

Philosophical and Scientific Basis of Physical Education.OBJECTIVES :

1. To acquaint the student with the general philosophical background of education and physical Education.
2. To help the student to understand the Biological and sociological foundations of physical Education.
3. To acquaint the student with social dimensions of sports.

UNIT I * Philosophical Foundations of Physical Education.

- i.) Philosophy of Education.
- ii) Philosophy of Physical Education.

UNIT II

- i) Physical Education as Art and Science
- ii) Philosophy of Yoga - Related to physical practices (Yogasanas & Pranayam)

UNIT III

Educational Philosophies in relation to Phy. Edn.

- i) Progressivism (ii) Perennialism
- iii) Essentialism (iv) Reconstructionism

UNIT IV

- i) Development of Democratic Values.
- ii) National integration through sports & Edn.
- iii) Aesthetics of sports and Physical Education.

UNIT V Sociological foundations of Physical Education.

- i) Social environment for the development of Personality.
- ii) Social Motivation Group dynamics.
- iii) Leadership ; social welfare
- iv) Competition and Co-operation
- v) Socio-Economic status and physical Education.

UNIT VI - Biological Foundations of Physical Education.

- i) Evolution, the interplay of structure and ~~few~~ function, Bone growth and development big muscle-activities, health of the organism, adaptation.
- ii) Mechanisation and Automation of work, play and industry.
- iii) Biological weaknesses
- iv) Anatomical & Physiological basis.

UNIT VII - Social Dimensions in Sports

- i) Culture and sports.
- ii) Social status and mobility
- iii) Spectators and their influence on performance
- iv) Race and Ethnic differences in Sports.

UNIT VIII - Contribution from other sciences.

- i) Kinesiology and development of motor skills
- ii) Pedagogical principles.

Books Recommended :

1. Bucher, C.A. : Foundations of Physical Education
(Saint Louis C.V. Mosby Co. (7th Edition 1975).
2. Barrow Harold : Principles of physical education,
Man & Movement (Philadelphia Lea & Febiger, 2nd Ed 1977.
3. Frost, Reuben B. Phy. Edn. Foundations, Practices
Principles (London, Addison, Wesley
Publishing Co, 1975)
4. Singer Robert W. Physical Education : Foundations,
(New York, Holt-Rinehart & Winston 1976)
5. Richard S. Rivasnas. Foundations of phy. Edn. (Houghton
Mifflin co. Boston)
6. Covell, C.C. & Philosophy & Principles of phy. Edn.
France, W.C. (English cliffs, Prantice hall)
7. Zeigler E.F. Philosophical Foundations for phy.
Edn, Health, Recreation,
(Englewood cliffs, R.J. Prantice Hall)

PAPER II

Psychology of Physical Education & Sports

OBJECTIVES :-

- 1) To acquaint the student with the knowledge of psychologist facts for effective teaching and coaching.
- 2) To develop in him the ability to apply the principles of psychology of physical education and sports to various situations.
- 3) To acquaint him with some of the psychological features which influence the professional growth and mental health of the teacher.

UNIT I - Meaning & Necessity of sports psychology. General factors affecting sports learning & Programme.

UNIT II - Learning.

- a) Theories of learning
- b) Motor learning & Corrodination of Movements.
- c) Reinforcement, Retention of Motor skills.
- d) psychology of conditioned.
- e) Extinction, Excitation and inhibition.

UNIT III + Perception in Sports

- 1) Chain from motor movement to perception
- 2) Mental practice and perception.
- 3) Kinesthetic sense and perception.
- 4) Perceptual development and factors affecting perceptual discrimination,
- 5) Development of highest level of performance as effect of motor skill and perception.

UNIT IV - Emotions & Adjustment.

- a) Emotions -
 - i) Theories of emotions.
 - ii) Relation, between sports & emotions.
 - iii) Activation, Agression and Anixety.
- b) Adjustment -
 - i) Conflicts & Frustration competitions.
 - ii) Effect of exercise and sports on mental and spcal health
- c) Adjustment for the Handicapped -
 - i) Injuries & Psychological adjustment.
 - ii) Adjustment to physical impairment.

- iii) Play and physical education diagnosis and treatment of maladjusted.

UNIT V - Motivation & Sports

- i) Physiology of Activation.
- ii) Sports competitions & Motivation
- iii) Praise, blame - incentives
- iv) Level of aspiration

UNIT VI - Group Dynamics

- i) Individual & group interaction.
- ii) Group aspirations & Achievement needs.
- iii) Stability of group membership, communication and size, composition & structure of groups.
- iv) competition within & between the groups.
- v) Leadership & fellowmen attitudes.

UNIT VII - Personality & Sports.

- i) Personality theories
- ii) Personality measures for athletes
- iii) Personality traits.
- iv) Personality of the coach.

UNIT VIII - A behavioural analysis of sports.

Definition of term participation, professionalism, punishment in sports, the Extinction process in sports dismissal Training, competition and co-operation, aggression, Attitudes towards sports

Books Recommended :

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|-----------------------|---|
| 1. Bryant J. Cratty | <u>Psychology in contemporary sports</u>
(Prentice Hall Englewood) |
| 2. Fisher A. Craig. | <u>Psychology of Sports.</u>
(May field Pub.co.) |
| 3) Dorcas Susan Butt. | <u>Psychology of Sports</u> |
| 4) John D. Lewther : | <u>Sports Psychology.</u> |
| 5) John Dickinson : | <u>A Behavioural Analysis of sports</u> |
| 6) R.D. Alderman : | <u>Psychological Behaviour in Sports.</u> |
| 7. Singer Robert W. | <u>Myths and truths in sports psychology</u> |

PAPER III

Elements of Research in Physical Education.

OBJECTIVES :

- 1. To acquaint the student with the tools, techniques, and methods of Research in Physical Education.
- 2. To enable the students of to use various statistical measures in interpreting results of research physical Education.
- 3. To enable the student to be a better consumer of research.

UNIT I - Nature, need, and scope of research in phy. Edn.

UNIT II - Different areas and sources of research in phy Edn.

UNIT III - Steps involved in conducting research in Phy Edn.

UNIT IV - Types of research in physical education.

- i) Historical
- ii) Philosophical
- iii) Descriptive
- iv) Experimental. (General experimental research work, laboratory

Mechanical Principles & their application to sports

1. The need for and the scope of Mechanical analysis of movements in athletics and sports.

2. Review of the portion, done under body mechanics in B.ED. (Phy) Edn. course with special reference the following concepts.

Force motion, Newton's Laws inters equilibrium, centre of gravity leverage, speed, velocity, acceleration, centrifugal forces, force of gravity, mass, weight, Projectiled, potential energy, spinning and curving.

N.B. : (No question to be set on this portion in the examination)

3. Definition and principles of application derived from the following concepts.

Acceleration momentum angular momentum, moment of force, axis of rotation, axis of displacement, air resistance, water resistance, work power energy, kinetic energy, potential energy, elasticity, laws of impact.

4. Analysis of the techniques of different activities and principles of application for optimum performance. The discussion by guided as per guided as per the line followed in the part II of the book "Principles of Scientific Coaching" by Prof. J.W. Bunn. (choice of activities should invariably be given in question on this topic)

5. Elementary mathematical problems to make the concepts clear involving the following formulae and operations $F = ma$.

Relationship between velocity, distance, time and acceleration.

Resolution and combinations of vector quantities like force and velocity

Problems in projectiles calculation distances covered and time taken in long, high jump, diving and throws.

$$P \times PA + R \times RA$$

$$M = mv$$

$$e = \frac{v_2 - v_1}{u_1 - u_2}$$

$$0 =$$

$$m_1 u_1 + m_2 u_2 = m_1 v_1 + m_2 v_2 \text{ for elastic bodies.}$$

2) For imperfect elastic bodies,

$$i) m_1 u_1 + m_2 v_1 + m_2 v v_2$$

$$ii) v_1 = u_1 - \frac{m_2}{m_1 + m_2} (u_1 - u_2) (1 + e)$$

$$iii) v_2 = u_2 - \frac{m_1}{m_1 + m_2} (u_2 - u_1) (1 + e)$$

For inelastic bodies

$$m_1 u_1 + m_2 u_2 = (m_1 + m_2) v$$

Moment of force = $r \times d$ turning movement in starting gymnastic event.

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

$$\tan \theta = \frac{v^2}{r}$$

Relationship of angular motion to linear motion.

$$V = rw$$

$$W = fd$$

$$P = W/t = F \times v$$

$$P.E. = mgh$$

$$K.E. = \frac{1}{2} mv^2$$

Problems might jumped in relation to force applied.

$$\text{Coefficient of Friction } C = \frac{F}{W} = \frac{F}{R} = \tan \theta$$

PART II

6. Sports Training & Coaching.

Definition, Aim, Tasks, and characteristics of sports Trainings a long term and a short term process. The training of the talented athletes. The training of Top level athlete, prerequisites and conditions of attaining high sport performances.

7. The development of Conditioning in athletes.

Definition and characteristics of conditioning performance form. Means to develop conditioning. The training load. The development of through training Load. Important components of load. Relation between the load and adaptation. Overload and its effects. Principles of administering load. Principles of periodication and Rhythmical loading.

8. Principles and Methods of developing strength, Endurance, speed, flexibility and Agility.

Principles and methods of strength training. Characteristics of strength. Control of strength development. Strength training for children, Youth and women. Principles and methods of Endurance Training. Specific demands of Endurance in Various of speed. Specific demands of speed in various sport. Speed Training for Games. Principles and Methods of development flexibility. Control of flexibility. Principles and method developing agility. Characteristics and importance of agility. prerequisites - For developing agility.

9. Learning and perfection of the sports techniques. Role and importance of techniques in various sport, Pre-requisites for learning sport techniques.

10. Principles of sport tactics and Tactical Training. Aim, Tasks and characteristics of tactical training. Theoretical and practical Training of Tactics. Planning of Practical training.

11. Planning and organization of Training Process. Importance and functions of training plans. Forms of Training Plans. Performance, Control and tests. The Training unit or lessons. Pre and post consideration of a training Unit.

12. Special Special Problems of appearing for competitions. competitions and development. General principles in preparing for competitions. Preparation for the main competitions.

13. Hygiene and Diet for Athletes.

- 1) Hygienic measures for competitions
- 2) Use of medicament in Training competitions.
- 3) General diet of the athlete.
- 4) Diet on competitions and apparatus.

3) Care of equipment and apparatus.

Books Recommended :

1. Bunn, John W. Scientific Principles of Coaching,
(Englewood Cliffs, N.J. Prentice Hall)
2. Frank W. Dick Sports Training Principles.
3. Donna MacMiller : Coaching the female Athlete
4. Broer, Bernice R. Efficiency of human movement
(London, W.B.S. Under co.)
5. Dyson Geoffrey H.G. The Mechanics of Athletics, (London)
, University of London press Ltd.)
6. Sunder Rajan : Biomechanics of sports and Games.
7. James G. Hay Biomechanics of sports and Techniques.
8. Bucher. : Biomechanics of sports Techniques.

PAPER VI - OPTIONAL PAPER 'A'

TESTS & MEASUREMENTS OF PHYSICAL EDUCATION

OBJECTIVES :

1. To acquaint the student with different types of tests in physical education and the steps involved in the construction of a test.
2. To enable the students to select a proper test for a specific purpose and to administer it.
3. To enable the student to construct and validate a test.

UNIT

1. Modern development in physical education Measurements;
Broad survey of somatotyping and Anthropometry.
2. Need for and use of tests and measurements in physical education.
3. Principles of test construction :
 - a) Use of test classification, achievement, prediction, grading, diagnosis, motivating evaluation of programmes, guidance, research.
 - b) Selecting test items, trying out or items, standardising administering procedures, selecting, normative group, preparing test norms, alternative forms of tests.
 - c) Validation of test with respect to criteria, reliability, objectivity, normative group with special reference to motor fitness, motor skills and other measurable factors in physical education.
 - d) Test profile - The historic development in test construction with respect to items in physical education like physical fitness and the requirements for constructing tests to measure a single or cluster of factors.
 - e) Test Batteries (combination of tests)
4. Construction of Achievement tests. :
 - a) Revision of the theory of Evaluation done at B.Ed. (Phy. Edn) :- Objectives, specifications, Essay & Objective types of tests. The merits and limitations of different types of objective tests.
 - b) Principles of setting an essay test and grading it.
 - c) Speed and power type of tests.

- d) Principles of selecting items.
- e) Item analysis discrimination index, difficulty index quality of tests with respect to objective and test administration.
- f) Scores analysis (Mean, Variance, reliability, validity, percentiles)
- g) Norms, Standard and derived scores.

5. Criteria for selecting tests :
 Validity, reliability-objectivity-Administrative feasibility
 Economy, Norms, standard forms, simplicity, Standardised directions
 Accuracy and interpretability.

6. Critical review of various tests available with respect to their technical criteria and practical considerations and choosing the most appropriate test for a given situation. (1) Physical fitness tests (2) Motor fitness tests (3) Cardiovascular tests (4) General motor Ability tests (5) Motor Educability (6) Sports skills Testing (7) Sports Knowledge Tests.

7. Analysis and interpretation of test results.
 a) Regression and prediction, Interpretation of correlation.
 b) Concepts of partial and Multiple co-relation.
 (No question involving calculations will be set).
 c) Significance and reliability of difference between two statistical measures (Chapter 8,9,10 Garrett).

PRACTICAL WORK :

The practical work will involve preparing administering, scoring interpreting, evaluating and modifying one test in physical education.

Books Recommended :-

1. Barrow & Moque	<u>A Practical approach to measurement in physical Education,</u> (Lea & Febiger Philadelphia 1979).
2. Mathews	<u>Measurement in phy. Edn.</u> (W.B. Saunders Co. England)
3. Garrett H.E.	<u>Statistics in Psychology & Edn.</u> Allied Pacific Private Ltd., Bombay
4. Harrison E.F. Lindquist E.F.	<u>Design & Analysis of Experiments in Psychology and Education.</u> (Boston : Houghton Mifflin co.
5. H. Harrison Clarke.	<u>Application of Measurement to Health & Phy. Edn.</u>
6. Baumgartner & Jackson	<u>Measurement for Evaluation in Phy-Edn</u> (Houghton Mifflin co., Boston)
7. Purst Edward J.S.	<u>Constructing Evaluation Instruments.</u> (David McKay co. New York).
8. Anastitasi	<u>Psychological Testing</u> (Mac Millan co. New York).

PAPER VI + OPTIONAL PAPER B

PROFESSIONAL PREPARATION IN PHYSICAL EDUCATION.

OBJECTIVES -

- 1. To help the student to understand effect of various forces on educational policies. (viz. special religions economic etc)

2. To acquaint the students with role of the central Govt. state Govt. and Voluntary Associations - Promoting physical Education.
3. To acquaint the students with a brief historical perspective of teacher training especially in physical Education.

UNIT I - Foundations of professional Preparation :

1. Education, a force for democratic living, education for decision making in a democratic society. Opportunity for self realization for every citizen of a democracy. Creative education as facilitated by democratic procedure in education, democratic skills fostered by education.
2. The ideals of Indian Democracy as stated in the preamble to our constitution and our Philosophy of education.
3. Contribution of physical education, Health Education and Recreation to education.
4. Forces and factors affecting educational policies and programmes social, religious economic and political.
5. Education and professional Preparation in Phy. Edn. a state subject.
6. Accreditation and certification - a state subject.
7. Role of the Central Government in Education and Professional Preparation - relationship of central and state Govt.
8. Role of non-Official agencies in improving professional Preparation.
9.
 - a) Voluntary Accrediting agencies.
 - b) Professional associations.
10. Leadership and Promotion of profession.
 - a) Criteria of a profession.
 - b) Scientific and philosophical basis.
 - c) Selection of Leaders.
 - d) Types & Qualities of leaders & Leadership.
 - e) Ways and means to cultivate the qualities.

UNIT II - Under-Graduate Preparation of professional Personnel :

Areas of health Education, Physical Education and Recreation purposes of under-Graduate Preparation - Administration - Guidance of students - Curriculum. Laboratory experiences, field experiences, teaching, practices - professional competencies to be developed, Facilities special resources (Library, Laboratory, research) - staff placement and follow-up guidance and follow-up accrediting authorities - state Education Board, Universities.

UNIT III - Post-Graduate Preparation of Professional Personnel :

- a) Purpose of Post-Graduate studies, admission requirement, curriculum, area of specialization or concentration and co-areas, research requirement, Methods of instruction, special qualifications of staff teaching at post-graduate levels, professional relations.
- b) General Principles of management of school and service rendered by the schools, apprenticeship on the job projects, surveys and reports, critical appraisal of existing types of post-Graduate programmes.
- c) Comparative study of professional preparation in Physical Edn. in Indian with those in U.S.E., U.S.S.A.R. and U.K.

c) Evaluation in the preparation of professional personnel :
Importance of evaluation - steps in Evaluation process and its application in professional preparation.

Promotion of professional competence.

- a) Professional competencies - Jacksons Mill conference.
- b) Personal competencies.
- c) Stud. of self evaluation care - as follow up.
- d) Specialized skills.
- e) Service motive.
- f) Physical Fitness & Preparation for leisure.
- g) Programme re-curriculum in Physical Education.

UNIT IV - In-service Education of professional personnel :

Nature and scope of In-service education - Responsibility for in-service training. Role of Administration, physical education Training Institutes, Supervising Inspectors, Specialist teachers, the profession and In-Service Training programme In-service Education through individual efforts.

UNIT V - Sports - Physical Education and other activities in other than educational institutes.

- 1) Importance of sports and recreative activities in an industrial areas.

Sports festivals in industrial areas. Recreative activities as per the groups of workers & Kinds of jobs. Sports facilities in factories and industrial estates.

Sports as means of industrial developments.

Clubs, parties and social gatherings.

UNIT VI - Students, schools and community & Phy. Edu.

Profession and pedagogical principles.

- a) Class management - modern methods.
- b) Pedagogical principles and guidelines.
- c) Profession of physical educators and community.
- d) Health, physical education and recreation.
Personnel and community involvement.
- e) Development leadership in community.
- f) Certain programmes in community development.

UNIT VII - Sports - Physical Education and other activities in other than educational institutes.

- 1) Importance of sports & recreative activities in other than areas.

2) Use of sports for bringing the personnel together of different cadre level.

3) Sports festivals in industrial areas.

4) Recreative activities as per groups of worker and kinds of jobs.

5) Sports facilities in factories and industrial estates.

Sports as means of industrial development.

Books Recommended :

1. Harold M. Barrow

Hand & Move - Principles & Practices
(Lowe & Fabinger - Part VIII).

2. Reuban B. Frost : Phy. Edn. - Foundation - Practives & Principles
3. Snyder, R. & Scoot H.A. - Professiona (Addission Wesley serfices in Phy Edn.) Professional preparation in Health, Physical Education & Recreation, (New York, New crew Hill book co.)
4. Veudien, C.I. & Nixon J.E. The world Today in Health, Phy, Edn. & Recreation. (Englewood Cliffs, N.J. Prentice Hall).
5. Irwin, Leslie W Curriculum in Health & Phy. Edn. (St. Louis, The C.V. Mosby co.)
6. Cowell, c.c. & W.L. Philosophies & Principles of Phy Edn. (Englewood Cliffs, M.J. Prentice Hall)
7. Bucher C.A. Foundations of Phy. Edn. st. Louis, The C.V. Mosby Co.
8. Davis, Elwood & Earl, L. Wallis. Towards Better Teaching In Phy. Edn. (Englewood Cliff, N.J. Prentice Hall).

PRACTICAL WORK

- a) Study of institutions organising physical Education Programme.
- b) Preparing self evaluation card for teachers of physical Education.

PRACTICAL WORK - Contd...

Coaching in one sports.

Any one of the following sports may be taken up for intensive study from the point of view of advanced coaching.

Athletics, Badminton, Basket Ball, Cricket, Foot-Ball, Gymnastics, Hockey Lawn, Swimming, Table Tennis, Volley Ball, Kabaddi, Kho-Kho, Wrestling (for men Only). The syllabus in each sport will be as follows.

I. History and development of the sport.

- (a) In India
- (b) In Asia
- (c) In World

II. Organisation of the game.

- 9 (a) At National Level.
- (b) At International Level.

III. Organisation & Officiating

- (a) Rules and their interpretation.
- (b) Equipment-specifications.
- (c) Organisation of tournaments.

IV. Techniques of the sport, fundamental skill and their application.

V. Tactics and strategy.

VI. Training procedures.

VII. Planning coaching schedules.

VIII. Tests and measurements & Evaluation

(Points for a coaching lesson.)

- 1) Warming up & conditionship.
- 2) Techniques of the sport.
- 3) Training & coaching.
- 4) Tactics and strategy

5) Officiating and equipment-specifications