

Saurashtra University, Rajkot



Re- Accredited Grade B
By NAAC
(CGPA 2.93)

Faculty of Education

Department of Physical Education

**REGULATION, ORDINANCE AND
REVISED SYLLABUS FOR DEGREE OF
MASTER OF PHYSICAL EDUCATION
(M. P. Ed.)
SEMESTER SYSTEM**

*Choice Based Credit System
In force from June 2012
(w.e.f. Academic Year 2012-13)*

Different Weightage Scales: (For awarding grades to Internal, Semester End and Combined Exam Scores for Theory Examination)

Different Scales			Grade	Grade Point
Combined	Internal	Semester End Exam		
90<X<=100	27<X<=30	63<X<=70	O	10
80<X<=90	24<X<=27	56<X<=63	A	9
70<X<=80	21<X<=24	49<X<=56	B	8
60<X<=70	18<X<=21	42<X<=49	C	7
50<X<=60	15<X<=18	35<X<=42	D	6
40<X<=50	12<X<=15	28<X<=35	E	5
Less than 40	Less than 12	Less than 28	F	4

Different Weightage Scales: (For awarding grades to Internal, Semester End and Combined Exam Scores for Practical Examination)

Different Scales			Grade	Grade Point
Combined	Internal	Semester End Exam		
90<X<=100	27<X<=30	63<X<=70	O	10
80<X<=90	24<X<=27	56<X<=63	A	9
70<X<=80	21<X<=24	49<X<=56	B	8
60<X<=70	18<X<=21	42<X<=49	C	7
50<X<=60	15<X<=18	35<X<=42	D	6
40<X<=50	12<X<=15	28<X<=35	E	5
Less than 40	Less than 12	Less than 28	F	4

Different Weightage Scales: (For awarding grades to External Motor Fitness, Physical Fitness and Athletic Ability Test, Semester End Exam Scores for Practical Examination)

Different Scales			Grade	Grade Point
Semester End Exam				
45<X<=50			O	10
40<X<=45			A	9
35<X<=40			B	8
30<X<=35			C	7
25<X<=30			D	6
20<X<=25			E	5
Less than 20			F	4

Scale for Awarding Grades Based on SGPA & CGPA :

	Semester End SGPA	Programme End CGPA	Grade	Description
1	9.0 <SGPA<= 10	9.0 <CGPA<= 10	O	Outstanding
2	8.0 <SGPA<= 9.0	8.0 <CGPA<= 9.0	A	Upper Distinction
3	7.0 <SGPA<= 8.0	7.0 <CGPA<= 8.0	B	Distinction
4	6.0 <SGPA<= 7.0	6.0 <CGPA<= 7.0	C	First Class
5	5.0 <SGPA<= 6.0	5.0 <CGPA<= 6.0	D	Second Class
6	4.0 <SGPA<= 5.0	4.0 <CGPA<= 5.0	E	Passed
7	SGPA Less than 4.0	CGPA Less than 4.0	F	Failed

The candidate who fails to obtain less than 40% in practical activity examination shall have to clear the same in ensuring attempt to be arrange by the department of Physical Education and the marks of his / her attempt in which he /she have obtain more than 40% of marks will be carry forwarded for calculating his / her CGPA / SGPA & Class.

Marking System

	Theoretical	Practical	Credits
Semester – I	400	250	26
Semester – II	400	250	26
Semester – III	400	250	26
Semester – IV	400	250	26
Total	1600	900	104

Distribution of the subjects

Semester	Core courses	Elective courses	Elective/ Multidisciplinary	Instructional practical activity
Semester-I	3	2	-	3
Semester-II	3	2	-	3
Semester-III	3	-	2	3
Semester-IV	3	-	3	3
Total	12	4	5	12

Weekly Lectures and credits

Semester – I (M. P. Ed.)

Section – I

Sr. No.	Course Code	Title of the Course	Weekly Lectures	Credits
1	PEC 1001	Philosophical foundation of Physical education	4	4
2	PEC 1002	Health Education	4	4
3	PEC 1003	Research Method in Physical education	4	4
Elective Subjects (Any one)			4	4
4	PEE 1004	Sports Sociology	-	-
5	PEE 1005	Yoga and Naturopathy	-	-

Section – II Practical Instructional

Practical	Course Code	Activities	Weekly Lectures	Credits
6	PEP 1006	Athletics Skill Test – Running (Any two out of Stances, Strides and Finish Skill in running event) (Technical Ability and officiating)	4	4
7	PEP 1007	Skill Test of the Games – Table Tennis, Badminton, Kabaddi, Kho-Kho.(Any two)	4	4
8	PEP 1008	Motor Fitness Test : 50 yard Dash Run, Standing Broad Jump, Pull ups, 25 mts. Shuttle run, Sit Ups	2	2
Total Credits/ Lectures			26	26

Section: III Add on credit courses

Maximum 6 credits

Sr. No.	Add on Activities	Credit
1	Inter Uni. Participation (Any one game)	2
2	Inter college participation (min. two game)	2
3	Research paper presentation (National level seminar)	2
4	Research paper presentation Min. two paper (state level seminar)	2
5	Mountaineering – Advance camp Basic camp	2 1
6	Officiating – State/National level in any two game	2

**Weekly Lectures and credits
Semester – II**

Section – I

Sr. No.	Course Code	Title of the Course	Weekly Lectures	Credits
9	PEC 2001	Kinesiology & Bio-mechanics	4	4
10	PEC 2002	Test Measurement & Evaluation	4	4
11	PEC 2003	Statistics in Physical Education	4	4
Elective Subjects			4	4
12	PEE 2004	Information technology in physical education	-	-

13	PEE 2005	Sports Nutrition	-	-
----	----------	------------------	---	---

Section – II Practical Instructional

Practical	Course Code	Activities	Weekly Lectures	Credits
14	PEP 2006	Athletics – Jumping Skill Test (Any two out of Approach run, Take off and Landing Skills and Style in Jumping Events) (Technical Ability and officiating)	4	4
15	PEP 2007	Games – Handball, Basketball, Tennis, Cricket (Any two)	4	4
16	PEP 2008	Physical Fitness Test 6 Minute Walk Test Illinois Agility Test vertical jump Test Sit and reach test Hand Grip Strength Test	2	2
Total Credits/ Lectures			26	26

Section: III Add on credit courses

Maximum 6 credits

Sr. No.	Add on Activities	Credit
1	Inter Uni. Participation (Any one game)	2
2	Inter college participation (min. two game)	2
3	Research paper presentation (National level seminar)	2
4	Research paper presentation Min. two paper (state level seminar)	2
5	Mountaineering – Advance camp Basic camp	2 1
6	Officiating – State/National level in any two game	2

**Weekly Lectures and credits
Semester – III**

Section – I

Paper	Course Code	Title of the Course	Weekly Lectures	Credits
17	PEC 3001	Sports Medicine	4	4
18	PEC 3002	Scientific Principles of Training & Coaching	4	4
19	PEC 3003	Exercise Physiology	4	4
Elective/ Multi discipline any subject (any one)			4	4
20	PEM 3004	Physical fitness and wellness	-	-
21	PEM 3005	Olympic movement	-	-

Section – II Practical Instructional

Practical	Course Code	Activities		
22	PEP3006	Athletics – Throwing Skill Test(Any two out of Stances, Throwing action and follow through skills in throwing event) (Technical Ability and officiating)	4	4
23	PEP 3007	Games – Volleyball, Football, Softball, Basket ball (Any two)	4	4
24	PEP 3008	Athletic performance Test, 100 mts Run 400 mts. Run Long Jump High Jump Shot Put	2	2
		Total Credits / Lectures	26	26

Section: III Add on credit courses**Maximum 6 credits**

Sr. No.	Add on Activities	Credit
1	Inter Uni. Participation (Any one game)	2
2	Inter college participation (min. two game)	2
3	Research paper presentation (National level seminar)	2
4	Research paper presentation Min. two paper (state level seminar)	2
5	Mountaineering – Advance camp Basic camp	2 1
6	Officiating – State/National level in any two game	2

Weekly Lectures and credits Semester – IV

Section – I

Sr. No.	Course Code	Title of the Course	Weekly Lectures	Credits
25	PEC 4001	Sports Management	4	4
26	PEC 4002	Physical Education & Sports Psychology	4	4
27	PEC 4003	Health and Fitness Management	4	4
Elective/ Multidisciplinary (any one)			4	4
28	PEM 4004	Sports Tourism	-	-
29	PEM 4005	Dissertation	-	-
30	PEM 4006	Life saving skill & disaster management		

Section – II Practical Instructional

Practical	Course Code	Activities		
31	PEP 4007	Internal Coaching Lesson (3 special. Games and 3 Athletics) External Coaching Lesson- (1- special. Games and 1 Athletics)	8	8
32	PEP 4008	Specialization games (Choose any one) Skill, Technique, Tactics, officiating, performance and Viva	2	2
Total Credits/ Lectures			26	26

Section: III Add on credit courses

Maximum 6 credits

Sr. No.	Add on Activities	Credit
1	Inter Uni. Participation (Any one game)	2
2	Inter college participation (min. two game)	2
3	Research paper presentation (National level seminar)	2
4	Research paper presentation Min. two paper (state level seminar)	2
5	Mountaineering – Advance camp	2
	Basic camp	1
6	Officiating – State / National level in any two game	2

Semester - I

Evaluation Structure

Section – I Theory Section

Course Code	Title of the Course	Internal	External
PEC 1001	Philosophical Foundation of Physical Education	30	70
PEC 1002	Health Education	30	70
PEC 1003	Research in Physical Education	30	70
Elective		30	70
PEE 1004	Sports Sociology		
PEE 1005	Yoga and Naturopathy		
		120	280
	Theoretical Internal/ External Total marks	400	

Section – II Practical Section

		internal	External
PEP 1006	Athletics (Running Event) (Technical Ability and officiating)	30	70
PEP 1007	Games – Table- Tennis, Badminton, Kabaddi, Kho-Kho. (Any two games skill Achievement & officiating)	30	70
PEP1008	Motor Fitness Test : 50 yard Dash Run, Standing Broad Jump, Pull ups, 25 mts. Shuttle run, Sit Ups (Every Event 10 Marks)		50
		60	190
	Practical Internal / External Total marks	250	

Semester - I
PEC -1001 : Philosophical .Foundation of physical Education.

- Unit – I : Education.
- Meaning. Definition, aim and objectives of Education.
 - Philosophy and physical Education.
- Unit – II: Philosophical. Foundation of physical Education (Basic Principles)
Psychological, Biological, Sociological and Education.
Foundations.
- Unit – III Educational Philosophy, related to physical Education. Idealism, Naturalism, Realism, Pragmatism, Existentialism, Humanism.
- Unit - IV Physical Education in .Ancient Greece, Rome, Germany, Sweden, Denmark and Russia.
- Unit- V (A) Development and origin of physical Education in India
- (B) Olympic movements- Ancient and modern Olympic history and development, Asian and Commonwealth games.

Ref. books

- Ajmersinh “physical Education and Olympic Movement” Kayani publishers’
Ludhiana 2004
- Buchev C.A. “Foundation of physical Education” Saint loais, Missouri, Mosbi
College sub. 1987
- Barrow Harsold M., “Man and Movement, principles of phy. Edu.” Leo and
Febiger, 1993
- Kamlesh M.L., “Physical Education: Feats and Foundation” P.S. publication
1985.
- Chauhan Shivkumar, “sharirik shiksha ka Darshik Avem Aitihashik Pehlu”
New Delhi, Friends publication.
-

Semester-I

PEC: 1002: Health Education.

- Unit – I Meaning, Definition. Aims, objectives principles of physical Education. Health Education. (Physical, Mental, Social) and Recreation.
- Unit-II: Methods of recreation, Recreational Programmer for various age groups.
- Unit - III (A) Environmental and professional. Hazards and First aid
(B) Communicable disease-their privative and therapeutic methods (Aids, Air Water and Food)
- Unit - IV - School Health programmer and personal Health and hygiene
- Necessity and Maintain personal Health.
- Mental health
- Unit- V Population Education (policy)
- Reasons and actions of population Explosion.
- National Family Welfare.
- Sex Education and Necessity.

Ref. Books -

- Ajmersinh and others, “physical Education and Olympic movement.” Kalyani Publishers. Ludhiyana. 2004
- Millev david K. “Fitness a life time Achievement” surjeet sub. Delhi, 1982
- Devendrasinh Dull. “Ahatony, physiology and health Education” friends sub. Delhi – 1998
- Charu Sapra, Yograjthani. “Health Education Encyclopedia” sports publication Delhi 2006
- Verma K.K. “Health Education” Friends Publication, Delhi
- Sarvaiya G.T. “Svasthya Shikshan Ane Ramat Chikitshashasra” Gandhinagar, Gujarat Rasya pathya pustak mandal 2001
-

Semester-I
PEC – 1003: Research Methods in physical Education

- Unit - I Meaning, Definition, Nature, importance and Field of Research in Physical Education.
- Unit - II Meaning and Definition of problem, Criteria for selection of problem, source of problem Hypothesis-Formulation.- Review of Related literature, Library technique
- Unit - III (A) Sampling- Meaning, Definition, types, characteristic, Importance.
 (B) Research Tools, Questioners, interviews, Attitude Rating scale- characteristic and types.
- Unit - IV- (A) Historical Research- Meaning, Definition, importance- primary and secondary sources, External and internal criticism.
 (B) Descriptive, Survey type research, Meaning Definition, importance
- Unit V- (A) Case study
 (B) Experimental research-Meaning, Definition-Designs (Experimental)
 (C) Research proposal and Research Report

Ref. books :

Patel Aatmaram J. “Sharirikl shikshan ma sanshodhan paddhatiyo” Bharat institute Ahmadabad

Madan kamlesh, “Methodology of research in physical Education and sports”
Chaniara N.J. kasundra P.M. “Sanshodhan Aheval” om printers,
Ahmadabad.2007

Thomar R. Nelson Jaek K. “Research methods in physical activity, U.S.A.
Human kinetics, 1996

Semester - I

PEE – 1004: Sports sociology (Elective)

- Unit – I - Sociology.
- Meaning, Definition and importance of sociology.
- Meaning, Definition and importance of sports sociology.
- Unit – II Meaning and Definition of Heredity and Environment
Factors affecting sports competition, Environment, spectators, competitor, and Grounds
- Unit –III: Meaning, Definition and principles of games, competition.
In sports, Co-operation, group Dynamics,
(Team Co-ordination)
- Unit – IV - Games sports and socialization (Role of Home, school and Education)
- Role of Games in Socialization.
- Role of Leadership to establish good relationship in society
By games and sports.
- Unit –V - Social Nature and physical activity of Humans,
- Games and sports as a cultural heritage for Humans.
- Beliefs and traditions.
- Economy and politics Games and sports.

Ref Books

Anthony Lacker, “The sociology of sports and physical Education” Rutledge Taylor and Francis, 2002.

Adward and Lerim, “Sociology of sports. The dorsi press, Illinois, 1973.

Sharma S.R., “Sociological Foundation in physical Education and sports New Delhi, Friends publications,

Pobu A., “Sociology of sports, Delhi, Friends publication

Semester-I

PEE – 1005: Yoga and Naturopathy (Elective)

- Unit - I Meaning, importance of yoga and pranayam, attentive
Matters to note, difference between yoga and exercises.
- Unit- II Types of Asnas, Importance, Sun Salutation.
- Unit - III Ashtaga yoga
- Types of pranayam and importance.
 - Omkar, kapalbhati, Bhramri, shitli, shitkari.
- Unit – IV Naturopathy,
- Meaning, History and importance.
 - Principles for Naturopathy.
- Unit –V Medium (types) of Naturopathy.
- Food, water, mud, Massage, Magnet therapy, sun bath, Fast,
Acupressure.

Ref books

Sarin N. “Yog shiksha avem yog owara Rog Nivaran.” Delhi, Khel sahitya
Kendra, 1195

Satypal. Dholandas Agrawal “Yoga Ashans Avem Sadhana” Delhi, Bhartiya
Yoga sansthan. 1989.

Karambelkar P.V., “patanjali Yoga sutra”. Lohavala, Kaivalyadham.

Gaud Gangaprasad, “prakratik Ayuvigyan”, Morinagar. Utarpradesh 994.

Semester – II Evaluation Structure

Part – I Theory Section

Paper Code	Title of the Paper	Internal	External
PEC 2001	Kinesiology and Bio-mechanics	30	70
PEC 2002	Test, Measurement, Evaluation	30	70
PEC 2003	Statistics in Physical Education	30	70
Elective (choose any one)		30	70
PEE 2004	Information technology in Physical Education		
PEE 2005	Sports Nutrition		
		120	280
	Theoretical Internal/ External Total marks	400	

Part – II Practical Section

Event			
PEP 2006	Athletics – Jumping Events (Skill Achievement and officiating)	30	70
PEP 2007	Games – Handball, Basketball, Tennis, Cricket. (any two games skill achievement and officiating)	30	70
PEP 2008	<u>Physical Fitness Test</u> 6 Minute Walk Test Illinois Agility Test vertical jump Test Sit and reach test Hand Grip Strength Test (Every Event 10 Marks)		50
		60	190
	Practical Internal/ External Total marks	250	

Semester - II
PEC: 2001: Kinesiology and Biomechanics

- Unit – I Meaning, Definition and importance of kinesiology and Biomechanics.
- Unit- II Basic fundamentals of Anatomy, joint and their movements, Planes and axis.
- Unit – II - Kinetics
 - Kinematics
 - Linear and angular motion.
- Unit – III : Rules of motion, principles of Balance (Equilibrium) and Force, spin and Elasticity lever
- Unit – IV : Analysis of motor movements' in muscle, mechanical Analysis of skills in various games, Running, Jumping, Throwing, Pulling, Pushing- mechanical Analysis – Athletics, Volleyball, Basketball, Handball, Cricket, Football, Hockey, Kabaddi, Kho-Kho.

Ref. books

- Patel Harshad I. “Sharirik Halanchalan Shashtra” Ahmedabad, Ahada Book depo.
- Patel Kirtibhai R. “Sharirk Halanchalan Shashtra”, Gandhinagar, Rama Prakashan, 2008.
- Viadhimir M.Z. “Kinetics of Human Motion”, Human Kinetics, 2002
- Uppal A.K. and V. Lawvance, “Kinesilogy in Physical Education and Exercise science” Delhi, friends pub. 2004
- Patter M.C. Ginise “Biomechanics of sports and exercise” Delhi, Friends Pub. 2005
- Kumar Ramesh, “Khelgivyantirki Vigyan” Delhi, friends pub.
-

Semester - II

PEC: 2002: Test, Measurement and Evaluation in Physical Education

- Unit – I (A) Meaning, Definition and importance of Test, Measurement And Evaluation
(B) Classification of Tests, Criteria for selection of the Test, Body composition (B.M.I., Fat Measurement)
- Unit – II Physical fitness and Motor fitness tests
(1) AAHPER youth fitness test
(2) National Physical fitness drive
(3) Indiana Motor fitness test
(4) J.C.R. Test
- Unit- III (A) General Motor ability test
(1) Barrow-General Motor ability test
(2) Newton Motor ability test
(3) Cozen Athletic ability test
(4) Larson Test
(B) Cardiovascular and strength test
(1) Harward step test
(2) Cooper's 12 minute run/walk test
(3) Kross-waber strength test
(4) Roger's strength test
- Unit – IV Skill Related Test of games
Badminton – (1) Lockhart Mcfurson test
(2) Miller wall-valley test
Basketball - (1) Jhonson Basketball test
(2) Leelich Basketball test
Hockey - (1) Harbansingh Hockey test
Tennis - (1) Dyer Tennis test
(2) Hevit Tennis test
Volleyball - (1) Russel Lange test
(2) Braddy Volleyball test
- Unit – V - Concept of social and psychological test
- Self concept (social)
- Peterson's social ability measurement
- Anxiety test (SCAT)

Ref. Books

- Kasundra P.M., Patel K.R., "Sharirik Shikshan Ma Kasotiyo, Mapan ane Mulyankan", Gandhinagar, Rama Prakashan.
- Kansal D.K. "Test and Measurement in sports and physical education' New Delhi, D.V.S. publication 1996
-

Ashare M.H. “Sharirik Shiksha Me Parixa Avem Mapan” Ahurwati, Ahare
Prakashan

Clark Harsion, Clark david, “Application of Measurement to physical
education.”, Newjersy Practice Hall Inc.

Saffrit Margent J. “Introducation to Measurement in physical education and
exercise science”

Johnson, Barry L, Nelson Jack K. “Pratical Measurement for evaluation in
physical education, Delhi, Surjeet Publication, 1986

Corbin Charles B. Ruth Lindsey, Concept of physical fitness with laboratories,
W.M.C. Brown publishers, IOWA – 1989

Hustod Dougls N, Lechi Alan, “Measurement and Evaluation in physical
education and exercise science” Aricona, 1994.



Semester – II
PEC : 2003: Statistics in Physical Education

- Unit – I Definition, need and importance of statistics
- Unit – II Frequency distribution, Measures of central Tendency, Mean, Mode, Median, Quartiles, deciles, percentile, grouped and ungrouped data – computation and uses.
- Unit – III (A) Measures of variability, Range, Average deviation, Quartile deviation, Standard deviation.
- (B) Meaning, Definition, uses and types of Graphs – Line, Bar, Simple, Comparative, Histogram, Frequency PolyGram
Olive Curve
- Unit – IV (A) Co-Relation – Person's product, Moment co-relation
- (B) Normal curve – Meaning, Qualities, Kurtosis, Skewness
- Unit- V Z-scale, T-scale, Sigma scale, 't' ratio

Ref. books.

- Parekh Bhagvanlal U, Trivedi Manubhai D., "Shikshan Ma Ankadashshtra", Ahemdabad, University Granth Nirman Board 1994.
- Verma Prakash J. "A text book of sports statistical" Gwalior, Venus publication, 2004.
- Clarke Harison H. "Research process in physical education, Health Education and Recreation, New jersey, Practice Hall inc. 1979.
- Thomes Jerry R., Nelson Jack K., "Research Methods in Physical acitivity", Human Kinetics, U.S.A. 1996.
- Shiv Ram Krishna S. "Statistics for physical Education", New Delhi, Friends Publication.
- Parekh Suresh C., "Aprachaliy Ahkadashashtra", Junagadh, Gujarat, 1998.
-

Semester – II

PEE: 2004: Information Technology in Physical Education (Elective)

- Unit – I Computer – Meaning and definition – components of computer – input and output devices – storage devices – software and hardware – languages LAN and WAN – Application of computer in physical education and sports.
- Unit – II MS Word – document creating, saving and opening – formatting and Editing features – Drawing tables – page setup – paragraph alignment spelling and grammar check – printing option – inserting page number, graph, footnote and end notes – mail merge – hyperlink.
- Unit – III Introduction to MS Excel – creating, saving and opening a spreadsheet – formatting and editing – creating formulas – Adjusting Column width and Row height – Understanding charts –
- Unit- IV Introduction to MS Power Point – creating, saving and opening a PPT file – formatting and editing features – slide show – design – inserting slide number, picture, graph and table, hyperlink.
- Unit –V Meaning and Definition of Internet and multimedia their application in Physical Education and sports.
- Internet: History, Address, Server, Web, Web browser, Search Engine, Firewall – Email
- Multimedia: Fundamental application, 3D graphics, Animation, Morphing, sound and music.
- Practical: Introduction to games software, application of project manager, Internet, browsing, E-mail, PPT Presentation, Multi Media slide show.

Ref. books

- Jerry R. Thomas, Jack K. Nelson and Stephen J. Silverman, Research Methods in Physical activity (5th Ed.) New York, Human Kinetics, 2005.
- Chris Grattor and Lan Jones, Research methods for sports studies, London, Routledge taylor and Francis group 2004.
- Sunil Chauhan, Akash Saxena, Kratika Gupta, “Fundamentals of computer”, Firewall media 2006.
-

Semester – II
PEE: 2005: Sports Nutrition

- Unit – I Interpretation and Functions of Food. – Physiological, Psychological and social function of food.
- Unit – II Nutrition elements and function carbohydrate, fat, protein, Water, Vitamins and minerals.
- Unit- III Calorie demand and supply
- Maintain body weight
 - Nutrition value of Fruits
 - Junk food and its effect
 - Controversial Diet (versus food)
- Unit – IV (A) Digestion of food in the body
- Alimentary canal
 - Absorption of food
 - Use of Nutrient elements
- (B) Mal-Nutrition and Health
- Meaning, effect on Health, over Nutrition and overweight.
- Unit –V Sports Diet
- Pre training and pre competition food.
 - During training and During Competition food
 - Post training and post competition food
 - Necessity of Liquid.

Ref. books

- Neney Clark, Nutrition guide book, U.S.A. Leisure Press, Human Kinetics, 1990.
- Judy A> Driskel, Sports Nutrition, U.S.A., C.R.C, Press New York, 2000
- Pathak J.D. “Poshan Vidya” University Granth Nirman Board, 1974
- P.R. Reddy, Shardagupta, Ahar Juth Poshak Ghatako temna Kavyo, New Delhi, C.P.F.N., Continuous Education IGNOU Nov. 1988.
- Vaidya Ushakant, “Manav Poshan” Ahmedabad, University Granth Nirman Board, 1971
-

Semester - III
Evaluation Structure

Part – I Theory Section

Paper Code	Title of the Paper	Internal	External
PEC 3001	Sports Medicine	30	70
PEC 3002	Scientific Principle of Training & Coaching	30	70
PEC 3003	Exercise Physiology	30	70
Elective/ Multidisciplinary (any one)		30	70
PEM 3004	Physical fitness and wellness		
PEM 3005	Olympic Movement		
		120	280
	Theoretical Internal/ External Total marks	400	

Part – II Practical Section

Event			
PEP 3006	Athletics – Throwing Events (Skill proficiency and officiating)	30	70
PEP 3007	Games: Volleyball, Football, Softball, Judo (Any two Games skill proficiency and officiating)	30	70
PEP 3008	Athletic performance Test, 100 mts Run 400 mts. Run Long Jump High Jump Shot Put (Every Event 10 Marks)		50
		60	190
	Practical Internal/ External Total marks	250	

Semester – III
PEC : 3001: Sports Medicine

- Unit – I Meaning Definitions, aim, objectives, modern, concept and importance of sports medicine.
- Unit – II Injuries and First Aid in games and sports
- Skin – Abrasions, Lacerations, Incisions, Puncture wounds, Blister
 - Bone – Fractures, Dislocation
 - Soft Tissue – strain, sprains, cramp, Tennis elbow.
- Unit- III (A) Causes and prevention of injuries, Rehabilitation and first Aid.
- (B) Massage and Therapeutic Modalities – Hydrotherapy, Electrotherapy, Exercise therapy, cryo therapy and Thermo Therapy
- Unit – IV - Meaning and Definition of food and Diet food, Elements of Food and importance of Diet for players.
- Meaning, Definition and importance of Bioenergetics
- Unit –V Doping
- Meaning Types and effect on sports standard
 - Smoking and Alcohol
 - Banned drugs by world Anti doping agency and it's side effects.

Ref. books

- Clark Nancy, “Sports Nutrition guide book” Human Kinetics Liesure press, Champasigh, 1990.
- Driskell Judy A. “Sports Nutrition”, Washington D.C. 2000.
- Panday P.K., “Know how sports medicine”, Jalandhar book Market, 1989.
- Sinh Vijay, “Sharirik Shiksha Me Khel Chikitsa”, Friends publication New Delhi.
-

Semester – III
PEC: 3002: Scientific Principles of sports training

- Unit – I Sports training
Adaptation: Training and coaching, objectives of sports training, function, Traits and principles.
- Unit- II Training Load: Meaning, Definition, Types and principles, overload – cause, symptoms, relation between load and adaptation.
- Unit – III Training for Physical fitness components
- Strength, Endurance, speed, flexibility co-ordination – Intro, Definition, Form, Training methods for development.
- Unit – IV Technique – Tactics – Definition, Specialty, Training methods, cause and treatment for fault, Training principles for Technique and tactics.
- Unit –V Training plan – importance, principles, periodisation and their types.
- Control planning for sports training, trends,
- Sports talent identification process and methods.

Ref. books

- Sharma R.K. “Khel training Ke Vaigyanik Siddhant” New Delhi, Krida Sahitya Prakashan, 2000.
- Patel K.R., “Ramat talim na Vaiganik Siddhanto”, Gandhinagar, Rama Prakashan, 2001.
- Singh Hardayal, “Science of sports training”, New Delhi, D.A.V. Publication, 1991.
- Thelor O. Bompa, “Periodisation training sports”, U.S.A. Human Kinetics Pub.1999.
- Dick French W., “Sports training Principle” London, Letus book, 1980.

PEC : 3003: Exercise Physiology

- Unit – I Meaning, Definition, importance and scope of Exercise Physiology.
- Unit – II Muscles types' structure and Function, Fiber types, theory of Muscular contraction, energy for muscular contraction, acute and delayed muscular soreness.
- Unit – III effect of exercise on various systems, structure and functions of Body systems.
(Muscular system, cardio-respiratory system, Respiratory system, Digestion system, Nervous system)
- Unit – IV Oxygen debt, second wind, warm up, conditioning, fatigue, cooling down.
- Unit- V Factors affecting performance, fatigue, general and chronic symptoms and sites of fatigue, prevention, factors limiting anaerobic and aerobic performance

Ref. books

- Champe Pamella C. and Harry Richard A., "Bio-chemistry", New jersey, vaven pub.1994.
- Bowers Richard W., Fox Adward L. "Sports Physiology", brown pub. IOWA, 1992.
- Gaure Kristopher John, "Physiological test for elite athletes" Human Kinetics, Australia sports com. 2000.
- Patel Kautibhai R., "Sharir halan-chalan shashtra", Gandhinagar, Rama Prakashan, 2006.
- Sharma R.K. "Vyayam Kriya Vigyan Avem, Khel Chikitsha Shashtra", Krida Sahitra Prakashan, New Delhi, 1999.
- Patel Harshad I. "Kashratiy Sharir Vigyan", Ananda book, Ahmedabad, 1994.
-

Semester - III
PEM : 3004 Physical Fitness and Wellness
(Elective / Multidisciplinary)

- Unit - I - Meaning of Physical Fitness and definition
 - Importance and Advantages of fitness (Physical - Mental)
- Unit - II Physical Fitness Components and it's evaluation
 - Health related fitness
 - Skill related fitness
 - Exercise Programme for Children and youth
- Unit - III Activities for Fitness
 - Aerobic dance, Water exercise, Brain exercise, Training for Co-
 ordination and balance, Isometric Training, Cycling, stair Up-
 down, Treadmill etc.
 - Physical fitness and stress Management
 - Concept of stress
 - Contribution of exercises in stress Management
- Unit - IV Development of Physical Fitness and Steps for Maintain
 - Factors affecting Physical Fitness
- Unit - V Meaning of Wellness, Definition
 - Components of Wellness
 - Contribution of Behaviour in Wellness
 - Advantage of Wellness

Ref. Books

- Allen W. Jockson et al, "Physical activity for health and fitness, USA, Human Kinetics, 1999.
- Jerrold S. Greenberg, "Physical fitness and wellness (3rd Ed.) USA, Human Kinetics, 2004.
- Josheph P. Winnick and Francis X. Short, "Physical fitness training guide, USA, Human Kinetics, 1999.
- Lyne brick, "Fitness aerobics, USA, Human Kinetics, 1996.
- Martha White, "Water exercise". USA, Human Kinetics, 1996.
- Gudrun Paul, "Aerobic training, meyer and meyer sports : UK, 2000.
-

Semester – III

PEM: 3005: Olympic Movement (Elective/ Multi disciplinary)

- Unit – I History of Olympics – Ancient and modern Olympics – Sparta and Athens – Olympic games – summer and winter Olympics – Physical Education in India = structure of Olympic family – sports for all.
- Unit – II Olympic movement and its action – ‘Mission and Role of IOC – Olympic symbol – Olympic flag – Olympic Anthem – Olympic Flame and torches – Olympic movement in India.
- Unit – III International Olympic committee (IOC) – Legal status members – organization. (Session, Executive board and president) – IOC commissions and Ethics commissions International Federations (Ifs)
- Unit- IV Registration of Ifs – Mission and Role of Ifs within Olympic movement – National Olympic committee – Indian Olympic Association.
- Unit –V Olympic games, celebrations – Elections of the host city – Location, sites and venue – Olympic games co-ordination, commission – Olympic villages – protocol (use of Flag and Flame, opening and closing ceremony, Medal).

Ref. books

- www.olympic.org
 - I.O.C. Marking Guide, Published by I.O.C.
 - The Olympic charter, published by I.O.C.
 - Barrow Harrold M. “Man and movement” Principle of Physical Education. Ice and Febiger 1993.
-

Semester - IV
Evaluation Structure

Part – I Theory Section

Paper Code	Title of the Paper	Internal	External
PEC 4001	Sports Management	30	70
PEC 4002	Physical Education and Sports Psychology	30	70
PEC 4003	Health and Fitness Management	30	70
Elective/ Multidisciplinary (any one)		30	70
PEM 4004	Sports Tourism		
PEM 4005	Dissertation (Internal 20 Dissertation Evaluation + 10 Viva) and (External 50 Dissertation evaluation + 20 Viva Voce)		
PEM 4006	Life saving skill & disaster management		
		90	310
	Theoretical Internal/ External Total marks	400	

Part – II Practical Section

Event			
PEP 4007	Coaching Lesson (Internal - 6) Athletics – 3, Games – 3, Total – 6 Coaching Lesson (External – 2) Athletics – 1, Games – 1, Total – 2	60	140
PEP 4008	Specialization games (Choose any one) Skill, Technique, Tactics, officiating, performance and Viva	15	35
	Practical Internal/ External Total marks	250	

Semester – IV

PEC: 4001: Sports Management

- Unit –I :** Meaning of management , functions of management (planning organizing controlling leading evaluation) – skills of management (technical skills human skills conceptual skills) role of manager (interpersonal roles , informational roles decision roles).
- Unit –II** Attributers of organization – Classifying organizational set up of clubs; sport association, sports Authority of India department of sports and Youth affairs (center & state-school and University Department of sports and Association of Indian Universities- Supervision qualities of supervisor y techniques
- Unit –III :** Planning : steps in the planning process strategic planning – planning sports facilities (out door and indoor) – program planning ; (normal and special population)- social and economic Parameters in planning.
- Unit –IV:** Office management; personnel management, human resource management, financial Management – Event management - Man power requirement planning organization, Development recruitment and placement – monitoring performance of physical education Personnel; behavioral audit; human relations – communication in personal management public Relations
- Unit-V:** Organization of sports events (Intramurals and extramural) – Writing of circulars , notifications And invitations – publicity fund raising selecting and fixing of officials- monitoring and write-Up – press, sponsoring teams, writing reports and maintaining records – factors in sports
Marketing – sponsorships

REFERENCES

- Chelladurai .p. Managing organizations for sports physical activity, Holcomb Hathaway publishers: Arizona, 2001.
- Davis Kathleen A.,sports management WCB brown & Benchmark Iowa ,1994
- Philip kotler Marketing Management Pearson Education inc, 2003
- Lisa Pike Masteralexis Carol A Barr and Mary A. Hums Principles and Practice of Sports management, jone and Bartlett Publishers, 2005
- David C.Watt sports management and administration Routledge Taylor & Francis Group, .2003-
-

Semester – IV

PEC: 4002: Physical Education and Sports Psychology

- Unit – I Meaning of Physical Education and Sports Psychology, Definition, and Importance.
- Unit – II (A) Learning Process, Meaning, Definition, Principles and Implementation.
(B) Meaning of Transfer of Learning, Types of Definition, Principles and Implementation.
- Unit- III (A) Meaning of Growth and Development. Definition, Principles, Factor Effecting, Growth and Development, Age and Gender Related Symptoms of Adolescence and Traits.
(B) Meaning of Individual Difference. Definition, Types and Causes.
(C) Sports Activity According to Body Types, Effects of Individual differences in skill learning and sports performance.
- Unit – IV (A) Meaning of Emotions, Definition, Types and Symptoms.
- Psychological Factor Affected to sports Achievement (Ex. Load, Anxiety, Stress, Aggression.)
(B). Meaning of Motivation. Definition, Types. Motivational dynamics and Method in Sports.
- Unit – V (A) Meaning of Personality, Definition. Principles, Personality Dimension, Personality and Performance, Personality Development to Physical and Sports Activity.
(B) Psychological Preparation of Competition, Definition, Principles, Aim. Influence Factor of Psychological Preparation, Short-form Psychological Preparation. Long-term Psychological Preparation.

Ref. books

- Ajemersinh r others, "Physical Education and Olympic movements" Ludhiana, Kalyani Publishers, 2004.
- Singher Richard M., "Psychology In Sports Methods and Application", Delhi, Surgite Publication, 1962.
- Singher Roberte, "Motor Burning and human performance", New-york, Mecmilan Publication company, 1975.
- Kamlesh M. L. "Psychology In Physical Education and Sports" New Delhi, Metropolitan Book Company. 1998.
- Kaever R. C. "Shiksha Avem Krida manovignana Daetoli, Nagpur, Amit Brothers Publication, 2002.
- Tripathi Premchandre, Misera Suryeprosad, "Sharike Shiksha. Avem Krida Manovignan", Bhopal, Hindi Granth Akademi, 1996.
- Kamlesh Maden, "Vyayam Avem Krida Manavignan" New Delhi, Metropolitan Bo9ok Company, 1998.
- Patel Atemaram Solanki Devendresinh, "Ramet Manovignan", Ahmadabad, Bharat Institute, 1997.
- Ravindra Anedhariya ane Aneye. "Sheksenik and Ramet Manavignan", Gandhinagar, Gujarat Rajeye Pateye Pustek Mandal, 2002.
- Pandav P. D. "Shiksha Manaevgignan" Agra Vinod Pustak Mandir, 1979.
- Patel, Chardekunt P. "Samanye Manuevignan" Ahmadabad university Grants Nirman Board Gujarat Raseye, 1991.
-

Semester - IV

PEC: 4003: Health and Fitness Management

- Unit – I: **Introduction**
Concepts of Fitness and Wellness and Important of Present Time.
- Scope for Fitness Trainer, Health and Fitness Components,
 - Health screening-Health conditions that affect physical activity and medication
 - Preference to the Trainee. Expectation and Lifestyle Information.
 - General Principles of Training.
- Unit - II **Exercise for fitness & designing of the programme**
- Making the Right Exercise Programming Attentive Matters
 - understanding suitability and forms of exercise for fitness. Aerobic dance, weight Training. Other parts.
 - Fitness Training Programs Passive and Active People
 - Fitness Training Programs for Different Age Group.
 - Weight Control/Lose Training Program
 - Fitness Program me and Rehabilitation Program obesity and Diabetic People.
- Unit - III **Nutrition and Energy**
Nutrition, Calorie Consumption, weight variation due to dietary habit
- Physiological and metabolic changes During Exercise
 - The energy support (Aerobic-Anaerobic)
- Unit- IV **Relation of Exercise**
- with heart rate, equation for calculating heart rate zones for various exercise intensities
 - recommended nutritional intakes
 - dietary guidelines
 - nutrient needs for people with different life style
- Unit - V **Establishment and management of fitness centre**
- Selecting of Training Federation to Trainer.
 - Health Club/Line of Fitness Center (Lay-out)
 - Responsibility, Facilities, Equipment, supervision, safety, exercise recommendation and testing.

Ref. books

- Aemeli R. Roster. Catlen Hati Gur, “Fitness Fun”,Human Kinetics’ Publication.
Rebeka And Bil Tulin. “Travel Fitness weight”
Thomas R. Bechele and Roger W.L. “Fitness weight Training”
Sara Black, “The Supple Body” Dun ken Bayard Publication.1995.
Upple A.G. “Physical Fitness” Friends Publication . 1992.
-

Semester - IV

PEM.4004: Sports Tourism (Elective / Multidisciplinary)

- Unit –I: History of Sport Tourism,**
Concepts of Sport Tourism Industry Historical Development of Connection between Sport and Tourism – Basic Concepts.
- Unit –II: Categories of Sport Tourism**
Classification – Scheme for Sport Tourism –Infrastructure of Sports, Tourism – The Characteristics of Participants.
- Unit –III Tourism in Development of Sports**
Development of Sport Activity Based on Available tourism resources Tourism generated Sports development Through Programs and Instruction – Development of regional Sports.
- Unit –IV: Socio – Economic**
Importance of Sports & Tourism Industry – Positive & Negative Impacts – Sports & Tourism as Economic Activities – Sports Tourism: The Issue of Socio Economic Equity – Sports Tourism to raise Sponsorship for People with disabilities and to fight diseases
- Unit –V: Modern Development and Promotional**
Characteristics In Sports Tourism – Major Events Attraction for Visitors – Tourist – Sport Tourism In the 21st century: Sport Tourism Today –Facilities / Amenities for Sports & Tourism

Ref. books

Jay Standeyone Bye Sports Tourism

Pol di Kanape Bay Sports Tourism.

Semester - IV

PEM: 4005: Dissertation (Elective)

- Research Project/ Dissertation related to Physical Education and Sports
 - Survey/historical/comparative /Experimental
 - Applied research report on Allied sports sciences, physical fitness, Training methods, Exercise physiology, Sports Sociology, Sports psychology games and sports etc.
-

Semester-IV
PEM: 4006:

LIFE SAVING SKILL & DISASTER MANAGEMENT
(Elective/ Multidisciplinary)

UNIT – I **LIFE SAVING SKILL**

- Meaning and concept of life saving skill
- Need and importance of life saving skill

UNIT – II **DISASTER MANAGEMENT**

- Meaning and concept of disaster management
- Need and importance of disaster management

UNIT – II **CLASSIFICATION OF DISASTER MANAGEMENT**

Natural Disaster

- Earth quack, Flood, Drought, Cyclone, Tsunami, Landslide
- Avalanche, Heat wave, Cold wave, Fire ,Coastal and sea erosion, Biological disaster endemic epidemic disaster

Men made disaster

- War, Terrorist attack
- Radio active hazard

UNIT – IV **SAFETY MEASURE & FIRST-AID**

Meaning and concept of safety measure & first – aid
Prevention of disasters

UNIT – V **DISASTER MANAGEMENT**

- Steps of disaster management
- Various act and agencies in disaster management
 - Disaster and management act
 - Local emergency management agency
 - Role of voluntary/NGO agency
 - National disaster management agency
 - Do's and don't and during disaster