Syllabus for the Recruitment Test for the post of Assistant Professor (College Cadre) in the subject of Physical Education

Unit – I

- Definition, aim and objectives of Physical Education, Health education and Recreation.
- Philosophies of Education as applied to Physical Education Idealism, Naturalism, Realism, Pragmatism, Existentialism and Humanism.
- Biological basis of physical activity benefits of exercise, growth and exercise, exercise. and well being sex and age characteristics of adolescent, body types.
- Psychological basis of Physical Education Play and Play theories, general principles of growth and development, Principles of motor skill acquisition, transfer of training effects.
- Sociological basis of Physical Education socialization process, social nature of men and physical activity, sports as cultural heritage of mankind, customs, traditions and sport, competition and cooperation.
- Physical Education in ancient Greece, Rome and Contemporary Germany, Sweden, Denmark and Russia.
- Olympic Movement Historical development of Ancient and Modern Olympic Games.
- Physical Education in India.

Unit – II

- Physiology of Muscular activity, Neurotransmission and Movement mechanism.
- Physiology of respiration.
- Physiology of blood circulation.
- Factors influencing performance in sports.
- Bioenergetics and recovery process.
- Athletic injuries their management and rehabilitation.
- Therapeutic modalities.
- Ergogenic aids and doping.

Unit – III

- Joints and their movements planes and axes.
- Kinetics, Kinematics-linear and angular, levers.
- Laws of motion, principles of equilibrium and force, spin and elasticity.
- Posture, Postural deformities and their correction.
- Muscular analysis of Motor movement.
- Mechanical analysis of various sports activities.
- Mechanical analysis of fundamental movements (running, jumping, throwing, pulling and pushing).
- Massage manipulation and therapeutic exercises.

Unit – IV

- Learning process theories and laws of learning.
- Motivation, theories and dynamics of motivation in sports.
- Psychological factors affecting sports performance viz., stress, anxiety, tension and aggression.
- Personality, its dimensions, theories, personality and performance.
- Individual differences and their impact on skill learning and performance.
- Group dynamics, team cohesion and leadership in sports.
- Sociometrics, economics and politics in sports.
- Media and sports.

Unit – V

- Development of teacher education in Physical Education.
- Professional courses in Sports and Physical Education in India.
- Professional Ethics.
- Qualities and Qualifications of Physical Educational Personnel.
- Principles of curriculum planning.
- Course content for academic and professional courses.
- Age characteristics of pupils and selection of activities.
- Construction of class and school Physical Education time table.

Unit – VI

- Health Guiding principles of health and health education.
- Nutrition and dietary manipulations.
- Health related fitness, obesity and its management.
- Environmental and occupational hazards and first aid.
- Communicable diseases their preventive and therapeutic aspect.
- School health program and personal hygiene.
- Theories and principles of recreation.
- Recreation program for various categories of people.

Unit – VII

- Characteristics and principles of sports training.
- Training load and periodization.
- Training methods and specific training programme for development of various motor qualities.
- Technical and Tactical preparation for sports.
- Short-term and long term training plans.
- Sports talent identification process and procedures.
- Preparing for competition (build up competitions, main competition, competition frequency, psychological preparation).
- Rules of Games and Sports and their interpretations.

Unit – VIII

- Nature, scope and type of research.
- Formulation and selection of research problem.
- Sampling process and techniques.
- Methods of research.
- Data collection tools and techniques.
- Statistical techniques of data analysis measures of central tendency and variability, correlation, normal probability curve, t test and f tests, chi square, z test.
- Hypothesis formulation, types and testing.
- Writing research report.

Unit – IX

- Concept of Test, measurement and evaluation.
- Principles of measurement and evaluation
- Construction and classification of Tests.
- Criteria of test evaluation.
- Concepts and assessment of physical fitness, motor fitness, motor ability and motor educability.
- Skill test for Badminton, Basket ball, Hockey, Lawn tennis, Soccer, Volley ball.
- Testing psychological variables competitive anxiety, aggression, team cohesion, motivation, self concept.
- Anthropometric measurements and body composition.

Unit – X

- Concept and principles of management.
- Organization and functions of sports bodies.
- Intramurals and Extramurals.
- Management of infrastructure, equipments, finance and personnel.
- Methods and Techniques of teaching.
- Principles of planning Physical Education lessons.
- Pupil teacher interaction and relationship.
- Concept of techniques of supervision.