

INSTITUTE OF ADVANCED STUDIES IN
EDUCATION (DEEMED UNIVERSITY)
GANDHI VIDYA MANDIR
SARDARSHAHR

Detailed Syllabus
of

MASTER OF ARTS (PHYSICAL EDUCATION)
(TWO YEARS DEGREE COURSE)

COURSE OF STUDY AND SCHEME OF EXAMINATION

FIRST YEAR

Paper Code	Paper Name	M.M.
MAPHE -110	History & Principles of Physical Education	100
MAPHE -120	Sports Management	100
MAPHE -130	Anatomy & Physiology of Exercise	100
MAPHE -140	Officiating & Coaching	100
MAPHE -150	Elective (Select any one elective paper)	100

ELECTIVE PAPER

MAPHE-150 (E1)	Computer Applications	
MAPHE-150 (E2)	Health Education	
MAPHE-150 (E3)	Kinesiology	

SECOND YEAR

MAPHE – 210	Sports Training & Bio Mechanics in PE	100
MAPHE – 220	Test , Measurement , Evaluation	100
MAPHE – 230	Research methodology	100
MAPHE – 240	Sports Medicine & Exercise Physiology	100
MAPHE – 250	Specialization (Select any one special paper)	100

SPECIALIZATION

MAPHE-150 (SP-1)	Athletic	
MAPHE-150 (SP-2)	Kabbadi	
MAPHE-150 (SP-3)	Hockey	
MAPHE-150 (SP-4)	Voly Ball	

Section A

Definition, Meaning & scope of Physical Education. Aims & objectives of Physical Education. Relationship of Physical Education & Recreation. Contribution of physical Education towards general education.

Section B

History of physical Education in ancient Greek, comparative study of Spartan Athenian education. The origin and development of Olympic games. Development of Asian Games.

Section C

Physical Education in Germany, Sweden & Denmark (Emphasis only on contribution of based, Guts-Moths, John Spies, Machtegall, Ling). Present status of Physical Education & Recreation in Russia and Japan. History of physical education in India (Pre & Post independence Era).

Section D

Critical appreciation of the following: State Sports departments, I.O.C. policies for developing Education & Sports, Compulsory programmed of physical education & sports for school Modern Olympics, Sports Authority of India, South Asian Federation Games

Section E

Foundation of physical education, Biological activity, its need, principle of use and dis-use Growth and development, Age & Sex difference, Qualification of physique.

REFERENCE BOOKS:

1. Charles & Bucher: Foundations of Physical Education
2. Harold m. Barrow: Man & His movement principles of phy. Education.
3. J.F. Williams: principles of physical education.
4. Cowl & France: philosophy and principles of physical education.
5. D.G. wakharkar: Manual of physical education.
6. M.L. Kamlesh & M.S. Sangral : physical education
7. Upadyke Johnson: principles of modern physical education health & recreation.

Section A

Meaning importance and scope of sports management., Factors influencing sports Management , Meaning & importance of teaching methods , Factors affecting teaching methods and various methods of teaching., Steps of personnel and types of audio-visual aids.

Section B

Meaning and types of class management, Salient features of good class management. Factors effecting good class management , Meaning & values of lesson plan- Games,Gymnastic,Athletic and Indigenous activity , Classification of excercises and activities and its importance.Meaning & importance of tournaments.Type of tournament knock out and league, their advantages and dis-advantages.

Section C

Meaning, importance and principles of administration and organization. Factors influencing good administration, Qualifications and qualities of Physical Education teachers Play-grounds, area, location, lay-out and care of sports equipment , Need, importance, purchase of sports equipment

Section D

Need & importance of curriculum planning .Time-table, factors affecting time-table, objectives, principles and precautions in preparation of time table. Intramural objectives and organization .Budget-importance and criteria for a good budget. Meaning & importance, types of records and registers.

Section E

Evaluation-meaning need, importance & methods of evaluation.Characteristics of a good test. Supervision & inspection-meaning & methods of supervision & inspection.,Qualities of a good supervisor. Organization and conduct of tournaments and athletic meets.

Reference Books:

- | | | |
|----|---------------|--|
| 1. | P. M. Loseph | : Organization of physical education |
| 2. | Suraj Singh | : Administration of physical education |
| 3. | D.G.Wakherker | : Manual of physical education |

MAPHE -130 ANATOMY AND PHYSIOLOGY OF EXERCISES

Max Marks : 100

Time : 3 hours

Section A

- i. Definition of terms: Cell, Tissue, Organ, Ligament, Cartilage etc.
- ii. The skeletal system: Its structure, Its functions, Spinal column, pelvic girdle-male and female, the thorax, the extremities, joints and their movements.

Section B

- i. The muscular system: structure of the muscles; different types of muscles; functions of the muscles; contraction of muscles effect of exercise on the muscular system; fatigue; staleness; muscle cramp.
- ii. The Nervous System: The neuron; Spinal cord; the brain; the autonomic system; Reflex action; peripheral nerves; influence of exercise on the nervous system.

Section C

The Circulatory System, General arrangement of Circulatory system; functions of the circulatory system ; Blood, Homeostasis, The heart and blood vessels; pulse, blood pressure and its measurement; effect of exercise on circulatory system; Athletic Heart.

Section D

- i. The Digestive System: Anatomy of digestive system; digestion of food, metabolism, effect of exercise on the digestive system.
- ii. The Excretory system: Anatomy of excretory system and its function; the heat regulating mechanism.

Section E

- i. The respiratory system; anatomy of respiratory system; mechanics of respiration; vital capacity ; Role of oxygen in exercise on the respiratory system.
- ii. The endocrine system : Glands and their functions influence of exercise on the endocrine system.

Recommended/Reference books:

1. Clarke, David H. Exercise physiology, Englewood Cliffs, N.Y. Prentice Hall Inc 1975
2. Crouch , James E. Functional Human Anatomy, 2nd Edition Philadelphia: Lea and Febiger, 1972.
3. Morehouse and Miller Physiology of exercise. St. Louis the C.V. Mosby company, 1976
4. Pearce Evelyn C. Anatomy and physiology for Nurses. London Faber and Faber Ltd.

Section A

- (i) Importance and principles of officiating.
- (ii) Qualities of a good official.
- (iii) Relations of official with management, players, coaches and spectators.
- (iv) Duties of officials in general-pre, during & post game duties.
- (v) Measures of improving the standards of officiating.

Section B

- (i) Rules of games and athletes events and their interpretation (hockey, football, volleyball, basketball, kabaddi, hand ball, kho-kho, table-tennis, badminton, judo, weight-lifting & wresling)
- (ii) Score sheet of different games and all athletic events.
- (iii) Layout of different playfields grounds, court track.

Section C

- (i) Principles of coaching.
- (ii) Qualities, qualification & responsibilities of a coach.
- (iii) Warming up, cooling down and their physiological trends.

Section D

- (i) Methods of condition(circuit training, fast lak, interval training, weight lifting).
- (ii) Principles of training.
- (iii) Dopping and its effect on performance.

Section E

- (i) Periodization-types of periodization.
- (ii) Preparation of training schedule.
- (iii) Psychology of competition and coaching.
- (iv) Factors effecting sports performance.
- (v) Eligibility rules of intercollegiate and inter-university.
- (vi) Preparation of TA, DA bills.

Reference books:

1. Rules of games and sports by YMCA, Madras.
2. The art of coaching by John Bunn
3. Athletic training by Claffs.
4. Rules of games and sports by Lokesh Thani.

Max Marks : 100**Time : 3 hours****SECTION A****1. INTRODUCTION TO COMPUTER:**

i) Introduction ii) Characteristics of a computer iii) Advantages and disadvantages of computer iv) Brief history of computer v) Simple model of a computer vi) Computer generations vii) Evolution of Digital Computer viii) Classification of computers xi) Data representation in computers x) Computer applications

2. INPUT/OUTPUT UNITS:

i) Input Devices ii) Output Devices iii) Input/Output Techniques v) Printers vi) Input/Output Processor.

3. MEMORY ORGANIZATION:

i) Introduction ii) Semiconductor Memory iii) RAM iv) ROM v) PROM vi) EPROM vii) EEPROM viii) Cache memory ix) Real and virtual memory x) Magnetic memory xi) secondary storage devices xii) Floppy Disk xiii) Hard disk xiv) Magnetic Tapes xv) Optical Disk xvi) CD-ROM xvii) DVD-ROM xviii) Memory Management

SECTION B**4. CENTRAL PROCESSING UNIT:**

i) CPU Organization ii) CPU registers iii) ALU iv) Control unit v) Interrupts vi) Example of some processor vi) Different types of BUS

5. NUMBER SYSTEM:

i) Introduction ii) Decimal Number System. iii) Binary Number System iv) Conversion of Binary Number to Decimal Number. v) Conversion of Decimal to Binary Number vi) Addition, Subtraction of binary Numbers vii) Signed numbers viii) Binary Coded Decimal (BCD) ix) Hexadecimal Number System x) Octal Number system xi) ASCII and ISCII codes xii) EBCDIC code xiii) Gray Code.

SECTION C**6. SOFTWARES & COMPUTER LANGUAGES:**

i) Introduction ii) Difference between software and hardware iii) Assembly level language iv) Higher level programming language v) Types of softwares – system and application softwares

7. OPERATING SYSTEM:

i) Introduction ii) Types of Operating System iii) Operating System Structure iv) Functions of Operating System v) Directory and File Structure vi) GUI and CUI vii) Features of Windows, DOS and Linux viii) Differences between Windows, DOS and Linux xi) Working with Windows, DOS and Linux

8. NETWORKING:

i) Introduction, ii) Advantages of networking, iii) Types of networking: LAN, WAN, MAN

SECTION D**9. MS - WORD:**

Entering, Writing & Editing Text ii) Printing iii) Formatting Text & paragraphs iv) Applying text & language tools iv) Designing pages with columns & Tables v) Graphics in Word vi) outlines, Styles & Templates vii) Mail merge viii) Creating & distributing word forms

10. MS – EXCEL:

Creating & printing Excel Worksheets ii) Managing data with worksheets, references & functions iii)
Creating, Editing & formatting charts iv) Custom & Special formats

PRACTICAL:

- a) Basic operations in Computer.
- b) DOS Commands
- c) Working with Windows
- d) Working with Linux
- e) MS-Word
- f) MS-Excel

REFERENCES:

1. Fundamentals of computers – by V. Rajaraman
2. Computer system architecture – by M. Mano
3. Computer fundamentals – by B. Ram
4. Mastering Office 2000 : Professional Edition – by Marquis
5. MS Office 2000 – by G. Courter and A. Marquis

MAPHE-150 (E2)

HEALTH EDUCATION AND FIRST-AID

THEORY

Time: 3 Hours

Max. Marks: 70

1. Meaning of Health – Definition – Needs for Health Education for an individual – World Health Organization and its importance – National and State level health organization – voluntary health organization and facilities.
2. School Health Programme: School Health Services – Health Appraisal (Medical Examination) – Health Instruction – Health Supervision – Factors influencing Health – heredity, Environment – Health Counseling.
3. Nutrition: Elements of good nutrition – balanced diet- food poisoning normal weight – gaining weight, causes and effects of over weight, caloric values of foods, weight reduction and effects of dieting and exercise.
4. Communicable disease and their causes symptoms and prevention of Malaria, Tuberculosis, Typhoid, Sexually transmitted diseases and AIDS etc.
5. Health Problems: Hazards of alcoholic, Smoking, narcotics and Drugs, family Welfare, problem of over population, problems of ageing.
6. Exercise and Health Awareness: Prescriptions of Exercise in Health Population as to duration frequency, intensity Population to diseased Diabetics, post heart attack patient and type for improvement of various motor abilities.
7. Environment Health: Protected drinking water sewage and garbage disposal, infection prevention, immunity and allergy.
8. First Aid: Definition and Meaning – First Aid for shock, poisoning, drowning, hemorrhage, Different types of fracture, sprain, strain (artificial respiration) Mislocation, bandages, slings and splints etc.
9. Indicators of Health: Growth Status, Physiological levels, Psychological indicators, motor fitness.

Books Recommended:

1. Even, A. Willia, Everyday Safety Chicago: Lyons & Carnahao 1990.
2. First Aid to the injured New Delhi: St. John Ambulance Association, 1989
3. Ghoad, B. N. Treatise of Hygiene and Public Health, 1991
4. Hanlon John. J. Principles of Public Health Administration, 1992.
5. Johnson, Health in Action, Holt Bhinement and Winston, 1977.
6. Moss Etral Health Education, National Education, Education Association of U.T.A., 1986.
7. Nemir. A. The School Health Education, New York: Harper and Brother, 1991.
8. Obertenterfer, D. School Education, New York: Harper and Brother, 1992.

PRACTICAL

1. Preparation of Blanced diet for different sports groups, for different age groups, for different diseased groups.
2. Measurement of weight indicators of a obesity (Ht./Wt. approach) BMI approach, percentage fat approach.
3. Preparation of dietary and exercise schedules for reducing body weight / gaining body weight (Strength exercise and high performance diets).
4. Determination of caloric expenditure and caloric intake.
5. Methods of purifying water.
6. Demonstration of cardiac-pulmonary recessitation techniques.
7. First-aid in sprains, strains, fractures and sports injuries.

MAPHE-150 (E3)

KINESIOLOGY

Max Marks : 100

Time : 3 hours

A) Instructions for paper-setter

1. The question paper will be divided into two parts. Part-I will contain subjective questions. This part will carry 60% of the total marks.
2. Part-II will compromise of 10-15 short questions, which will cover the entire syllabus and will carry 40% of the total marks.

B) Instructions for the candidates

1. Candidates are required to attempt Part-I as defined in the question paper and the entire part-II.
2. Use of non-programmable scientific calculator is allowed

COURSE CONTENTS

The kinetics of normal and abnormal human motion of the musculo-skeletal system.

Evaluation procedures for range of motion and functional muscle strength.

Principles and techniques of body mechanics, transfers, and positioning. and Neuromotor treatment techniques for physical dysfunction

SECOND YEAR

MAPHE- 210 SPORTS TRAINING AND BIO-MECHANICS IN PHYSICAL EDUCATION

Max Marks : 100

Time : 3 hours

Section A

Introductin to Sports Training

1. Meaning and definition of sports Training and Coaching
2. Aims and Tasks of sports Training
3. Characteristics of sports Training
4. Training Load and its Factors –
Quality of movements, Type of Exercises, Load Volume and Load Intensity.
5. Loading and Adaption Process.
6. Forms of adaptation; Adaptation, de-adaptation , Maladaption, and re-adaptantion;
7. Laws of Adaptation.
8. Principles of Loading .
9. Judgement of Trainin Load : Objectives and Subjective Means.

Section B

Over Load: Meaning, Causes, Symptoms and Tackling of Over Load .

1. Principles of Sports Training
2. Recovery and its phases, Factors Affecting recovery, Means of Faster recovery.
3. Types of Training Means .

Section C

Conditional Abilities :

1. Strength : Meaning, Forms, Factors determining, Strength Training Methods, Organisation of Strength Training, General Guidelines for Strength Training, Principles of Strength Training , Strength Training for Children and Women.
2. Speed: - Meaning, Forms of Speed, Factors determiing Speed Barrier.
3. Endurance :-Meaning and Significance, Forms of Endurance, Factors determining Endurance, Training Methods .

Section D

(Motor abilities)

Motor Abilities - Meaning of Flexiblity, Forms of Flexibility , Factors detemining Flexibility, Methods for Flexibility training, Guidelines for Flexibility Training.

1. Coordinative Abilities – Meaning ,Types of Coordinative Abilities, Characterstics of Coordinative Abilities, Importance of coordinative Abilities, Methods for Coordinative Ability Training.
2. Periodisation – Meaning and Types of periodisation, contents of training for different periods.
3. Planning & Meaning, Principles of Planning, Types of Training Plans.
4. competitions :- Importance of Competitive Frequency, Preparation for Competitions.

Section E

- 1) Bio-mechanics –Meaning, justification & Importance
- 2) Relative motion, cause of motion, kinds of motion
- 3) Kinematics - Linear, kinematics, distance and displacement Speed velocity and acceleration.
- 4) i) Projectiles, Trajectory, angle of release, velocity of release height of release
ii) Centripetal and Centrifugal forces
iii) Rebound; angle of rebounds, Type and effect of spin, Ball Spin (swing)
iv) work-power –Energy, kinds of liver.

REFERENCES:

1. Dick, F.W. : Sports Training Principles, Lepus, London 1980
2. Enson, C.R. Fischer A.C. : Scientific basis of Athletic conditioning, Lea and Feliger, Philadelphia, 1979
3. Brook, J.D. Whiting H.T.A : Human Movement a Field of study.
4. Dr. Singh Hardgal : The Science -9 sports training
5. Cooper, K.H. : The Aerobic way, Bantom books Inc. 1978
6. Bunn, J.W. : Scientific Principles of coaching, Englewood cliffs, Prentice Hall
7. Breer Merison, R. : Efficiency of Human Movement London W.B. Saunders.

MAPHE- 220 TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

Max Marks : 100

Time : 3 hours

Section A

Meaning of test, Measurement and Evaluation Need and Importance of test , Measurement and Evaluation General Consideration for the construction and Administration of Test. Johnson Basketball skill Test. Aahaper Basketball Skill Test. Hewitt's Tennis Achievement Test.

Section B

Meaning of Motor Ability, Borrow Motor Ability Test, Scoot Motor Ability Test, Indiana Motor fitness Test, Calculation of Measure of Central Tendency : Mean, Median, Mode. Graphical Representation : Histogram, Frequency Polygon, Olive, Bar Diagram and Pie Graph.

Section C

Meaning of Strength, Kraus-weer Strength Test, Roger Strength Test, Tuttle Pulse Ratio Test Harvard Step test, Characteristics of a good test. Meaning of percentile and percentile rank. Calculation of percentile and percentile Rank , Preparation of scales : T.Scale, Sigma Scale and Hull Scale.

Section D

Badminton French Short serve Test and French Clear Test, Borich Badminton observation ration scale, Poetry Volleyball Test and helmen Volleyball Test. Calculation of Variability : Range, Quartile Deviation (Q. D.) Average Deviation (A.D.), and Standard Deviation (S.D.) Meaning and Characteristics of normal Probability Curve (N.P.C.), Application of normal Probability Curve.

Section E

Warner Test of soccer skill, Mor-Christian General soccer Ability skill Test, Battery, schmithles test of field hockey, Henry friedel field hockey test Calculation of Co-efficient of Co-relation by Karl Person Method. Chi-Square Test.

REFERENCE :

1. Clarke H. Harison : Application of measurement to ealth and Physical Education, Prentice Hall Inc. Englewood Cliffs N.D. (3rd Edition 1961).
2. James S. Bosco. : Measurement and Evaluation in physical Edu., fitness and sports, Prentice Hall , INC., Englewood Cliffs, N.J. 07632(1983).
3. Margaret J. Safrit : Introductio to Measurement in Physical Education and Exercise Scienc, Times Mirror/ Mos, Collage Publishing St.louis. Toronte. Bosion (2nd Ed. 98)
4. Barry L. Johnson : Practical Measurement for Evaluation in Physical Education , Surgeet Publication, Kamco Mafa Delhi – 11000 (3rd Edition 1988)
5. Anne L. Rothstein : Research Design and Statistics for Phy. Edu., Prentice Hall, Inc., Englewood Cliffs, New Jrsey 07632 (1985)
6. Morey E. garrett : Statistics in Psychology and Educated, David Meka Company Inc.

MAPHE 230 RESEARCH METHODOLOGY IN PHYSICAL EDUCATION

Max Marks : 100

Time : 3 hours

Section A

INTRODUCTION

- i) Definition of Research
- ii) Need and importance of Research In Physical Education and sports.
- iii) Scope of Research in physical Education and Sports.
- iv) Types of research :- Basic, Applied, Action Research and what Hinders Research.

Section B

RESEARCH PROBLEM

- i) Meaning of the term
- ii) Location and Criteria of Selection of problem.
- iii) Formulation of a Research Problem.
- iv) Limitations and Dellemitations.
- v) Hypothesis – Meaning of Hypothesis, types of Hypothesis, Error of Hypothesis, Importance of hypothesis.
- vi) Meaning of population and sampling .
- vii) Types of sampling probability & Non- Probability.

Section C

1. Survey of Related Literature
 - a) Need for surveying related literature.
 - b) Literature Sources
 - c) Library Reading
2. Historical Research
 - a) Meaning and definition of Historical Research
 - b) Historical Sources
 - c) Evaluation of historical Data
 - d) Internal and External Criticism

Section D

- 1 Survey Research
- 2 Tools of Survey Research
- 3 Questionnaire and Interview
- 4 Meaning of Questionnaire and Interview
- 5 Construction, Appearance and Development of Questionnaire
- 6 Procedure of Conducting Interview
- 7 Sugesstion to enhance responses

Case Studies

1. Meaning of case Studies
2. Objective

Normative Survey

1. Meaning of Normative survey.
2. Factors affecting Normative Survey.

Section E

1. Philosophical Research
 - a) Meaning of Philosophical Research
 - b) Tools of Philosophical Research
 - c) Steps in Critical Thinking
2. Experimental Research
 - a) Meaning of experimental Research
 - b) Experimental Designs
 - 1) Types of design
 - 2) Suitability of Designs
1. Research Proposal
 - a. Meaning and significance of research proposal
 - b. Preparation of Research Report
2. Research Report
 - a. Meaning of Research Report
 - b. Qualities of a good Research Report
 - c. Part of a Research Report/Format of Research Report

REFERENCE BOOKS :

1. S.P Sukhia etal : Elements of Educational Research, Allied Publishers Pvt. Ltd. New Delhi,1983
2. Americal Association of Health, Physical Education and recreation, Research Methods-applied to Health, Physical Edu. And Recreation
3. C.V. GOOD : Methods of Research, Appleton Century Crofts Inc., New York,1954
4. J.W. BEST : Research in Eduction, Prentice Hall,1980
5. W.R.mouly : Educational Research and Introduction David, Making Co., Inc.,New york,1975
6. D.H. Clarke : Research Process in Physical Eduction Recreationn and Health Prentice Hall,1970
7. M.L. Kamlesh : Research Methodlogy in Physical Education
8. Yoginder Prasad : Research Methodology in Physical Education.
Sharma

Max Marks : 100**Time : 3 hours****Section A**

- (1) sports medicine and its importance in games and sports .
- (2) Brief History of sports medicine.

Section B

Principles of reconditioning of sports injuries.

Sports Injuries: Consolion of injuries:

- (a) Soft tissue injuries – Classification
- (b) Bone injuries - Poathological change
- (c) Joint injuries - Classification

Section C

Physiotherapy:

Definition, Therapeutic methods and Procedures:

- Cryotherapy,
 - Hydrotherapy
 - Thermotherapy,
 - Electrotherapy,
 - Message,
 - Therapeutic exercises.
- i) pregananey and exercise
 - ii) Instrumentation

Section D

What is exercise physiology, its role in scientific coaching and Traning. Effect of exercise on Muscular system, short term and long term effect of Exercise.

Heart and Exercise:

- i) Adaptations of the Heart,
- ii) Caridoc Output during exercise,
- iii) Stroke volume during exercise,
- iv) Heart rate during exercise,
- v) Structural and Phusiological changes in the heart,
- vi) Cardiovascular,
- vii) Blood Pressure and blood flow resistance respomses to exercise,
- viii) Measurement of blood pressure.

Section E

The Respiratory system and exercise:

- i) Basic Phusiology of respiration.
- ii) Respiratory values,
- iii) Gas exchangediffusion,
- iv) Acute adaptations of the respiratory system,
- v) Dead point and second wind.

Exercise in Hot, Cold and fresh Altitude and physiological change and Adaptation:

Exercise and temperature regulation in Hot climate,

- ii) Exercise and temperature regulation in cold climate
- iii) Exercise and altitude.

Ergogenic aids in exercise and sports:

- i) Ergogenic aids defined.
- ii) Nutrition aids,
- iii) Pharmacological Agents,
- iv) Physiological Agents
- v) Sports and Drug Testing.

REFERENCE BOOKS:

1. AHPER : Weight Training in Sports and Physical Education 1962
2. Armstrong and Tuckler: Injuries in Sports, London Staples Press, 1964
3. Bolan, J.P. : Treatment and Prevention of Athletic Injuries. The Inter-State Printers and Publishers, 1967.
4. Morehouse, L.E. & Rash, P.,J. : Sports medicine for Trainers. Philadelphia, B.Saunders Co., 1963
5. Ryans Allan, : Medical Care of the Athlete, McGraw Hill.
6. Pande, P.K. : Know How Sports Medicine, A.p. Publishers, Jalandhar.
7. Morehouse, L.E. : Sports & Medicine for training Philadelphia W.B. Saunders Co.
8. Williame, J.G.P. : Sports & Medicines, Arnold Press.
9. Johnson Warren(edited) : Science and Medicine of of Exercise and Sports, Harpar and Brothers.
10. Morehouses & Miller : Physiology of Exercise.
11. Falls : Exercise Physiology.
12. Karpovitch : Phusiology of Muscular activity.

MAPHE- 250

SPECIALIZATION

Max Marks : 100

Time : 3 hours

Candidates are required to select one specialization from the following special papers.

MAPHE – 250 (SP-1) ATHLETICS

Section - A

- a) History of Athletics in India 8 Olympics
- b) Teaching training and coaching of Athletes.
- c) Selection of an Athlete.
- d) Organisation and Administration of Athletic Meet.

Section B

- a) Track and Field Markings with layout of Field Events
- b) Rules and regulations of track and Fields events.
- c) Duties and Powers of officials

Section C

- a) Warming up and its significance, factors effecting warming up, types of warming up, cool down and its significance.

- b) Defination- Athletic terminology : 1) Jogging
 - 2) Striding
 - 3) Second wind
 - 4) Soreness of muscles
 - 5) Speed play or forlek
 - 6) Stiteh in the side
 - 7) Sprinting
- c) Training Methods their Components and Significance :
 - 1) Interval training
 - 2) Acceleration sprints
 - 3) Continuous running
 - 4) Hollow sprints
 - 5) Repetition running
 - 6) Sprints
 - 7) Fartlek or speed play
 - 8) Circuit training

Section D

Explain the Physical requirement of the vents given below :

Explain Mechanics involved in the technique at different stages given against each event.

- a) Sprinting (Cronch Start : Supposing Phase, driving Phase, Recovery phase, Finish)
- b) Hurdles(approach, take off, flight, landing, stride in between hurdles)
- c) High jump (approach run, take off, bar clearance, landing)
- d) Javenile throw(Holding & carrying, approach run, transitional steps, throwing stance, release and recovery)
- e) Long Jump(approach run, take off, flight, landing)
- f) Hammer throw(Hand hold, starting position, preliminary swing, turns, release and recovery)

Section E

Periodisation:

- a) Meaning and types and objective of periodisation
- b) Division of training aspects for different events for different Periods of training.
- c) Prepration of a weekly training Programme for
 - 1) Track events
 - 2) Jumps
 - 3) Throws

Note :

While setting question from (C) the period , event and level of athlete must be given or choice should be left to the student

References :

1. Vidyasagar: Training systematics in throwing NS NIS patiala, India 1979
2. Gerry A. Carr.: Fundamentals of Track and field Theodore Bragnaza,63 ARCHI Gokhale Road Dadar,Bombay,India,1995
3. Fox L.Edward : The Physiological Basis of Physical Education and Athleties Web. Wrnc Brown Publishers Debuque Iowa 4th Edition.
4. Kethryn Lattgous Helga Deustsch: Kinsiology, Scientific Basis of Human Motion Eighth Edition Wn. C Brown, communications, Inc,Dubuque,IA USA

MAPHE – 250 (SP-2) KABADDI

Section A

1. Define Kabaddi , Types of Kabadi, Style and formation of Kabbadi-Origin of Kabbaddi
2. History of Kabaddi in Modern time and Ancient time.
3. Scope of Kabaddi in India, Asian games, world championship, common wealth and olympic games.

Section B

1. Dimension of Kabaddi ground/court and its Measurement in different style/types/kinds
2. Methods and technique to formation the Kabaddi ground/court
3. Official and formation of Kabaddi to conduct the good competition/tournaments or championships and duties & uses of all the official
4. Responsibility & duties of the team Manager, Coach & Captain of the Kabaddi Team during, after and before the competition.

Section C

1. Rule & regulation of Kabaddi, Dissertation in details.
2. Duration, time and period of the Kabaddi match es in Men, Women, Junior & sub junior level.

Section D

1. Training & Coaching, Describe, specific Try. And general Try & Coaching for Kabaddi players
2. Technique of training, Tactic & skill of training of Kabaddi.
3. Defensive & Offensive Kabaddi Technique
4. Describe in details about the specific training for kabaddi team.

Section E

1. Kabadi tournament in India.
2. Selection of Kabaddi Team. What method you adopt for the selection of the Kabbadi team.
3. Famous Kabaddi players, team give then daily training schedule/time table.

REFERENCES::

1. John W. Dunn Scientific principle of Coaching
2. Prentice hall, englewood clips , N, J
3. V.N. Rao Kabaddi

MAPHE – 250 (SP-3) HOCKEY

Section A

1. Asia and Olympic .
2. Teaching, Training and coaching of Hockey.
3. Selection of Hockey Team.
4. Organising Hockey Tournament

Section B

1. Layout of Hockey Ground and its Dimensions
2. Rules and regulation of Hockey
3. Duties and powers of officials
4. Size and weight of equipments.
5. Protective equipments.

Section C

1. Importance of warning up and cool down
2. Preparation of team, before, during and after the game.
3. Technical and Tectical preparation of different position.
4. Team tectics, Formation of attack and difference system of play .

Section D

(a) Individual skills Teaching and Analysis:

- a. Hitting
- b. Stopping
- c. Pushing
- d. Scopping
- e. Dribbling
- f. Reverse Flick
- g. Dodging
- h. Hitting on the wrong foot.

(b) Passes :

- | | |
|-----------------|-------------------|
| a. Forward Pass | f. Scoop Pass |
| b. Back Pass | g. Deflected Pass |
| c. Side Pass | h.Flick Pass |
| d. Cross Pass | |
| e. Through Pass | |

Section E

Periodisation of training :

- a. Annual training plan
- b. Training during poreparetory period
- c. Training during competence period.
- d. Training during transitional
- e. Weekly training plan .

REFERENCES:

1. Horst Wein Transferred by : The Science of Hockey (1993) David Belchamber. M.A.
2. Lokesh Thani : Skill in Tactics Hockey (1995) Matin Khan
3. Story of Sher Khan : To Hell With Hockey (1982) The life Olympian Aslam
4. Jan Taylor With David Viar. Taylor on Hockey(1988)

MAPHE-250 (SP-4)**VOLLEY BALL**

UNIT – 1:

1. Origin of game
2. History of Volley Ball
3. Ancient History of Volley Ball
4. Haryana History of Volley Ball
5. Role of Haryana's people for the development of Volley Ball game.

UNIT – 2: Dimensions rule regulation

1. Length and width of Volley court.
2. Height of Volley Ball Net
3. Length and width of Volley Ball Net
4. Total number of volley Ball players
5. Interpretation of Rules.

UNIT-3: Fundamental of game.

1. Smash
2. Blocking
3. Lifting
4. Under Hand Service
5. Upper Hand service. Etc.

UNIT -4: Strategy and tactics

1. Rotation
2. Placing of Libero
3. Placing of players
4. Dropping

UNIT-5 Duties and power of officials

1. Number of referee
2. Duties of referee
3. Duties of lineman
4. Technical Officials

REFERENCES:

- | | |
|--------------------|-----------------------------------|
| 1. Keith Nichollos | Modern Volley Ball (1967-76) |
| 2. S.K. Saggarr | Play Better Volley Ball |
| 3. S.K. Saggarr | Skill & Tactics |
| 4. Deepak Jain | Teaching and Coaching volleyball. |