

## **Programme Specific Outcomes of Physical Education**

**PSO1- Knowledge of Human Anatomy and Physiology:** Graduates should have a solid understanding of the structure and function of the human body, particularly as it relates to physical activity, exercise, and sports.

**PSO2- Proficiency in Teaching and Instruction:** Students will develop the skills necessary to effectively teach physical education and lead various physical activities. This includes planning lessons, creating age-appropriate programs, and assessing student progress.

**PSO3- Sports and Exercise Science Knowledge:** Graduates will have a comprehensive understanding of sports and exercise science principles, including biomechanics, kinesiology, exercise physiology, motor learning, and sports psychology.

**PSO4- Ability to Develop Physical Fitness Programs:** Students will learn how to assess an individual's fitness level and design personalized fitness programs to enhance their overall health and physical performance.

**PSO5- Knowledge of Sports Management and Administration:** Students will gain an understanding of the principles and practices involved in managing and administering sports programs, including organizing events, coordinating teams, and managing facilities.

**PSO6- Awareness of Health and Safety:** Graduates will be knowledgeable about safety protocols, injury prevention, and first aid techniques relevant to physical education and sports settings.

**PSO7- Communication and Leadership Skills:** Students will develop effective communication and leadership skills, enabling them to interact professionally with individuals of all ages and abilities in physical education and sports environments.

**PSO8- Ethical and Professional Behaviour:** Graduates will understand the importance of ethical conduct and professional behaviour in the field of physical education. They will be prepared to uphold standards of professionalism and promote fair play, respect, and inclusivity.

**PSO9- Lifelong Learning and Professional Development:** Graduates will be equipped with the mindset and skills to engage in ongoing professional development, staying up to date with advancements in physical education, sports science, and related fields.

## **Course Outcomes of Physical Education**

### **SEMESTER- 1**

#### **CORE PAPER-1: Foundation and History of Physical Education**

CO1- Students should be able to demonstrate knowledge of the origins and evolution of physical education throughout history. This includes understanding the contributions of various cultures, civilizations, and individuals to the development of physical education as a discipline.

CO2- Students should be able to examine the underlying philosophies and ideologies that have influenced physical education practices. This may involve studying key philosophical concepts such as the mind-body relationship, the role of physical activity in human development, and the educational objectives of physical education.

CO3- Students should be able to identify and discuss significant events, movements, and individuals that have shaped the field of physical education. This includes understanding the impact of key historical figures, such as Johann Christoph Friedrich GutsMuths, Friedrich Ludwig Jahn, and Pierre de Coubertin, as well as major educational reforms and societal shifts.

CO4- Students should be able to analyze how social, cultural, and political contexts have influenced the development and practices of physical education.

CO5- Students should be able to critically reflect on how historical perspectives can inform and shape current practices in physical education. This includes understanding the challenges and opportunities faced by physical education professionals in adapting historical knowledge to the modern educational landscape.

### **SEMESTER- 2**

#### **CORE PAPER- 2: Management of Physical Education and Sports**

CO1- Students should develop a foundational understanding of management theories, principles, and concepts as they apply to physical education and sports. This includes understanding key management functions such as planning, organizing, leading, and controlling.

CO2- Students should be able to analyze and evaluate different organizational structures and systems commonly used in physical education and sports settings. This may include studying the roles and responsibilities of administrators, coaches, instructors, and support staff within the organization.

CO3- Students should be able to identify and discuss effective leadership strategies and techniques for managing individuals and teams in physical education and sports settings. This includes understanding leadership styles, communication skills, motivation techniques, and conflict resolution strategies.

CO4- Students should be able to plan and evaluate physical education and sports programs effectively. This includes setting program goals, designing curriculum and instructional plans, assessing participant needs, and implementing program evaluation methods to measure program effectiveness.

CO5- Students should develop an awareness of legal and ethical issues that arise in the management of physical education and sports programs. This includes understanding risk management, liability, participant safety, compliance with laws and regulations, and ethical considerations related to fairness, equity, and integrity.

### **SEMESTER- 3**

#### **CORE PAPER- 3: Anatomy, Physiology and Exercise Physiology**

CO1- Students should be able to identify and describe the major anatomical structures and systems of the human body, including the skeletal system, muscular system, cardiovascular system, respiratory system, nervous system, and others.

CO2- Students should have a thorough understanding of the physiological processes that occur during human movement and exercise. This includes knowledge of energy metabolism, muscular contraction, cardiovascular response, respiratory response, thermoregulation, and other physiological mechanisms involved in exercise.

CO3- Students should be able to apply their understanding of anatomy and physiology to explain the effects of exercise and physical activity on the body. This includes understanding how different types of exercise affect various physiological systems and how the body adapts to exercise training.

CO4- Students should be able to analyze how anatomical and physiological factors influence exercise performance. This includes understanding the role of muscle strength, flexibility, cardiovascular fitness, and other physiological parameters in determining athletic performance and physical fitness.

#### **SEC1- Track and Field**

CO1- Students should be able to identify and describe the various events that make up track and field, including sprints, hurdles, middle-distance and long-distance running, relays, jumping events (long jump, high jump, triple jump), throwing events (shot put, discus throw, javelin throw), and combined events (decathlon, heptathlon). They should understand the rules, techniques, and strategies associated with each event.

CO2- Students should be able to analyze the biomechanical principles underlying efficient and effective performance in track and field events. This includes understanding concepts such as stride length, stride frequency, center of mass, angular momentum, and force application in relation to sprinting, jumping, and throwing techniques.

CO3- Students should have an understanding of the physiological demands placed on athletes in track and field events. This includes knowledge of energy systems, aerobic and anaerobic capacities, muscle fiber types, and the specific physiological adaptations associated with different events.

CO4- Students should be able to discuss the principles and methodologies involved in training for track and field events. This includes understanding the concepts of periodization, specificity, intensity, volume, recovery, and the development of speed, strength, endurance, and technique.

CO5- Students should be able to analyze the key factors that influence performance in track and field events, such as biomechanics, physiology, psychology, and tactical considerations. They should be able to discuss strategies for maximizing performance and minimizing errors in different events.

#### **SEMESTER- 4**

#### **CORE PAPER- 4: Health Education, Physical Fitness and Wellness**

CO1- Students should develop a clear understanding of the fundamental concepts and principles related to health education, physical fitness, and wellness. This includes knowledge of the components of physical fitness (cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition) and the dimensions of wellness (physical, emotional, social, intellectual, occupational, and spiritual).

CO2- Students should be able to analyze the impact of lifestyle choices on overall health and well-being. This includes understanding the connections between physical activity, nutrition, stress management, sleep, and other health behaviours and their effects on disease prevention, chronic disease management, and overall quality of life.

CO3- Students should be able to identify common health risks and behaviours that impact individuals and communities. This may include analyzing factors such as sedentary behaviour, poor nutrition, substance abuse, risky sexual behaviour, and stress. Students should also understand the importance of health screenings and assessments in identifying and managing health risks.

CO4- Students should understand the importance of physical activity in maintaining and enhancing physical fitness, mental well-being, and overall health. This includes knowledge of physical activity guidelines, the benefits of regular exercise, and strategies for incorporating physical activity into daily life.

CO5- Students should be able to analyze the social and cultural factors that influence health behaviours and outcomes. This may include examining issues such as health disparities, social determinants of health, cultural beliefs and practices, and the impact of socio-economic factors on health.

#### **SEC2- Gymnastics and Yoga Course code**

CO1- Students should be able to identify and describe the fundamental techniques, movements, and apparatus used in gymnastics. This includes knowledge of basic skills in disciplines such as artistic gymnastics, rhythmic gymnastics, trampoline, and acrobatics.

CO2- Students should be able to identify and describe the foundational principles, philosophies, and practices of yoga. This includes knowledge of key concepts such as asanas (physical postures), pranayama (breathing exercises), meditation, and the eight limbs of yoga as described in Patanjali's Yoga Sutras.

CO3- Students should be able to analyze the biomechanics and body mechanics involved in gymnastics movements. This includes understanding concepts such as balance, alignment, joint mobility, coordination, and the application of forces during gymnastics skills.

CO4- Students should be able to analyze the physiological benefits of practicing gymnastics and yoga. This includes understanding the effects of these practices on strength, flexibility, endurance, balance, agility, and overall physical fitness.

CO5- Students should be able to explore and discuss the mental and emotional benefits of practicing gymnastics and yoga. This includes understanding how these practices can enhance mindfulness, body awareness, stress management, self-confidence, and emotional well-being.

CO6- Students should understand the role of gymnastics and yoga in physical education and personal fitness. This includes recognizing the benefits of these practices in developing motor skills, enhancing body awareness, promoting physical literacy, and fostering a lifelong commitment to physical activity and well-being.

## **SEMESTER- 5**

### **DSE1- Tests, Measurements and Evaluation in Physical Education**

CO1- Students should develop a solid understanding of the fundamental concepts and principles related to tests, measurements, and evaluation in physical education. This includes knowledge of key terms, reliability, validity, objectivity, norms, and standards in the context of assessing physical fitness, motor skills, and other related variables.

CO2- Students should be able to identify and describe different assessment tools and methods used in physical education. This includes knowledge of fitness tests, skill tests, performance assessments, observation techniques, self-assessment, and peer assessment.

CO3- Students should have knowledge of the principles and procedures involved in test administration and scoring. This includes understanding the importance of standardized protocols, ethical considerations, appropriate scoring criteria, and methods for reducing biases and errors in assessment.

CO4- Students should be able to analyze and interpret assessment data in physical education. This includes understanding how to interpret test scores, analyze individual and group performance, identify strengths and weaknesses, and use data to inform instructional planning and intervention strategies.

CO5- Students should understand the importance of assessment in promoting inclusive and equitable physical education. This includes recognizing the need for fair and unbiased assessment practices, accommodating diverse learner needs, and ensuring that assessment processes are culturally sensitive and inclusive.

### **GE1- Modern Trends and Practices in Physical Education Exercise Sciences**

CO1- Students should be able to demonstrate knowledge of the current trends, practices, and advancements in physical education and exercise sciences. This includes understanding emerging research areas, new technologies, innovative teaching methodologies, and contemporary issues in the field.

CO2- Students should be able to analyze the impact of technology on physical education and exercise sciences. This includes understanding the use of wearable devices, mobile applications, virtual reality, and other technological tools in enhancing physical activity, monitoring performance, and promoting health and wellness.

CO3- Students should be able to investigate evidence-based practices in physical education and exercise sciences. This includes critically evaluating research studies, examining best practices, and understanding the importance of using scientific evidence to inform decision-making in teaching, training, and program development.

CO4- Students should be able to analyze the role of physical education in promoting lifelong physical activity. This includes understanding strategies for fostering intrinsic motivation, promoting physical literacy, and designing programs that encourage individuals to engage in regular physical activity throughout their lives.

CO5- Students should explore inclusive practices in physical education and exercise sciences. This includes understanding the importance of adapting programs and instructional strategies to meet the diverse needs of individuals with disabilities, diverse cultural backgrounds, and varying levels of ability or fitness.

CO6- Students should understand the role of physical education in promoting public health and community wellness. This includes recognizing the importance of physical education programs in schools, workplace wellness initiatives, community-based physical activity promotion, and the impact of physical activity on reducing the risk of chronic diseases.

### **SEC3- Indian Games and Racket Sports**

CO1- Students should be able to demonstrate knowledge of the history, origins, and cultural significance of Indian games and racket sports. This includes understanding the traditional roots, evolution, and regional variations of games such as Kabaddi, Kho Kho, Gilli Danda, and racket sports like Badminton and Tennis.

CO2- Students should be able to identify and describe the rules, techniques, and equipment used in various Indian games and racket sports. This includes knowledge of the playing field, scoring system, gameplay strategies, and specific skills required for each game or sport.

CO3- Students should be able to analyze the physiological demands placed on individuals participating in Indian games and racket sports. This includes understanding the cardiovascular fitness, muscular strength, endurance, agility, coordination, and mental skills required for optimal performance. Students should also recognize the health benefits associated with regular participation in these activities.

CO4- Students should explore and discuss the social and cultural aspects of Indian games and racket sports. This includes understanding the role of these activities in community bonding, cultural preservation, traditional values, and the promotion of teamwork, leadership, and sportsmanship.

CO5- Students should understand the importance of Indian games and racket sports in physical education curricula and sports development programs. This includes recognizing the value of these activities in promoting active lifestyles, skill development, cultural heritage preservation, and talent identification for higher-level competitions.

## **SEMESTER- 6**

### **DSE2- Psychology in Physical Education and Sports**

CO1- Students should be able to demonstrate knowledge of the fundamental principles and concepts of sport psychology. This includes understanding topics such as motivation, goal setting, self-confidence, concentration, arousal regulation, stress management, and team dynamics.

CO2- Students should be able to analyze the psychological factors that influence performance in physical education and sports. They should understand the role of psychological factors in injury prevention, management, and rehabilitation. This includes recognizing the psychological impact of injuries, understanding stress and coping mechanisms, and exploring strategies for promoting psychological well-being during the recovery process.

CO3- Students should explore the psychological aspects of teamwork and group dynamics in sports. This includes understanding group cohesion, communication patterns, leadership roles, and conflict resolution strategies to optimize team performance and create a positive team culture.

CO4- Students should understand the psychological aspects of motivation and adherence to physical activity. This includes exploring different theories of motivation, understanding the factors that influence exercise adherence, and examining strategies for promoting intrinsic motivation and long-term engagement in physical activity.

## **GE2- Health Education and Tests & Measurements in Physical Education**

CO1- Students should be able to demonstrate knowledge of the foundations of health education, including the concepts of health promotion, disease prevention, health behavior theories, and the role of health education in improving individual and community health.

CO2- Students should be able to identify and explain key health education topics, such as nutrition, physical activity, substance abuse prevention, sexual health, mental health, and other areas relevant to promoting overall well-being and healthy lifestyles.

CO3- Students should be able to analyze and evaluate effective health education strategies and interventions. This includes understanding evidence-based practices, behavior change models, communication techniques, and cultural considerations in designing and implementing health education programs.

CO4- Students should understand the role of assessments in health education. This includes knowledge of various assessment methods, such as surveys, questionnaires, health screenings, and needs assessments, to collect data, evaluate health status, and inform program planning and evaluation.

CO5- Students should be able to design and develop appropriate assessments for health education and physical education. This includes developing valid and reliable assessment tools, establishing appropriate norms or criteria, and considering ethical considerations in assessment practices.

## **SEC4- Ball Games**

CO1- Students should be able to identify and describe the rules and techniques of various ball games. This includes knowledge of popular ball games such as soccer, basketball, volleyball, tennis, cricket, baseball, and others. Students should understand the specific skills, strategies, and game dynamics associated with each game.

CO2- Students should be able to analyze the physiological demands placed on individuals participating in ball games. This includes understanding the cardiovascular fitness, muscular strength, endurance, agility, coordination, and mental skills required for optimal performance. Students should also recognize the health benefits associated with regular participation in ball games.

CO3- Students should explore and discuss the social and cultural aspects of ball games. This includes understanding the role of ball games in community bonding, teamwork, competition, and cultural traditions. Students should also analyze the influence of factors such as gender, race, and socioeconomic status on participation and opportunities in ball games.

CO4- Students should be able to analyze the key factors that influence performance in ball games. This includes understanding the technical skills, tactical considerations, physical conditioning, and mental aspects that contribute to successful gameplay. Students should also analyze strategies used by athletes and teams to achieve a competitive advantage.

CO5- Understand the role of ball games in physical education and sports development: Students should understand the role of ball games in physical education curricula and sports development programs. This includes recognizing the value of ball games in developing motor skills, promoting teamwork, enhancing physical fitness, and fostering a lifelong commitment to physical activity and sports.