</b>						
<b>MPCC-301</b>	Scientific Principles of Sports Training	3	3	30	70	100
<b>MPCC-302</b>	Sports Medicine, Athletic Care and Rehabilitation	3	3	30	70	100
<b>MPCC-303</b>	Sports Psychology	3	3	30	70	100
<b>Open Elective Course</b>						
<b>MPEC-311</b>	Open Elective / Non Core	3	3	30	70	100
<b>Part- B Practical Course</b>						
<b>MPPC-321</b>	Track and Field: Throwing Events.  Field test for Fitness & Skills	6	3	30	70	100
<b>MPPC-322</b>	Laboratory : Sports Psychology and Physiotherapy lab (Any two practical in each subject)	6	3	30	70	100
<b>MPPC-323</b>	Games Specialisation – <b>Any two games other than two games opted from first semester</b> Badminton / Baseball / Basketball/Cricket/ Football/ Handball /Hockey/ Kabaddi / Kho-kho / Netball/ Softball/ Table Tennis / Tennis	6	3	30	70	100
<b>MPPC-324</b>	Teaching Lessons: Coaching lessons in the events of MPPC- 321 and 323.	6	3	30	70	100
<b>Total</b>		<b>36</b>	<b>24</b>	<b>240</b>	<b>560</b>	<b>800</b>

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

**SEMESTER - IV**

<b>Part A :Theoretical Course</b>						
<b>Course Code</b>	<b>Title of the Papers</b>	<b>Total Hours</b>	<b>Credit</b>	<b>Internal Marks</b>	<b>External Marks</b>	<b>Total Marks</b>
<b>Core Course</b>						
<b>MPCC-401</b>	Information & Communication Technology (ICT) in Physical Education	3	3	30	70	100
<b>MPCC-402</b>	Health Education and Sports Nutrition	3	3	30	70	100
<b>MPCC-403</b>	Sports Technology	3	3	30	70	100
<b>Elective Course</b>						
<b>MPEC-411</b>	Dissertation [compulsory]	3	3	30	70	100
<b>Part- B Practical Course</b>						
<b>MPPC-421</b>	Track and Field – Combined events Training methods: Circuit, Interval, Fartlek, Plyometric & Resistance Trainings	6	3	30	70	100
<b>MPPC-422</b>	Game Specialisation – Practical Skills - any one opted from four games in previous semesters - Record & Viva-voce.	6	3	30	70	100
<b>MPPC-423</b>	Officiating in Track and Field / Gymnastics / Swimming/Yoga	6	3	30	70	100
<b>MPPC-424</b>	Coaching lessons in Game of Specialization - Internship	6	3	30	70	100
<b>Total</b>		<b>36</b>	<b>24</b>	<b>240</b>	<b>560</b>	<b>800</b>
<b>Grand Total for Four Semesters</b>		<b>144</b>	<b>96</b>	<b>960</b>	<b>2240</b>	<b>3200</b>

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

**SCHEME OF EXAMINATION****SEMESTER – I**

<b>Paper</b>	<b>Subject</b>	<b>Internal</b>	<b>External</b>	<b>Total</b>
<b>THEORY (300)</b>				
<b>MPCC-101</b>	Research Process in Physical Education & Sports Sciences	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPCC-102</b>	Physiology of Exercise	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPCC-103</b>	Applied Statistics in Physical Education & Sports	<b>30</b>	<b>70</b>	<b>100</b>
<b>ELECTIVE (100)</b>				
<b>MPEC-111</b>	Fitness and Life Style Management	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPEC-112</b>	Education Technology in Physical Education			
<b>PRACTICAL (400)</b>				
<b>MPPC-121</b>	Track and Field Running Events (compulsory) Any one of the following i.e. Gymnastics/ Swimming / Yoga	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPPC-122</b>	Game of Specialisation – Badminton / Baseball / Cricket/ Football/ Handball /Hockey/ Kabaddi / Kho-kho / Netball/ Softball/ Table Tennis / Tennis /Volleyball. (Any two games – One Indigenous & one ball game)	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPPC-123</b>	Teaching Lessons: Coaching lessons in the events of MPPC- 121 and 122.	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPPC-124</b>	Class room Teaching Lessons on theory of different Sports & Games	<b>30</b>	<b>70</b>	<b>100</b>
<b>Total</b>		<b>240</b>	<b>560</b>	<b>800</b>

**SEMESTER – II**

<b>Paper</b>	<b>Subject</b>	<b>Internal</b>	<b>External</b>	<b>Total</b>
<b>THEORY (300)</b>				
<b>MPCC-201</b>	Yogic Sciences	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPCC-202</b>	Sports Biomechanics and Kinesiology	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPCC-203</b>	Test, Measurement and Evaluation in Physical Edu.	<b>30</b>	<b>70</b>	<b>100</b>
<b>ELECTIVE (100)</b>				
<b>MPEC-211</b>	Sports Management	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPEC-212</b>	Sports Journalism & Mass Media			
<b>MPEC - 212</b>				
<b>MPPC-221</b>	Track and Field Jumping and hurdle Events (compulsory) Any one of the following i.e. Gymnastics/ Swimming / Yoga	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPPC-222</b>	Laboratory Practical in Physiology of Exercise and Bio Mechanics & Kinesiology (Two practical in each subject)	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPPC-223</b>	Any two of the following activities: Aerobics / Self Defensive Techniques – Taekwondo / Shooting / Archery.	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPPC-224</b>	Adventure Activities / Mass demonstration Activities	<b>30</b>	<b>70</b>	<b>100</b>
<b>Total</b>		<b>240</b>	<b>560</b>	<b>800</b>

**SEMESTER – III**

Paper	Subject	Internal	External	Total
<b>THEORY (300)</b>				
<b>MPCC-301</b>	Scientific Principles of Sports Training	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPCC-302</b>	Sports Medicine, Athletic Care and Rehabilitation	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPCC-303</b>	Sports Psychology	<b>30</b>	<b>70</b>	<b>100</b>
<b>OPEN ELECTIVE (100)</b>				
<b>MPEC-311</b>	Open Elective	<b>30</b>	<b>70</b>	<b>100</b>
<b>PRACTICAL (400)</b>				
<b>MPPC-321</b>	Track and Field: Throwing Events. Field test for Fitness & Skills	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPPC-322</b>	Laboratory : Sports Psychology and Physiotherapy lab (Any two practical in each subject)	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPPC-323</b>	Games Specialisation – <b>Any two games other than two games opted from first semester</b> Badminton / Baseball / Basketball/ Cricket/ Football/ Handball /Hockey/ Kabaddi / Kho-kho / Netball/ Softball/ Table Tennis / Tennis/	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPPC-324</b>	Teaching Lessons: Coaching lessons in the events of MPPC-321 and 323	<b>30</b>	<b>70</b>	<b>100</b>
<b>Total</b>		<b>240</b>	<b>560</b>	<b>800</b>

**SEMESTER – IV**

Paper	Subject	Internal	External	Total
<b>THEORY (300)</b>				
<b>MPCC-401</b>	Information & Communication Technology (ICT) in Physical Education	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPCC-402</b>	Health Education and Sports Nutrition	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPCC-403</b>	Sports Technology	<b>30</b>	<b>70</b>	<b>100</b>
<b>ELECTIVE (100)</b>				
<b>MPEC-411</b>	Dissertation.[compulsory]	<b>30</b>	<b>70</b>	<b>100</b>
<b>PRACTICAL (400)</b>				
<b>MPPC-421</b>	Track and Field – Combined events Training methods: Circuit, Interval, Fartlek, Plyometric & Resistance Trainings	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPPC-422</b>	Game Specialisation – Practical Skills - any one opted from four games in previous semesters - Record & Viva-voce.	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPPC-423</b>	Officiating in Track and Field / Gymnastics / Swimming/Yoga	<b>30</b>	<b>70</b>	<b>100</b>
<b>MPPC-424</b>	Coaching lessons in Game of Specialization (Internship)	<b>30</b>	<b>70</b>	<b>100</b>
<b>Total</b>		<b>240</b>	<b>560</b>	<b>800</b>

## THEORY SYLLABUS

### SEMESTER – I

#### MPCC-101: RESEARCH PROCESS IN PHYSICAL EDUCATION AND SPORTS SCIENCES

##### Unit-1 Introduction

Meaning, Definition, Nature, Scope and importance of research in Physical Education. Classification of Research: Basic, Applied and Action Research, Location of Research Problem, Criteria for selection of a Research problem and Qualities of a good researcher.

##### Unit-2 Methods of Research

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

##### Unit-3 Experimental Research

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

##### Unit-4 Sampling

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

##### Unit-5 Research Proposal and Report

Characterization of Thesis / Dissertation: Front Materials, Body of Thesis, Back materials, Method of Writing Research proposal, Thesis / Dissertation: Method of writing abstract, full paper for presenting in a conference, publishing in journals, Mechanics of writing Research Report, Footnote and Bibliography.

##### References:

- 1) Best J. W (1971) Research in Education, New Jersey; Prentice Hall, Inc
- 2) Clarke David. H & Clarke H, Harrison (1984) Research processes in Physical Education, New Jersey; Prentice Hall Inc.
- 3) Craig Williams and Chris Wragg (2006) Data Analysis and Research for Sport and Exercise Science, London; Routledge Press
- 4) Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illinois; Human Kinetics;
- 5) Kamlesh, M. L. (1999) Research Methodology in Physical Education and Sports, New Delhi
- 6) Moses, A. K. (1995) Thesis Writing Format, Chennai; Poompugar Pathippagam
- 7) Rothstein, A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc
- 7) Subramanian, R, Thirumalai Kumar S & Arumugam C (2010) Research Methods in Health, Physical Education and Sports, New Delhi; Friends Publication
- 8) Moorthy A. M. Research Processes in Physical Education (2010); Friend Publications
- 9) Satyanarayana Vaddepalli, Research Methodology in Physical Education (2015) Sports Publication, New Delhi

## **MPCC-102: PHYSIOLOGY OF EXERCISE**

### **Unit-1 Introduction, Skeletal Muscles and Exercise**

Definition of Physiology, Exercise Physiology and importance of Exercise Physiology in sports. Macro & Micro Structure of the Skeletal Muscle, Types of Muscle fibers and their characteristics, Chemical Composition, Chemistry of Muscular Contraction, Sliding Filament theory of Muscular Contraction. Muscle Tone, Heat Production in the Muscle and Effects of exercise and training on the muscular system.

### **Unit-2 Cardiovascular System and Exercise**

Structure of the Heart , Heart Valves and Direction of the Blood Flow, Conduction System of the Heart, cardiac Circulation, Cardiac Cycle, Heart Rate ,Stroke Volume, Cardiac Output and Heart Rate and stroke Volume interactions. Effects of exercise and training on Cardio vascular system.

### **Unit-3 Respiratory System and Exercise**

External and Internal Respiration, Mechanism of Respiration, Respiratory Muscles, Minute Ventilation, Ventilation at Rest and During Exercise. Exchange of Gases in Lungs and Tissues, Control of Ventilation, Ventilation and Anaerobic Threshold, Oxygen recovery, Lung Volumes and Capacities ,Anatomical Dead Space. Effects of exercise and training on respiratory system.

### **Unit-4 Metabolism and Energy Transfer**

Metabolism: Definition and types- Anabolism and Ketabolism, Anaerobic Metabolism: ATP,PC or Phosphagen System, Anaerobic Glycolysis, Aerobic Metabolism: Aerobic Glycolysis, Fat Metabolism. Metabolism during Rest and Exercise (.High Intensity ,and Long Duration Exercises),

### **Unit-5 Climatic conditions and Ergogenic aids**

Variations in Temperature and Humidity,– Thermoregulation, –Sports performance in hot Cool and humid Climate, high altitude, acclimatization and circadian rhythm. Ergogenic Aids: Pharmacological, Hormonal, Physiological aspects and their effects on sports performance. Doping and WADA.

*Note: Laboratory Practicals in Physiology be designed and arranged internally.*

### **References:**

- 1) Amrit Kumar, R, Moses. (1995). Introduction to Exercise Physiology. Madras: PoompugarPathipagam.
- 2) BeotraAlka, (2000) Drug Education Handbook on Drug Abuse in Sports: Sports Authority of India Delhi.
- 3) Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs.
- 4) David, L Costill. (2004). Physiology of Sports and Exercise. Human Kinetics.
- 5) Fox, E.L., and Mathews, D.K. (1981). The Physiological Basis of Physical Education and Athletics. Philadelphia: Sanders College Publishing.
- 6) Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sanders co.
- Richard, W. Bowers. (1989). Sports Physiology. WMC: Brown Publishers.
- 7) SandhyaTiwaji. (1999). Exercise Physiology. Sports Publishers.
- 8) Shaver, L. (1981). Essentials of Exercise Physiology. New Delhi: Subject Publications.
- Vincent, T. Murche. (2007). Elementary Physiology. Hyderabad: Sports Publication.
- William, D. McAradle. (1996). Exercise Physiology, Energy, Nutrition and Human
- 9) Performance. Philadelphia: Lippincott Williams and Wilkins Company.
- John Bullock. et.al., Physiology, 4th Ed.Newyork

## **MPCC-103: APPLIED STATISTICS IN PHYSICAL EDUCATION AND SPORTS**

### **UNIT I – Introduction**

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

### **UNIT II – Measures of Central Tendency**

Construction of frequency table. Meaning, Definition, Importance, Computation, Advantages and Disadvantages of Measures of central tendency. – Mean, median and mode.

### **UNIT III – Measures of Dispersions and Scales**

Meaning, Purpose, Calculation and Advantages of Range, Quartile Deviation, Mean Deviation, Standard Deviation, Probable Error. Scales: Meaning, Purpose, Computation and advantages of t - ratio, 6 Sigma scale, Z Scale and Hull scale.

### **UNIT IV – Probability Distributions and Graphs**

Normal Curve. Principles of normal curve, Properties of normal curve. Meaning of probability, –. Divergence from normality. Skewness and Kurtosis. Graphical Representations in Statistics: Line diagram, Bar diagram, Histogram, Frequency Polygon, Ogive Curve and Pie Diagram.

### **UNIT V – Inferential and Comparative Statistics**

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

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

### **REFERENCE**

1. Best J. W (1971) Research in Education, New Jersey; Prentice Hall, Inc
2. Clark D.H. (1999) Research Problem in Physical Education 2nd 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) Reserach 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. Thirumalaisamy (1998), Statistics in Physical Education, Karaikudi, Senthilkumar Publications.



## **MPEC-111: FITNESS AND LIFE STYLE MANAGEMENT (ELECTIVE)**

### **Unit-1**

Concept of Fitness Definition and meaning of Fitness, Different Kinds of Fitness, Physical Fitness, Skill Related and Health Related Physical Fitness. Relationship of fitness and health fitness to develop health of an individual, Wellness revolution: Life style and Health fitness relationship, Meaning of active life style, Physical inactivity and associated health risks Diabetes, Hypertension, Atherosclerosis, Arthritis

### **Unit - 2**

Meaning of Health, Health related fitness components: Body Compositions, cardio vascular fitness, Muscular Endurance, strength, flexibility, benefits of health related fitness. Benefits of Health fitness Components: Meaning of health related and Physical fitness components Exercise protocols for the health fitness components, Body Composition, concepts of body weight and components of body weight, Assessment of body composition, Obesity, Meaning of Obesity and risk factors, of Obesity and over fatness- Muscular and joint flexibility-risk factors Associated with poor muscular and Joint flexibility..

### **Unit-3**

Nutrition: base for human performance- Carbohydrates, Fats and Proteins. Recommended intake for Normal persons and exercising individuals. Vitamins, Minerals and Water. Osteoporosis and Calcium, Minerals and performance. Optimal nutrition for exercise, Energy value of different important foods, Food Pyramid, fluid replacement before, during and after exercise for temperature regulation and injury prevention, carbohydrates and electrolytes during exercise.

### **Unit-4**

Stress-meaning and types of stress, Physical and mental stress- Harmful effects of overtraining and excessive exercise on health, -mental stress and painful effects of mental stress on health. Anxiety, Depression, insomnia, Compulsive obsessive behaviors, Stress relief through exercise and stress management protocols.

### **Unit-5**

Health behavior, Self efficacy and health behavior, Behavioral modification for wellness, Social support and health of an individual, Life style and other related aspects of activity during childhood. Facts on childhood obesity and activity.

### **References:**

1. Lifestyle management in Health and Social care, Merinda Thew and Jim McKenna, Blackwell Publishing, United Kingdom.
2. Predicting Health behavior, Mark Connor and Paul Norman, Open University Press, Buckingham, UK.
3. Health Behavior and health education: Theory, research and Practice, Karen Glanz, Barbara Rimer, Viswanath, John Wiley and sons, USA. (Free pdf book)
4. Human Body Composition, Steven B Heymstead, Timothy Lohan, Zimian Wang, Scott B Going, Human Kinetics, USA.
5. Science of Flexibility, Michael J Alter, Human Kinetics, USA.
6. Applied Body Composition Assessment, Vivian H Heyward, Dale R Wagner, Human Kinetics, USA.
7. Coping with life stress- the Indian experience, Meena Hariharan, Amazon Books.
8. Stress Management- a Wellness approach, Nanette E Tummers, Human Kinetics, USA.
9. Wellness coaching for lasting Lifestyle change, Michael Arloski, Whole person associates, Duluth, USA.
10. Staying Healthy with Nutrition: The complete guide to Diet and Nutritional medicine, Elson M Has.,
11. Satyanarayana Vaddepalli, Fitness and life style Management (2015) Sports Publication, New Delhi

## **MPEC-112: EDUCATION TECHNOLOGY IN PHYSICAL EDUCATION (Elective)**

**Unit I** – Naturtechnology: concept, Nature and Scope. Forms of educational technology: teaching techne and Scope

Educational ology, instructional technology, and behavioural technology; Transactional usage of educational technology: integrated, complementary, supplementary stand-alone (independent); programmed learning stages; media application stage and computer application stage.

### **Unit II – Systems Approach to Physical Education and Communication**

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

### **Unit III- Instructional Design**

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

### **Unit IV – Audio Visual Media in Physical Education**

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

### **Unit V – New Horizons of Educational Technology**

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

### **REFERENCE:**

1. AmitaBhardwaj, New Media of Educational Planning”.Sarup of Sons, New Delhi-2003 Bhatia and Bhatia. The Principles and Methods of Teaching (New Delhi :Doaba House), 1959.
2. Communication and Education, D. N. Dasgupta, Pointer Publishers
3. Education and Communication for development, O. P. Dahama, O. P. Bhatnagar, Oxford Page 68 of 71 IBH Publishing company, New Delhi
4. Essentials of Educational Technology, MadanLal, Anmol Publications
5. K. Sampath, A. Pannirselvam and S. Santhanam. Introduction to Educational Technology (New Delhi: Sterling Publishers Pvt. Ltd.) : 1981.
6. Kochar, S.K. Methods and Techniques of Teaching (New Delhi, Jalandhar, Sterling Publishers Pvt. Ltd.), 1982
7. Kozman, Cassidy and kJackson. Methods in Physical Education (W.B. Saunders Company,Philadelphia and London), 1952.

## SEMESTER-II

### MPCC-201: YOGIC SCIENCES

#### Unit I – Introduction

Meaning, Definition, Scope and importance of Yoga, Essentials For Yoga Practices; Age, Diet, Stomach Emptying bowels, bathing, Clothes, Sun Bathing, No Straining, Place, Time, Awareness, Sequence. Contra indication, Counter Pose, Breathing, and Relaxation. Basic Systems of Yoga with importance - Astanga Yoga: Yama, Niyama, Aasna, Pranayama, Prathyahara, Dharana, Dhyana, Samadhi. Streams of Yoga: Hatha Yoga, Raja Yoga, Karma Yoga, Bhakti Yoga and Gnana Yoga.

#### Unit II – Asanas ,Kriyas, Bandhas and Mudras:

Asana: Definition, Classification, Sitting, Standing, Lying, & Inverted Asanas. Benefits of Asanas, Asanas and Loosening Exercises, Surya Namaskara- Description and Benefits. Kriyas :Meaning, Neti, Nauli, Dhauti, Kapalabhati, Trataka, Bhastrika, Benefits. Bandhas:Jalandhara, Udyana, Mula and MahaBandha,their Importance. Mudras: meaning, Definition, Purpose, types of Mudras.

**Unit III – Pranayama:** Meaning, Definition, Tradition, Types , Importance & Impact of Pranayama on naadis. Chakras: Meaning, Definition and types, Effects of Pranayama on major chakras.

**Unit IV – Meditation:** Meaning, Definition and Benefits. Types of Meditation,Passive, active, Saguna and Nirguna Meditation. Meditation and Health, Meditation and stress Management.Concentration: Meaning, Definition and Benefits.

#### Unit V – Yoga and Sports

Effects of Yoga on Physiological Systems: Respiratory, Circulatory, Digestive, Nervous and Excretory Systems. Place of Yoga as Supplementary, Compensatory, Regenerative and Yogic Power. Role of Yoga in Sports: Promotion of Mental Wellbeing, Role of Yoga in Making out a Sports Person.

*Note: Laboratory Practicals be designed and arranged internally.*

#### REFERENCE:

1. George Feuerstein, (1975). Text Book of Yoga. London: MotilalBansaridass Publishers (P) Ltd.
2. Gore, (1990), Anatomy and Physiology of Yogac Practices.Lonavata: KanchanPrkashan. Helen Purperhart (2004), The Yoga Adventure for Children. Netherlands: A Hunter House book.
3. Iyengar, B.K.S. (2000), Light on Yoga. New Delhi: Harper Collins Publishers.
4. Karbelkar N.V.(1993) PatanjalyogasutraBhashya (Marathi Edition) Amravati: Hanuman VyayamPrasarak Mandal
5. Kenghe.C.T. (1976). Yoga as Depth-Psychology and para-Psychology (Vol-I): Historical Background, Varanasi: BharataManishai.
6. Kuvalyananada Swami & S.L. Vinekar, (1963), Yogic Therapy – Basic Principles and Methods. New Delhi: Govt. of India, Central Health Education and Bureau.
7. Moorthy A.M. &Alagesan. S. (2004) Yoga Therapy. Coimbatore: Teachers Publication House.
8. Swami Kuvalayanda, (1998), Asanas. Lonavala: Kaivalyadhama.
9. Swami SatyananadaSarasvati. (1989), Asana Pranayama Mudra Bandha.Munger: Bihar School of Yoga.
10. Swami SatyanandaSaraswathi. (1984), Kundalini and Tantra, Bihar: Yoga Publications Trust.
11. Swami Sivananda, (1971), The Science of Pranayama. Chennai: A Divine Life Society Publication.
12. Thirumalai Kumar. S and Indira. S (2011) Yoga in Your Life, Chennai: The Parkar Publication.
13. Tiwari O.P. (1998), Asanas-Why and How.Lonavala: Kaivalyadham.
14. SatyaMurty.K, *Elements of Yoga,Vedadri Brahma Gnana Kendra, Pedakakani, Guntur, India,(2015)*

## **MPCC-202: SPORTS BIOMECHANICS AND KINESIOLOGY**

### **UNIT I – Introduction**

Meaning, nature, importance and scope of Applied kinesiology and Sports Biomechanics. Meaning of Axis and Planes, Dynamics, Statics, Kinematics, Kinetics, gravity, Center of Gravity, Line of gravity and base of the body. Vectors and Scalars.

### **UNIT II – Muscle Action**

Origin, Insertion and action of Muscles around shoulder, Elbow, Hip, Knee and muscles of Abdomen & Trunk.

### **UNIT III – Motion and Force**

Meaning and definition of Motion. Types of Motion: Linear motion, angular motion and General motion. uniform & Non Uniform motion. Laws of Motion :law of Inertia, Law of acceleration and law of reaction. Force: Definition and types of force: Centripetal Force, Centrifugal Force, Sources of force, components of Force, Factors of Force. pressure, friction, Buoyancy and Spin .

### **UNIT IV – Projectiles and Levers**

Freely falling bodies, Projectiles: Principles of Projectiles: Stability, equilibrium and its Types. Factors Effecting on Equilibrium .Definition of Work, Power and Energy.Mechanical Energy: kinetic energy, potential energy and strain energy. Levers: Definition and Types of Levers and their practical application. Mechanical Advantage. Fluid Resistance, Aerodynamics.

### **UNIT V – Movement Analysis**

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

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

### **REFERENCE:**

1. Deshpande S.H.(2002). ManavKriyaVigyan – Kinesiology (Hindi Edition) Amravati :HanumanVyayamPrasarak Mandal.
2. Hoffman S.J. Introduction to Kinesiology (Human Kinesiology publication In.2005. Steven Roy,& Richard Irvin. (1983). Sports Medicine. New Jersey: Prentice hall. Thomas. (2001).
3. Manual of structural Kinesiology, New York: Me Graw Hill. Uppal A.K. Lawrence Mamta MP Kinesiology(Friends Publication India 2004)
4. Uppal, A (2004), Kinesiology in Physical Education and Exercise Science, Delhi Friends publications.
5. Williams M (1982) Biomechanics of Human Motion, Philadelphia; Saunders Co.
6. Peter.M.Mc.Ginnis, Biomechanics of Sport and Exercise, Human Kinetics, U.S.A, 1999

## **MPEC-203: 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, Administrative Considerations and Educational Applications. Scientific Authenticity: Validity, Reliability, Objectivity, Norms, Duplicate Forms and Standard Directions.

### **UNIT II – Physical Fitness Tests**

Physical Fitness: Meaning and Definition, Physical Fitness Tests: AAHPER, JCR Tests. Roger's physical fitness Index. Cardio vascular test: Harvard step test, Cooper's 12 minutes run / walk test.

### **UNIT III – Motor Fitness Tests**

Meaning and Definition of Motor Fitness, Motor Fitness Tests; Indian Motor Fitness Test, Oregon Motor Fitness Test. Motor Ability: Meaning, Definition. Motor Ability Test: Barrow Motor Ability Test, Newton Motor Ability Test. Muscular Fitness: Kraus Weber Minimum Muscular Fitness Test.

### **UNIT IV – Anthropometric and Aerobic-Anaerobic Tests**

Physiological Test-Aerobic Capacity: Bruce Treadmill Test Protocol, Beep test. Anaerobic Capacity: Margaria-Kalamen test, Anthropometric Measurements: Method of Measuring Height: Standing Height, Sitting Height. Girth: Arm, Waist, Hip, Thigh. Skin Folds: Chest, Abdomen, Midthigh, Triceps, Iliac Crest.

### **UNIT V – Skill Tests**

Specific Sports Skill Test: Badminton: French Stalter Short Service Test, Miller Wall Volley Test. Basketball: Knox, Johnson Basketball Test. Hockey: Henry Friedel Field Hockey Test, Schmithal's Field Hockey Test, Volleyball: Russel Lange Volleyball Test, Brady Volleyball Test. Football: Johnson Soccer Test, Mc-Donald Volley Soccer Test. Tennis: Dyer Tennis Test, Broer Miller Test.

*Note: Practicals of indoor and out-door tests be designed and arranged internally.*

### **REFERENCES :**

1. Authors Guide (2013) ACSM's Health Related Physical Fitness Assessment Manual, USA: ACSM Publications
2. Collins, R.D., & Hodges P.B. (2001) A Comprehensive Guide to Sports Skills Tests and Measurement (2nd edition) Lanham: Scarecrow Press
3. Cureton T.K. (1947) Physical Fitness Appraisal and Guidance, St. Louis: The C. Mosby Company
4. Getchell B (1979) Physical Fitness A Way of Life, 2nd Edition New York, John Wiley and Sons,
5. Jenson, Clayne R and Cyntha, C. Hirst (1980) Measurement in Physical Education and Athletics, New York, Macmillan Publishing Co. Inc
6. Kansal D.K. (1996), "Test and Measurement in Sports and Physical Education, New Delhi: DVS Publications
7. Krishnamurthy (2007) Evaluation in Physical Education and Sports, New Delhi; Ajay Verma Publication
8. Vivian H. Heyward (2005) Advance Fitness Assessment and Exercise Prescription, 3rd Edition, Dallas TX: The Cooper Institute for Aerobics Research
9. Wilmore JH and Costill DL. (2005) Physiology of Sport and Exercise: 3rd Edition. Champaign IL: Human Kinetics
10. Yobu, A (2010), Test, Measurement and Evaluation in Physical Education in Physical Education and Sports. New Delhi; Friends Publications

## **MPEC: 211: SPORTS MANAGEMENT**

### **Unit I :- Meaning and Definition of Sports Management:**

Meaning – Definition – Scope and concept of management – need and scope of sports management, levels of management – Principles of management – span of control – unity of command.

### **Unit II :- Organization of Physical Education and Budget**

Scheme of Physical Education Programs in schools, colleges and universities – **Districts – States – National** -Organization Chart in schools / college level.

Budget – Sports Budget - Games Fund – Sources of Income and Expenditure – Approved items of expenditure – Rules for Utilization of games fund for Physical Education programme – Budget preparation and planning in schools and colleges.

### **UNIT-III:- Maintenance of Records and Equipment etc:-**

Maintenance of Records and Registers for Physical Education programme and their care maintenance of games equipment - administration and maintenance of track and field – swimming pool – Gymnasium – play grounds.

### **UNIT – IV:- Leadership:**

Meaning and definition of leadership – types of leadership – theories of leadership – qualities and qualifications of a leader, sports leadership.

### **UNIT-V: Organization of sports events (Intramurals and extramurals):**

Intramurals – meaning and definitions – need and importance of intramurals – annual sports day - Writing of circulars, notification and invitations – publicity & public relations – selecting and fixing of officials – monitoring and write ups – press – sponsoring teams – writing reports and maintaining of records. Extramurals – meaning and definitions – need and importance of extramurals – Intercollegiate tournaments – team selections – awards and rewards

### **REFERENCE BOOKS:**

1. U.K. Singh M.Dewan: Sports Management
2. B.D. Bhatt & S.R. Sharma: Educational Administration
3. KiranSandhu: Sports Dynamics
4. Shivers: Introduction to recreational and service administration
5. Mason Raul: Modern Sports Administration Raymond
6. Nakamura: The Power of Positive Coaching

## **MPEC – 212 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 a sanintegral 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, AsianGames, CommonwealthGames, WorldCup, 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. Method so fediting a Sports report. Evaluation of Reported News. Interview with and elite Player and Coach.

Practical assignment stoob serve the matches and preparereport and news of the same; visit to News Paper office and TV Centre to know various departments and their working. Collection of Album of news paper cuttings of sports news.

### **REFERENCE:**

1. Ahiya B.N. (1988) Theory and Practice of Journalism: Setto Indian context Ed3. Delhi: Surjeet Publications
2. Ahiya B.N. Chobra S. S. A. (1990) Concise Coursein Reporting. NewDelhi: Surjeet Publication
3. Bhatt S.C. (1993) Broadcast Journalism Basic Principles. New Delhi. Haranand Publication Dhananjay Joshi (2010)
4. Value Education in Global Perspective.NewDelhi:LotusPress.KannanK (2009)
5. SoftSkills, Madurai: Madurai: Yadava College Publication
6. Mohit Chakrabarti (2008): Value Education: Changing Perspective, New Delhi: Kanishka Publication.
7. Padmanabhan. A & Perumal A (2009), Science and Art of Living, Madurai: Pakavathi Publication
8. ShivKhera (2002), You Can Win, NewDelhi: Macmill an India Limited.
9. VarmaA.K.( 1993) Journalism in India from Earliest Times to the Present Period. Sterling publication Pvt. Ltd.
10. Venkataiah.N (2009) Value Education,-NewDelhi: APH Publishing Corporation.

### **SEMESTER III**

#### **MPCC-301: SCIENTIFIC PRINCIPLES OF SPORTS TRAINING**

##### **UNIT I – Introduction**

Sports training: Definition – Aims, Characteristics, Principles of Sports Training. Load: Definition, Components of load. Over Load: Definition, Causes of Over Load, Symptoms of Overload, Remedial Measures for over load – Super Compensation .Recovery. Detraining and Retraining.

##### **UNIT II – Components of Physical Fitness**

Strength: Meaning, types - Isometric, Isotonic and Iso kinetic exercises – Factors determining strength – Methods to improve strength. Speed: Meaning – types - Factors determining speed – Methods to improve speed. Endurance: Meaning – types - Factors determining endurance – Methods to improve Endurance.

##### **UNIT III – Flexibility and Coordination**

Flexibility: Meaning – types - Factors determining flexibility – Methods to improve flexibility- Coordination : Meaning, types - Factors determining coordination – Methods to improve coordination.

##### **UNIT IV – Methods of Sports Training**

Aerobic training, Anaerobic training, Weight training, Fartlek Training, Interval training, Plyometric training, Resistance training, Pressure training, High Altitude training, Functional training, Repetition method of training, and Transfer of training effects.

##### **UNIT V – Periodization**

Training Plan: Micro, Meso and Macro Cycles. Short Term Plan and Long Term Plans - Periodisation: Meaning, Single, Double and Multiple Periodisation, Phases of Periodisation, Preparatory Period, Competition Period and Transition Period. Top form, Tapering performance. Training schedules.

##### **REFERENCES :**

1. BeotraAlka, (2000), Drug Education Handbook on Drug Abuse in Sports. Delhi: Sports Authority of India.
2. Bunn, J.N. (1998) Scientific Principles of Coaching, New Jersey Engle Wood Cliffs, Prentice Hall Inc.
3. Cart, E. Klafs&Daniel, D. Arnheim (1999) Modern Principles of Athletic Training St. Louis C. V. Mosphy Company
4. Daniel, D. Arnheim (1991) Principles of Athletic Training, St. Luis, Mosby Year Book
5. David R. Mottram (1996) Drugs in Sport, School of Pharmacy, Liverpool: John Moore Univ.
6. Gary, T. Moran (1997) – Cross Training for Sports, Canada : Human Kinetics Hardayal Singh (1991) Science of Sports Training, New Delhi, DVS Publications
7. 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
8. Bartlett Publications
9. YograjThani (2003), Sports Training, Delhi : Sports Publications
10. Michael; J.Alter : Sciences of stretching (1988) Human Kinetics.
11. The Physiology basis of Physical Education and Athletics, 4th Edition, Fox, Bruiser and Foss.
12. Larry G. Shaver : Essentials of Exercise Physiology.
13. Stwven J. Flack &Willam J. Kraemer : Designing resistance training programme (1997) Human Kinetics



## **MPCC-302: SPORTS MEDICINE, ATHLETIC CARE AND REHABILITATION**

### **Unit I – Introduction**

Meaning, definition and importance of Sports Medicine, Definition and Principles of therapeutic exercises. Injuries: acute, sub-acute, chronic. Advantages and Disadvantages of PRICE, PRINCE (Protection, Rest, Ice, NSAIDS (Non Steroidal anti-inflammatory drugs), Compression & Elevation) therapy, Aquatic therapy.

### **Unit II – Posture**

Posture, Values of Good posture, Causes of Bad posture, Normal curve of the spine and its utility, Deviations in posture: Kyphosis, lordosis, flat back, Scoliosis, round shoulders, Knock Knees, Bow legs, Flat foot. Causes for deviations and treatment including exercises. Posture test, Gait and types.

### **Unit III – Rehabilitation Exercises**

Passive, Active, Assisted, Resisted exercise for Rehabilitation, Stretching, PNF techniques and principles. Gait training, swiss ball exercises.

### **Unit IV – Massage**

Brief history of massage – Massage as an aid for relaxation, Principles of massage, Physiological, Chemical, Psychological effects of massage, Contra indications of Massage, Classification of Massage, 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: Vibration and shaking.

### **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, Therapeutics modalities: Cryo, thermo, Hydro, Electro, Actino therapy Strapping, Taping and Bandages, supporting, Aiding techniques for equipment for upper extremities and Lower extremities and spine.

**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:**

1. 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.
2. McOoy and 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.

**MPCC-303: SPORTS PSYCHOLOGY**

**UNIT – I:- Sports psychology – Meaning – Scope – Need and Importance**

Introduction to psychology – sports psychology Meaning, Definition, Nature, need and importance of sports psychology in physical education- Development of sports psychology in India and Abroad - Emotions – Meaning and Definition of emotions - types of emotion, effect of emotion on performance, reasons and control of emotions in sports.

**UNIT-II:- Personality and Motivation**

Personality – meaning, definition, nature of personality – types of personality – classification of personality – well built sports personality. Motivation – nature, meaning, definition of motivation – need and importance of motivation in sports and games – types of motivation - intrinsic and extrinsic motivation and sports performance.

**UNIT-III:-Emotional states and Aggression**

Emotional states: Aggression – hostility – Aggression, meaning, definition and nature of aggression – role of aggression in sports – types of aggression – degrees/models of aggression – reasons and control of aggression in sports.

**UNIT-IV:-Anxiety and Stress**

Anxiety- Meaning, definitions, nature, role of anxiety in sports competitions – types of anxiety – reasons and control of anxiety in sports  
Stress – Meaning and definitions - physical stress – mental stress – reason and control of stress with physical activity and exercise.

**UNIT-V:-Emotional status – Arousal and Activation**

Emotional status – Arousal and Activation – meaning, definitions – need and importance of arousal and activation in sports competitions – episodes of activation – drive theory – stages of drive theory – role of drive theory in sports performance - recurrent emotions and cognitive accompaniment to activation in sports.

**REFERENCE BOOKS:**

1. Brynat,J., Gatty (1973) Psychology in contemporary Sports, Englewood Cliffs, New Jersey
2. Kamlesh, M.L. (1988) Vpsychology in physical education and sports (2<sup>nd</sup> Ed.), Metropolitan Book Co. Pvt. Ltd., Delhi.
3. Robert, N. Singer, Coaching athletics and psychology, McGraw Hill Book Co., New York.
4. Satyarayana, Vaddepalli, Physical education, social attitude and leadership qualities, Discovery Publishing House, New Delhi, 2001.
5. Suin Richard, M., Psychology in sports methods and application. Colorado State University, Fort Williams, Colorado, Surjeet Publications, Delhi.

## **Semester - IV**

### **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 , challenges in integrating ICT in Physical Education and Education Scope of ICT: Teaching Learning Process, Publication Evaluation, Research and Administration.

#### **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 and 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 : Meaning and Definition – Need and importance of E - learning in physical education and sports

Web Based Learning: Meaning, importance and types of web based learning in physical education and sports

Visual Classroom: Visual thinking: Visual learning – benefits of visual class room in physical education and sports

#### **REFERENCES:**

1. 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
2. Heidi Steel Low price Edition, Microsoft Office Word 2003- 2004
3. ITL Education Solution Ltd. Introduction to information Technology, Research and Development Wing-2006
4. Pradeep K. Sinha&Priti; Sinha, Foundations computing BPB Publications -2006. Rebecca Bridges Altman Peach pit Press, Power point for window, 1999
5. Sanjay Saxena, Vikas Publication House, Pvt. Ltd. Microsoft Office for ever one, Second Edition-2006

## **MPCC-402 : HEALTH EDUCATION AND SPORTS NURTITION**

### **Unit - I Health Education**

Meaning, Definition of Health, Health Education. Concept, Dimensions, and Determinants of Health. Health Instructions, Aims, objectives and Principles of Health Education. Health Service, Health supervision .

### **Unit - II Health Problems in India**

Communicable: Tuberculosis, Measles, Mumps, Rabies, Polio, whooping cough, Hepatitis, Ebola, Swine flu, Dengue, Malaria and STD: Gonorrhoea, HIV/Aids, Syphilis. and Non Communicable Diseases: Cancer, Osteoporosis, Asthma, Hypertension, Diabetes. Obesity, Malnutrition, Adulteration in food, Environmental sanitation, Explosive Population, Personal and Environmental Hygiene in schools. Objectives of school health service, Role of health education in schools, Nutritional service, Health appraisal, Healthful school environment, first-aid and emergency care. Health Agencies: Red cross, WHO, St. John Ambulance, UNICEF, UNESCO.

### **Unit- III –Hygiene and Health**

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

### **Unit – IV- Introduction to Sports Nutrition**

Meaning and Definition of Sports Nutrition, Role of nutrition in sports, Basic Nutrition guidelines, Nutrients: Carbohydrate, Protein, Fats, Vitamins, Minerals, Water Dehydration and fluids replacement, Classification of food, organic food, Carbohydrate loading, Hyponatremia., Role of carbohydrates, Fat and protein on Sports Performance.

### **Unit – V Nutrition and Weight Management**

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

### **References:**

1. Bucher, Charles A. "Administration of Health and Physical Education Programme". Delbert, Oberteuffer, et. al." The School Health Education".
2. Ghosh, B.N. "Treaties of Hygiene and Public Health".
3. Hanlon, John J. "Principles of Public Health Administration" 2003. Turner, C.E. "The School Health and Health Education".
4. Moss and et. Al. "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.
5. Boyd-Eaton S. et al (1989) The Stone Age Health Programme: Diet and Exercise as Nature Intended. Angus and Robertson.
6. Terras S. (1994) Stress, How Your Diet can Help: The Practical Guide to Positive Health Using Diet, Vitamins, Minerals, Herbs and Amino Acids, Thorons.
7. Satyanarayana Vaddepalli, Sports Nutrition and Weight Management (2015) Sports Publication, New Delhi

## **MPEC-403: SPORTS TECHNOLOGY**

### **Unit I – Sports Technology**

Meaning, definition, Importance of technology in Sports, General Principles and purpose of instrumentation in sports, Technological impacts on sports.

### **Unit II – Science of Sports Materials**

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

### **Unit III – Surfaces of Playfields**

Modern surfaces for playfields, construction and installation of sports surfaces. Types of materials: synthetic, wood, polyurethane. Artificial turf. Modern technology in the construction of indoor and outdoor facilities. 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: Running, 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. Use of computer and software in mater analysis and coaching.

**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:**

1. Charles J.A. Crane, F.A.A. and Furness, J.A.G. (1987) "Selection of Engineering Materials" UK: Butterworth Heiremann.
2. Finn, R.A. and Trojan P.K. (1999) "Engineering Materials and their Applications" UK: Jaico Publisher.
3. John Mongilo, (2001), "Nano Technology 101 "New York: Green wood publishing group. Walia, J.S. Principles and Methods of Education (Paul Publishers, Jullandhar), 1999.
4. Kochar, S.K. Methods and Techniques of Teaching (New Delhi, Jullandhar, Sterling Publishers Pvt. Ltd.), 1982
5. Kozman, Cassidy and Jackson. Methods in Physical Education (W.B. Saunders Company, Philadelphia and London), 1952.

**MPEC- 411: DISSERTATION**

1. Student who has chosen elective paper in Dissertation has to choose the Supervisor in the Department and select the Topic/Event of his choice in consultation with his/her Supervisor and submit the research proposal on or before the end of the second semester to the Principal / Head of the Department.
2. Further the student has to submit his/her Dissertation (four copies) not less than 15 days before the beginning of the Fourth Semester examinations and he/she shall appear Viva-voce examination.

## **SEMESTER - I**

### **Practicum Course**

#### **MPPC- 121: Track and Field - Running Events (compulsory)**

**Any one of the following i.e. Gymnastics/ Swimming / Yoga.**

##### **Running**

Fundamental techniques–Short and Middle distance.

Use of Starting blocks- stance on the blocks.

Running ABC, Body position at the start- starting technique, change in body position during running, movements of the arms, stride length and frequency, position of torso while running and at finish.Drills.

Advanced techniques Various techniques of sprint start: Bullet, Medium and Elongated

Laying out of Standard Track with staggers

##### **Gymnastics**

Floor Exercise, Pyramids, Parallel bars and Balancing beam.

##### **Swimming**

Float, Free style, and Breast stroke.

##### **Yoga**

Yoga Asanas: standing, sitting, prone, supine and balancing Asanas.

**MPPC- 122 :Game of Specialization** – Badminton / Baseball / Cricket/ Football/ Handball /Hockey/ Kabaddi / Kho-kho / Netball/ Softball/ Table Tennis /Tennis/Volleyball.

A candidate has to learn and perform proficiency and officiating in any two games – One Indigenous & one ball game

**MPPC- 123: Teaching Lessons: Coaching lessons in the events of MPPC- 121 and 122.**

Student has to take Coaching lessons of each 45 mins in the activities and games mentioned above MPPC 121 and 122. 5 lessons (4 Internal and 1 External)

**MPPC- 124: Class room teaching Lessons on theory of different Sports & Games**

Student has to take Teaching lessons on theory of each 45 mins in different sports and games of the above MPPC 121 and 122. 5 lessons (4 Internal and 1 External)

**SEMESTER - II**

**Practicum Course**

**MPPC- 221: Track and Field - Jumping Events (compulsory)**

Any one of the following i.e. Gymnastics/ Swimming / Yoga.

**Jumping**

Fundamental techniques –Broad jump, High Jump, Triple jump and Pole vault

Advanced techniques in jumps and Drills.

Laying out of Jumping Sectors

**Gymnastics**

Horizontal bar, Roman rings, Gymnastics positions, Rhythmic Gymnastics and Vaulting horse.

**Swimming**

Butterfly, Back stroke, Medley and Rules regarding swimming.

**Yoga**

Pranayama, Dhyana, Bhandas, Mudras and Shatkriyas.

**MPPC- 222 :Laboratory Practical in Physiology of Exercise and Kinesiology and Biomechanics**

Student has to learn atleast two practicals in Exercise Physiology and Kinesiology and Biomechanics in the laboratory and prepare work book on practicals.

**MPPC- 223: Any two of the following activities:**

**Aerobics / Self Defensive Techniques – Taekwondo / Shooting / Archery.**

Student has to learn atleast two activities from the above and exhibit proficiency in examination.

**MPPC- 224: Adventure Activities (Trecking, rock climbing and cycling) / Mass demonstration Activities (Bharathiyam, Pyramids, Callisthenics and light apparatus)**

Student has to learn the activity from the above and exhibit demonstration and show proficiency during examination.



**SEMESTER - III**

**Practicum Course**

**MPPC- 321: Track and Field – Throwing Events (compulsory)**

**Throwing Events**

Fundamental techniques –Shot-put, discuss, javelin and Hammer

Advanced techniques in throws and Drills.

Laying out of Throwing Sectors

**Field Test for Fitness and Skills**

Student has to learn testing procedures to test any two fitness variables and skills related to sports / games on ground and prepare practical work book on practical done.

**MPPC- 322: Laboratory Practical in Psychology and Physiotherapy**

Student has to learn atleast two practical in Psychology and Physiotherapy in the laboratory and prepare work book on practical done.

**MPPC- 323: Game of Specialisation – Badminton / Baseball/Basketball/ Cricket/ Football/ Handball /Hockey/ Kabaddi / Kho-kho / Netball/ Softball/ Table Tennis /Tennis.**

A candidate has to learn and perform proficiency and officiating in any two games – other than two games opted in the First Semester.

**MPPC- 324: Teaching Lesson – Coaching lessons in the Track and Field of this Semester / Gymnastics / Swimming / Yoga**

Student has to take Coaching lessons on the above of each 45 mins. 5 lessons (4 Internal and 1 External)

## **SEMESTER - IV**

### **Practicum Course**

#### **MPEC- 411: Dissertation**

Student who has chosen elective paper in Dissertation has to choose the Supervisor in the Department and select the Topic of his choice in consultation with his/her Supervisor and submit the proposal on or before the end of the second semester to the Principal / Head of the Department.

Further the student has to submit his/her Dissertation (four copies) not less than 15 days before the beginning of the Fourth Semester examinations and he/she shall appear for Viva-voce examination.

#### **MPPC- 421: Track and Field – Combined Events Combined Events**

Pentathlon – Order of events, Heptathlon – Order of events and Decathlon – Order of events.

Rules regarding Track and Field.

Officiating in Track and Field.

**Training Methods** – Design Circuit, Interval, Fartlek, Plyometric and Resistance training with load dynamics. Training Schedules.

Student has to prepare a detailed work book of the above.

#### **MPPC- 422: Game of Specialization**

A student has to choose any one of the games taught in the previous semesters as a Game of Specialization and exhibit the proficiency, and officiating ability.

Student has to prepare a detailed Record with the following guidelines and attend for viva-voce.

1. Origin, History and development of game
2. Technical terms related to the game
3. Fundamental Skills
4. Techniques and Tactics
5. Advanced Skills / drills
6. Game strategies / set play
7. Lead up games
8. Training Schedules for six weeks.
9. Skill tests
10. Talent identification
11. Selection criteria
12. Rules of the game, laying of court, advanced gadgets,
13. Officiating and signals
14. Mechanics of officiating
15. Major Tournaments, Trophies and the results
16. Awards and Awardees in the respective game/event.
17. Paper cuttings and latest articles

**MPPC- 423: Officiating in Track and Field / Gymnastics / Swimming/Yoga**

Student has to learn system of officiating in any one of the above events, participate in the intramural or extramural as official and show his abilities during the examinations.

**MPPC- 424: Coaching lessons in Game of Specialization (Internship)**

Student has to take 10 coaching lessons of each 45 mins duration in his/her game of specialization. 5 lessons at schools and 4 internal and 1 external at the institution/department.

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