

FACULTY OF PHYSICAL EDUCATION

SYLLABUS

FOR

MASTER OF PHYSICAL EDUCATION (PART I-II)

EXAMINATION: 2016



GURU NANAK DEV UNIVERSITY AMRITSAR

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MASTER OF PHYSICAL EDUCATION

**OUTLINE OF TEST, SYLLABI AND COURSE OF READING FOR
MASTER'S IN PHYSICAL EDUCATION (M.P.ED)- 1st YEAR**

The course of Instructions in Master in Physical Education 1st year shall consist of the following parts:-

M.P.Ed. 1st Year			
S.No.	Division of Syllabus		Max. Marks
1	Section-I	Theory	500
2	Section-II	Practical	300

45% shall be the pass percentage in each. Theory Paper and 50% shall be in aggregate each paper shall be of three hours duration.

Section –I	THEORY PAPERS/SUBJECTS	Max. Marks
	PAPER–I: RESEARCH METHODOLOGY	100
	PAPER–II: KINESIOLOGY AND BIOMECHANICS	100
	PAPER–III: SPORTS PSYCHOLOGY	100
	PAPER–IV: SPORTS MEDICINE AND EXERCISE PHYSIOLOGY	100
	PAPER–V: SPORTS SOCIOLOGY	100

Section – II: PRACTICALS

Minimum Pass percentage for each practical shall be 50% :

Section –II	Practical Papers / Subjects	Max. Marks
1.	Lesson on Training and Coaching in Athletics Long Jump, High Jump, Javelin Throw, Shot-Put, Start, Relay	100
2.	Lesson on Training and Coaching in Games Badminton, Handball, Football, Swimming, Boxing, Kho-Kho	100
3.	Proficiency in Athletics and Games based on Performance recognized by AIU. ➤ Athletics Events: One Jump, One Throw, One Sprint, One Middle, Distance Race and One Hurdle. ➤ Games: (As per the Choice of Each Student)	100

Notes:

1. The student are required to complete five lessons each in above-mentioned activities, and prepare a practical notebook.
2. The students are required to give 5 seminars.
3. There will be four periods per course in a week for M.P.Ed. Part–I students
4. There will be three-practical/activity periods (including specialization) in evening for M.P.Ed. Part–I students.

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**OUTLINE OF TEST, SYLLABI AND COURSE OF READING FOR
MASTER'S IN PHYSICAL EDUCATION (M.P.ED)- SECOND YEAR**

The course of Instructions in Master in Physical Education 2nd year shall consist of the following parts:-

M.P.Ed. 2nd Year			
S.No.	Division of Syllabus		Max. Marks
1	Section-I	Theory	500
2	Section-II	Practical	300
3	Section-III	Teaching Practice (TP)	---

Detailed outline of the Syllabus:**Section-I: THEORY**

45% shall be the pass percentage in each Theory Paper and 50% shall be in aggregate. Each paper shall be of three hours duration.

Section-I	Theory Papers/Subjects	Max. Marks
	PAPER 1: Science of Coaching & Training	100
	PAPER 2: Sports Journalism	100
	PAPER 3: Measurement & Evaluation in Physical Education	100
	PAPER 4: Athletes Care and Rehabilitation	100
	PAPER 5: Any One of the Following Optional Subject:	100
	i) Dissertation	
	ii) Applied Statistics and Basic Computer Programming	
	iii) Yoga and Health Education	
	iv) Kinanthropometry in Sports	

Section-II: PRACTICALS

Minimum pass percentage for each Practical shall be 50%:

Practical Papers/Subjects	Max. Marks
1. Lesson on Training and Coaching in Athletics a) Triple Jump b) Pole Vault c) Discuss Throw d) Hammer Throw e) Hurdles f) Steeple Cheese	100
2. Lesson on Training and Coaching in Games a) Hockey b) Basketball c) Volleyball d) Kabbadi e) Wrestling f) Cricket	100

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3. Proficiency in Athletics and Games base on performance recognized by AIU: ➤ Athletics Events One Jump, One Throw, One Sprint, One Middle Distance Race and one Hurdle ➤ Games: (As per the Choice of each student)	50+50
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Notes:

- 1) The student are required to complete five lessons each in above-mentioned activities, and prepare a practical notebook.
- 2) No student of M.P.Ed. Part–II can repeat the Athletic Event & Game that had opted in M.P.Ed. Part I.
- 3) The students are required to give 5 seminars.
- 4) There will be four periods per course in a week for M.P.Ed. Part II students.
- 5) There will be three-practical/activity periods (including specialization) in evening for M.P.Ed. II students.

Section-III: Teaching Practice (TP)

A student pursuing Master of Physical Education (M.P.Ed.) Two Year Course, shall have to undergo Teaching Practice (TP) of:

Section –III	Practical Papers / Subjects
1.	15 Supervised lessons in nearby schools
2.	Note Book (Teaching Practice)

MASTER OF PHYSICAL EDUCATION (PART-I)

PAPER-1: RESEARCH METHODOLOGY**Time: 3 Hours****Max. Marks: 100****Instructions for the Paper Setters:****Question paper will be divided into three sections as follows:**

Section A: The candidates are required to attempt all the ten questions in not more than five lines each and carrying two marks each. **10x02= 20 Marks**

Section B: The candidates are required to attempt eight out of twelve questions in not more than two pages each carrying six marks each. **08x06=48 Marks**

Section C: The candidates are required to attempt two out of four questions in not more than five pages each and carrying sixteen marks each. **16x02=32 Marks**

Unit-I: Introduction

- a. Meaning and objectives of research
- b. Need of research in Physical Education
- c. Types of research
- d. Motivation in research
- e. Criteria of a good research

Unit-II: Research Problems

- a. Identifying a research problem
- b. Sources of research problems
- c. Criteria for the selection of a research problem
- d. Delimitation and limitation of a problem

Unit-III: Hypothesis

- a. Definition , Nature and characteristics of Hypothesis
- b. Types of Hypothesis
- c. Testing of Hypothesis
- d. Importance of Hypothesis

Unit-IV: Survey of Related Literature

- a. Need to survey related literature
- b. Sources of literature
- c. Advantages of survey of related literature
- d. Library sources
- e. Note-taking
- f. Scanning and skimming

Unit-V: Research Proposal

- a. Title of the problem
- b. Statement of the problem
- c. Hypothesis
- d. Significance
- e. Definition of the terms
- f. Review of literature
- g. Methodology
- h. Bibliography

Unit-VI: Tools of Data Collection

- a. Collection of data through questionnaires
- b. Collection of data through schedules
- c. Guidelines for Constructing questionnaire /schedule
- d. Guidelines for successful interviewing
- e. Observation Method

Unit-VII: Sampling

- a. Advantage of sampling
- b. Characteristics of sampling
- c. Types of sampling
- d. Sampling errors

Unit–VIII: Research Design

- a. Meaning and need of research design
- b. Feature of a good research design
- c. Important concepts relating to research design
- d. Historical design
- e. Descriptive design
- f. Experimental design

Unit–IX: Research Report

- a. Organization of research report
- b. Precautions for writing research reports
- c. Main division of research report
 - i. Preliminary material
 - ii. Main body of the thesis
 - iii. Supplementary material
- d. Evaluation of research report

Unit–X: Introduction to Statistics

- a. Meaning and importance of statistics in physical education
- b. Measures of central tendency– the mean, the median ,the mode
- c. Measures of variability–Range A.D,S.D. Percentiles
- d. Analysis of Variance and Co–variance
- e. Chi–square
- f. Correlation– Product moment and rank difference method

References:

1. Author's Guide: "Research Methods Applied to Health Physical Education and Recreation", Washington, D.C., 1991.
2. Best J.W., "Research in Education", Prentice Hall, New Delhi 1982.
3. Clarke H. David, "Research Processes in Physical Education, Recreation and Health", Prentice Hall Inc, Englewood Cliffs, New Jersey, 1985.
4. Kamlesh M.L., "Methodology of Research in Physical Education and Recreation", AHPER, Washington D.C., 1973.
5. Kamlesh M.L., "Methodology of Research in Physical Education and Recreation", AHPER, Washington D.C. 1973.

Time: 3 Hours**Max. Marks: 100****Instructions for the Paper Setters:****Question paper will be divided into three sections as follows:**

Section A: The candidates are required to attempt all the ten questions in not more than five lines each and carrying two marks each. **10x02= 20 Marks**

Section B: The candidates are required to attempt eight out of twelve questions in not more than two pages each carrying six marks each. **08x06=48 Marks**

Section C: The candidates are required to attempt two out of four questions in not more than five pages each and carrying sixteen marks each. **16x02=32 Marks**

Unit – I

- a. Meaning of kinesiology, aims and objectives of kinesiology.
- b. Origin of kinesiology, historical perspective.
- c. Contribution of kinesiology to physical education and sports.

Unit – II

- a. Meaning of bone, composition of bone.
- b. Kinds of bones (flat, long, short, irregular and sesamoid).
- c. Function of bones
- d. Bone fracture and its types
- e. Structure of major bones

1. Upper extremities

- i. The clavicle
- ii. The scapula
- iii. Radius and ulna
- iv. Sternum
- v. Humerus

2. Lower extremities

- i. The femur
- ii. The patella
- iii. The tibia
- iv. The fibula
- v. The pelvic

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Unit – III

- a. Meaning and types of joints
- b. Plan and axes
- c. Fundamental movements around the joints
- d. Joint flexibility, technique to increase the flexibilities
- e. Structure, function, fundamental movements around the joints.
 - i. Shoulder joint
 - ii. Elbow joint
 - iii. Hip joint
 - iv. Knee joint
 - v. Spinal column
 - vi. Pelvic girdle

Unit – IV

- a. Muscles, classification of muscle
- b. Structure of Skeleton muscle, classification of muscles basis of the fiber arrangement.
- c. Physiology of muscle contraction, types of muscle contraction.
- d. Role of the muscle in the movement.
- e. Methods of the studying the action of the muscle
- f. Muscle of the neck & trunk (origin, insertion, innervations and action)
- g. Sternocleidomastoid, Levator scapulae, erector latissimus dorsi, serratus anterior, Rectus abdominus, External and internal obliques.

Unit – V

- a. Muscle of upper extremities:
 - i. Trapezius Rhomboids,**
Teres major & Teres minor Deltoids, Pectoralis major and minor, Infraspinatus and supraspinatus.
 - ii. Muscle of the elbow joint**
Biceps brachii, triceps, Brachioradialis, Pronator teres, Supinator, Pronator quadratus Brachialis.

Unit – VI

- a. Definition of Biomechanics.
- b. Role of Bio-Mechanics in the field of physical education
- c. Defined the motion, types of motion.
- d. Newton law of angular motion and linear motion.
- e. Relationship between angular Motion and linear motion.

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Unit – VII

- a. Force, unit of force, factor affecting the force, types of force, principle of force.
 - i. Centripetal and centrifugal forces.
 - ii. Concept of couple.
 - iii. Moment of force.
 - iv. Moment of inertia.

Unit – VIII

- a. Equilibrium, its types and principles.
- b. Centre of gravity, finding the centre of gravity, factor affecting the centre of gravity.
- c. Stability, factor affecting the stability.
- d. Freely falling bodies, projectile, momentum, impulse
- e. Lever and its types.

Unit – IX

- a. Work, power, energy.
- b. Relationship work, power and energy.
- c. Friction and its types.
- d. Spin, impact, elasticity, rebound.
- e. Fluid mechanics, air resistance, and water resistance

Unit – X

- a. Mechanical analysis of fundamental skill.
 - i. Walking
 - ii. Running
 - iii. Throwing
 - iv. Pulling
 - v. Pushing
- b. Mechanical analysis of sports.
 - i. Archery
 - ii. Hockey (hitting, scoop)
 - iii. Football (kicking and heading)
 - iv. Swimming, (free style, backstroke)
 - v. Tennis (fore hand and back hand strokes)
- c. Mechanical analysis of track event:
 - i. Hurdles
 - ii. Long Jump,
 - iii. Shot Put

References:

1. Atha, J., Current Research in Sports Biomechanics, Switzerland: Karger, 1987.
2. Gowitzke, B.A. and Milner, M. Scientific Bases of Human Movement, (3rd. Ed.) Baltimore: Williams and Wilkins, 1988.
3. Grabiner, M.D., Current Issues in Biomechanics, New Delhi, 1993.
4. Hall, S.J., Basic Biomechanics, London, Mosby, 1991.
5. Kreighbaum & Barthels, Biomechanics, NY: Macmillan, 1985.
6. Mood, S.D., Beyond Biomechanics, New York: Taylor, 1996.
7. Shaw, D., Pedagogic Kinesiology, Khel Sahitya Kendra, 2007.
8. Thompson, C., Manual of Structural Kinesiology. (10th Ed.), St. Louis: Times Mirror/Mosby College Publishing, 1995.
9. Shaw, Dhanonjoy, Kinsiology and Biomechanics of Human Motion, Khel Sahitya Kendra, 1998.

PAPER-III: SPORTS PSYCHOLOGY**Time: 3 Hours****Max. Marks: 100****Instructions for the Paper Setters:****Question paper will be divided into three sections as follows:**

Section A: The candidates are required to attempt all the ten questions in not more than five lines each and carrying two marks each. **10x02= 20 Marks**

Section B: The candidates are required to attempt eight out of twelve questions in not more than two pages each carrying six marks each. **08x06=48 Marks**

Section C: The candidates are required to attempt two out of four questions in not more than five pages each and carrying sixteen marks each. **16x02=32 Marks**

Unit-I: Introduction

- a. Sports Psychology, Nature, Scope and Importance in Physical Education
- b. Methods of Sports Psychology

Unit-II: Learning

- a. Concept of Learning, theories and laws of learning,
- b. Individual differences and their impact on skill learning and performance,
- c. Principles of motor-skill acquisition,
- d. Transfer of training effects

Unit-III: Motivation

- a. Motivation, dynamics of motivation in sports
- b. Techniques and Types,
- c. Theories of Motivation,
- d. Psychological preparation for sports competition.

Unit-IV: Emotions

- a. Meaning , Definition and Types
- b. Theories :- James Lange Theory, Cannon Bard Theory and Scatchter- Singer Theory of emotions
- c. Physiological manifestations, Influence of Emotions (Success and Failure) on level of aspiration and Achievements

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Unit-V: Anxiety

- a. Concept, Dimension and Evaluation
- b. Role of Anxiety in Sports
- c. Strategies to manage Anxiety

Unit-VI: Stress

- a. Concept , Types of Stress
- b. Physiology of Stress
- c. Causes of Stress
- d. Stress related to Sports and Exercise
- e. Stress Managements Techniques

Unit-VII: Aggression

- a. Concept of Aggression
- b. Physiological and Psychological constructs of Aggression
- c. Role of Media in Aggression
- d. Theories of Aggression
- e. Steps to Control Aggression

Unit-VIII: Group Dynamics and Leadership

- a. Nature and Concept of Groups:- Team Cohesion.
- b. Characteristic of good Leader
- c. Theories of Leadership

Unit-IX: Personality

- a. Meaning, Types and Trait theories of Personality
- b. Relationship of Personality to sports Performance
- c. Measurements of Personality (Projective and Objective Measures)

Unit-X: Intelligence

- a. Definition , Theories , Measurements, Intelligence in Exercise and Sports

References:

1. Aggarwal, J.C., Basic Ideas in Educational Psychology, Delhi: Sipra, 2003.
2. Bhatia, Hans Cox, R. H., Sport Psychology Ed 5 Th., London, Mcgraw Hill, 2002.
3. Dewey, John, Psychology, New Delhi: K.S.K., 2003.
4. Kamlesh, M.L, Educational Sport Psychology, New Delhi, Friends Pub., 2006.
5. Levinthal, Charles F., Introduction to Physiological Psychology, N.D. Prentice Hall, 2005.
6. Seashore, C.E., Elementary Experiments in Psychology, ND: Sports Pub., 2001.
7. Woodworth, R.S., Basic Facts in Psychology, ND: Sports Pub., 2001.
8. Cashmore, Ellis, Key Concepts in Sport Psychology, London, Routledge, 2004.
9. M.L. Kamlesh, "Psychology in Physical Education and Sports" Metropolitan Book Co., Delhi.
10. Singer Robert N., "Motor Learning and Human Performance" Macmillan, New York.
11. Lauther, John. D., "Sports Psychology" Prentice Hall, Inc Englewood.
12. Whiting,H.I.A.& others " Personality and Performance in Physical Education" Henry Kimton Publishers, London.

PAPER-IV: SPORTS MEDICINE AND EXERCISE PHYSIOLOGY**Time: 3 Hours****Max. Marks: 100****Instructions for the Paper Setters:****Question paper will be divided into three sections as follows:**

Section A: The candidates are required to attempt all the ten questions in not more than five lines each and carrying two marks each. **10x02= 20 Marks**

Section B: The candidates are required to attempt eight out of twelve questions in not more than two pages each carrying six marks each. **08x06=48 Marks**

Section C: The candidates are required to attempt two out of four questions in not more than five pages each and carrying sixteen marks each. **16x02=32 Marks**

UNIT-I: Introduction

- a. Definition and Concept of Sports Medicine
- b. Historical Background of Sports Medicine
- c. Scope of Sports Medicine
- d. Aims and Objective of Sports Medicine
- e. Role of Sports Medicine in Physical Education & Sports

UNIT-II: Physiological Basis

- a. Oxygen and performance
- b. Energy Dynamics ; Aerobic- Anaerobic Sources
- c. Human Energy Expenditure at rest and exercise
- d. Bio-Chemical Changes in Muscles During Exercise
- e. Effect of Long Term Training on Muscles

UNIT-III: Nutrition

- a. Definitions of Terms Related to Nutrition
- b. What are Nutritional Elements
- c. Nature and Sources of Nutritional Elements
(Carbohydrates, Fats, Protein, Water, Mineral, Vitamin)
- d. Role of Nutritional Elements in the Body

UNIT-IV: Nutrition and Athletic Performance

- a. Caloric Value of Different Nutrients
- b. Carbohydrates Loading
- c. Appropriate Diet Before , During and After Competition
- d. Protein , Carbohydrates and Liquid Meals

UNIT-V: Enhancement of Performance

- a. High Altitude Training and Adaptation
- b. Cardiovascular Adaptation to Training
- c. Pulmonary Adaptation to Training
- d. Muscular Adaptation to Training

UNIT-VI: Cryogenic Aids and Doping in Sports

- a. Meaning , Definition of Cryogenic Aids
- b. Definition ,Classes and Methods of Doping
- c. Useful and Harmful Effect of Doping
- d. Role of I.O.C. and W.A.D.A. Against Doping

UNIT-VII: Applied Physiology

- a. Physical, Physiological, Bio-Mechanical and Bio-Chemical differences between Men & Women
- b. Female Specific Problems
- c. Obesity and its Causes
- d. Obesity and Weight Control
- e. Role of Exercise in Prevention and Treatment of Obesity and Diabetes

UNIT-VIII: Body Composition and Ageing

- a. Body Composition , Physique
- b. Body Composition and Sports Performance
- c. Body Composition Assessments
- d. Gerontology ; Study of Ageing
- e. Exercise and Ageing

UNIT-IX: Sports Injuries

- a. Introduction , Meaning and Definition of Sports Injuries
- b. Common Sports Injuries , Classification
- c. Regional Injuries
- d. Treatment and Management of common Sports Injuries
- e. R.I.C.E.

UNIT-X Miscellaneous Topics

- a. Disabled Sports
- b. Medical Examination
- c. First Aid Box
- d. Sports Medicine Clinic an Out Line
- e. Exercise and Cardiovascular Fitness
- f. Exercise Benefits at various Stages of Life

References:

1. Ann. Lowlin. Women's Fitness Program Development Human, Kinetics. 2002.
2. Bengt O. Eriksson et al, Sports Medicine, GuinnessPublication, 1990.
3. Christine M. Drews, Physiology of Sports and Exercise, Human Kinetics, USA, 1999.
4. David R. Mottran, Drugs in Sports (4th Ed) Routledge Taylor and Francis Group, 2005.
5. Erikson, B.O. et al, Sports Medicine, Guinness Pub. Great Britain, 1990.
6. Jain, Rachna, Sports Medicine, KSK, New Delhi, 2002.
7. Jeyaprakash, C. S., Sports Medicine, J.P. Brothers Pub., New Delhi, 2003.
8. Khanna, G.L., Exercise Physiology & Sports Medicine, Lucky Enterprises, Delhi, 1990.
9. Mathew D.K. & Fox E.L, Physiological Basis of Physical Education and Athletics, W.B. Saunders Co: Philadelphia, 1971.
10. Pandey, P.K., Outline of Sports Medicine, J.P. Brothers Pub., New Delhi, 1987.
11. Pandey, P.K.,Sports Medicine, Khel Sahitya Kendra, New Delhi,1998.

PAPER-V: SPORTS SOCIOLOGY**Time: 3 Hours****Max. Marks: 100****Instructions for the Paper Setters:****Question paper will be divided into three sections as follows:**

Section A: The candidates are required to attempt all the ten questions in not more than five lines each and carrying two marks each. **10x02= 20 Marks**

Section B: The candidates are required to attempt eight out of twelve questions in not more than two pages each carrying six marks each. **08x06=48 Marks**

Section C: The candidates are required to attempt two out of four questions in not more than five pages each and carrying sixteen marks each. **16x02=32 Marks**

Unit-I: Introduction

- a. Meaning, Definition and Scope of Sports Sociology
- b. Study of social behavior of individual in Sports
- c. Sports Sociology considers the relationship between sports and society.
- d. Issues and Controversies in Sports Sociology.

Unit-II: Sports and Micro Social System

- a. Study of Sports Groups
- b. Sports as main culture heritage
- c. Group interaction, competition and Co-operation

Unit-III: Sports and Macro Social System

- a. Inter-relationship between Sports and regulating institutions (Politics and Economy)
- b. Commercialism in Sports
- c. Research technique in Social Sciences
- d. Identifying research problems in Sports Sociology

Unit-IV: Sports and Culture

- a. How Culture Influences Sports.
- b. Sports as an element of culture and a cultural product
- c. Influences of Sports on culture and values
- d. Culture:- The pattenen, Traditions , Rituals , Habits, Values and briefs of a Society .

Unit-V: Social Factors concerning Sports in Society

- a. Problem regarding professionalism in Sports for women
- b. Sociological links between different aspects of Society:- Family, Economics and Politics etc.
- c. Role of religion in sports development.
- d. Influence of spectators in dynamics of Sport.
- e. Social values and Sports

References:

1. Bhusan, V. and Sachdeva, An Introduction to Sociology, Delhi: Kitab, 2003.
2. IGNOU, The Study of Society – Understanding Sociology, Delhi – IGNOU, 2007.
3. Inkeles, A. Ed., What is Sociology, ND: Prentice Hall, 1997.
4. Jain, Rachna, Sports Sociology, New Delhi: KSK, 2005.
5. Kanwal Jeet, S., Sport Sociology, ND: Friends Pub., 2000.
6. Mitchell, G.D. Ed., Dictionary of Sociology, U.K: Routledge, 1999.
7. Sharma, R.N., Urban Sociology, ND: Surjeet Pub., 1993.
8. Singh, Bhupinder, Sports Sociology, New Delhi: Friends, 2004.
9. Turner, B., Cambridge Dictionary of Sociology, U.K., Cambridge, U.N. Press, 2006

PAPER-I: SCIENCE OF COACHING AND TRAINING**Time: 3 Hours****Max. Marks: 100****Instructions for the Paper Setters:****Question paper will be divided into three sections as follows:**

Section A: The candidates are required to attempt all the ten questions in not more than five lines each and carrying two marks each. **10x02= 20 Marks**

Section B: The candidates are required to attempt eight out of twelve questions in not more than two pages each carrying six marks each. **08x06=48 Marks**

Section C: The candidates are required to attempt two out of four questions in not more than five pages each and carrying sixteen marks each. **16x02=32 Marks**

UNIT-I: Sports Training

- a. Importance and definition of sports training
- b. Aim and objectives of sports training
- c. Characteristics of sports training
- d. Principles of sports Training

UNIT-II: Training load, Adaptation and Recovery

- a. Concept of load
- b. Adaptation
- c. Relationship of load and recovery
- d. Factors of load
- e. Relationship between volume and intensity
- f. Overload , Causes and symptoms of overload,
- g. Tackling of over load

Unit-III: Training Method

- a. Interval training method
- b. Circuit training method
- c. Fartlek training method
- d. Weight training method
- e. Resistance training method
- f. Plyometric method

UNIT-IV: Strength Training

- a. Types of strength
- b. Factors affecting strength performance
- c. Methods of strength : training maximum strength; explosive strength and Strength endurance
- d. Strength training for muscle hypertrophy

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UNIT-V: Endurance Training

- a. Definition and significance of endurance
- b. Factors affecting endurance
- c. Forms of endurance
- d. Methods to develop endurance
- e. Load factors in relation to endurance

UNIT-VI: Speed Training

- a. Definition
- b. Forms of speed
- c. Factors determining speed
- d. Load parameters to develop speed
- e. Methods to develop speed abilities
- f. Physiological characteristics of speed.

UNIT-VII: Flexibility Training

- a. Definition
- b. Factors affecting flexibility;
- c. Types of flexibility
- d. Methods used to develop flexibility

UNIT-VIII: Technical and Tactical Training

- a. Definition and meaning of technique, skill and style
- b. Technique training & its implication in **various** phases; methods employed for technique training, causes of technical fault and their correction
- c. Definition and meaning of tactics, aim of tactics according to sport
- d. Training for tactics
- e. Principles of tactical preparation

UNIT-IX: Planning, Periodzation and Competition**A. Planning**

- a. Definition of planning
- b. Need and importance in planning
- c. Principles of planning
- d. Types of plan (training conception, macro, micro, meso and training session plan)

B. Periodzation

- a. Need of Periodzation
- b. Types of Periodzation
- c. Aims of various periods of Periodzation

C. Competition

- a. The number and frequency of competition
- b. Preparation for competition
- c. Types of Competition

UNIT-X: Talent Identification and its Development

- b. Talent identifications and its importance,
- c. Phases of talent identification,
- d. Guidelines for talent identification
- e. Motor development and training implications and different

References:

1. Allan W. Jakson & James R. Morrow, "*Physical Activity for Health and Fitness*". (Human Kinetics). 1999.
2. American College of Sports Medicine, "*Guidelines for Exercises Testing and Prescription*" 4th Ed., (Philadelphia: Lea & Febiger). 1991.
3. Annette, Lang. Morning Strength Workouts. Human Kinetics, Champaign, Ilc, USA, 2007.
4. Daniel, D. Arnheim & William E. Prentice "Principles of Sports Training" Morby-Year Book Inc. St. Louis, 1993.
5. Hardayal Singh, Science of Sports Training, ND: D.A.V. Pub., 1993.
6. Herre, D., Principals of Sports Training, London : Grafion Book, 1982.
7. Lee, E.brown & Vance A.Ferrigna. (Editors). Training for speed, Agility and Quickness, Human Kinetics, Champaign, Ilc.,USA, 2005.
8. Marney, B. Simon & Steren R. Levisohn. The Athlete within A Personal Guide To total Fitness. Little Brown Company, Boston, 1987.
9. Matveyew, L.P. Fundamentals of Sports Training (Translation from Russian) Mir. Publisers, Moscow, 1991.
10. Novich, Max M. & Taylor, Buddy Training Conditioning of Athletes. Lea & Febiger, Philadelphia, 1983.
11. Willmore, J.H. Athletic Training & Physical Fitness. Allyand Bacon, Inc. Sydeny, 1987.

PAPER-II: SPORTS JOURNALISM**Time: 3 Hours****Max. Marks: 100****Instructions for the Paper Setters:****Question paper will be divided into three sections as follows:**

Section A: The candidates are required to attempt all the ten questions in not more than five lines each and carrying two marks each. **10x02= 20 Marks**

Section B: The candidates are required to attempt eight out of twelve questions in not more than two pages each carrying six marks each. **08x06=48 Marks**

Section C: The candidates are required to attempt two out of four questions in not more than five pages each and carrying sixteen marks each. **16x02=32 Marks**

Unit-I: Introduction

- a. Meaning, Scope and Changing Trends of Sports Journalism in Sports
- b. Importance of Journalism in Sports Promotion & Vice – Versa
- c. Historical Development of Sports Journalism
- d. Public Relation Media–advertising, press release, conference, exhibitions, films etc

Unit-II: Mass Media

- a. Introduction and Meaning of Mass Media
- b. Purpose of Mass Media for the Propagation of Sports
- c. Growth of Sports Communication
- d. Radio and T.V. communication for sports information

Unit-III: Writing Skill for Media

- a. Fundamentals of a Sports News, News – Types
- b. Sports Terminators and its Use
- c. Language – Vocabulary , Spellings , Figure of Speech
- d. Qualifications and responsibilities of a sports writer, Reporter and Editor

Unit-IV: Writing a Sports Media

- a. Types of Sports Feature; Exclusive Picture Feature, Freelance Writing in Sports
- b. Write-Ups Feature, Follow-Ups , Advance Story, Article, Editorials
- c. Reviewing Sports Books
- d. Design and make-ups ; headings, front reading ,layout & page making

Unit-V: Research Trends in Sports Journalism

- a. Research tools for developing a sports story
- b. Process of news paper publishing and management
- c. Olympics and sports journalism
- d. Introduction to photo journalism in reference to sports

References:

1. Ahuja, B.N., Theory and Practice of Journalism, Surjeet Pub, Delhi, 1988.
2. Health Jr. Gelfand, How to Cover, Write and Edit Sports, Annes Lowa, USA, 1951.
3. Juris, John R., The Writing Games, Columbia Univ. Press, New York, 1969.
4. Nea. Robest, News Gathering and News Writing, Columbia Hall Inc., New York, 1949.
5. "Sports" by Bholu Singh Thakur (pp.111.1240) in the Indian Reporter Guide by Richard Critchfield. Allied Pecific Pvt. Ltd., Bombay, 1962.
6. Woodward. S., Sports Page, Simon and Schuster, New York .1949.

PAPER-III: MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION**Time: 3 Hours****Max. Marks: 100****Instructions for the Paper Setters:****Question paper will be divided into three sections as follows:**

Section A: The candidates are required to attempt all the ten questions in not more than five lines each and carrying two marks each. **10x02= 20 Marks**

Section B: The candidates are required to attempt eight out of twelve questions in not more than two pages each carrying six marks each. **08x06=48 Marks**

Section C: The candidates are required to attempt two out of four questions in not more than five pages each and carrying sixteen marks each. **16x02=32 Marks**

Unit-I: Introduction

- a. Meaning of Measurement and evaluation.
- b. Principle need and Importance of Measurement and evaluation in Physical Education
- c. Inter-Relationship between test Measurement and evaluation

Unit-II: Constructing tests and Evaluation**Constructing Test**

- a. General Consideration
- b. Construct Physical Performance

Evaluation

Criteria of tests: Validity, reliability, objectivity norms and economy of tests, etc.

Unit-III: Administration of Test and Measurement Technique

- a. Organizing and administering the testing programme. Defining the problem, selecting test, scoring the test, determination of validity and reliability of test, presenting and interpreting the result.
- b. Measurement Technique :- Physical Measurement of Size shape and body

Unit-IV: Strength Test

- a. Krausweber Test
- b. Roger's Strength Test
- c. Macloy Strength Test

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Unit-V: Test of Motor Ability

- a. Philip's JCR Test.
- b. Indiana Motor Fitness Test.
- c. AAHPER Youth Fitness Test.
- d. Barrow Motor Ability Test.

Unit-VI: Cardiovascular Test

- a. Cardiovascular Function
- b. Tuttle Pulse Ratio Test.
- c. Harvard Step Test.
- d. Copper's 12 minute run walk test

Unit-VII: Sports Skill Test**Basket Ball:**

- a. Johnson Basketball Test
- b. Knox Basketball Test.

Volleyball:

- a. Modified Brady Volleyball Test
- b. Russel – Lange Volleyball Test.

Soccer:

- a. Johnson Soccer Test

Unit-VIII: Hockey :-

- a. Henry Fridel Field, Hockey Test

Badminton :-

- a. Lochmart Mcpherson Badminton test.

Tennis

- a. Hewitt Revision of the dyer Backboard Test

Unit-IX: Knowledge Test

- a. Types of Test
- b. Physical Education Knowledge Test

Unit-X: Statistics

Raw score and derived scores, Sigma Score, Hull Score, Sigma Scale, Hull Scale, t-test, f-test

References:

- 1) ACSM's Health / Fitness Facility Standards and Guidelines, New York: Human Kinetics, 1992.
- 2) Barrow, Harold M. and McGhee, "Rosemary, A Practical Approach to Management in Physical Education" Philadelphia: Lea and Febiger 1979.
- 3) Clake, H. Harrison.: Application of Measurement to Health and Physical Education, New Jersey: Prentice Hall Inc. 1976.
- 4) Edmund O. Acevedo and Michael A. Starks, Exercise Testing and Prescription lab Manual, USA: Human Kinetics Publishers, 2003.
- 5) Safrit, Margaret J.: Introduction to Measurement in Physical Education and Exercise Science, St. Louis: Mosby, 1995.

PAPER-IV: ATHLETES' CARE AND REHABILITATION**Time: 3 Hours****Max. Marks: 100****Instructions for the Paper Setters:****Question paper will be divided into three sections as follows:**

Section A: The candidates are required to attempt all the ten questions in not more than five lines each and carrying two marks each. **10x02= 20 Marks**

Section B: The candidates are required to attempt eight out of twelve questions in not more than two pages each carrying six marks each. **08x06=48 Marks**

Section C: The candidates are required to attempt two out of four questions in not more than five pages each and carrying sixteen marks each. **16x02=32 Marks**

Unit-I: Prevention and Management of Sports Injuries

- a. Injuries in sports
- b. Meaning ,definition and classification of injuries
- c. Causes of injuries in sports
- d. General guidelines for their prevention
- e. Introduction and First-Aid management of following injuries:-
Fracture, Dislocation, Laceration, Abrasion, Sprain and Strain

Unit-II: Safety in Sports

- a. Safety appliances in sports and their uses
- b. Principles of safety education
- c. Provision of safety rules in competitive sports
- d. First-Aid box and its requirements on the play fields

Unit-III: Rehabilitation

- a. Meaning and definition of Rehabilitation
- b. Concepts of Rehabilitation
- c. Objective and scope of Rehabilitation
- d. Principal of care and Rehabilitation

Unit-IV: Therapeutic Modalities

- a. Shortwave Diathermy
- b. Microwave Diathermy
- c. Ultra Sound
- d. Cryo therapy
- e. Contrast bath
- f. T.E.N.S
- g. I.F.T

Unit-V: Posture

- a. Meaning ,definition and concept
- b. Good posture and its value
- c. Bad posture , causes and its drawbacks

Unit-VI: Posture Deformities and Corrective Exercise

- a. Kyphosis
- b. Lordosis
- c. Scoliosis
- d. Knock-knee
- e. Bow legs
- f. Flat foot

Unit-VII: Aquatic Rehabilitation Exercise

- a. Introduction to aquatic rehabilitation
- b. Meaning and definition
- c. Equipment for aquatic exercise
- d. Aqua workout station
- e. Rehabilitative role and importance of aquatic activity
- f. Benefits of exercise in water

Unit-VIII: Therapeutic Exercise

- a. Introduction, meaning and definition
- b. Scope of therapeutic exercise in sports injuries and rehabilitation
- c. Exercise programme to strengthen the injury
- d. Classification, effects and use of following types of therapeutic exercise
 - i. Active Exercise (Free, Assisted, Resisted)
 - ii. Passive Exercise (Relaxed, Passive and Stretching)

Unit-IX: Massage – I

- a. Introduction ,meaning and definition of massage
- b. Brief history of massage
- c. Massage precautions / contra-indication
- d. Physical and mental benefits of massage therapy
- e. Role of massage in relation with sports competitions

Unit-X Massage- II

- a. Effects of massage on major systems of body
- b. Types & Techniques of massage
 - i. Effleurage
 - ii. Kneading
 - iii. Petrissage
 - iv. Friction
 - v. Shaking and Vibration
 - vi. Percussion Movements (Hacking, Clapping, Beating, Pounding)

References:

1. Davies, J.E., Essentials of Sports Medicine, New Delhi, 1986.
2. Ellison, A.E. et al, Athletic Training & Sports Medicine, American Academy, 1984.
3. Eriksson, B.O., Sports Medicine, Great Britain:Guiness Pub.,1990.
4. Irvin, R. et al, Sports Medicine,USA: Allyn and Bacon,1998.
5. Komi, P.V., Encyclopadia of Sports Medicine, Blackwell, 1992.
6. Larry, J. Durstine and Geoffrey, E. Moore, Exercise Management for Person with Chronic Diseases and Disabilities (*2nd Ed*), Human Kinetics, USA, 2003.
7. Melinda, J. Flegel, Sports First Aid (*3rd Ed*), Human Kinetics, USA, 2003.
8. Prentice, W.E., Therapeutic Modalities in Sports Medicine, Times Mirror, 1990.
9. Torg, J.S. et al, Current Therapy in Sports Medicine, New Delhi.1996.

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PAPER-V: (Opt. i)
(Optional Subject)

Note: Any one of the following:

Paper-V: (Option i) :

DISSERTATION

Can be opted only by the students who have secured at least 60% marks in Theory Papers of M.P. Ed. Part-I.

PAPER-V: (Opt. ii)
APPLIED STATISTICS AND BASIC COMPUTER PROGRAMMING

Duration of Paper: 3 Hours

Max. Marks: 100

Instructions for the Paper Setters:

Question paper will be divided into three sections as follows:

Section A: The candidates are required to attempt all the ten questions in not more than five lines each and carrying two marks each. **10x02= 20 Marks**

Section B: The candidates are required to attempt eight out of twelve questions in not more than two pages each carrying six marks each. **08x06=48 Marks**

Section C: The candidates are required to attempt two out of four questions in not more than five pages each and carrying sixteen marks each. **16x02=32 Marks**

Unit-I:

Statistics

Meaning and Importance of Statistics in Physical Education

Unit-II:

Presentation of data through Tables and Graphs; Normal Probability Curve.

Unit-III:

Measures of Central Tendency

- a) Mean
- b) Median
- c) Mode

Unit-IV:

Measures of Variability

- a) Range
- b) Standard Deviation
- c) Percentiles
- d) Deciles
- e) Quartiles

Unit-V:

Correlation – Karl Pearson’s Product Moment and Spearman’s Rank Difference Method.

Unit-VI:

Chi-square

Unit-VII:**Tests of Significance**

- a) Procedure of testing a hypothesis
- b) Critical Region and Acceptance Region
- c) t-test
- d) z-test
- e) F-test

Unit-VIII:**Analysis of Variance**

- a) Purpose of Analysis of Variance
- b) One way ANOVA with equal and unequal sample size.
- c) LSD and Scheffe's Tests

Unit-IX:**Computer Fundamental**

- a) Types of computers
- b) Classification of Computers
- c) Block Diagram of Computers
- d) Different Levels of Languages
- e) Flow Chart, Basic Language: Assignment statements, jumping, branching, and looping
- f) Different commands of BASIC for executing, saving, Listing and loading a programme.
- g) Constants and Variables
- h) Expression in Basic
- i) Relational Operators
- j) Library Function
- k) Printer Controls, Comma, Semicolon, Tab Using and Locate Control.
- l) Sub-scripted variable and dimension

Unit-X:**Programming with BASIC**

- a) Simple Matrix Printing
- b) Program for calculating Odd and Even number, Sums, Mean and Standard Deviation.
- c) Program for solving quadratic equation
- d) Simple programs in Physical Education.

PAPER-V: (Opt. iii)
YOGA AND HEALTH EDUCATION

Time: 3 Hours

Max. Marks: 100

Instructions for the Paper Setters:

Question paper will be divided into three sections as follows:

Section A: The candidates are required to attempt all the ten questions in not more than five lines each and carrying two marks each. **10x02= 20 Marks**

Section B: The candidates are required to attempt eight out of twelve questions in not more than two pages each carrying six marks each. **08x06=48 Marks**

Section C: The candidates are required to attempt two out of four questions in not more than five pages each and carrying sixteen marks each. **16x02=32 Marks**

Unit-I: Introduction

- a. History of Yoga
- b. Meaning, types and objective of yoga

Unit-II: Classification of Asanas (Asanas that activate and deactivate the an Athlete/ Player)

1. Surya Namaskar, its study of the technique.
2. The benefit of the following Asanas :
 - a. Specific activating Asanas :- Dhanur Asana, The Cobra (Sarap Asana), Sarvang, Ardhamatsyendra, Uddiyan Bandha Asana.
 - b. Specific Deactivating Asanas :- Paschimothan asana, Hal Asana, Shave Asana, Padahasth Asana.
 - c. Restorative Asanas :- Suptakon Asana, Vipritakri Asana
 - d. Meditatives :- Padama Asana, Svastik Asana, Vajra Asana

Unit-III: Pranayama, Bnadhas and Kriyas

Pranayama :- Meaning, Objectives and varieties of Pranayama , Techniques and benefits of Ujjai , Bhastrika , Shita/ Sitkari and Bharamati, Pranayamas.

Techniques of Bnadhas- Jhiva, Uddiyan, Mool Bnadhas

Sudhi Kriyas :- Techniques and Effects of Neti (Jal, Sutra) Kapalbhathi, Nauli and Vaman Bhauti.

Unit-IV: Reference of Yoga in modern life

- a. Stress and Strain
- b. High Blood Pressure
- c. Back Pain

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Unit-V: Health

- a. Meaning ,Definition and Dimension of Health
- b. Factors effecting Health
- c. Role of heredity in achieving positive health

Health Education

- a. Meaning and Importance of Health Education
- b. Aim and concepts of Health Education
- c. Need and Scope of Health Education

Unit-VI: Health Information and Practice

- a. Role of Physical Education teacher
- b. Role of Media
- c. Role of Community Health services.

Unit-VII: School and College Health Services :-

- a. Meaning and Objectives of school Health and College Health services and their Status.
- b. Aspect of School and College health services:-
 - i. Health Appraisal
 - ii. Medical Examination
 - iii. First aid and Accident prevention
 - iv. Mental Health, Dental Health, Eye Health
 - v. Guidance and Counselling
- c. Role of Physical Education teacher in relation to School health Service and College Health Service

Unit-VIII: Fitness and Wellness

- a. Definition and meaning of Fitness and Wellness
- b. Components of Wellness
- c. Hygiene, Meaning, Need and Importance
- d. Nutrition :- Macro Nutrients, Micro Nutrients
- e. Weight Management/ Obesity Control

Unit-IX: Community and Environment Sanitation

Community

- a. Population Policy, Population Dynamics and Population Explosion
- b. National Family welfare programme
- c. Sex Education in School and College

Environment Sanitation

- a. Housing, School and College
- b. Air pollution, Light, Noise, Temperature :- Diseases arising out of them and cures there of.

Unit-X: Communicable and Non-communicable Diseases**1. Communicable Diseases**

- a. Meaning and epidemiological approach of Communicable Diseases
- b. Brief Description of following Communicable Diseases and their Prevention :- Typhoid, cholera, Swine Flue, Dangu, Aids (HIV), Tuber colosis

2. Non-communicable Diseases

- a. Meaning of Non-communicable Diseases
- b. Brief Description of following Non-Communicable Diseases and their Prevention :- Obesity, Diabetes, Heart Disease, Cancer

References:

- 1) Alader Kogler : Yoga for every Athlete (Secrets of an Olympic Coach), Jaico Publishing House, Delhi, 1999.
- 2) Bedi Yaspal : Social and Preventive Medicine, New Delhi ; Atmaram and Sons, 1985.
- 3) Ghosh, S.N. Hygiene and Public Health, Calcutta: Scientific Publishing Co., 1989.
- 4) F.Yeast Brown: How to use Yoga and Sports, Publication by Durga Ganj New Delhi, 2006.
- 5) Iyenger, B.K.S : Light on Pranayama, 1981.
- 6) K.Chandra Shekar: Yoga for Health, Publication by Khel Sahtya, Kendra New Delhi, 2007.
- 7) Kirak Martin : Hatha Yoga Illustrated, Human Kinetics Publication, 2004.
- 8) Kumar Amresh (Prof.) : Yoga for Health and Body, Publisher by Khel Sahitya Kendra, Delhi, 2007.
- 9) Rana Asha : Yoga and health promotion in Schools, Sports Publications, New Delhi, 2006.

PAPER-V: (Opt. iv)
KINANTHROPOMETRY IN SPORTS

\Duration of Paper: 3 Hours

Max. Marks: 100

Instructions for the Paper Setters:

Question paper will be divided into three sections as follows:

Section A: The candidates are required to attempt all the ten questions in not more than five lines each and carrying two marks each. **10x02= 20 Marks**

Section B: The candidates are required to attempt eight out of twelve questions in not more than two pages each carrying six marks each. **08x06=48 Marks**

Section C: The candidates are required to attempt two out of four questions in not more than five pages each and carrying sixteen marks each. **16x02=32 Marks**

Unit-I:

Kinanthropometry:

- a) Introduction, scope and general consideration, i.e. Application of anthropometric data in sports.
- b) Body proportions and indices.
- c) Sports specific body proportions and indices.
- d) Body mass index and its importance in sports.

Unit-II:

Anthropometric Measurements and Procedures

- a) Equipment for anthropometric measurements
- b) Gross Body Measurements and procedures
- c) Length of Body Parts, Measurements and procedures
- d) Diameters of Body Parts, Measurements and procedures
- e) Circumferences of Body Parts, Measurements and procedures
- f) Skinfold Thickness , Measurements and procedures

Unit-III:

Physiological Maturation:

- a) Decimal Age and concept of Physiological maturity in sports.
- b) Measures of maturity.
- c) Assessment of skeletal maturity of athletes.
- d) Prediction of adult values and its applications.

Unit-IV:**Body Composition:**

- a) Anthropometric, determination of body composition.
- b) Importance of body composition in sports.
- c) Various methods to estimate body composition

Unit-V:**Somatotyping**

- a) Introduction, Definition of Somatotyping.
- b) Heath – Carter method of somatotyping.
- c) Sheldon's method of somatotyping

References:

- 1) Sports Anthropometry by H.S. Sodhi, ANOVA Publication.
- 2) Physique and Selection of Sportsmen by H.S. Sodhi and L.S. Sidhu.
- 3) Kinanthropometry by S.P. Singh and P. Malhotra, Luna Publication, Patiala.
- 4) Kinanthropometry by Roger Eston and Thomas Reilly, E & F.N. SPON, London.
- 5) Skeletal Maturity by S.P. Singh, L.S. Sidhu, and J. Singh, Human Biology Publication Society, Punjabi University, Patiala.
- 6) Genetic and Anthropological Studies of Olympic Athletes by De Garray, Louis Levine & Cater, Academic Press, London.
- 7) Human Biology by Harrison et al, Oxford University Press, Oxford.