



Ph.D. COMMON ENTRANCE TEST JANUARY 2024

PHYSICAL EDUCATION AND SPORTS

Application No:

PART B

Duration: 60 minutes

Maximum Marks: 50

Instructions:

1. This entrance test question paper is not to be taken out of the examination hall
2. Part B Question paper consists of Section A and Section B
3. Section A consists of 30 MCQs carrying one Mark each. Put a tick (✓) mark against the correct answer.
4. Section B consists of Descriptive questions carrying five marks each. Restrict your answer to 500 words. Additional plain sheets have been attached to the question paper to answer Section B

SECTION – A

Answer the following by using tick (✓) mark against the correct answer:

30 X 1 = 30

Answer all the questions

- 1. Why Physical Education is considered a comprehensive educational process?**
 - a. It only focuses on physical fitness.
 - b. It includes the development of physical fitness, motor skills, and cognitive understanding.**
 - c. It excludes personal and social development.
 - d. It is limited to traditional sports.
- 2. What determines the historical development of Physical Education?**
 - a. Personal preferences
 - b. Technological advancements
 - c. Societal, cultural, and educational factors**
 - d. Economic factors only
- 3. What is the primary focus of Movement Education?**
 - a. Cognitive development**
 - b. Social interaction
 - c. Skill acquisition
 - d. Emotional well-being
- 4. Biomechanics involves the study of:**
 - a. Forces and their effects on the human body**
 - b. Psychological responses to exercise
 - c. Social aspects of physical activity
 - d. Nutritional requirements for athletes

5. **Which parameter is often measured to assess muscular strength in Exercise Physiology?**
 - a. Flexibility
 - b. Endurance
 - c. **Force production**
 - d. Oxygen consumption

6. **In sports movements, what does the term "kinematics" specifically focus on?**
 - a. Forces applied to the body
 - b. **Description of motion without regard to its causes**
 - c. Psychological responses to movement
 - d. The cultural context of sports

7. **Which biomechanical concept involves the study of the forces that cause rotational motion in the body?**
 - a. Linear motion
 - b. **Angular kinetics**
 - c. Kinematics of joints
 - d. Force production analysis

8. **What is the primary goal of rehabilitation in sports medicine?**
 - a. Maximizing athletic performance
 - b. Understanding cultural influences
 - c. **Restoring function and minimizing disability**
 - d. Enhancing psychological well-being

9. **Which modality is commonly used in the rehabilitation of musculoskeletal injuries for pain management?**
 - a. **Cryotherapy**
 - b. Cultural therapy
 - c. Cognitive-behavioural therapy
 - d. Nutritional therapy

10. **In injury prevention, what does the acronym "R.I.C.E." stand for?**
 - a. Rehabilitation, Isolation, Compression, Exercise
 - b. **Rest, Ice, Compression, Elevation**
 - c. Range of motion, Ice, Coordination, Endurance
 - d. Resistance, Isometric, Cardiovascular, Endurance

11. **Which micronutrient is crucial for oxygen transport and utilization in endurance sports?**
 - a. Vitamin C
 - b. Calcium
 - c. **Iron**
 - d. Vitamin D

12. **What is the primary role of protein in sports nutrition?**
 - a. Providing quick energy

- b. Only for muscle growth
- c. Supporting muscle repair and growth**
- d. Psychological well-being only

13. Which electrolyte is essential for muscle contraction and nerve impulse transmission in sports performance?

- a. Calcium
- b. Magnesium
- c. Sodium
- d. Potassium**

14. In sports nutrition, what does the term "glycemic index" measure?

- a. Only protein quality
- b. The impact of carbohydrates on blood sugar levels**
- c. Fats content in food
- d. Cultural preferences in food choices

15. What is the primary goal of advanced pedagogical approaches in Physical Education?

- a. Memorization of facts
- b. Strict discipline
- c. Enhanced learning experiences and skill development**
- d. Cultural adaptation only

16. What is the primary focus of the Cooperative Learning pedagogical approach in Physical Education?

- a. Strict competition among students
- b. Individual performance only
- c. Promoting teamwork, collaboration, and mutual support**
- d. Ignoring social aspects

17. In the context of assessment, which approach focuses on continuous feedback and improvement rather than grades alone?

- a. Traditional grading approach
- b. Formative assessment approach**
- c. Strict behaviorist approach
- d. Ignoring assessment practices

18. What is the primary focus of sports psychology?

- a. Physical fitness only
- b. Understanding and optimizing psychological factors in sports**
- c. Technical aspects of sports
- d. Nutritional requirements

19. In the context of mental conditioning, what does the term "visualization" involve?

- a. Mentally rehearsing and imagining successful performance**
- b. Ignoring mental aspects of sports
- c. Focusing solely on physical training

- d. Emphasizing cultural influences
- 20. How does stress management contribute to mental conditioning in sports?**
- a. **Helping athletes cope with pressure and maintain optimal performance**
 - b. Ignoring stress factors
 - c. Encouraging constant pressure
 - d. Strictly enforcing rules
- 21. What is the primary role of a sports coach in the context of coaching theory?**
- a. Strict discipline enforcement
 - b. Ignoring leadership qualities
 - c. **Guiding and developing athletes' skills and performance**
 - d. Focusing only on team dynamics
- 22. In the leadership context of sports coaching, what does "transformational leadership" focus on?**
- a. Strictly enforcing rules
 - b. **Inspiring and motivating athletes to reach their full potential**
 - c. Ignoring individual differences
 - d. Focusing only on technical aspects
- 23. Which coaching leadership style emphasizes building strong relationships with athletes and fostering a positive team environment?**
- a. Authoritarian coaching
 - b. Laissez-faire coaching
 - c. **Transformational coaching**
 - d. Autocratic coaching
- 24. In sports technology, what does the term "biomechanical analysis" involve?**
- a. Only analyzing physical fitness
 - b. Ignoring technical aspects
 - c. **Analyzing the mechanics of movement to enhance performance**
 - d. Focusing solely on psychological aspects
- 25. How can sports analytics contribute to decision-making in coaching?**
- a. Ignoring performance data
 - b. Strictly enforcing rules
 - c. **Analyzing statistical data to make informed decisions about strategies and player selection**
 - d. Focusing only on personal preferences
- 26. Which technology is commonly used for tracking the movements of athletes during training and competition?**
- a. Pencil and paper
 - b. Stopwatch
 - c. **Global Positioning System (GPS)**
 - d. Traditional cameras

27. Which type of data is commonly used in data-driven coaching for athlete assessment?
- Only cultural data
 - Performance metrics, including speed, endurance, and skill proficiency**
 - Ignoring individual differences
 - Focusing solely on team dynamics
28. What role does real-time data play in data-driven coaching during competitions?
- Providing immediate insights into athletes' performance for in-game adjustments**
 - Ignoring in-game data
 - Strictly enforcing predefined strategies
 - Focusing solely on psychological aspects
29. What is the primary goal of integrating data-driven coaching methodologies into sports programs?
- Ignoring technological advancements
 - Strictly enforcing traditional coaching methods
 - Enhancing overall performance, strategy, and athlete well-being through data-driven insights**
 - Focusing solely on psychological aspect
30. How does flexibility training contribute to injury prevention in sports?
- Ignoring biomechanical principles
 - Strictly enforcing inflexible training programs
 - Enhancing joint mobility and reducing the risk of muscle strains**
 - Focusing solely on team dynamics

SECTION B

Answer any **FOUR** of the following:

4 x 5 = 20

- How has the field of Physical Education evolved over time, and what are some pivotal moments?
- Describe the major physiological responses of the human body during exercise.
- Choose a specific skill in sports and analyze the biomechanics involved.
- Discuss specific biomechanical considerations for injury prevention in high-impact sports.
- Write the roles of carbohydrates, proteins and vitamins during exercise regimes.
- Elaborate on various approaches in coaching.
