PHYSICAL EDUCATION

SYLLABUS

- Introduction to and definition, aim and objectives of Physical Education and other terms—health education and recreation, Philosophies of Education as applied to Physical Education-Idealism, Naturalism, Realism, Pragmatism, Existentialism, 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.

- 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

- 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.

- 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, 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.

- 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 programme and personal hygiene, Theories and principles of recreation, Recreation programme for various categories of people.

- 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.

- 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.

- 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.

- Concept and principles of management, Organisation 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.