**Ph.D. COMMON ENTRANCE TEST**

**SUBJECT: SPORTS SCIENCES & MANAGEMENT**

**Roll 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. **Question paper consists of Section A and Section B** 3. **Section A consists of 30 MCQs carrying 1 Mark each. Write the Alphabet of the correct answer in the space given.** 4. **Section B consists of Descriptive questions carrying 5 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 questions by writing the Alphabet of the correct answer in the Box given: 30 X 1 = 30**

1. Why Physical Education is considered a comprehensive educational process?
2. It only focuses on physical fitness.
3. It includes the development of physical fitness, motor skills, and cognitive understanding.
4. It excludes personal and social development.
5. It is limited to traditional sports.
6. What determines the historical development of Physical Education?
7. Personal preferences
8. Technological advancements
9. Societal, cultural, and educational factors
10. Economic factors only
11. What is the primary focus of Movement Education?
    1. Cognitive development
    2. Social interaction
    3. Skill acquisition
    4. Emotional well-being
12. Biomechanics involves the study of:
    1. Forces and their effects on the human body
    2. Psychological responses to exercise
    3. Social aspects of physical activity
    4. Nutritional requirements for athletes
13. Which parameter is often measured to assess muscular strength in Exercise Physiology?
    1. Flexibility
    2. Endurance
    3. Force production
    4. Oxygen consumption
14. In sports movements, what does the term "kinematics" specifically focus on?
    1. Forces applied to the body
    2. Description of motion without regard to its causes
    3. Psychological responses to movement
    4. The cultural context of sports
15. Which biomechanical concept involves the study of the forces that cause rotational motion in the body?
    1. Linear motion
    2. Angular kinetics
    3. Kinematics of joints
    4. Force production analysis
16. What is the primary goal of rehabilitation in sports medicine?
    1. Maximizing athletic performance
    2. Understanding cultural influences
    3. Restoring function and minimizing disability
    4. Enhancing psychological well-being
17. Which modality is commonly used in the rehabilitation of musculoskeletal injuries for pain management?
    1. Cryotherapy
    2. Cultural therapy
    3. Cognitive-behavioural therapy
    4. Nutritional therapy
18. In injury prevention, what does the acronym "R.I.C.E." stand for?
    1. Rehabilitation, Isolation, Compression, Exercise
    2. Rest, Ice, Compression, Elevation
    3. Range of motion, Ice, Coordination, Endurance
    4. Resistance, Isometric, Cardiovascular, Endurance
19. Which micronutrient is crucial for oxygen transport and utilization in endurance sports?
    1. Vitamin C
    2. Calcium
    3. Iron
    4. Vitamin D
20. What is the primary role of protein in sports nutrition?
    1. Providing quick energy
    2. Only for muscle growth
    3. Supporting muscle repair and growth
    4. Psychological well-being only
21. Which electrolyte is essential for muscle contraction and nerve impulse transmission in sports performance?
    1. Calcium
    2. Magnesium
    3. Sodium
    4. Potassium
22. In sports nutrition, what does the term "glycemic index" measure?
    1. Only protein quality
    2. The impact of carbohydrates on blood sugar levels
    3. Fats content in food
    4. Cultural preferences in food choices
23. What is the primary goal of advanced pedagogical approaches in Physical Education?
    1. Memorization of facts
    2. Strict discipline
    3. Enhanced learning experiences and skill development
    4. Cultural adaptation only
24. What is the primary focus of the Cooperative Learning pedagogical approach in Physical Education?
    1. Strict competition among students
    2. Individual performance only
    3. Promoting teamwork, collaboration, and mutual support
    4. Ignoring social aspects
25. In the context of assessment, which approach focuses on continuous feedback and improvement rather than grades alone?
    1. Traditional grading approach
    2. Formative assessment approach
    3. Strict behaviorist approach
    4. Ignoring assessment practices
26. What is the primary focus of sports psychology?
    1. Physical fitness only
    2. Understanding and optimizing psychological factors in sports
    3. Technical aspects of sports
    4. Nutritional requirements
27. In the context of mental conditioning, what does the term "visualization" involve?
    1. Mentally rehearsing and imagining successful performance
    2. Ignoring mental aspects of sports
    3. Focusing solely on physical training
    4. Emphasizing cultural influences
28. How does stress management contribute to mental conditioning in sports?
    1. Helping athletes cope with pressure and maintain optimal performance
    2. Ignoring stress factors
    3. Encouraging constant pressure
    4. Strictly enforcing rules
29. What is the primary role of a sports coach in the context of coaching theory?
    1. Strict discipline enforcement
    2. Ignoring leadership qualities
    3. Guiding and developing athletes' skills and performance
    4. Focusing only on team dynamics
30. In the leadership context of sports coaching, what does "transformational leadership" focus on?
    1. Strictly enforcing rules
    2. Inspiring and motivating athletes to reach their full potential
    3. Ignoring individual differences
    4. Focusing only on technical aspects
31. Which coaching leadership style emphasizes building strong relationships with athletes and fostering a positive team environment?
    1. Authoritarian coaching
    2. Laissez-faire coaching
    3. Transformational coaching
    4. Autocratic coaching
32. In sports technology, what does the term "biomechanical analysis" involve?
    1. Only analyzing physical fitness
    2. Ignoring technical aspects
    3. Analyzing the mechanics of movement to enhance performance
    4. Focusing solely on psychological aspects
33. How can sports analytics contribute to decision-making in coaching?
    1. Ignoring performance data
    2. Strictly enforcing rules
    3. Analyzing statistical data to make informed decisions about strategies and player selection
    4. Focusing only on personal preferences
34. Which technology is commonly used for tracking the movements of athletes during training and competition?
    1. Pencil and paper
    2. Stopwatch
    3. Global Positioning System (GPS)
    4. Traditional cameras
35. Which type of data is commonly used in data-driven coaching for athlete assessment?
    1. Only cultural data
    2. Performance metrics, including speed, endurance, and skill proficiency
    3. Ignoring individual differences
    4. Focusing solely on team dynamics
36. What role does real-time data play in data-driven coaching during competitions?
    1. Providing immediate insights into athletes' performance for in-game adjustments
    2. Ignoring in-game data
    3. Strictly enforcing predefined strategies
    4. Focusing solely on psychological aspects
37. What is the primary goal of integrating data-driven coaching methodologies into sports programs?
    1. Ignoring technological advancements
    2. Strictly enforcing traditional coaching methods
    3. Enhancing overall performance, strategy, and athlete well-being through data-driven insights
    4. Focusing solely on psychological aspect
38. How does flexibility training contribute to injury prevention in sports?
    1. Ignoring biomechanical principles
    2. Strictly enforcing inflexible training programs
    3. Enhancing joint mobility and reducing the risk of muscle strains
    4. Focusing solely on team dynamics

**SECTION B**

Answer any **FOUR** of the following: 4 x 5 = 20

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

\*\*\*\*\*\*\*\*\*\*