### UNIVERSITY OF MUMBAI



# Ordinances, Regulations and Syllabus Program – B.P. Ed Course – Physical Education (Sem. I to IV)

(As per Credit Based Semester and Grading System with effect from the academic year 2015-2016)

#### UNIVERSITY OF MUMBAI

# Bachelor of Physical Education (B. P. Ed) Programme (Revised Syllabus)

With Effect from the Year 2015-16

#### GOAL OF THE B. P. ED PROGRAMME

To prepare Professionally Fit teachers of Physical Education and academic subjects, who are capable of responding to the changing needs of the Modern Indian Society with the challenges and opportunities available therein.

#### GENERAL OBJECTIVES OF THE B. P. ED PROGRAMME

- 1. To enable learner to understand the nature, purpose and philosophy of education and physical education at the secondary stage.
- 2. To prepare teachers of Physical Education with broader educational perspective.
- 3. To develop Personal, Professional and Social competencies required in teaching profession.
- 4. To develop potential for planning and organizing Physical Education programmes and activities.
- 5. To empower learners to inspire their students to actively participate in Physical and Yogic Exercises, Games and Sports.
- 6. To enable teachers to develop personality, character, will power, democratic values and positives attitude towards life among their students through Physical Education.
- 7. To make teachers capable of imparting basic knowledge about health, hygiene, nutrition and physical fitness.
- 8. To develop skills and competencies to organize school and community games and sports.
- 9. To cultivate the spirit of sportsmanship, mental and physical alertness, scientific temper and optimism.
- 10. To promote mental health, power of self-decision and self-control, correct judgment and action, emotional stability, respect for other and acceptance of the authority and rules.
- 11. To promote appreciation and interest for indigenous games, sports and yogic practices among learner.

12. To create awareness about health and hygiene in the community.

# ORDINANCES AND REGULATIONS RELATED TO THE PROGRAMME OF THE BACHELOR OF PHYSICAL EDUCATION (B. P. Ed) Programme

(With effect from Academic Year 2015-16)

O\_\_\_\_\_A learner for the admission of programme at Bachelor of Physical Education (B. P. Ed.) must fulfill the eligibility criteria as per the directives of the Government of Maharashtra which changes from time to time. In addition a learner must have fulfilled the followings subsequent to his/her admission for B. P. Ed. programme after passing the Bachelor's degree examination:

- 1. A learner shall kept four consecutive semesters for the full time B. P. Ed Programme spread over a maximum period of two years from the date of admission in the College/Department of Physical Education. However, the learner shall be permitted to complete the programme within maximum of three years from the date of admission to the programme.
- 2. A learner shall complete practicum extending over four consecutive semesters to the satisfaction of the Head of the institution in which the candidate is studying consisting of:
  - a Attendance at Practical's, Theory, Practice Teaching and Internship.
  - b Teaching practice and internship of not less than 15 days per year distributed over different standards from V to XII of recognized Secondary and Higher Secondary Schools/Colleges selected by the Principal/Head as practicing School/College. In addition to these lessons, there will be micro teaching lessons and simulated lessons for each Academic Year.
  - Cobservation of practice teaching lesson in school: 30 lessons (15 in compulsory method, 10 in own optional method and 5 in other optional methods)
  - d Participation in Curricular and Extracurricular activities.
  - e Project Work and Assignments.

A learner for the theory examination (external) in each semester must apply to the University as per the prescribed procedure of the

University through the Principal of the concern College.

- 2. The Internal Assessment of each Semester should be followed as per the scheme/procedure given in the syllabus. The aggregate of marks obtained shall be converted into grades as per the scheme. The Principal / Head shall forward the Grade and marks awarded to the concern learner/s to the University for Scrutiny by the coordination committee appointed as under the revaluation of the scripts of internal assessment shall not be permitted.
- 3. Following Records are required to be Maintained and Certified by the Head of Institution:
  - 1. A file containing notes of Lesson given and criticism made there on.
  - 2. Note book of observations of at least 30 Lessons of which 10 should be in each of the special methods and remaining 10 lessons from other methods.
  - 3. A journal of experiments of Psychology.
  - 4. Record of Organization of Practice Teaching.
  - 5. Record of conducting Practical Examination.
  - 6. Record of Terminal Examination.
  - 7. Record of Practical Work of physical education activities.
  - 8. Record of Project work/Assignments.
  - 9. Record of various programmes, competitions, intramurals, Athletic meet, Scout and Guide training camp, Hike-Picnic, Educational excursions etc. conducted by the college/Department.

The Head of the institution in which the learner is studying will be required to keep record of all the work done in the College/department and practicing school /junior college and certify that the work has been completed satisfactorily by the learner/s.

#### R.\_\_\_\_

- 1. For the purpose of scrutiny of original record of evaluation of Internal Assessment there shall be a co-ordination committee consisting of:
  - i. Chairperson, Board of Studies in Physical Education,
  - ii. Chairperson, B. P. Ed. Examination of the concern year,
  - iii. One Principal of the Institution where the internal assessment of course is conducted as recommended by the Board of Studies in Physical Education.
- 2. For each semester the co-ordination committee shall go through internal assessment marks and the grades awarded to the learners of different Institutions of Physical Education. If any discrepancy is found in the standard of marking and /or grading by college, the Principal/Head concern would be required to modify the marks

accordingly as per the directions given by the Coordination Committee. The Committee is authorized to check all the internal work of the learner/s of all the Colleges /Department to verify the marks awarded by the College/Department and make necessary changes wherever required.

## R.----SEMESTER DURATION AND TERM END EXAMINATION

SEMESTER	DURATION	TERM END EXAM
I & III	2 <sup>nd</sup> Week of July to 1 <sup>st</sup> Week of	2 <sup>nd</sup> Week of
	December	December
II & IV	3rd Week of December To 1st Week of	2 <sup>nd</sup> Week of May
	May	-

#### SCHEME OF EXAMINATION

#### R.\_\_\_\_Standard of Passing the Examination

- The learners shall have to obtain a minimum of 40 % marks in aggregate to qualify the each course where the course consists of internal assessment and semester end examination.
- The learners shall obtain a minimum of 40 % marks in the internal assessment and obtain a minimum of 40 % marks in semester end examinations.
- To pass the course minimum grade 'C' shall be obtained in each course wherever applicable in the Particulars semester.

#### • Nature of Semester End Examination

- For each Course 75 Marks
- ➤ Duration 2.30 Hours
- Questions paper pattern:-
- 1. There shall be 05 questions, each of 15 marks and on each unit there will be one question.
- 2. All questions shall be compulsory with internal choice.

#### • ALLOWED TO KEEP TERMS (ATKT):

> A learner shall be allowed to keep term for Semester II &III irrespective of number of heads of failure in previous Semester/s.

#### Method to carry forward the marks

 A learner who passes in the internal assessment but fails in the semester end examination of the course shall reappear for the semester end examination of that course. However his/her marks of the internal assessment shall be carried over and he/she shall be entitled for grade obtained by him/ her on passing.

 A learner who fails in the internal assessment but passes in the semester end examination of the course shall resubmit and reappear for the internal assessment. However his/her marks of the semester end examination shall be carried over and he/she shall be entitled for grade obtained by him/ her on passing.

#### Abbreviations and formulae used

■ *G*: *Grade* 

• *GP*: *Grade Points* 

• *C*: *Credits* 

• *CP*: *Credit Points* 

CG: Credits X Grades (product of credits & grades)

ΣCG: sum of product of credits & grades

•  $\Sigma C$ : sum of credit points

•  $GPA: \Sigma CG / \Sigma C$ 

• SGPA: Semester Grade Point Average shall be calculated for individual semesters. (it is also designated as GPA)

• *CGPA*: *Cumulative Grade Point Average shall be calculated for the entire program by taking all semesters taken together.* 

The system of evaluation will be as follows; Each term work module mentioned will be evaluated in terms of marks first and then to letters grades as shown in the following table-

% of marks obtained by the	Grade points	Letter grade
student		
70-100	7	0
60-69.99	6	A
55-59.99	5	В
50-54.99	4	С
45-49.99	3	D
40-44.99	2	Е
0-39.99	1	F (Fail)

#### Grade cards

- The grade cards will be printed along with the marks shown for all the concern courses.
- The grade cards will be issued to all the learners with credits earned and all the remarks.

- The SGPA will be calculated only for the learners who will qualify in all the courses and accordingly the grade will be awarded to them.
- Overall weighted percentage of marks (OWPM) and cumulative grade point average (CGPA) after completing the programme will appear only on the grade card for the fourth semester.

#### ADDITIONAL EXAMINATION:

- i. The learner must apply to the Head of the Institution giving the reason (s) for absence within 8 days of the conduct of the examination along with the necessary documents and testimonials.
- ii. The learner who failed in the semester end examination (external) in semester-I shall reappear along with Semester End Examination (External) of Semester-II, similarly the learner who failed in the semester end examination (external) in semester-II shall reappear along with Semester End Examination (External) of Semester-III, whereas, the learner who failed in the semester end examination (external) in semester-III shall reappear along with Semester End Examination (External) of Semester-IV
- iii. The Learner who failed in internal assessment shall reappear for additional examination conducted by the college as per convenience within 30 to 45 days from the date of declaration of result and marks of the same will be send to university.

#### STRUCTURE OF B. P. ED. PROGRAM

• Duration : 02 years

First year : 02 semesters (100 days each)
Second year : 02 semesters (100 days each)

• Working Hours : 36 hours in a week

• Credits each Year : 44 (22 credits Per Semester)

• Total Credits : 88 Credits

• Total Marks : 2000 (1000 Marks each year)

#### • COURSE WISE AND SEMESTER WISE CREDIT ASSIGNMENTS

#### B. P. Ed (First Year) SEMESTER- I

Course	Code	Hours	Marks (External)	Credit	Code	Hours	Marks (Internal)	Credit
Course I	BPED	90	75	3	BPEDP	30	25	1
Foundations of	101				101			
Physical Education								
and Sports								
Course II	BPED	90	75	3	BPEDP	30	25	1
Yoga Education and	102				102			
Environmental studies								
Course III	BPED	90	75	3	BPEDP	30	25	1
Methodology of	103				103			
Teaching (any one of								
the following Optional								
Method )								
Marathi, Hindi,								
English History,								
Geography Science &								
Mathematics								
Course IV					BPEDP	300	150	10
Physical Education					104			
Activities								
Total		270	225	09		390	225	13

<sup>•</sup> Total Credits = 22 (Theory 9 Credits + Practical 13 Credits)

#### B. P. Ed (First Year) SEMESTER-II

Course	Code	Hours	Marks (External)	Credit	Code	Hours	Marks (Internal)	Credit
Course V	BPED	90	75	3	BPEDP	30	25	1
	104				105			
Anatomy,								
Physiology and								
Health Education								
Course VI	BPED	90	<i>7</i> 5	3	BPEDP	30	25	1
Officiating, Coaching	105				106			
and Sports Training								
Course VII	BPED	90	<i>7</i> 5	3	BPEDP	30	25	1
Organization,	106				107			
Administration and								
Sports Management								
in Physical								
Education								
Course VIII					BPEDP	180	150	6
Physical Education					108			
activities								
Course IX					BPEDP	120	100	4
Practice Teaching					109			

<sup>•</sup> Total Marks = 450 (External 225 Marks+Internal 225 Marks)

and Internship in						
Optional Method						
Total	 270	225	09	 390	325	13

<sup>•</sup> Total Credits = 22 (Theory 9 Credits + Practical 13 Credits)

#### B. P. Ed (Second Year) SEMESTER-III

Course	Code	Hours	Marks	Credit	Code	Hours	Marks	Credit
			(External)				(Internal)	
Course X	BPED	90	<i>7</i> 5	3	BPEDP	30	25	1
Psychology of	107				110			
Education, Physical								
Education and								
Sports								
Course XI	BPED	90	75	3	BPEDP	30	25	1
Fitness, Wellness,	108				111			
Nutrition and								
Weight management								
Course XII	BPED	90	75	3	BPEDP	30	25	1
Methodology of	109				112			
Teaching Physical								
Education								
Course XIII					BPEDP	300	150	10
Physical Education					113			
Activities								
Total		270	225	09		390	225	13

<sup>•</sup> Total Credits = 22 (Theory 9 Credits + Practical 13 Credits)

#### B. P. Ed (Second Year) SEMESTER- IV

Course	Code	Hours	Marks	Credit	Code	Hours	Marks	Credit
			(External)					
Course XIV	BPED	90	<i>7</i> 5	3	BPEDP	30	25	1
Measurement,	110				114			
<b>Evaluation</b> and								
Statistics in Physical								
Education								
Course XV	BPED	90	75	3	BPEDP	30	25	1
Sports Medicine,	111				115			
Physiotherapy and								
Rehabilitation								
Course XVI	BPED	90	<i>7</i> 5	3	BPEDP	30	25	1
Kinesiology and	112				116			
Biomechanics								
Course XVII					BPEDP	180	150	6
Physical Education					117			
activities								
Course XVIII					BPEDP	120	100	4

<sup>•</sup> Total Marks = 550 (External 225 Marks+Internal 325 Marks)

<sup>•</sup> Total Marks = 450 (External 225 Marks+Internal 225 Marks)

 Practice Teaching in Physical Education
 118
 118

 Total
 270
 225
 09
 - 390
 325
 13

#### • STRUCTURE OF SEMESTER AND COURSE WISE INTERNAL ASSESSMENT

#### B. P. Ed (First Year) SEMESTER- I

Course	Course code	Particulars	Marks
Course I		A. Term Paper	10
Foundations of Physical	BPEDP	B. Value education	10
Education and Sports	101	C. Hiking/Trekking	05
Course II		A. Term Paper	10
Yoga Education and	BPEDP	B. Project/Assignment on	10
Environmental studies	102	Yoga Education	
		C. Cleanliness campaign	05
Course III		A. Term Paper	10
Methodology of Teaching	BPEDP	B. ICT and Computer	10
(any one of the following	103	Application	
Optional Method )		C. Micro Teaching Lessons	05
Marathi, Hindi, English			
History, Geography			
Science & Mathematics			
Course IV*	BPEDP	Practical Examination of	150
Physical Education Activities	104	Physical Education	
		Activities	

\* Physical Education Activities (Course IV): The following Physical Education Activities will be thought to the learners and they will be assessed for 150 marks (10 Credits) by conducting practical examination as per the procedure given. The distribution of the marks will as follows-

MODULE	GAME/ACTIVITIES	MARKS (150)	HOURS (300)
Module I	• Football	(150)	(500)
Major Games and Sports	Table Tennis	60	100
(Any Three)	Mallakhamb	(20 marks each)	100
(Ally Tillee)		(20 marks cacif)	
	• Boxing		
N. 1.1.17	• Tennis		
Module II	• Lezium – Baroda		400
Rhythmic Activities and	Lezium – Dakhani	20	100
Drills	Lezium – NFC		
(Lezium - Any Two)	Aerobics	10	
	Band Training	10	
Module III	Suraynamskar	05	
Fitness Developmental	• Dand & Baithak	05	30
Exercises	• Sit Ups & Push Up	05	
Module IV	• Asanas		
Yogic Practices	Pranayam	15	30
	• Kriyas		
Module V	Organization and Participation		
Co - Curricular	in-		
Activities	Hiking & Trekking	20	40

<sup>•</sup> Total Credits = 22 (Theory 9 Credits + Practical 13 Credits)

<sup>•</sup> Total Marks = 550 (External 225 Marks+ Internal 325 Marks)

Inter-house Com	petitions	

#### B. P. Ed (First Year) SEMESTER- II

Course	Course code	Particulars	Marks
Course V		A. Term Paper	10
Anatomy, Physiology and	BPEDP	B. First aid	10
Health Education	105	C. Project / Assignment on Health	05
		education	
Course VI		A. Term Paper	10
Officiating, Coaching and	BPEDP	B. Assignment / Project on	10
Sports Training	106	Officiating	
		C. Play field marking	05
Course VII		A. Term Paper	10
Organization,	BPEDP	B. Assignment / Project	15
Administration and	107		
Management in Physical			
Education			
Course VIII*	BPEDP	Practical examination of Physical	150
Physical Education	108	Education activities	
Activities			
Course IX	BPEDP	Simulation lesson, School lessons and	100
Practice Teaching and	109	Internship	
Internship in Optional			
Method			

<sup>\*</sup> Physical Education Activities (Course VIII): The following Physical Education Activities will be thought to the learners and they will be assessed for 150 marks (10 Credits) by conducting practical examination as per the procedure given. The distribution of the marks will as follows-

MODULE	GAME/ACTIVITIES	MARKS (150)	HOURS (300)
Module I	• Kabaddi		
Major Games and Sports	Kho-Kho	60	100
(Any Three)	Volleyball	(20 marks each)	
	Swimming		
	• Langdi		
Module II	Sprint -		
Athletics (Any One Sprint and	• 100 Mt.	15	80
Any two Throwing events)	• 200 Mt.		
	Throwing Events		
	Shot-put	30	
	• Discuss		
	• Javelin		
Module III	<ul> <li>Drill and Marching</li> </ul>	05	
Rhythmic Activities and Drills	Band training	10	40
	• Pyramids	05	
Module IV	<ul> <li>Motor Fitness</li> </ul>	05	
Physical Fitness Activities	• HRPF	05	40
Module V	Organization and		
Co - Curricular Activities	Participation in		

• Intramurals 15 40

#### B. P. Ed (Second Year) SEMESTER-III

Course	Course code	Particulars	Marks
Course X	BPEDP	A. Term Paper	10
Psychology of Education,	110	B. Experiments and	15
Physical Education and		Journal	
Sports			
Course XI	BPEDP	A. Term Paper	10
Fitness, Wellness, Nutrition	111	B. Assignment on Fitness	10
and Weight Management		C. Project on Nutrition	05
Course XII	BPEDP	A. Term Paper	10
Methodology of Teaching	112	B. ICT and Computer	10
Physical Education		Application	
		C. Micro teaching lessons	05
Course XIII*	BPEDP	Practical Examination of	150
Physical Education Activities	113	Physical Education	
		Activities	

<sup>\*</sup> Physical Education Activities (Course XIII): The following Physical Education Activities will be thought to the learners and they will be assessed for 150 marks (10 Credits) by conducting practical examination as per the procedure given. The distribution of the marks will as follows-

MODULE	GAME/ACTIVITIES	MARKS (150)	HOURS (300)
Module I Major Games and Sports (Any Three)	Badminton     Basketball     Judo     Cricket     Net ball	60 (20 marks each)	100
Module II Rhythmic Activities (any two)	<ul> <li>Folk Dance</li> <li>Zanj</li> <li>Drills (Hoops, Flag, Calesthenics, Frolics, Dumbells, Wands, Mix drills etc.)</li> </ul>	10 10	50
Module III Physical Fitness Activities	Stretching Exercises     Rope skipping	20	40
Module IV Gymnastics (Any three)	<ul> <li>Floor Exercises</li> <li>Vaulting</li> <li>Horizontal bar</li> <li>Parallel bar</li> <li>Roman Rings</li> <li>Uneven bar</li> <li>Balancing Beam</li> </ul>	30	50
Module V Co – Curricular Activities	Organization and Participation in- • Inter-house Competitions, • Picnic, Educational	15 05	60

Visits/Excursions	

B. P. Ed (Second Year) SEMESTER- IV

Course	Course code	Particulars	Marks
Course XIV	BPEDP	A. Term Paper	10
Measurement, Evaluation and	114	B. Assignment on	10
Statistics in Physical Education		Statistics	
		C. Project on	05
		Measurement	
		and Evaluation	
Course XV	BPEDP	A. Term Paper	10
Sports Medicine, Physiotherapy	115		
and Rehabilitation		B. Assignment on	10
		Sports Injuries	
		C. Field visit	05
Course XVI	BPEDP	A. Term Paper	10
Kinesiology and Biomechanics	116	B. Project /	15
		Assignment on	
		Biomechanics	
Course XVII*	BPEDP	Practical Examination	150
Physical Education Activities	117	of Physical Education	
		Activities	
Course XVIII	BPEDP	Simulation lesson,	100
Practice Teaching in Physical	118	School lessons and	
Education		Internship	

<sup>\*</sup> Physical Education Activities (Course XIII): The following Physical Education Activities will be thought to the learners and they will be assessed for 150 marks (10 Credits) by conducting practical examination as per the procedure given. The distribution of the marks will as follows-

MODULE	GAME/ ACTIVITIES	MARKS (150)	HOURS (300)
Module I Major Games and Sports (Any Three)	<ul><li> Wrestling</li><li> Hockey</li><li> Handball</li><li> Throw ball</li><li> Softball</li></ul>	60 (20 marks each)	100
Module II Athletics (Any One Relay and Any two Jumping events)	Relay – • 4x100 M. • 4x400 M.  Jumps • Running Broad Jump • Running High Jump • Hop Step Jump	15 30	50
Module III Physical Fitness Activities (Any two)	<ul><li> Circuit Training</li><li> Weight Training</li><li> Fartlek Training</li><li> Interval Training</li></ul>	10	25
Module IV	Organization and		

Athletics Competitions	Participation in-  • Athletic Meets	15	25
Module V Co – Curricular Activities	Organization and Participation in Intramurals Scout and Guide	15	100
	Training Camp	05	

# • PROCEDURE OF SEMESTER AND COURSE WISE INTERNAL ASSESSMENT B. P. Ed (First Year) SEMESTER- I

#### Course I - Foundations of Physical Education and Sports (25 Marks)

- a) *Term Papers* (10 Marks): Two and half hours theory paper as per the pattern of the semester end examination will be conducted for 75 marks, which will be converted in to marks out of 10.
- b) Value education (10 Marks): The learner should be taught the various activities included in school syllabi of value education prescribed for Std. V to XII and has to prepare Journal/Records of the same. Assessment of 10 marks for value education should be done on the basis of learner involvement and records by two examiners.
- c) *Trekking/ Hiking* (05 Marks)- The learner should be provided experience of participating in the organization and actual conduct of the co-curricular activities viz. Hiking/Trekking and the assessment of 05 marks should be done on the basis of learners actual participation and involvement in the same.

#### Course II - Yoga Education and Environmental studies (25 Marks)

- a) *Term Papers* (10 Marks): Two and half hours theory paper as per the pattern of the semester end examination will be conducted for 75 marks, which will be converted in to marks out of 10.
- b) *Projects/Assignment on Yoga education* (10 Marks): The learner will be given assignment on yoga education such as gathering/compiling the information about the various aspect of asanas and ask to prepare and submit the report of same based on which the concern subject teacher will give marks out of 10.
- c) *Cleanliness campaign* (05 Marks): The learner will participate in cleanliness campaign organized by the institution based on his/her participation he/she will be evaluated for 05 marks.

#### Course III - Methodology of Teaching

(25 Marks)

- a) *Term Papers* (10 Marks): Two and half hours theory paper as per the pattern of the semester end examination will be conducted for 75 marks, which will be converted in to marks out of 10.
- *b) ICT and Computer Application* (10 marks): The learner will be given 10 hands on experience on various applications of computers such as:\_
  - ➤ Fundamental of Computer Switching On/Off/Restart, C.P.U., Monitor, Key-board, Mouse etc.
  - **Basic features of Windows** The desktop, the Icons, Taskbar, Start

button and its different element, Basic Mouse operation, starting programme through windows.

- ➤ **Desktop setting of windows** Wallpaper, Screen saver, shut down process of windows.
- ➤ Activation of programmes Paint, Notepad, Basic editing operation like cut, copy, paste, saving files, naming a file, save as etc. Floppy drive, CD- ROM drive, running, selecting, copying files, explorer- creating a folders and files, loading of software.
- ➤ **Introduction of MS word** Editing facilities Bold, Italic, Underline, type of font, Alignment, Color, Spelling checking, working with page set-up, preview, Insertion of text, working with tables.
- ➤ **Starting Excel** Editing worksheet, function (Mathematical & Statistical)
- **Power Point** Preparation of slides, Slide show.

He / She will submit computer assisted Lesson Note and Audio-Visual Aid based on which he/she will be evaluated for 10 marks by concern teacher/s.

c) *Micro teaching lessons* (05 Marks): A learner shall conduct atleast 05 micro teaching lessons on various skills of teaching. He/she will be evaluated for marks out of 05 by the concern teacher/s.

#### **Course IV - Physical Education Activities**

(150 marks)

The learner will be taught the physical education activities included in the syllabus of Semester I by referring the existing syllabus of physical education of Secondary and Higher Secondary Schools prescribed by the competent authority of the State Government. The learner shall be evaluated by conducting practical examination by **two examiner's for each activity** included in the modules of the syllabus as per the following procedure:-

Module	Procedure	Marks
Module I - Major Games and	In case of each major	
Sports	Games/Sports	
	a. Performance in actual play	05
	of Games /Sports	05
	b. Examiner's choice one skill	05
	c. Learner's choice one skill	05
	d. Knowledge of Game/Sports	
	(Oral)	
Module II – Rhythmic	a. To perform 5 to 8 skills in a	05
Activities	group	
	b. Examiner's choice one skill	03
	c. Learner's choice one skill	02
Module III - Fitness and	Marks will be given on the	

Developmental exercises	basis of Ready Reckoner of	15
	Norms prepared by the	
	Institution	
Module IV - Yogic Practices	a. To perform 8 Asanas in a	10
	group	
	b. To perform one Pranayama	05
	and one Kriyas	
Module V - Co-curricular	Marks will be given on the	
activities	basis of participation,	
	performance and observations	
	in	
	Inter-house competitions	15
	Relays and activities (Any	10
	five each for 03 marks)	
	Hiking/Trekking,	05

#### **SEMESTER-II**

#### Course V - Anatomy, Physiology and Health Education

(25 Marks)

- a) *Term Papers* (10 Marks): Two and half hours theory paper as per the pattern of the semester end examination will be conducted for 75 marks, which will be converted in to marks out of 10.
- b) *First aid* (10 *Marks*): The learner will be taught practically the aspects of first aid included in school syllabus. The learner will be assessed by two examiners for 10 marks on the basis of practical examination.
- c) **Project and Assignment on Health education** (05 Marks): The learner will be given project work to collect the information about various types of pollution their causes and their remedial measures and submit the report of the same based on which he/she will be evaluated for 05 marks.

#### Course VI - Officiating, Coaching and Sports Training (25 Marks)

- a) *Term Papers* (10 Marks): Two and half hours theory paper as per the pattern of the semester end examination will be conducted for 75 marks, which will be converted in to marks out of 10.
- b) Assignment /Project on officiating (10 Marks): The learner will be given assignment on officiating of various games/activities conducted by the institution and outside organizations under the supervision of the teacher and will submit the report of the same in the prescribed format based on which he/she will be evaluated for 10 marks by the concern teacher/s.
- c) Play field marking (05 marks): The learner will be taught the procedure of actual play field marking required for various games and athletic events. The learner will be evaluated for 05 marks on the basis of assignment /Journal prepared by him/her by the concern teachers/s.

Course VII - Organization, Administration and Management in Physical Education (25 Marks)

- a) *Term Papers* (10 Marks): Two and half hours theory paper as per the pattern of the semester end examination will be conducted for 75 marks, which will be converted in to marks out of 10.
- b) Assignment / Project (15 Marks): The learner will take part in organization of the various competitions under the supervision of teacher organized by the institution and other organizations of sports and submit the report of the same in prescribed format based on which he/she will be evaluated for 15 marks by the concern teacher/s.

#### **Course VIII - Physical Education Activities**

(150 Marks)

The learner will be taught the physical education activities included in the syllabus of Semester II by referring the existing syllabus of physical education of Secondary and Higher Secondary Schools prescribed by the competent authority of the State Government. The learner shall be evaluated by conducting practical examination by **two examiner's for each activity** included in the modules of the syllabus as per the following procedure:-

Module	Procedure	Marks
Module I Major Games and	In case of each major	
Sports (Any three)	Games/Sports	
	a Performance in actual play of Games /Sports	05
	b Examiner's choice one skill	05
	c Learner's choice one skill	05
	d Knowledge of Game/Sports (Oral)	05
Module II Athletics	Marks will be given on the	
(Any One Sprint and Any two	basis of Ready-Reckoner of	
Throwing events)	Norms for the performance	
	prepared by the institution (out	
	of 10 marks) and knowledge as	
	well as style (out of 05 marks)	
	of the following activities_	
	a. Sprint	15
	b. Throws	15
Module III Rhythmic	For Drill & Marching	
activities	a. To perform any 3 to 6 skills	03

	•	
	in a group	
	b. Examiner's choice one skill	01
	c. Learner's choice one skill	01
	• In case of Pyramid marks on	
	the basis of performance in a	05
	group of 03 to 05 learner's	
	In case of Band training	
	a.To perform any three skills	06
	in a group	
	b. Examiner's choice one skill	02
	c. Learner's choice one skill	02
		02
Module IV. – Fitness and	a To perform any five	
Developmental exercises	exercises of Motor Fitness.	05
	b To perform any five	
	exercises of HRPF.	05
Module V Co-curricular	Marks will be given on the	
activities	basis of participation,	
	performance and observations	
	in -	
	Intramurals (any three)	15
	Educational Excursion	05

#### **Course IX - Practice Teaching and Internship**

(100 Marks).

The learner will conduct practice teaching and internship for atleast 15 days in Secondary and Higher Secondary schools. The following records pertaining to the practice teaching are required to be maintained and certified by the Principal /Head of the Institution as well as instruction given below be followed by the institution-

- A file containing notes of lesson given and criticism made thereon.
- ii) Observation Note book of Practice teaching lessons in school in which for Semester-II observation of atleast 10 lessons of own method and remaining 05 lessons in other methods. Every observation should possess signatures of the student-teacher, peer observers and supervising faculties.
- iii) Records of practice teaching organization (Micro teaching, Simulation lesson, Demonstration lesson, and Unit allotment, Time Table, Distribution of Supervision, Evaluation Sheets and Cumulative Records) should be maintain by the institution/Department.
- iv) A learner should remain present in the practice teaching schools throughout the session and apart from his/her own lessons he/she should be given exposure by giving assignments from time to time to the other aspects of academic and administrative areas of the school functioning such as preparing time table, yearly/monthly/weekly/daily planning,

attendance, fees, dead stocks registers, meetings, progress cards, maintenance of infrastructure and facilities, tie-up activities, interclass competitions, interactions and feedback from the teachers, students, and other stakeholders of schools, resource management, governance and other porgrammes/activities related to school functioning.

v) During practice teaching and internship the learner should conduct atleast 15 practice teaching lessons (including simulation lessons and school lessons) and he/she will be evaluated for marks out of 100, out of which 10% weightage of marks should be given to other relevant aspects of internship (as mentioned above) except actual practice teaching.

#### **SEMESTER-III**

#### Course X - Psychology of Education, Physical Education and Sports (25 Marks)

- a) *Term Papers* (10 Marks): Two and half hours theory paper as per the pattern of the semester end examination will be conducted for 75 marks, which will be converted in to marks out of 10.
- b) Experiments /Journal (15 Marks): The learner will conduct 5 experiments on various important areas of Psychology and prepare journal of the same and submit to the college. He/she will be evaluated for 15 marks on the basis of the same by concern teacher. The Journal should be signed by the concern faculty as well as certified by the Principal/ Head of the Institution.

#### Course XI - Fitness, Wellness, Nutrition and Weight Management (25 Marks)

- a) *Term Papers* (10 Marks): Two and half hours theory paper as per the pattern of the semester end examination will be conducted for 75 marks, which will be converted in to marks out of 10.
- b) Assignment on Fitness (10 Marks): The learner will be given one assignment on calculation of fitness index and submit the report of the same in the prescribed format based on which marks out of 10 will be given by the concern teacher/s.
- c) Project on Nutrition (5 Marks): The learner will be given one project on calculation of Basel metabolic rate. He /she will submit the report of the same in prescribed format based on which the learner will be evaluated for 05 marks by the concern teacher/s.

#### Course XII - Methodology of Teaching Physical Education (25 Marks)

- a) *Term Papers* (10 Marks): Two and half hours theory paper as per the pattern of the semester end examination will be conducted for 75 marks, which will be converted in to marks out of 10.
- b) ICT and Computer Application (10 marks): The learner will be given 10 hands on experience on various applications of computer such as Microsoft Word, Excel, Power-Point & internet browsing. He/she will be asked to develop lesson plan with the help of MS word, to prepare support material and audio-visual aid based on which he/she will be evaluated for 10 marks by the concern teacher/s.
- c) Micro teaching lessons (05 Marks): A learner shall conduct atleast 05 micro teaching lessons on various skills of teaching. He/she will be evaluated for marks out of 05 by the concern teacher/s.

#### **Course XIII - Physical Education Activities**

(150 Marks)

The learner will be taught the physical education activities included in the syllabus of Semester III by referring the existing syllabus of physical education of Secondary and Higher Secondary Schools prescribed by the competent authority of the State Government. The learner shall be evaluated by conducting practical examination by two examiner's for each activity included in the modules of the syllabus as per the following procedure:-

Module	Procedure	Marks
Module I Major Games and	In case of each major	
Sports	Games/Sports	
	a Performance in actual play	05
	of Games /Sports	05
	b Examiner's choice one skill	05
	c Learner's choice one skill	05
	d Knowledge of the	
	Games/Sports (Oral)	
Module II. – – Rhythmic	In case of each activity	
Activities (any two)	a Entry, Exit & Formations	02
	b Rhythm & Perfections	03
	c Overall effect	05
Module III Fitness and	a. To perform any five	10
Developmental exercises	exercises in a group.	
(any two)	b. To arrange circuit for	10
	Strength / Flexibility	
	/Endurance and perform	
	exercises.	
Module IV. – Gymnastics	a. To perform any five floor	10
(any three)	exercises	
	b. Any two exercises of	10
	examiners choice.	
	c. Any two exercises of	10
	learner's choice.	
Module V. – Co-curricular	Marks will be given on the	
activities	basis of participation,	
	performance and observations	
	in-	
	• Inter-house	15
	competitions (any three)	
	Picnic, Educational	

Visits/Excursions	05

#### **SEMESTER-IV**

## Course XIV - Measurement, Evaluation and Statistics in Physical Education (25 Marks)

- a) *Term Papers* (10 Marks): Two and half hours theory paper as per the pattern of the semester end examination will be conducted for 75 marks, which will be converted in to marks out of 10.
- b) Assignments on Statistics (10 Marks): The learner will be taught different aspects of statistics such as Mean, Mode, Median, Standard Deviation and Quartile Deviation. He/she will be given project on various fitness parameters and with the help of statistical tools he/she will submit the report of the same in prescribed format based on which the marks out of 10 will be given by the concern teacher/s.
- c) Projects on Measurement and Evaluation (05 Marks): The learner will be taught practicals of various tests by the concern teacher. One project covering specific areas of measurements will be given to the learner by the concern teacher, based on the report submitted by the learner and observations he/she will be evaluated for 05 marks.

#### Course XV- Sports Medicine, Physiotherapy and Rehabilitation (25 Marks)

- a) *Term Papers* (10 Marks): Two and half hours theory paper as per the pattern of the semester end examination will be conducted for 75 marks, which will be converted in to marks out of 10.
- b) Assignments on Sports Injuries (10 Marks): The learner will be given two assignments on the specific sports injuries and their remedial aspects based on the report submitted in the prescribed format by him/her as well as observations, the concern teacher/s will give marks out of 10.
- c) Field Visit (05 Marks): The learner will visit any one Rehabilitation Centre/Laboratory/ Institutions and submit the report of the same in prescribed format based on which he/she will be evaluated for 05 marks by the concern teacher/s.

#### **Course XVI - Kinesiology and Biomechanics**

(25 Marks)

- a) *Term Papers* (10 Marks): Two and half hours theory paper as per the pattern of the semester end examination will be conducted for 75 marks, which will be converted in to marks out of 10.
- b) *Project / Assignment on Biomechanics* (15 marks): The learner will be taught the various analyses of the human movements. He/she will make Movement, Muscular and Mechanical analysis of skills of various games / sports and submit the report of the same in the prescribed format. Based on which he/she will be evaluated for 15 marks by the concern teacher/s.

#### **Course XVII - Physical Education Activities**

(150 Marks)

The learner will be taught the physical education activities included in the syllabus of Semester IV by referring the existing syllabus of physical education of Secondary and Higher Secondary Schools prescribed by the competent authority of the State Government. The learner shall be evaluated by conducting practical examination by two examiner's for each activity included in the modules of the syllabus as per the following procedure:-

Module	Procedure	Marks
Module I Major Games and	In case of each major	
Sports	Games/Sports	
	a Performance in actual play	05
	of Games /Sports	05
	b Examiner choice one skill	05
	c Learners choice one skill	05
	d Knowledge of the	
	Game/Sports (Oral)	
Module II Athletics	Marks will be given on the	
(Any One Relay and Any two	basis of Ready-Reckoner of	
Jumping events)	Norms for the performance	
	prepared by the institution (out	
	of 10 marks) and knowledge as	
	well as style (out of 05 marks)	
	of the following activities_	
	a Relay	15
	b Jumps	15
Module III Fitness and	To perform any five component	
Developmental exercises	wise exercises in a group	10
Module IV Athletic	Marks will be given on the	15
competitions	basis of participation,	
	performance and observations	
	in Athletic Meet.	
Module V. – Co-curricular	Marks will be given on the	
activities	basis of participation,	
	performance and observations	
	in	
	Intramurals competitions	15
	(any three)	-
	Scout and Guide Training	05
	Camp	

Course XVIII - Practice Teaching and Internship

(100 Marks).

The learner will conduct practice teaching and internship for atleast 15 days in Secondary and Higher Secondary schools. The following records pertaining to the practice teaching are required to be maintained and certified by the Principal /Head of the Institution as well as instruction given below be followed by the institutions-

- i) A file containing notes of lesson given and criticism made thereon.
- ii) Observation Note book of Practice teaching lessons in school in which for Semester-II observation of atleast 10 lessons of own method and remaining 05 lessons in other methods. Every observation should possess signatures of the student-teacher, peer observers and supervising faculties.
- iii) Records of practice teaching organization (Micro teaching, Simulation lesson, Demonstration lesson, Unit allotment, Time Table, Distribution of Supervision, Evaluation Sheets and Cumulative Records) should be maintain by the institution/Department.
- iv) A learner should remain present in the practice teaching schools throughout the session of the day and apart from his/her own lessons he/she should be given exposure by giving assignments from time to time to the other aspects of academic and administrative areas of the school functioning such as preparing time table, yearly/monthly/weekly/daily planning, attendance, fees, dead stocks registers, meetings, progress cards, maintenance of infrastructure and facilities, tie-up activities, interclass competitions, interactions and feedback from the teachers, students, and other stakeholders of schools, resource management, governance and other porgrammes/activities related to school functioning.
- v) During practice teaching and internship the learner should conduct atleast 15 practice teaching lessons (including simulation lessons and school lessons) and he/she will be evaluated for marks out of 100, out of which 10% weightage of marks should be given to other relevant aspects of internship (as mentioned above) except actual practice teaching.

R.\_\_\_\_\_ The following shall be the Syllabi for the various theory Courses of Semester I, II, III and IV.

#### **SEMESTER I**

# COURSE I FOUNDATIONS OF EDUCATION, PHYSICAL EDUCATION & SPORTS

(60 Hours)

#### **OBJECTIVES:**

- 1. To understand the relationship between Philosophy, Education and Physical Education.
- 2. To acquaint the learner with the goals of education and Physical Education.
- 3. To understand the contribution of Philosophers of Education and Physical Education.
- 4. To acquaint the learner with History of Physical Education.
- 5. To understand the modern development and social aspects of Physical Education.

#### I PHILOSOPHICAL FOUNDATION

(12 Hours)

- a. Meaning and Need of Philosophy in Physical Education
- b. Physical Education and traditional schools of Philosophy Physical Education as Idealism, Naturalism and Pragmatism
- c. Curriculum Putting Philosophy into action
- d. Physical Education and Social Philosophy and Philosophy of Education

#### II HISTORICAL FOUNDATION

(12 Hours)

- a. Meaning, Aim and Objectives of Physical Education
- b. History of Indian Physical Education
- c. History of ancient Olympic games
- d. Modern Olympic, Asian Games and Common Wealth Games

# III COMMISSION, AWARDS, SPORTS POLICIES AND CONTRIBUTION (12 Hours)

- a. Commissions Dr. Kunzaru commission, Kothari commission
- b. Awards and trophies of sports at various level Shiv Chhatrapati Award,
   Arjun Award, Dadoji Konddev Award, Dronacharya Award, Eklavya,
   Rajiv Gandhi Khel Ratna Puraskar Trophis Ranji Trophy, Santosh
   Trophy, Agakhan Gold Cup and Devis Cup
- c. Various current, schemes and sports policies of State and Central Government pertaining to Physical Education and Sports
- d. Contribution of LNIPE, YMCA, NSNIS and SAI in promoting Physical Education and Sports

#### IV SOCIOLOGICAL FOUNDATION

(12 Hours)

- a. Meaning, Nature and Scope of sociology in Physical Education and Sports
- b. Factors affecting social change through Physical Education.
- c. Relationship of sports with culture
- d. Components and Importance of Philosophy in Physical Education

#### V ROLE OF TEACHING IN SOCIETY

(12 Hours)

- a. Professional ethics
- b. Ethics and values related to sports, Sportsman Spirit
- c. Role of teacher in changing society through Physical Education and Sports
- d. Values and Principles of Philosophy

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- 10 Dr. Kamlesh M.L. Physical Education facts and foundations, P.B. Publication (Pvt.) Haryana, 1988
- Dr. Kamlesh M.L. Principles and History of Physical Education, Prakash Brothers Educational Publication, Ludhiana, 1987
- 12 गद्रे,गीता, गद्रे, ल.रा. शिक्षणाचा इतिहास भाग-१, २, नुतन प्रकाशन, पुणे, १९७६
- १३ गाजरे/महंत उदयोन्मुख भारतीय समाजातील शिक्षण भाग-१, २, नुतन प्रकाशन, पुणे, १९९२

- १४ अहेर हिरा उदयोन्मुख भारतीय समाजातील शिक्षण व शिक्षक, विदया प्रकाशन, नागपुर, १९६८
- १५ प्रा. प्रभारक वीरकर/ डॉ. प्रतिभा वीरकर- उदयोन्मुख भारतीय समाजातील शिक्षण व शिक्षक, द्वारका प्रकाश, पुणे.१९८५
- १६ श्री. दि.गो. वाखारकर महाराष्ट्रातील शारीरिक शिक्षणाची वाटचाल, आंतरभारतीय मुद्रणालय, मुंबई , १९७३.
- १७ श्री. दि.गो. वाखारकर शारीरिक शिक्षणाचे आधुनिक स्वरूप व अध्यायन, निलकंठ प्रकाशन, पुणे, १९६९
- १८ प्रा. श्रीपाल जर्दे, प्रा. सौ. सुनिता जर्दे शारीरिक शिक्षणाचे स्वरूप, चंद्रमा प्रकाशन, कोल्हापूर, १९९१

#### **SEMESTER I**

#### COURSE II YOGA EDUCATION AND ENVIRONMENTAL STUDIES (60 Hours)

#### **OBJECTIVES:**

- 1. To understand the concept and nature of yoga along with its historical background.
- 2. To gain knowledge regarding the application of yoga to Physical Education and Sports.
- 3. To understand the anatomy and Physiology of Asanas and Pranayamas.
- 4. To acquire the skills needed to understand and to overcome environmental problems.
- 5. To gain knowledge regarding the effect of yogic practices on health aspects.

#### I Introduction of Yoga:

(12 hours)

- a. Concept of yoga, physical Education and health
- b. Misconceptions about Yoga
- c. Physical Education Exercise and Yogic Exercises
- d. Meaning of meditation and its types and principles

#### II. Yoga and Exercise for Health:

**(12 hours)** 

- a Yoga as a Science of Art (Yoga Philosophy)
- b Concept of exercise in Physical Education and its comparison with yogic exercise
- c Principles governing various exercises in yoga like Asana, Pranayam, Bandha, Mudra, Kriya and Meditation
- d Role of yoga and exercise in relation to health

#### **III.** Effect of Yogic Exercise:

**(12 hours)** 

- a. Principles of Yogic Practices
- b. Emotional stability and yogic exercises
- c. Effect of various yogic exercises on different system of the body.
- d. Yoga for Stress Management

#### IV Application of Yoga:

**(12 hours)** 

- a. Yogic therapies and modern concept of Yoga
- b. Application of yoga in sports and Physical Education
- c. Therapeutical application of yoga
- d. Yogic Methods and Techniques for Total Living

#### V Environmental Health:

(12 hours)

- a. Need and Importance of Environmental Health, public health and Environment
- b. Fundamental concepts of pollution, types and its measures
- c. Meaning of occupational hazards and its Measures
- d. Social issues and the Environment

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- 11 गोरे, म.म.; २००१**. शरीर विज्ञान आणि योगाभ्यास.** लोणावळा : कांचन प्रकाशन
- 12 घरोटे, म.ल.; १९८३. *योगिक प्रक्रियांचे मार्गदर्शन*. लोणावळा : मेधा पब्लिकेशन.

#### **SEMESTER I**

#### **COURSE III**

#### METHODOLOGY OF TEACHING

#### **ENGLISH METHOD (OPTIONAL METHOD)**

**(60 Hours)** 

#### **OBJECTIVES:**

- 1. To understand the importance of language as a subject in life.
- 2. To understand the methods and techniques of teaching various aspects of language teaching.
- 3. To acquire information on current directions in English language teaching.
- 4. To identify and be sensitive to the proficiency, interests and needs of learners.
- 5. To enable the learner to use technology to enrich language teaching.

#### I FUNDAMENTALS OF LANGUAGE

**(12 Hours)** 

- a) Importance of English in a Multi-lingual Society
- b) Role of Language in Life: Intellectual, Emotional, Social and Cultural Development
- c) Method and Approaches: Direct Method, Communicative Approach, and Constructivist Approach
- d) Principles and Maxims of Language teaching

# II STRATEGIES FOR DEVELOPING LANGUAGE COMPETENCIES (12 Hours)

- a) Developing basic competencies
  - i. Listening pronunciation, expression, phonetic stress & intonation
  - ii. Speaking conversation, drill
  - iii. Reading loud, silent, chorus, expressive, speed
  - iv. Writing hand writing skills, poetic & non-poetic
- b) Language Practice -Assignments, games, competitions, club
- c) Use of multiple intelligence in language teaching

#### III ASPECTS OF LANGUAGE TEACHING

(12 Marks)

- a) Prose
  - i. Techniques Discussion, Narration, Questioning
  - ii. Methods Story telling, Dramatization, Simulation
  - iii. Methods of teaching Reading Alphabetic, Phonetic
  - iv. Types of Reading Intensive, Extensive, Supplementary

- b) Poetry
  - i. Methods Recitation, Song/Action, Dramatization, Discussion, Appreciation
- c) Grammar
  - i. I Methods Inductive & Deductive, Playway interactive
  - ii. Types Functional & Formal

iii.

- d) Composition
  - i. Types Guided, Free, Creative
  - ii. Correction of Composition.

#### IV TEACHER AND TEXT BOOK

**(12 Hours)** 

- a) Teacher
  - i. Qualities
  - ii. Roles and responsibilities
  - iii. Professional growth
  - iv. Diagnostic testing and remedial teaching
- b) Text book
  - i. Characteristics of a text book
  - ii. Critical analysis of a text book (V to XII std.)

# V MATERIALS OF INSTRUCTION FOR LANGUAGE TEACHING (12 Hours)

- a) Use of technology- O.H.P. Video, tape-recorder
- b) Use of Media-Television, News paper, Advertisements
- c) Use of Library-Koshas, Dictionaries

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#### MARATHI METHOD (Optional Method)

(60 Hours)

#### मराठी भाषा अध्यापन पध्दती

#### उद्दिष्टये

पण भाषेचा एक विषय म्हणून जीवनातील महत्व समजणे. पपण भाषा अध्यापनाच्या विविध अगांच्या अध्यापन पध्दती व तंत्रे समजणे. पपपण भाषा अध्ययनासंबंधी विविध क्षमतांचा विकास करणे. पअण भाषा शैक्षणिक साधनांच्या प्रभावी उपयोगाची माहिती प्राप्त करून देणे. अण पाठयपुस्तक मुल्यांकन करण्याची क्षमता विकसित करणे.

#### ξ मराठीचे जीवनातील व अभ्यासक्रमातील स्थान

- विद्यार्थ्यांच्या दैनंदिन जीवनातील भाषेचे महत्व व भाषेच्या माध्यमातून व्यक्तिचा विविधांगी विकास : बौध्दीक, भावनिक, सामाजिक, साहित्यिक, आध्यात्मिक
- ब. शालेय अभ्यासकमातील मराठीचे महत्वः माध्यमिक व उच्च माध्यमिक
- गद्य, पद्य, व्याकरण आणि वर्ग अध्यापनाची उद्दिष्टे व स्पष्टीकरणे क.
- समवाय : मराठीचा अंतर्गत समवाय व इतर विषयांच्या संदर्भातील ਤ. समवाय

#### भाषेचे शिक्षणशास्त्रीय विश्लेषण 7

(१२ तास)

- मराठी भाषेची संरचना अ.
- घटक विश्लेषण, अध्यापन उदि्दष्टे आणि स्पष्टीकरणे ब.
- उपक्रम आणि मूल्यमापन तंत्रे व घटक चाचणी क.
- नैदानिक चाचणी व उपचारात्मक अध्यापन ਤ.

#### भाषा अध्यापनाची विविध अंगे व पध्दती ३

(१२ तास)

- मराठी अध्यापनाची तत्वे व सुत्रे अ
- भाषा अध्यापनाची पध्दती : ब

  - ताटयीकरण ;गद्य, पद्य २. कथाकथन ;गद्यद्ध
     रसग्रहण ;गद्य, पद्य ४. चर्चा ;गद्य, पद्य, लेखनद्ध
     व्याख्यान ;गद्यद्ध ६. उद्गामी अवगामी
     भिनम अभिनय ८. भाषिक खैळ
  - ७. भूमिका अभिनय ८. भाषिक खैळ
- भाषा अध्यापनाची कौशल्ये क
  - १. श्रवण उच्चार, अभिव्यक्ती, ध्वनीबल, स्वराघात
  - २. भाषण संवाद
- मूलभूत क्षमतांचा विकास ड
  - १. वाचनप्रकट, मान, आशयानुसार, सुक्ष्म, पूरवणी वाचन

२. लेखनमुक्त सृजनात्मक निबंध लेखन, श्रृत लेखन, संवाद लेखन, जाहिरात लेखन, अर्ज लेखन

#### ४ मराठीचे पाठयपुस्तक व शिक्षक

(१२ तास)

- अ. १. चांगल्या पाठयपुस्तकाची वैशिष्टे
  - २. पाठयपुस्तकांचे समीक्षण ९वी ते १२वी पर्यत
- ब. भाषा अध्यापक गुणविशेष, भूमिका, जबाबदा-या, व्यवसाय वृध्दी

#### ५ भाषा अध्यापनाची साधने

(१२ तास)

- अ. छापील साहित्यवृत्तपत्रे, मासिके, हस्तपुस्तिका, शब्दकोष, विश्वकोष
- ब. दूक श्राव्य साधने आकाशवाणी, दूरदर्शन, संगणक व ध्वनिमुद्रक
- क. वाड्मय मंडळउद्दिष्टे, उपक्रम, महत्व
- ड. भाषा अध्यापन अध्ययनासाठी सहशालेय कार्यक्रम

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- ८. फडके, वासंती : अध्यापनाची प्रतिमाने, नूतन प्रकाशन, पुणे, १९८८.
- ९. वाळंबे, मो.रा. : सुगम मराठी व्याकरण लेखन, नितीन प्रकाशन, पुणे, २००१.

#### **HINDI METHOD (Optional Method)**

(60 Hours)

#### हिन्दी भाषा अध्यापन पध्दति

#### हिन्दी भाषा अध्यापन अभ्यसासक्रम के उद्देश्य :

- पण बालक के सर्वागीण विकास में हिन्दी भाषा को समझना।
  - २ हिन्दी भाषा अध्यापन के सूत्र व सिध्दांतों की जानकारी।
  - ३ हिन्दी भाषा की विविध विधाओं, उद्देश्यों एवम विधियों की जानकारी प्राप्त करना।
  - ४ भाषा अध्यापन के उभरते आयामों की जानकारी और उनका उपयोग करना।
  - ५ हिन्दी भाषा अध्यापन में विभिन्न शैक्षणिक साधनों का उपयोग करना।

#### १ बालक के सर्वागीण विकास में भाषा व भाषा शिक्षक का महत्व (१२ तास)

- अ हिन्दी भाषा का उद्गम ; संक्षिप्त अध्ययन
  - १ मानसिक विकास
    - २ सामाजिक विकास
    - ३ संवेगात्मक विकास
- ब विद्यालयीन पाठयकम में हिन्दी भाषा का स्थान व महत्व १ त्रिभाषा सूत्र कोठारी आयोग ६४६६ के सुझाव एवम् सवैधानिक
  - २ वर्तमान समय में भाषा का बदलता स्वरूप
- क भाषा शिक्षक
  - १ हिन्दी भाषा शिक्षक के विशेष गुण एवम् व्यवसायिक वृध्दि
  - २ बदलते परिवेश मे हिन्दी भाषा शिक्षक के उत्तरदायित्व एवम् चुनौतियाँ

#### २ भाषा अध्यापन के सूत्र और सिध्दान्त

(१२ तास)

- अ भाषा अध्यापन के सूत्र : ज्ञात से अज्ञात की ओर, सरल से जटिल की ओर, मूर्त से अमूर्त की ओर, पूर्ण से अंश की ओर, सामान्य से विशिष्ट की ओर
- ब भाषा अध्यापन के सिध्दान्त : अनुकरण का सिध्दान्त, रूचि का सिध्दान्त अभ्यासक सिध्दान्त, बोलचाल का सिध्दान्त, अनुपात और क्रम का सिध्दान्त, व्यक्तिगत विभिन्नता का सिध्दान्त
- क सहसंबंध महत्व एवम् प्रकार
  - १. आन्तरिक गद्य, पद्य एवम् रचना
  - बाहय विद्यालयीन विषयों के साथ; इतिहास, भूगोल, विज्ञान, अर्थशास्त्र, पर्यावरण शिक्षण एवम् कला हस्त संगीत व नृत्य

#### ३ भाषा अध्यापवन की विधाएँ

(१२ तास)

- अ. गद्य : उद्देश, विधियाँ चर्चा, कथाकथन, अभिरूप नाटयीकरण, भूमिका अभिनय
- ब. पद्य: उद्देश, विधियाँ चर्चा, रसास्वादन
- क. व्याकरण : उद्देश्य, विधियाँ आगमन निगमन, खेल विधि
- ड. रचना : उद्देश्य, प्रकार नियमबध्द एवम् मुक्त रचना

#### ४ भाषा कौशल

(१२ तास)

- अ श्रवण : महत्व एवम् दोष
- ब भाषण : महत्व एवम् दोष, ;अशुध्द उच्चारण के कारण एवम् अभिव्यक्ति का महत्व के विशेष सन्दर्भ में
- क पठन/वाचन : महत्व देष, वाचन के प्रकार ;मौन वाचन एवम् सस्वर वाचन
- ड लेखन : महत्व एवम् दोष ;अशुध्द वर्तनी के कारण के विशेष सन्दर्भ में
- इ १. उपरोक्त भाषा कौशल्यों के विकास की भुमिका
  - २. निदानात्मक परीक्षण व उपचारात्मक शिक्षक ;उपरोक्त कौशल्यों को ध्यान में रखकर

#### ५ भाषा अध्यापन के आयाम ;पहलूद्ध व शेक्षणिक साधन (१२ तास)

- अ भाषा अध्यापन में संगणक का उपयोग
- ब भाषा अध्यापन में बहुआयामी बुध्दिमत्ता का उपयोग शाब्दिक, संगीतात्मक, शारीरिक और वैयक्तिक, प्राकृतिक
- क हिन्दी भाषा की प्रचलित व प्रभावित बनाने में जनसंचार माध्यमों; समाचार पत्र, दूरदर्शन आकाशवाणी एवम् विज्ञापन एवम् दृश्यश्राव्य साधनों का महत्व एवम् उपयोग
- ड विद्यालयीन स्तर पर आयोजित किए जानेवाले उपक्रम भाषा परिषद एवम् भाषा प्रतियोगिताएँ ;उद्देश्य, महत्व एवम् आयोजन
- इ १. पाठयपुस्तक आवयकता एवम् महत्व
  - २. पुस्तकालय आवश्यकता, महत्व व उपयोग

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- ४. योगेंद्रजित : हिन्दी भाषा शिक्षण उन्नीसवॉ संस्करण विनोद पुस्तक मंदिर, आग्रा, १९८९.
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#### **HISTORY METHOD (Optional Method)**

(60 Hours)

#### **OBJECTIVES:**

- 1. To understand the significance of history in school curriculum.
- 2. To understand the methods of teaching history.
- 3. To understand critical analysis of textbook.
- 4. To understand the importance of co-curricular activities in the teaching of history.
- 5. To develop skills in the preparation and use of instructional materials.

#### I Place of history in school curriculum and life (12 Hours)

- a) Concept of history
- b) Place and importance of teaching the subject
- c) Objectives of teaching at secondary levels of education
- d) Importance and organization of co-curricular activities clubs, visits, museums, importance of celebration of national days and festivals

#### II Methods of teaching

**(12 Hours)** 

- a) Story telling methods
- b) Lecture cum discussion methods
- c) Dramatization and role play
- d) Project methods
- e) Discussion methods
- f) Self study, assignments, supervised study
- g) Source methods

# III Pedagogical Analysis: In relation to core elements as given in NEP 1986. (12 Hours)

- a) Unit analysis
- b) Instructional objectives and specifications
- c) Activities and procedures
- d) Evaluation techniques

# IV Enhancing the teaching & Equipment and Facilities for the subject (12 Hours)

a) Maxims of teaching – known to unknown, simple to complex, concrete to abstract

- b) Correlation with other school subjects-Geography, Literature, Science, Mathematics
- c) Instructional materials and teaching aids in History room:
  - *i)* Visual: C.B. or white board, Charts, Pictures, Graphs, Maps, Models, Specimens and Flannel Board
  - ii) Auditory: Radio, audio (C.D.) player
  - iii) Audio-Visual: Television, C.D. & films
  - iv) Miscellaneous: Booklets, Newspapers, Magazines

# V Textbooks and role of the teacher in relation to technology (12 Hours)

- a) Characteristics of a good textbook
- b) Qualities and qualifications
- c) Professional growth
- d) Computer application in teaching of History
- e) Methods of using Power-Point presentation in teaching of History
- f) Uses of Internet facility in teaching of History

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- २१. प्रा.सौ. लता मोरे इतिहास अध्यापन पध्दती, पिंपळापुरे ॲण्ड कं. पब्लिशर्स, नागपूर, २००७

## **GEOGRAPHY METHOD (Optional Method)**

(60 Hours)

## **OBJECTIVES:**

- 1. To develop the skills of pedagogical and textbook analysis.
- 2. To familiarize the student-teachers with different methods of teaching Geography and its application in the classroom.
- 3. To develop skills in the use of technology and leaning resources.
- 4. To develop an understanding of the importance of organization of cocurricular activities in the teaching of geography.
- 5. To develop an understanding of the multifarious role of the Geography teacher in the present context.

# I Place and Importance of Geography in Curriculum and Life (12 Marks)

- a Nature and Scope of Geography (Physiography, Economic Geography, Human Cartography, Political Geography, Cartography, Urban Geography, Anthropogeography and Agricultural Geography)
- b Aims of Teaching Geography Practical, Social and Cultural, Economic, National Integration and International Understanding

### II Methods of Teaching

(12 Hours)

(Concept, Procedure, Advantages and Limitations of the following methods)

- a Journey
- b Regional
- c Comparative
- d Project
- e Lecture cum Demonstration
- f Cooperative Learning think-pair-share, three step interview, simple jigsaw and numbered heads together

#### g Problem based Approach

## III Essentials of Teaching the Subject

(12 Hours)

- a Maxims of Teaching Known to Unknown, Simple to Complex
- b Concrete to Abstract, Particular to General, Analysis to Synthesis, Empirical to Rational
- c Correlation with other School Subjects Economics, History,
   Literature, Science, Mathematics, Craft
- d Understanding Maps Map reading and Map filling
- e Importance and Organization of Co-curricular Activities Club, Events, Museums

## IV Curriculum organization and analysis

(12 Hours)

- a) Curriculum and textbooks
  - i) Organization of Content Concentric Approach, Topical Approach (Advantages and Limitations)
  - ii) Essential Characteristics of a Geography textbook
  - iii) Importance of Handbook for Teachers
  - iv) Critical Analysis of a Textbook (Std V-XII) (only for practical work and not for examination)

# b) Pedagogical analysis in relation to core elements & values, NPE 1986

- i) Unit Analysis
- ii) Instructional Objectives and Specifications
- iii) Activities and Procedures
- iv) Evaluation Techniques

Note: Only for practical not to be evaluated in examinations.

## V Learning resources & the geography teacher

- a) Equipments and resources
  - i) Instructional Materials and Teaching Aids:
    - Visual Chalkboard, Charts, Pictures, Graphs, Maps, Globes, Models, Specimens and Atlas
    - Multimedia Computers (Online and Offline)
  - ii) Geographical Information System
  - iii) Planetarium, Nature Park
  - iv) Geography Room Need, Equipments, Maintenance
- b) The geography teacher
  - i) Qualities and Qualifications

- ii) Professional Growth
- iii) Challenges faced by a Geography Teacher
- iv) Developing Global Perspectives through Geography Teaching (Concept, Need, Importance and Ways)
- v) Diagnostic Testing and Remedial Teaching

- 1. Bhatia, B.D. & Bhatia, Kamala : Principles and Methods of Teaching, Doaba House, Delhi, 1972.
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- 19. पाटणकर, ना.वि. : भूगोलाचे अध्यापन, ९वी आवृत्ती, मॉडर्न बुक डेपो प्रकाशन, पूणे, १९७७.

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- 21. बापट, भा.गो. : भूगोलाचे अध्यापन आणि अध्ययन, २री आवृत्ती, व्हीनस प्रकाशन, पुणे, १९८१.
- 22. सांगळे, शैलजा : स्पेशल मेथड भूगोल, नुतन प्रकाशन, पुणे, १९८३.
- 23. सिंह,एच्.एन्. : भूगोल शिक्षण, विनोद पुस्तक मंदिर, आगरा, १९८९.

## SCIENCE METHOD (Optional Method)

(60 Hours)

## **OBJECTIVES:**

- 1. To develop an understanding of the approaches and methods of teaching Science
- 2. To develop an understanding of the importance and use of learning resources in Science
- 3. To prepare and use different types of instructional materials in the teaching of Science.
- 4. To develop an understanding of the qualities, responsibilities and Professional growth of the Science teacher.
- 5. To develop an understanding of the various issues in Science education.

#### I Place of science in the curriculum

(12 Hours)

- a) Meaning and Nature of Science
- b) Values of teaching Science
- c) General objectives of teaching Science at Secondary and Higher Secondary level.
- d) Co-relation of Science in the Curriculum: Internal & External

#### II Pedagogical analysis

- a) In relation to Core Elements as given in NEP 1986:
  - i) Unit Analysis
  - ii) Instructional Objectives and Specifications
  - iii) Activities and Procedures
  - iv) Evaluation Techniques
  - (Only Practical work. no theory questions to be asked in the examination.)
- b) Developing Global Perspectives in Science teaching:
  - i) Meaning and Concept of Global Perspectives
  - ii) Need of Global Perspectives

#### iii) Infusing Global Perspectives in the Curriculum

## III Methods and approaches to teaching of science (12 Hours)

- a) Maxims of Teaching:
  - i) Simple to Complex
  - ii) Whole to Part
  - iii) Empirical to Rational
  - iv) Concrete to Abstract
  - v) Known to Unknown
  - vi) Particular to General
- b) Approaches -
- i) Disciplinary Approach
- ii) Integrated Approach
- c) Methods of Teaching -
- i.) Lecture cum Demonstration
- ii.) Laboratory
- iii.) Project
- iv.) Inductive, Deductive, Inductive-deductive
- v.) Heuristic

(Each Method should also highlight Processes of Science viz. – Heurism, Analysis, Synthesis, and Scientific Inquiry.)

## IV Learning Resources

**(12 Hours)** 

- a) Importance and Organization of Science Clubs
- b) Visits, Excursiotis, Science Exhibitions and Science Fain
- c) Importance and Setting up of Science Laboratories
- d) Importance of Mobile Laboratories and Improvised Apparatus
- e) Importance of Support Material: -
- i) Criteria of a good Textbook of Science.
- ii) Reference Material: Encyclopedias, Newsletters & Magazines

#### V The Science Teacher

- a) Need & Types of Professional Growth
- b) Issues in Science Education:
  - i.) Incidental Science Education Concept and Role of the Science Teacher, Opportunities for Incidental Learning
  - ii.) Non Formal Science Education Concept, Role and Activities to be organized for Non Formal Learning
- c) Diagnostic Testing & Remedial Teaching

#### **SUGGESTED ACTIVITIES:**

A minimum of two of the following activities to be performed and a file of activities conducted to be maintained and certified.

- a) Critically analyze of any one textbook of Science.
- b) Attend an orientation program on the preparation of instructional material and prepare an instructional material for teaching one Topic in Science.
- c) Conduct at least one experiment from the science syllabus. (This can be combined with simulated lessons.)

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- 2 Bhatia & Bhatk The Principles and Methods of Teaching, Doaha house Book sellers and Publishers, 1994.
- Bhatnagar, AD, Teaching of Science, Surya publications, Meerut, 2004.
- Frost Jenny & Turner Tony, Learning to teach Science in the Secondary School (201 Edition). Routledge Palmer, N. York. (2005).
- J.C. Aggarwal: Principles, Methods and Techniques of Tcaching, Vikas Publishing House Pvt. ltd., 2000
- 6 Korde and Sawant: Science and Scientific Method, Himalaya Publishing house, 1980.
- Narendra Vaidya: Science Teaching in Schools for the 21<sup>St</sup> century, Deep and Deep Publications Pvt. Ltd., 1999.
- 8 New Trends in Integrated Science Teaching, Vol. 1, UNESCO. 1969-70.
- 9 Prasad Janardhan, Practical Aspects in Teaching of Science, Kanishka, Publication, N. Delhi 1999.
- 10 R.C. Sharma: Modem Science teaching, Dhanpat Rai Publishing Company, 2003
- Ravikumar S. K, Teaching of Science, Mangaldeep Publications.2000.
- 12 S. Venkataih (Ed): Science Education, Anmol publications Pvt. Ltd., 2000.
- 13 S.K. Kochhar: Methods and Techniques of teaching, Sterling Publishers Pvt. Ltd., 2003.
- 14 Sharma and Sharma: Teaching of Science, Dhanpat Psi and Sons, 1972
- 15 Sharma Jagdish , Model of Science Teaching, Raj Publishing House, Jaipur.(2006)
- Sharwan Kumar Gupta: Teaching Physical Science in Secondary schools, Sterling Publishers pvt. ltd., 1981
- १७ डॉ. पाठक अ.का, : विज्ञानाचे अध्यापन, सोमैया पब्लिकेशन प्रा.लि. मुंबई, १९६८
- १८ प्रा.कदम चारूदत्त परशुराम, प्रा. बोंदार्डे कैलास मुक्तगिरी : शास्त्र अध्यापन पध्दती, नुतन प्रकाशन, पृणे, १९८८
- १९ प्रा. कुलकर्णी : विज्ञान ;आशययुक्त अध्यापन पध्दती प्रगती बुक्स प्रा.लि. मुंबई, २००४
- २० शर्मा डि.सी. : विज्ञान शिक्षण, विनोद पुस्तक मंदिर, आगरा, १९९०

२१ डॉ. रावत एम.एस., डॉ. लाल अग्रवाल एम.बी. : नवीन विज्ञान - शिक्षण, विनोद पुस्तक मंदिर, आगरा, १९८९

## MATHEMATICS METHOD (Optional Method)

(60 Hours)

## **OBJECTIVES:**

- 1. To develop an understanding of the nature and values of mathematics.
- 2. To acquire knowledge of pedagogical analysis of various concepts in mathematics.
- 3. To understand the various methods and techniques of teaching mathematics.
- 4. To develop required competencies in teaching of mathematics.
- 5. To develop the skill of conducting recreational activities of mathematics.

#### I Nature of mathematics

(12 Hours)

- a) Meaning and Nature of Mathematics
- b) Branches of Mathematics (Pure and Applied), Nature of Mathematical Statements — Axioms and Postulates, Language of Maths, Logic, Intuition, Induction, and Deduction.
- c) Values of teaching Mathematics in Curriculum and in Life
- d) Correlation of Mathematics Internal and External. [External Subjects- Language, Science, History, Geography, Economics, Commerce, Drawing Music]
- e) Concept of Vedic Mathematics
- f) Contributions of Mathematicians-Aryabhatta, Euclid and Ramanujan

## II Pedagogical analysis

(12 Hours)

(In relation to core elements as given in NPE 1986)

- a) Unit Analysis
- b) Instructional Objectives and Specifications.
- c) Activities and Procedures
- d) Evaluation Techniques
   (Compulsory practical work. No theory questions to be asked in the examination.)

# III Methods and approaches to teaching of mathematics (12 Hours)

- a) Maxims of teaching Mathematics
  - i) From Known to Unknown

- ii) From Simple to Complex
- iii) From Particular to General
- iv) From Concrete to Abstract
- v) From Whole to Part

## b) Methods of teaching

#### Mathematics

- *i) Inductive Deductive*
- ii) Analytic Synthetic
- iii) Lecture cum Demonstration
- iv) Problem Solving
- v) Laboratory

## c) Techniques of teaching

#### Mathematics

- *i)* Assignments
- ii) Drill work Oral and Written
- iii) Cooperative Learning

## d) Support

## Technology

- i) 2 D: Charts, Boards (all types), Cutouts, Pictures, Graphs.
- ii) 3D: Models, Objects, and Abacus
- iii) Electronic mode:

Calculators — When and How to Use Calculators in Mathematics. Internet — Teaching and Learning of Mathematics

## IV Curriculum and textbook of mathematics (12 Hours)

- a) Approaches to Curriculum Construction- Topical and Concentric.
- b) Qualities of a good Mathematics Text Book.

# V Strategies for individual differences and) co-curricular activities in mathematics (12 Hours)

- a) Diagnostic Testing and Remedial Teaching for Learners with Dyscalculia
- b) Difficulties Faced by the Teacher in Teaching of Mathematics and Suggestive Measures to overcome them.
- c) Importance and Organization of Mathematics Club. (Objectives and Structure)
- d) Recreational Activities of Mathematics Club:
  - *i) Mathematics Fairs*;
  - ii) Games

iii) Visits

iv) Talks

#### **SUGGESTED ACTIVITY:**

(12 Hours)

Critical Evaluation of Mathematics Textbook (V to XII) [For any syllabus i.e. Maharashtra State Board, ICSE, CBSE, IB, IGCSE] *Note: Only for practical not to be evaluated in examinations.* 

- 1. Brueckner, L.J. et al : Developing Mathematical Understanding in the Upper grades.
- 2. Ediger, Marlow & Rao, Digumarti Bhaskara : Teaching Mathematics Successfully, New Delhi, Discovery, 2000.
- 3. Flynn, Meredith & Rutkosky, Nita H.: Advanced Microsoft office 2000, BPB publication. New Delhi, 2000.
- 4. Gupta,Vikas : Comdex computer course -kit , Dreamtech, New Delhi, 2001.
- 5. Haggarty, Linda: New Idas for Teacher Education: A Mathmatics Framework, London cassell, 1995
- 6. Hergert, Douglas A.: Excel for Windows' 95 Instant Reference, Sybex Incorporated. 1992.
- 7. Hillman, David : Multimedia Technology and Applications, Delmar Publishers. New York,1998.
- 8. Intel Teach to the Future, National Centre for Software Technology, Mumbai.
- 9. James, E.L. & Narasimahachari, R.: Teaching of Mathematics in Secondary schools.
- 10. Mangal, S.K.: A Text Book on Teaching Mathematics, Ludhiana: Tondon, Prakash Brothers.
- 11. Merrill, Paul F., Hammomns, Talman, Christensen, Vincient : Computers in Education.
- 12. Nagpal, D.P.: Computer Fundamentals, Wheeler publishing, New Delhi, 2001.
- 13. Phadke, Moghe: Notes for computer course, Vol. I, II, III & IV, Utility Creations, Pune.
- 14. Rathbone, Andy: Windows for Dummies, IInd ed., Comdex Computer Publications, New Delhi, 1997.
- 15. Sanders, Donald H.: Computers Today, McGraw Hill Book Co., New York, 1988.
- 16. Siddhu, Kulbir Singh: The Teaching of Mathematics, New Delhi, Sterling, 1995.
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- १९ जगताप, ह.ना. : गणित अध्यापन, ३री आवृत्ती, नुतन प्रकाशन, पुणे, १९९०.
- २० देशमुख, व.पा. : गणिताचे अध्यापन, ५वी आवृत्ती, मॉर्डन बुक डेपो प्रकाशन, पुणे, १९७२.
- २१ सतसंगी, जी.डी.: गणित अध्यापन, विनोद पुस्तक मंदिर, आगरा, १९९२.
- २२ रावत, एम्.एस्., अग्रवाल, एम्.बी. : गणित शिक्षण, विनोद पुस्तक मंदिर, आगरा, १९९०.

#### **SEMESTER II**

#### **COURSE V**

# ANATOMY, PHYSIOLOGY AND HEALTH EDUCATION (60 Hours)

## **OBJECTIVES:**

- 1. To enable the learner to understand the basic structure and function of human body.
- 2. To acquire the knowledge regarding effect of exercise on the body as a whole.
- 3. To enable the learner to understand the need and importance of health education and community health.
- 4. To acquaint the learner with school health programme.
- 5. To acquire the knowledge regarding awareness, precaution & understanding HIV/ AIDS preventive education.

## I Introduction to human body

**(12 Hours)** 

- a. Meaning, need and Scope of anatomy and its study in physical education
- b. Anatomy Terminology
- c. Anatomy, Heredity and sports
- d. importance of study of anatomy in physical education and sports

# II Body systems- structure, function and effect of exercise (12 Hours)

- a. Musculoskeletal system:
  - i. Classification and functions of bones and joints
  - ii. Movements at various joints
  - iii. Structural classification of muscle and types of muscles
  - iv. Effect of exercise on musculo-skeletal system

- b. Cardio- respiratory system:
  - i. Structure, working and function of human heart
  - ii. Processes of circulation
  - iii. Respiration Mechanism and types and respiratory volumes
  - iv. Effect of exercise on cardio-respiratory system
- c. Digestive system:
  - i. Digestion, effect of digestive juice and enzymes on food
  - ii. Balance diet and diet for athlete
  - iii. Effect of exercise on digestive system
- d. Nervous system:
  - i. Central nervous system- structure and function
  - ii. Autonomic nervous system-Structure and function
  - iii. Effect of exercise on nervous system

## III Applied and structural kinesiology

(12 Hours)

- a. Meaning, scope and importance of kinesiology in physical education and sports
- b. Aim, objectives and need of kinesiology
- c. Role of Kinesiological in Games and Sports
- d. Kinesiological and movement analysis

## IV Principles Related Human Motion

(12 Hours)

- a. Motion- Meaning types, laws and principles
- b. Force-Types, principles of force
- c. Lever- Classification, and utility of lever in sports
- d. Mechanical principles related to fundamental skill s in running, jumping and throwing

## V Health Education

(12 Hours)

- a. Meaning and principles of health
- b. Objectives and necessity of school health programme
- c. Postural deformities and corrective measures
- d. Role of physical education teacher AIDS and pollution awareness

- 1. Beashel, Paul & Taylor, John : Advance Studies in Physical Education and Sports, Thomas Nelson & Sons Ltd., U.K., 1996.
- 2. Brown M.C. & Sommer B.K. Movement Education- Its Evaluation and Modern Approach, Adchison, wesely publication, London, 1978.
- 3. Crouch James E. Essential Human Anatomy A Text Lea & Febriger , Philladalphia,

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- 5. Dr. Uppal A.K. & Dr. Gautam G.P.: Physical Education and Health, India, 2000.
- 6. Hay, James G & Reid J.G. Anatomical and Mechanical Basis of Human Motion, Prentice hall, New Jeresy, 1985.
- 7. Horne, John, Tomlinson D: Understanding Sports: An Introduction to the Sociological & Cultural Analysis of Sports, E & FN spon, London, 1999.
- 8. Jenson C.R. & Schultzer G.W. Applied Kinesiology and Biomechnics, Mc Grow hill book Co. New York, 1984,
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- 10. Murgesh N. Anatomy, Physiology and Health Education, Sathya, Chinnalapatti, 1990.
- 11. Pearce Evelyn Anatomy and Physiology for Nurses, Oxford University, 1975.
- 12. Rasch & Bruke Kinesiology and applied Anatomy, Lea Febriger, Philladalphia, 1978.
- 13. Rasch, Philip J. Kinesiology and Applied Anatomy, Lea Febriger, Philladalphia, 1989.
- 14. Dr. Sathe. V., Principles of Anatomy, Physiology and Clinical Basis of Disease (International Edition), Narmada Prakashan, Nagpur., 1998.
- 15. Shaw, Dhananjay Biomechanics and Kinesiology of Human Motion, Khel Sahitya Kendra, Delhi,1998
- 16. Sidentop, Daryl Introduction to Physical Education and Sports, 2<sup>nd</sup> Ed., Mayfield publishing Co., London,1994.
- 17. Wells & Luttgens Kinesiology Scientific Bases of Human Motion 6<sup>th</sup> Ed., Saunderdas College. , Philladaphia,1976
- १८ लेकावळे, व्ही.एल. शरीर शास्त्र- रचना व कार्य, बार्शी, १९९४.
- १९ जोशी, विजया व्यायामाचे शरीर कीया शास्त्र, अमित ब्रदर्स, नागपूर, १९९५.
- २० वाखारकर,दि.गो. शरीर विज्ञान व आरोग्य शास्त्र, क्रीडातंत्र, पुणे, १९९२
- २१ वर्मा, के.के. शरीर रचना तथा शरीर कीया विज्ञान, प्रकाश ब्रदर्स, लुधीयाना,१९८३
- २२ साठे, विवेक गतिशास्त्र और स्वास्थ शिक्षा, नर्मदा प्रकाशन, नागपूर, १९९५.
- २३ साठे, विवेक गतिशास्त्र आणि आरोग्य शिक्षण, नर्मदा प्रकाशन, नागपूर, १९९५.
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- २५ डॉ. साठे विवेक, शरीर रचना, किया व त्यावर आधारीत रोग, नर्मदा प्रकाशन, नागपूर, १९९८
- २६ श्रीवास्तव, अभयकुमार शरीर व्यायाम क्रीयात्मक विज्ञान एवं चिकीत्सा, सुयोग, अमरावती. १९९४.
- २७ हिर्लेकर, श्री.पू. मानव शरीर रचना एवं क्रीया विज्ञान, श्री हनुमान व्यायाम प्रसारक मंडळ, अमरावती.
- २८ गुप्त, मंजू, गुप्त, महेशचंद्र ;अनुवादकद्ध- शारीर और शरीरकीया विज्ञान,

ऑक्सफर्ड युनिव्हसिटी प्रेस, दिल्ली,१९८०.

#### **SEMESTER II**

#### **COURSE VI**

# OFFICIATING, COACHING AND SPORTS TRAINING (60 Hours)

## **OBJECTIVES:**

- 1. To understand the basic concept and principles of officiating and coaching of different games and sports.
- 2. To enable the students to understand the rules, regulations and officiating of different games and sports.
- 3. To acquaint the students with the duties and responsibilities of an officials and coaches.
- 4. To acquaint the students with dimensions and actual markings of different play fields, courts and arenas.
- 5. To understand the concept, principles and forms of sports training.

## I Theory of officiating

**(12 Hours)** 

- a Meaning, purpose and principles of officiating
- b Duties and responsibilities of officials
- c Qualification and qualities of officials
- d Professional growth of officials
- e Rules and regulations of various games and sports (included in the syllabus of Semester I & II)

## **II** Theory of Coaching

(12 Hours)

- a Meaning, purpose, Philosophy and Principles of coaching
- b Qualification, qualities and responsibilities of coach
- c Techniques, tactics and periodization.
- d Positional play and system of play, Selection of team
- e Promoting interest in the games and sports

## III Conditioning Exercise

- a Warm-up exercises- Meaning, importance and types
- b Meaning and importance of conditioning exercise
- c Training methods- Circuit Training, Fartlek Training, Weight Training, Interval Training
- d Limbering down exercises- Meaning, importance and types

IV Theory of Sports Training

**(12 hours)** 

- a. Meaning, definition and Characteristics of sports training.
- b. Principles of sports training
- c. Sports talent identification process and procedures
- d. Periodization and its types

## V Theory of technique and Training Load

**(12 hours)** 

- a. Concept of Technique, Tactics and Strategy
- b. Important Features and Principles of Training Load
- c. Overload: Principles, causes symptoms and tackling of over load
- d. Methods and specific training programme for development of various motor qualities

- Beashel, P.,& Taylor, J. (1996). *Advance Studies in Physical Education and Sports*. U.K.: Thomas Nelson and Sons Ltd.
- Bompa, T.O., & Carrera, M.C. (2005). *Periodization Training For Sports*. USA: Human Kinetics.
- Bunn, J.W. (1968). *The Art of Officiating Sports*. New Jersey: Prentice-Hall, Inc; Englewood Cliffs.
- 4 Bunn, J.W. (1972). *Scientific Principles of Coaching*. New Jersey: Prentice-Hall Inc Englewood Cliff.
- 5 Chu, D.A. (1998). *Jumping Into Plyometrics Human Kinetics*. U.S.A: printed
- Davis, K.L. (1996). *The Art of Sports Officiating*. London : Allyn and Bacon Boston ISBN.
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#### **SEMESTER II**

#### **COURSE VII**

# ORGANIZATION, ADMINISTRATION AND MANAGEMENT IN PHYSICAL EDUCATION

(60 Hours)

#### **OBJECTIVES:**

- 1. To understand the importance of management of Physical Education.
- 2. To gain knowledge regarding management of Physical Education and Sports at different level.
- 3. To gain knowledge regarding the organization of various Physical Education programmes.
- 4. To gain knowledge of various schemes and plans of State/Central Government.
- 5. To gain the knowledge regarding planning and personal management, facility management and budget management.

## I Management of Physical Education and sports (12 Hours)

- a Meaning, Need and scope of management of Physical Education
- b Principles of Sports Management
- c Organization of Sports at National, State, District, Taluka and Village level by the State Government & other voluntary organization of sports
- d Construction, marking and maintenance of play grounds, track & field, gymnasium, swimming pool and athletic track

# II Organization of co-curricular activities and Physical Education programmes. (12 Hours)

- a Physical Education Budget : Need, Importance, procedure and principles of budget making,
- Physical Education and sports programmes for Primary,
   secondary and higher secondary School for sports awareness
   demonstration, play days, sports rallies, sports exhibitions
- Organization of National days (15<sup>th</sup> August & 26<sup>th</sup> January).,
   Organization of mass competition, sports day, hiking, trekking,
   Scout and Guide Camp and picnics
- d Ceremonies of competition Opening, closing and victory

## III Administration in Physical Education (12 hours)

- a Meaning, and importance of administration in Physical education and sports
- b Types and essential of administration of sports
- c Process of administration
- d Qualification of administration

## **IV** The Management Process:

**(12 hours)** 

- a. Concept and principles of management
- b. Organization and function of sports bodies
- c. Concept of techniques of supervision
- d. Meaning, need and importance of public relation

## V Aspects in Physical education and Sports Management

**(12 hours)** 

- a. Meaning and organization of Intramural and Extramural
- b. Management of Equipment: Need, selection, purchase, storing, issuing, maintaining and supplier
- c. Management of Infrastructure, financial and personal
- d. Types of management: Authoritarian Management, Laissez-Fair management

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#### **SEMESTER III**

#### **COURSE X**

# PSYCHOLOGY OF EDUCATION PHYSICAL EDUCATION AND SPORTS

(60 Hours)

## **OBJECTIVES:**

- 1. To develop an understanding of the nature, scope & methods of psychology of education, physical education & sports.
- 2. To understand the nature, steps and factor facilitating and obstructing learning.
- 3. To develop an understanding of the intelligence, creativity & the role of the teacher in fostering them.
- 4. To develop an understanding of the concept of individual difference and its importance in education, physical education and sports.
- 5. To develop an understanding of the concept of personality, factors affecting personality development and the role of teacher in promoting mental health of students.

# I INTRODUCTION TO PSYCHOLOGY AND GROWTH AND DEVELOPMENT (12 Hours)

- a) Meaning, nature and scope of psychology
- b) Relevance of psychology with education, physical education and sports
- c) Methods of psychological study
  - 2. Introspection method
  - 3. Observation method
  - 4. Experimental method
- d) Concept and principles of growth & development, various stages of growth and development with special reference to the childhood and adolescence stage and physical education activities for them

#### II LEARNING

- a. Concept, steps of learning and learning curve.
- b. Factors affecting learning and their implications in education, physical education and sports
  - 1. Maturation
  - 2. Attention
  - 3. Fatigue

- 4. Motivation
- c. Transfer of learning
- d. Theories of learning:
  - Theories of Association: Trial & Error theory {E.L. Thorndike}
     Classical conditioning (Pavlov theory), Operant conditioning –
     (Skinner)
  - 2. Cognitive theory: Learning by Insight (Wolfgang Kohler)
  - 3. Social learning theory: Bandura

# III INTELLIGENCE, CREATIVITY AND DIVERSITY OF LEARNER (12 Hours)

- a. Meaning and nature of intelligence
- b. Theories of intelligence:
  - i. J.P. Guilford's structure of intellect
  - ii. Gardner's theory of multiple intelligence
  - iii. Goleman's theory of emotional intelligence
- c. Creativity:
  - i. Meaning and characteristics of a creative person
  - ii. Process of creativity
  - iii. Teachers role in fostering creativity
- d. Individual Difference: Concept of individual difference and its importance in education, physical education and sports

#### IV PERSONALITY

(12 Hours)

- a. Concept of personality, factors influencing personality development
- b. Assessment of personality
- c. Mental Health: Concept & Importance
- d. Mental conflicts and defense mechanisms

## V MENTAL PROCESSES OF LEARNING, GROUP DYNAMICS AND EXPERIMENTS (12 Hours)

- a. Mental Process:
  - 1. Sensation and Perception
  - 2. Memory
  - 3. Forgetting
  - 4. Thinking
  - 5. Imagery & Imagination
- b. Characteristics and types of group
- c. Leadership & Sociometry
- d. Experiments (Questions to be asked on Educational Implications only)
  - 1. Attention

- 2. Learning
- 3. Transfer of Learning
- 4. Imagination
- 5. Fatigue
- 6. Perception

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#### SEMESTER III

#### **COURSE XI**

# FITNESS, WELLNESS, NUTRITION AND WEIGHT MANAGEMENT (60 Hours)

### **OBJECTIVES:**

- 1. To understand the components of physical fitness.
- 2. To acquaint student with principles of sports nutrition.
- 3. To understand the application of human energy.
- 4. To understand the role of food in Physical performance.
- 5. To afford student the opportunity of understand the diet for various life cycle.

### I Physical Fitness

(12 Hours)

- a. Definition, meaning and concept of Physical fitness, Physical Activity and Exercise
- b. Components of HRPF, SRPF and Physical fitness
- c. Definition and concept of wellness and holistic health
- d. Factors affecting Physical Fitness and wellness

#### II Doping and Nutrition

(12 Hours)

- a. Prevention and first-aid for common sports injuries
- b. Nutrition-components, balance diet and diet for athlete
- c. Meaning and definition of doping, ergogenic aids

#### **III** Development of Fitness

(12 Hours)

- b. Benefits of physical fitness and exercise and principles of physical fitness
- c. Calculation of fitness index level 1-4
- d. Waist-hip ratio larger heart rate, BMI and types and principles of exercise (FITT)
- e. Methods of training Continues, Interval, Circuit, Fartlek and Plyometric

## IV Dietary Requirement:

**(12 hours)** 

- a. Need of Energy, Carbohydrate and Protein
- b. Manipulation of energy balance to Induce weight loss and weight gain
- c. Competition nutrition Before week and the day, on the day of competition and after the competition

## V Wellness and Weight Management

(12 hours)

a. Concept, meaning and Components of wellness

- b. Manipulation of energy balance to Induce weight loss and weight gain
- c. Methods of Weight Management
- d. Concept, types and causes of obesity and its management

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#### **SEMESTER III**

#### **COURSE XII**

# METHODOLOGY OF TEACHING PHYSICAL EDUCATION (60 Hours)

### **OBJECTIVES:**

- 1. To understand the place of Physical Education in school curriculum.
- 2. To acquaint the learner with different methods of teaching physical activities.
- 3. To acquaint the students with planning, objectives of different types of lessons.
- 4. To acquaint the learner with organizing and conducting various types of tournaments and athletic meet.
- 5. To acquaint the learner with the constructions and marking of track and field events.

## I Curriculum of Physical Education (12 Hours)

- a. Place & Importance of Physical Education in the school curriculum
- b. Objectives of Teaching Physical Education at Secondary & Higher Secondary Education
- c. Curriculum of Physical Education for Secondary & Higher Secondary Education in Maharashtra State
- d. Steps of curriculum design

# II Methods and Techniques of teaching Physical Education (12 Hours)

- a. Methods of Teaching Command, Orientation, Lecture, Demonstration, Discussion, Progressive part method, At-will method, whole-part-whole
- b. Planning and Presentation Personal preparation, technical preparation, Steps of presentation
- c. Class management Principles of class management and Classification of Pupils
- d. Principles and Steps in Effective teaching

# III Teaching and Planning of various Physical Education activities. (12 Hours)

- a. Teaching of Formal & informal activities, major and minor games, Track and field events, Rhythmic activities, Yoga
- b. Objectives of lesson plan

- c. Types and Preparation of lesson plan
- d. Year plan, Unit plan

## IV Physical Education Teacher and Evaluation Process (12 Hours)

- a. Qualities, qualifications, professional growth and Challenges faced by Physical Education teacher
- b. Meaning & Importance of Evaluation
- c. Tools and methods of evaluation as per school curriculum
- d. Preparation and Maintenance of records

# V Organization of Tournaments, Competitions and Co-curricular activities (12 Hours)

- a. Need & Importance of Tournaments
- b. Types of Tournaments
- c. Organisation of Intramural, Extramural
- d. Organisation of Co-curricular Activities (National days, National Sports days, Hiking, trekking, Picnic, Camping and Athletic meet etc)

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#### **SEMESTER IV**

#### **COURSE XIV**

# MEASUREMENT, EVALUATION AND STATISTICS IN PHYSICAL EDUCATION

(60 Hours)

### **OBJECTIVES:**

- 1 To understand the concept of Measurement, Evaluation and Assessment Procedure in Physical Education.
- 2 To understand different tests in Physical Education.
- 3 To acquire the knowledge of various tests regarding Physical fitness, motor and health related fitness.
- 4 To understand various sports skill tests.
- 5 To understand and application of simple statistical procedures for evaluation.

#### I Introduction

**(12 Hours)** 

- a. Meaning, Need and importance of Test, Measurement and Evaluation in Physical Education
- b Types, purpose and Principles of evaluation
- c Criteria of test selection
- d Classification of tests- Written test, Psychomotor test

## II Physical Fitness Test

(12 Hours)

- Health Related Physical Fitness Test (as per school syllabus for std. V to XII)
- b. Motor fitness test (as per school syllabus std. V to XII)
- c. Strength and Power test Phillips JCR Test, Flexed Arm hang test, Bent knee sit-ups, Standing Broad Jump test, Vertical Arm pull test
- d. Cardio-vascular test Harvard step test, Flexibility Sit and Reach test, Agility shuttle run test, Speed –sprint, 30 M flying start

# III Sports Skill Tests

(12 Hours)

- a SAI Basketball Skill test
- b SAI football test
- c SAI volleyball skill test
- d Badminton Miller wall Volley test

### IV Evaluation of Physical Education Activities

- a Importance and role of evaluation in Physical Education
- b Evaluation procedure of Physical Education activities (as per school syllabus of std. V XII)

- c Internal and External evaluation
- d. Merits and demerits of evaluation

### V Statistics in Physical Education

(12 Hours)

- a Meaning, Concept, definition, importance and classification of statistics
- b Meaning and kinds of data, frequency distribution, control tendency, application and interpretation of Mean, Mode, Median, Standard deviation and quartile deviation
- c Normal Probability curve and its interpretation, Percentile and percentile rank
- d Diagrammatic presentation of Data Bar, two dimensional, three dimensional and Histogram, Frequency Polygon

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- 2. Banmgartner and Jackson : Measurement for Evaluation in Physical Education, Instructor's Manual, Houghton Mifflin Col. Boston,1975.
- 3. Barrow and Rosemary Mc. Gee: Practical Approach to Measurement in Physical Education, Lea and Febiger, Philadephia, 1979.
- 4. Bosco J.S. and F.G. William : Measurement and Evaluation Fitness and Sports, Prentice Hall, New Jersey, Inc. 1983.
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- 6. Eckert H.M.: Practical Measurement of Physical Performance, Lea and Febiger, Philadephic,1974.
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#### **SEMESTER IV**

#### **COURSE-XV**

# SPORTS MEDICINE, PHYSIOTHERAPHY AND REHABILITATION

(60 hours)

### **OBJECTIVES:**

- 1. To understand the nature and importance of sports medicine in Physical Education and Sports.
- 2. To gain knowledge regarding the medical problems of athletes and its rehabilitation.
- 3. To acquire knowledge regarding sports injuries and their management.
- 4. To gain knowledge regarding the therapeutic modalities.
- 5. To understand medical problems and its rehabilitation.

#### I Introduction:

(12 hours)

- a. Concept, aim, objectives of Sports Medicine
- b. Need & importance of Sports Medicine
- c. Role of physician, athlete trainer & coaches, Team medical care- concept & approaches
- d. History of Sports medicine in India and abroad

## II Injury & tissue response:

**(12 hours)** 

- a. Micro & macro trauma, over use trauma.
- b. Tissue response to stress Different steps of wound healing
- c. Regional, Specific injuries related to games and sports & their management (head, neck, face, thorax, abdomen, pelvis, upper & lower limbs)
- d. Prevention of sports injuries

## III Therapeutic modalities & rehabilitation:

**(12 hours)** 

- a. Hydrotherapy, Cryotherapy, thermotherapy, Contrast & paraffin bath
- b. Son bath, Jacuzzi bath & Whir-pool bath
- c. Diathermy, infra-red, ultra sound

## d. Approach to rehabilitation

## IV Medical Problem and Rehabilitation: (12 hours)

- a. Lower Back, old age and postural problems and there corrections
- b. Advantages and Disadvantages of exercises
- c. Massage manipulations and therapeutic exercises
- d. Psychiatric rehabilitation

## **IV** Sports Medicine:

(12 hours)

- a. Role of sports Medicine in talent searching
- b. Importance of recovery
- c. Sports Massage
- d. Doping in sports

- 1 Appen zeller, Otto and Atkinson Ruth.(1983). *Sports Medicine* : *Fitness Training, Injuries*. U.S.A: Urban and Schwar Zenberg.
- Bean, A. (2000). *The Complete Guide to Sports Nutrition* (3<sup>rd</sup> Ed.). London: A & C Black.
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#### **SEMESTER IV**

## COURSE -XVI KINESIOLOGY AND BIOMECHANICS

(60 hours)

## **OBJECTIVES:**

- 1. To understand the nature and scope of Biomechanics in Physical Education & Sports.
- 2. To understand the importance of movement analysis, kinesiological analysis and biomechanical Analysis.
- 3. To understand the knowledge regarding antagonistic and agonistic muscles in the movements.
- 4. To gain knowledge of the application of mechanical principles to fundamental skills and sports techniques.
- 5. To understand basic mathematical problems related to motion, force and levers.

## I Introduction of Biomechanics:

(12 hours)

- a. Meaning, Definition, Scope and importance of Biomechanics in Physical Education and Sports
- b. Basic concepts related to Kinetics and Kinematics
- c. Laws of motion, principles of equilibrium and force, spin and elasticity
- d. Role of biomechanics in improving sports performance

#### II Human movement and biomechanics:

**(12 hours)** 

- a. Mechanical analysis of various sports activities
- b. Principles of application of biomechanics -Force-motion principles, Force-time principles, Stability-balance principles, Principles of leverage system, Power and Energy and projectiles
- c. Mechanical analysis of fundamental movements-(running, jumping, throwing, pulling and pushing

## III Introduction of Kinesiology:

**(12 hours)** 

- a. Meaning, Definition, Scope and importance of Kinesiology in Physical Education and Sports
- b. Aim, objectives and need of kinesiology
- c. fundamental concept of Planes and Axes
- d. Posture, postural deformation and their corrective measures

IV Structural kinesiology

(12 Hours)

- a. Kinds of Muscular contraction
- b. Kinesiological and movement analysis
- c. Joints and their movements
- d. Classification and characteristics of skeleton muscles

## V Applied kinesiology:

(12 hours)

- a. Neuromuscular base of kinesiology- process of muscular contraction
- b. Application of kinesiology to basic skills- Walking, Jumping, Running and Throwing
- c. Elementary problems related to motion, speed, velocity, force and projectiles

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