M.P.E. (PART-I)

Paper : I Research Methods And Statistics

OBJECTIVES :-

(i) To enable the students to delimit a Problem-area for research and design the research proposal.

(ii) The students would be able to select appropriate sample for formulating and testing the given hypothesis.

(iii) To enable the student to prepare a research report using proper mechanics of thesis writing.

(iv) To develop among students ability to select the proper statistical data, to draw infereness and interpret the results of statisyical analysis.

(v) To acquaint the students with the statistical aspect of research design.

(vi) To enable the students to understand statistical data presented in different forms in research reports and publications.

M. P. E. (PART-I)

(Theory)

Paper-I: Research Methods and Statistics.

Topics Section - I

1. Meaning of Research :
   Need and importance
   Scope of Research
   Importance of Philosophical Studies

2. Types of Research :
   Pure Research, Applied Research,
   Action Research and Historical Research.

3. Formulation and Development of Research Problem :
   Location of Research Problem
   Criticia in Selecting the Research Problem Hypotheisis
   Report Writing.

4. Survery of Related Literature :
   Need to Survery related Literature
   Library Sources and reading

5. Survey and case Studies :
   (A) Survey by Questionnaire :
   Development of questionnaire.
   Administrating the questionnire

   (b) Interview : Characteristics of Interview.

   (c) Case Studies : Need of Case Studies

6. Experimental Research :

   Nature and Meaning of Experimental Research, Laboratory Experimentation Vs. Field Experimentation.
   Different Experimental Designa.
   Control of Factora in Experimentation.

7. (a) Define Characteristics of Survey Methods and limitations of Survey.

   (b) Major Areas of Research.

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Topics :

1. Entroducation :
   Meaning, Nature and Head of Statistics.
   Types of Statistical Prosess : Descriptive Comparative, Relationship, Inferential Predictive
   Quantitative Data - Attributes and Variables.

2. The Normal Curve :
   a) Definition of Normal Curve.
   b) Principle of Normal Curve,
   c) Properties of Normal Curve.
   d) Divergence From normality - Skewness and Kurtosis
   e) Scoring Secles - Sigme Seale, Z Seale, T Seale.

3. The Significance of the Mean and of Other Statistics;
   a) The Meaning of Statistical Infere
   b) The Significance of the Mean and of the Median
   c) The Significance of Mea res of varruiabrility
   d) The Significance of Percentages

4. Reliability :
   a) Meaning of Reliability and Factors effecting Reliability
   b) Significance of Difference between Means. T- test and
      F-test.
   c) Type I and Type II errors

5. Testing Euperimental Hypothesis :
   a) Difference between parametrice and wow - parametrice Statistics.
   b) The x (Chi - Sa) test and the Hypothesis.

6. Correlation :
   a) Meaning of correlation.
   b) Computing correlation using folding methods.
      i) Product Moment Method (Ungrouped and grouped data)
      ii) Rank difference method.
      iii) Sum of the squares method.
   c) Level of significance for correlation coefficients.

(4)

References Books :

(1) Clarke David H. and Clarke, H. Harrison. Research Processes in Physical Education. Recreation and Health, Englewood cliffs, New Jersey, Prentice Hall Inc., 1979

2. Aggarwal, J.C. Education Research - An Introducation New Delhi : Arya Book Depot 1966

3. Best John. Research in Education. New Delhi : Prentice Hall of India (Pvt.) Ltd. 1963.

4. Mouly, George J, The Science of Educational Research New Delhi Eurasia publishing House (Pvt.) 1963.

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7. Clarke, H. Harrison, The Application of Measurements in Health and Physical Education, New York : Prentics Hall, Inc. 1967.

8. Garret, Harry E. and Woodworth R.S. Statistics in Psychology and Education. Bombay : Applied Pacific Private Ltd, 1958.

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M.P.E. (Part - I)

Paper -II Measurement and Evaluation in Physical Education.

OBJECTIVES :

(i) To develop within the Prospective Physical Education teacher a greater understanding and appreciation of the need and the application of tests and measurements in the evaluation process.

(ii) Students would appriciate the need to have a wide range of test material in the school.

(iii) Students enable to identify problems involved in isolating and measuring the particular components of performance.

(iv) Students would be able to select, administer and score the tests as well as able to interpret the results for decision making.

M.P.E. (Part-I) Paper -II

(6)

MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION.

1. Introduction :

meaning of the terms meansurement and evaluation, nature and scope of measurement and evaluation programme. Need and importance of measurement and evaluation in the field of Physical Education.

Principles of Measurement and Evaluation Programme.

2. Test Evaluation :

Criteria of Test Selection. Scientific Authenticity, (Reliability, validity, objectivity, norms) Administrative feasibility and Educational application.
Classification of test standardised and teacher made tests objective and subjective tests.

Construction of tests - knowledge tests (written tests) and skill tests.

Steps in constructing knowledge and skill tests.

3. Measurement of Organic functions

Cerdio vascular respirarory function-cooper's 12 minutes continuous run/walk test, Tuttle pulse ratio. test.

Harvard step test and its modifications.
Human's cardio pulmonary Index (CPI)
Motor fitness :
Orgen Motor fitness test. AAHPER Youth fitness test, J.C.R. Test, Indian Motor Fitness test.

Strength :

Rogers Physical fitness index and suggested changes in the PFI test. Kraus weber muscular test. Measures of posture and body mechanics - Cureton Postural Measurement. Iowa Posture test. anthropometric Measurement. Medical Examination. Vision tests. Audiotory tests. Tests of General Motor ability Mc. Cloys general motor ability and

(7)

4. Measurement of Social Efficiency :

Mc. Cllys behavious rating scale.
Co. well social behaviour trend index.
Social Distance scale.
Sociometric Questionnaire.
Mental Health analysis.
Washburn's social adjusment inventory.

5. Administrative Problems :

Suggestions for administring tests.
Medical examination.
Testing personal
Time and testing.
Economy of testing.
Test records.
Preparation of reports.
Construction of table-groups.
Purpose of reporting
Justification of particular phases of the programme.
Worth of a change in methodology.

.....

REFERENCE BOOKS :

1. Lesson L.A. & Yocom R.D. Measurement and Evaluation in Physical Health & Recreation Education, St.Louis:C.V. Mosby C. 1951.

2. Mathew, Donald, Measurement in Physical Education London, W.B. Saunders and Co. 1973.

3. Clarks H. Application of Measurement in Health and Physical Education, Prentics Hall Inc. 1967.

4. Sports Gladys M. Ged Research Methods applied to health Physical Education and Recreation 2nd Edn. Washington, Dog. American Association of Health - Physical Education and Recreation, 1959.

5. Encyclopaedia of Sports Sciences and Medicine.

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M.P.E. (Part - I)

(8)

Paper - III Exercise and Sports Physiology

OBJECTIVES :-

(i) To enable the students to made more adequate and extensive explanations of the Physiological events associated with the performance of work, sport and other Physical exercise.

(ii) To provide information about the Physiological systems primarily involved in work and how they can be modified by training.

(iii) Students can be aware of muscular system including structure, function, chemical reaction during contraction.

(iv) To acquaint the students with the effect of nutrition, alcohol, drugs, and smoking on athletic performance.

* * *

M.P.E. (Part - I) PAPER-III

EXERCISE AND SPORTS PHYSIOLOGY (9)

1. Skeletal Muscle, Structure and function :
Cross structure of skeletal Muscle, microscopic structure, structure of the myoflbrill and contractile meachanism, muscular basis of the contraction of skeletal muscle.

2. BIOENERGETICS :

Fuel for muscular work, chemical composition of skeletal muscle, Energy for muscular contraction and biochemical changes during muscular contraction. Heat production and thermodynamics of muscle contraction.

3. Neuron - muscular junction and co-ordination of muscular Activity : Neuron and motorunit transmission of nerce impulse, bio-electric potentials, neuro-muscular junction and transmission of nerve impulse across it.

Propiocaption and kinesthesis, Tone, posture and equilbrium.

4. Physiological changes due to exercise :

Effect of exercise and training on (i) heart and circulatory systems, (ii) hespiratory system. (A) Brief discussion on other systems. Oxygen debt, forced expiratory volume, Breathing Capacity, hecovery rate, Blood supply to skeletal muscle and regulation of blood flw during exercise. Aerobic and anaerobic muscular activity. second wind.

5. Other Physiological aspects of Exercise and Sports :

Concept of Physical fitness and physical training, warming up, conditioning and fatigue, Physiological aspects of development of strength, endurance skill speed agility and co-ordination. Work capacity under difference environmental condition hot humid, Cold high attitude.

6. Nutritional aspects of athletic performance and the effect of alcohol, drugs smoking on athletic performance.

7. Energy cost of various sports activity.

Conted.... 2.

RERERENCES :-

1. Guyton-A.C. : Text Book of Medical Physiology W.B. Saunder Company, Philadelphia, 1976.

2. De. Vries, H.A. : Physiology of Exercise for Physical Education and athletics, Staples Press, London, 1976.

3. Karpovichmp.V. and Sinninh W.E. :Physiology of muscular Activity.

4. Bourne G.H. The structure and Function of Muscle, Academic Press, London, 1972.

5. Morehouse L.E. & Miller A.T. Physiology of exercise, C.V. Mosley Company, Saint Louise 1976.

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7. Mathew D.K. & fox E.L. Physiollgical Basis of Physical Education & athletics W.B. Saunders Co. Philadelphia 1976.

M. P. E. (PART - I)

PAPER - IV : PSYCHOLOGY OF PHYSICAL EDUCATION AND SPORTS

OBJECTIVES :-

(i) The student would be able to develop a deeper understanding of correlates of skill learning and sports performance in the context of human growth and development.

(ii) The student would be able to appreciate the contribution of sports psychologist in relation to the theories of learning for the enhancement of sports performance.

(iii) To enable the student to interpolate changes in behaviour of sportsmen on and off the field of sports.

(iv) The students would be able to understand the problems of adjustment in sports and their significance in fiew of the dynamics of personality and social environment.

M. P. E. (PART-II)

PAPER-I SCIENTIFIC METHODS OF TRAINING AND COACHING

OBJECTIVES :-

(i) To enable the student to under stand the general theory and methods of training in a systematic manner.

(ii) It gives basic infonmation about the various aspects of sports training to the teacher, coaches, students and sports scientists.

(iii) To enable the students to improvement of Physical fitness and acquisition of motor skills.

(iv) To acquaint the students with the education improvement of mental capabilities and tactical efficiency through Sports training and competition.

SOUTH GU[illegible]

M. P. E. (PART - I) PAPER-IV

PSYCHOLOGY OF PHYSICAL EDUCATION AND SPORTS.

1. The meaning, nature and scope of Sport Psychology, development of Sport Psychology relationship of Sport Psychology with other Sport Sciences.
2. Importance of Sport Psychology for Physical Education Teacher.
2. Growth and development, factors affecting growth and development. Individual differences and their influence on physical activity.
3. Psychological aspects of action-regulation. Importance of action regulation in physical activities, Psychological characteristics of physical activities, the structure of action programme.
4. Personality:
   Meaning of a personality, personality traits of sportsmen, Relationship of personality to sport performance personality difference among various sport groups.
5. Cognitive Process in Physical activities, characteristics of cognitive process in sports. The importance of sensation and perception in physical activity. The function of thinking and imagination in physical activity. The role of memory in Physical activity.
   The importance of attention in Sport and its relationship with cognitive process.
6. Motor learning :
   Development of motor learning, factord that affect motor learning motor skill acquisition, sense-motor learning.
7. Motivation, meaning of motives, Role of motives attitudes, interest of physical activity.
   Importance of motivation in motivation in peak performance.
8. Emotion, meaning and types of motions, specific emotional process in physical activities, Level of aspiration and emotion (Sucess and failure), stress, fear, frustration, sonflict and its effect on sport performance.
9. Socio-Psychological aspects of physical activities, The importance of social character of physical activity, Sports performance in groups, sociometry in Sports, Leadership in Sports, Type & qualification of Leaders, cooperation in Sports. Relationship between athlets and physical education Teacher / Coach.
   Sport audience and their effect on the performance of the athlete.

10. Problems of Psychological lead in Sports, Meaning of Psychological load in sport, how to reduce mental load. performance and will power (Volition).
11. Methods of investigation in sports psychology. Its importance various methods used in sport psychology. Difference tests to be . used in sports.
12. Psychological aspects of competition. Psychology of Sports Competition, Psychological characteristics of pre-competition, competition and Post competition. Psychoregulative procedure in Sports. Details of selected Psycho-regulative procedures for activation and relaxation. (Autogenic training and ideomotoric training).
13. Psychological aspects of long term and short term preparation for competition.

REFERENCE BOOKS :-

1. Butt Dorces Susan Psychology of Sport, New York; Van Nostrand Reinhold Company 1976.
2. Cratty Brant J. Movement Behaviour and Motor learning Philadelphia; Lea & Febiger 1976.
3. Crately Brant J. Psychology and Physical Activity Englewood Cliffs, New Jersey; Prentice Hall Inc. 1968.
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6. Singer Robert N. Motor Learning and Human Performance New York, Macmillan Publishing Co. Inc. 1975.
7. Singer Robert No., Coaching athletics and Psychology New York, Mc Graw-Hills Book Com. 1972.
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9. Tutke and Richarks, Psychology of Coaching Boston: Allyn and Bacon, Inc. 1971.
10. Vanek Mirostay and Bryant J. Cratty, Psychology and Superior Athlete, New York, Macmillan, 1970.

M. P. E. (PART-II)

Paper - I Scientific Methods of training and Coaching

OBJECTIVES :-

(i) To enable the student to under stand the general theory and methods of training in a systematic manner.

(ii) It gives basic information about the various aspects of sports training to the teacher, coaches, students and sports scientists.

(iii) To enable the students to improvement of Physicsal fitness and acquisition of motor skills.

(iv) To acquaint the students with the education, improvement of mental capabilities and tactical efficiency through Sports training and competition.

M. P. E. (PART-II) PAPER-I

SCIENTIFIC METHODS OF TRAINING AND COACHING

1. a) A brief historical sketch of development of competitive sports in India.
   b) Historical development of coaching schemes in India.
   c) Philosophy of coaching and Qualities of a coach.
   d) Function of Competitive Sports.

2. Sports Training :
   Aims, Tasks, and characteristics, Principles of sports training.

3. Training Load :
   Important features of training load (Intensity, Density, Duration and frequency). Principles of Training load, Relationship between load and adoptation, conditions of adaptation, principles of over load.

4. Training for important Motor Components :
   a) Strength : Farms of strength, characteristics of strength, principles of strength training, strength training means and methods; strength training for children and women.
   b) Endurance - forms of endurance, characteristics of endurance training means and methods.
   c) Speed : Forms of speed, characteristics of speed, speed training means and methods.
   d) Flaxibility - Forms of flexibility, characteristics of basis of flexibility, Methods of Development of
   e) Co ordinative Abilities - characteristics of coordinative abilities, importance of co-ordinative abilities, classification coordinative abilities, training means & methods.

5. Technical preparation - Fundamentals and methods for the development of technique in sports - stages of technical training causes and correction of faults.

6. Tactical preparation - Tactical concepts, methods of tactical training.

7. Psychological preparation - General Psychology of a coach and his trainees, physiological preparation for competition, individual difference, Development of will power.
8. Training Plans. Long term & short term plans, periodisation (Single, double & triple) cyclic process of training.
9. Planning of competition - Main and build up competitions, Competition frequency, preparation for competition.
10. Diet - Diet for sportsmen during training and competition. Time for diet use of drugs and their ill effects.

REFERENCE BOOKS :-

1. Cratty, B; Perceptutal and Motor Dvelopment in Infants and children. Prentice Hall, 1979.
2. Dick. F. W. Sports Training Principles, Lepus, London, 1980.
3. Jenson, C. R. Fisher, A. G. Scientific Basis of Athletic conditioning Len and Febiger, Philadelphia, 1972.
4. Matveyew, L. P. Fundamentals of Sports Training (Translation from Russian) Mir Publishers, Moscow, 1981.
5. Pyke, Frank. S; Towards better coaching, Australian Government Publishing Service Canberre, 1980.
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7. Willmore, J. N. : Athletic Training and Physical Fitness, Allynand Bacon, Inc. Sydney 1977.

M.P.E. (Part-II)

Paper-II Sports Medicine

OBJECTIVES :-

(i) To enable the students to understand the scientific promotion of sports and games.

(ii) To devlop the concept of prophylactie health care.

(iii) To acquaint the students with the Sports medical extensive service.

(iv) To promote health and to increase the adjustability of the human beings to the living conditions, changing within the process of scientific and technological revolution.

M.P.E. (Part-II) PAPER-II

SPORTS MEDICINE

I. Introductory :

Definition, meaning and concept of Sport Medicine.
Scope and importance of the subject.
Short history of Sport Medicine of Modern Times.

II. Physical Fitness :

Concept, definition, measurement and maintenance of Physical Fitness.
Factors influencing fitness.
Types of fitness.

III. Scientific Basis of Sports Medicine :

A. Physiological Aspects :
1. Bio-chemical changes during exercise in following system
2. Role of Endocrines in Exercise.
3. Neuro-muscular mechanism.
4. Physiology of strength, endurance and fatigue.

B. Psychological Aspects :
1. Personality dynamics, individual differences, Heredity and Environmental factors.
2. Perceptual motor learning.
3. Motivational factors.
4. Stress and Strain in competition.
5. Women in Sports, Aging and Sports.

C. Conditioning and Training :
1. Importance and purpose of conditioning. General principle of conditioning. Balanced conditioning programme.
2. Various Methods of specific Training Programme.
3. Nutrition and its role in conditioning.
4. Care and problems of Sportsmen, refree during and after competition.

D. Pathological Aspects :
1. Injuries in relation of sport.
2. Pathology of Softt issue injuries such as Sprain, strain, confusion abrasion-cuases, symptons and first-aid.
3. Fractures-Kinds, causes, symptons and First-aid.
4. Dislocations-Shoulder, Knee, elbow, wrist, fingers, cuases, symptons and principles of management.
5. Other common injuries.

E. Sports Physiotheraphy- massage, postural defects and correction: Hydrotheraphy, Saunabath, electrotherapy and

IV. Prevention, Management and Rehabilitation of Sports Injuries:

1. Machanism of injury production in Sports and preventable measures. Role of Physical Educator, coaches and trainers
2. General Principles of safety in sport.
3. Sports Safety-meaning, concept and importance.
4. The needs for protective equipment in sports.
5. Prevention of Injury-Principles of prevention of injuries in Sport.
6. Doping and drug hazards in Sport.
7. Sport Hygiene-Clothing, Skin care, habits, social hygience, Equipment and Apparatus, Care and cleaning.

BOOKS RECOMMENDED :

1. Ryan, A.J.& Fred L.Allman (Edn.) Sports Medicine, New York, Academic Press 1974.
2. Williams, J.G.P. and P.N. Sporryan (Edn.) Sports Medicine, London, Edward Arnold Pub., 1976 (2nd Edition).
3. Williams J.G.P. Medical Aspects of Sport and Physical fitness, London, Pergamon Press, 1965.
4. Morehouse, L.E. & P.J. Resch: Sport Medicine for trainers, London, W.B. Saunders Company, 1974 (2nd Edn.)
5. Johnson, W.R. (Edn.) Science and Medicine of Exercise & Sport, New York Harper & Row Pub., 1966.
6. The Encyclopedia of Sport Science and Medicine, New York, Macmillan Company, 1971.
7. Falls, H.B. (Edn.) Exercise Physiology, New York, Academic Press, 1968.
8. Lee, M & M.M. Wagner : Fundamentals of Body Mechanics & conditioning New York, Greenwood Press Pub., 1949.
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11. Sorani, R.P. : Circuit Training. Babuque Iowa, W.M. C. Brown Co., Pub., 1966.
12. Aahper : Sports Safety, Washington.
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14. Johnson, P & D. Stolberg: Conditioning: New Jarsey, Prentice Hall, Englewood Cliffs, 1971.

Paper-III : Mechanical Analysis of Motor Movements

OBJECTIVES :-

(i) To provide a sound scientific basis for the analysis of the techniques used in Sports for the physical Education teachers, Coaches and others.

(ii) Students would be able to record and analyse biomechanicaly every human emotion which can be expressed in movements.

(iii) To acquaint the students to improve the analysis of all sport movements which enalble a better instruction.

(iv) Students would a knowledge of the biomechanical principles involved might well enhance the performance of an already skilled athlete.

MECHANICAL ANALYSIS OF MOTOR MOVEMENTS

1. Movement Analysis : Fundamental skills, kinesiological Analysis Bio-Mechanical Analysis.

2. Need and scope of Mechanical analysis - Diagnostic Teaching and coaching and Research.

2. Algembraic and trigonometrical concepts - Sympobic Representation of data, algebraic equations. sine, Cos. Tan, Summation and resolution of vectors graphic representation of numerical data.

3. Units of measurements - Fundamental and Derived Units. (Metric) Powers of tenmsignificant figures, common logerithms.

4. Definition and principles of application Derived from the following concepts :

   (i) Motion - Rectilinear motion, circular motion, inertia, egnilibrium (stable, unstablemneutral (Newton's laws of motion, acceleration, speed, Velocity, uniformacceleration uniform velocity, Radians, augular velocitymangular acceleration, relationship of lenear to rototary motion.

   (ii) Force, work, power, Energy-potentital and Kinetic Energy, Mass, weight, force of Gravity, projectiles.

   (iii) Momentum : Centripetal and centrifugal forces.

   (iv) Lever-parts and laws, Principles, uses and characteristics of body levers.

   (v) Friction - Kinds and laws of coefficient of friction Air resistance, Spinning, Swerving (curbing) water resistance

   (vi) Elasticity - Law of impact.

5. Use of mechanics in skillful performance - optimum use of force for desicable goals in sports.

   Use of body weight in Sports movements, structure of equipment dependent on application of mechanical principles.

6. Mechanics of Fundamental Skills- Walking, Running, Jumping, Throwing, Catching, Pulling, Rolling, Climbing, Swinging, Crawling and lifting.

7. Application of Mechanical Principles in Athletics, Gymnastics Swimming, Diving, Cricket, Football, Hockey, Volleyball, Basketball, Weight Lifting, Tennis.

8. Computation of problems using the formulas listed below to develop in sight into sports performance.

$$s = ut + Ps\ 1/2\ at^2$$

$$V = U + at$$

$$V^2 - U^2 = 2as$$

$$P \times PA = R \times RA$$

$$M = mv$$

$$e = \frac{V_2 - 1}{U_1 - U_2}$$

$$e = \sqrt{\frac{hb}{ub}}$$

$mi\ ul + m2\ Uz = ml\ vl + m2$ for perfectly alastic bodies

$$Vl = \frac{(ml + em2)\ Ul + (1 + e)\ m2\ u2}{ml + m2}$$

$$V2 = \frac{(ml + eml)\ u2 + (1 + e)\ ml\ ul}{ml + m2}$$ for imperfect elastic bodies.

$mlul + m2\ u2 + (ml + m2)V$ for inelastic bodies.

Moment of force = F length of the moment arm.

$$F = \frac{mv^2}{r}$$

$$Tan = \frac{V^2}{gr}$$

$$V_l = V_r \times r$$

$$D_l = D_r \times r$$

$$W = F \times d$$

$$W/t = PV$$

$$PE = mgh$$

$$KE = 1/2\ mv^2$$

$$C = P/W = Tan\ O\ (Tan\ theta)$$

REFERENCE BOOKS :

1. Broer Merion R. Efficiency of Human movement London: W.B. Sanders Co.
2. Bunn John W. Scientific Principles of Coaching.
3. Dyson Groffrey Ch.G. The Mechanics of Athletics London University of London Press Ltd.,
4. White, Horvery R. Modern College Physics : New York D. Van Nostrand Company.

M.P.E. (Part-II)

Paper - IV Professional preparation in Physical Education.

OBJECTIVES :-

(i) To enable the students to acquire knowledge of ideals of Indian Democracy and educational policies which contribute to Physical Education.

(ii) To understand the role of central Government in education and professional preparation.

(iii) To evaluate the preparation of Professional personnel.

(iv) To enable the non-official agencies in improving profession preparation.

(v) To compare the status of professional preparation in different countries.

PROFESSIONAL PREPARATION IN PHYSICAL EDUCATION

I. Foundation of Professional preparations :

a) Ideals of Indian Democracy - Contribution of Physical Education - Forces and factors affacting educational policies.

b) Contribution of Physical Education Health Education and Recreation to Education.

c) Forces and factors affecting education policies and programmes social, religious economic and political.

d) Education and professional preparation in Physical Education - A state subject.

e) Accrediation and Certification - A state function.

f) Role of the Central Government in education and professional preparation-relationships of central and State Governments.

g) Role of non-official agencies in improving professional preparation. Voluntary accreditating agencies, professional Associations.

II. Professional preparation in Physical Education :

a) Historical review of professional preparation in India.

b) Curriculum - old and new concepts, mechanics of curriculum planning.

c) Basic Principles of curriculum construction.

d) General Education - its aim and purposes in professional preparation, organisation in general education, preparation of general education, allied and foundational subjects and Professional knowledge in the curriculum for professional training at various levels.

e) General professional education - Aims and object pattern of general professional education, qualification desirable in all teachers.

III. Under graduate preparation of professional personal-Areas of Health educational physical education and Recreation. Purposes of undergraduate preparation-admissions. Guidance of students curriculum. Laboratory experiences, Field experiences, Teaching Practice, Professional competencies to be developed-Facilities and special resources for Library-Laboratory and Rosscor-staff placement and follow-up, guidance and follow-up.guidance and

follow-up accreditating authorities state education Boards and Universities.

Post Graduate preparation of professional personnel : Purposes of post-graduate studies, admission requirements, curriculum, area of specialization and concentration on core areas, Research requirement Methods of instruction, special qualifications of staff teaching at post-graduate levels, professional relations.

General Principles of Management of school and services rendered by the school, apprenticeship, on the job projects, surveys and reports critical appraisal of existing types of post-graduate programmes.

Comparative study of professional preparation in Physical Education in India with those of USA, U.S.S.R. and U.K.

In-service Education of Professional personnel. Nature and scope of service Education, Responsibility for in service training, Role of Administration. Physical Education training Institutes, Supervisors specialist teachers the professional and in-service training programmes in service education through individual effortes.

Evaluation in the preparation of professional personnel. Definition and purpose of evaluation. Importance of Evaluation, Measurement and evaluation-steps in Evaluations process and its application to Physical Education professional preparation programmes.

Employment Trends :

Job specialisations: Professional Preparation in allied areas (Education, Labour welfare, Youth welfare, student councelling- Dean of students.)

Reference Books :

1. Brown C. and Cassody T. : Theory in Physical Education, Philadelphis, Lea and Faebiger, 1963.
2. Cassidy R. : Curriculum Development in Physical Education, New York, Harper and Brothers, 1954.
3. Cowell, CC and Hazeltar, W.W. : Curriculum Designs in Physical Education Englewood Cliffs, N.J. Prentice Hall, 1955
4. Humphry J.N. : Child Learning, Babuque, IDEA, W.M.C.Brown Co. 1963.
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7. Snyder, R. and Scott.H.A. : Professional Preparation in Health, Physical Education and Recreation, New York McGraw Hill Book Co.Inc.1954.
8. Irvin Leslia, : Curriculum in Health, Physical Education St. Louis, The C.V. Mosby Co. 1948
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