Ph. D Entrance Test Syllabus Faculty of Physical Education

Section B - Under Graduate Level

Unit-I: Foundation of Physical Education and Sports:

- a) Introduction, definition, aim, and objectives of physical education and other terms health education, recreation.
- b) Philosophies of education as applied to physical education- Idealism, Naturalism, Realism, Pragmatism, Existentialism, Humanism.
- c) Biological basis of physical activity- Benefits of exercise, growth and exercise, exercise and well-being, sex and age characteristics of adolescence, body types.
- d) Psychological basis of physical education- play and play theories, general principles of motor skills, equisetums, transfer of training, effects.
- e) Sociological basis of physical education-social process, social nature, physical activity, sports as cultural heritage of mankind, customs, traditions, and sports, competition & co-operation.
- f) Physical Education in ancient Greece, Rome & contemporary, Sweden, Denmark, Russia.
- g) Olympics Movement-Historical development of ancient and modern Olympic games.
- h) Physical Education in India.

Unit-II: Health Education:

- a) Health guiding principles of health and health education.
- b) Nutrition and dietary manipulations.
- c) Health related fitness, obesity and its management.
- d) Environmental and occupation hazards and first aid.
- e) Communicable diseases preventive and therapeutic aspects.
- f) School health program and personal hygiene.
- g) Theories and principles of recreation.
- h) Recreation program for various categories of people.

Unit-III: Psychology and Sociology of Sports Exercises and Physical Education

- a) Learning Process: Theories and laws.
- b) Motivation- theories and dynamic of motivation in sports.
- c) Psychological factors affecting sports performance, via sports, anxiety, Tension and aggression.
- d) Personality its dimensions theories Personality and performance.
- e) Individual differences and its impact of skills learning and performance.
- f) Group dynamics team cohesion and leadership in sports.
- g) Psychometrics, economics, politics in sports.
- h) Media and Sports.

Unit-IV: Management and Methods of Physical Education.

- a) Concept and principles of management.
- b) Organization and functions of sports bodies.
- c) Intramurals and extramural.
- d) Management of infrastructure, equipments, finance and personal.
- e) Methods and techniques of teaching.
- f) Principles of playing.
- g) Pupil teacher interaction and relationship.
- h) Concept and techniques of supervision.

Unit-V: Measurement and Evaluation in Sports and Physical Education

- a) Concept of Test, Measurement and Evaluation.
- b) Principles of Measurement and Evaluation.
- c) Construction and Classification of Test.
- d) Criteria of Test Evaluation.
- e) Concept and Assessment of Physical Fitness, Motor Fitness, Motor Ability, Motor Educability.
- f) Skill Test for Badminton, Basket Ball, Hockey, Lawn Tennis, Soccer, Volley Ball.
- g) Testing Psychological Variables Competitive Anxiety, Aggression, Team Cohesion, Motivation, Self-Concept, Anthropometric Measurements and Body Compositions.

Post Graduate Level

Unit-I: Research Process in Physical Education.

- A. Nature, Scope and types of Research.
- B. Formulation and selection of research problem.
- C. Sampling –Process and techniques.
- D. Method of research.
- E. Data Collection –tools and techniques.
- F. Statistical techniques of data analysis measures of central tendency and variability correlation, normal probability curve 't' test and 'f' test, chi-square 'z' test.
- G. Hypothesis Formulation, types and testing.
- H. Writing the Research Report.

UNIT-II: Kinesiology and Bio-Mechanics

- (a) Joints and their Movement Plans and Axis.
- (b) Kinetic, Kinematics Linear and Angular Motion, Levers, Projectile Laws.
- (c) Laws of Motion, Principle of Equilibrium and Force, Spin and Elasticity.
- (d) Posture, postural deformities and their correction.
- (e) Muscular analysis of various sports activities.
- (f) Mechanical analysis of fundamental movements (Running, Jumping, Throwing, Pulling and Pushing).
- (g) Mechanical analysis of various sports activities.
- (h) Massage Manipulation and therapeutic exercise.

UNIT-III: Science of Sports Training, Coaching and Officiating.

- (a) Characteristics and principles of sports training.
- (b) Training load and Periodizations.
- (c) Training method and specific training Programme for development of various motor qualities.
- (d) Short-term and long term training Programme, sports talent identification –process and procedures
- (e) Preparing for completion –(buildup competitions, main competition, competition, frequency, psychological preparation.
- (f) Rules of games and sports and their interpretation.
- (j) Technical and Tactical preparation for sports.

UNIT-IV: Physiology of Exercise and Sports Medicine.

- (a) Physiology of muscular activity, neurotransmissions and movement mechanism.
- (b) Physiology of respiration.
- (c) Physiology of Blood circulation.
- (d) Factor Influence performance in sports.
- (e) Bio-energy and recovery process.
- (f) Athletic injuries –their management and rehabilitation.
- (g) Therapeutic modalities.
- (h) Ergogemic acid doping.

UNIT-V: Professions Preparation and Curriculum Planning.

- (a) Development of teacher education in physical education.
- (b) Professional Course in sports and physical education in India.
- (c) Professional ethics.
- (d) Quality and qualification of physical education personnel.
- (e) Principle of curriculum planning.
- (f) Course content–for academic and professional course.
- (g) Age characteristic of Pupils and selection of activities.
- (h) Construction of class and school physical education time table.