

# CLASS 12 PHYSICAL EDUCATION

## ANSWER KEY – SET 5

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### SECTION A – MCQ ANSWERS

1. b
2. c
3. c
4. b
5. b
6. b
7. c
8. b
9. a
10. c
11. b
12. c
13. b
14. b
15. b
16. b
17. b
18. a
19. b
20. b

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### SECTION B – (2 Marks Each)

**21. Define Obesity**

Obesity is a condition in which excessive body fat accumulates in the body due to imbalance between calorie intake and energy expenditure, leading to health risks.

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## **22. Two Objectives of Planning in Sports**

1. To ensure smooth and systematic conduct of sports events.
  2. To utilize available resources effectively and economically.
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## **23. What is Periodization?**

Periodization is the systematic division of training program into different phases such as preparatory, competitive and transition periods to achieve peak performance at the right time.

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## **24. Define Agility**

Agility is the ability to change direction quickly and efficiently without losing balance.

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## **25. Two Effects of Exercise on Respiratory System**

1. Increases lung capacity.
  2. Improves oxygen intake efficiency.
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## **26. What is Female Athlete Triad?**

Female athlete triad is a medical condition involving eating disorder, amenorrhea and osteoporosis commonly observed in female athletes.

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## **SECTION C – (3 Marks Each)**

### **27. Importance of Yoga for Senior Citizens**

- Improves flexibility and mobility
- Reduces stress and anxiety
- Controls blood pressure
- Improves balance and prevents falls
- Enhances mental peace

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## **28. Types of Strength with Examples**

1. Maximum Strength – Weightlifting
2. Explosive Strength – Long jump
3. Strength Endurance – Push-ups

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## **29. Causes & Corrective Measures of Knock Knees**

### **Causes:**

- Weak leg muscles
- Improper growth pattern
- Nutritional deficiency

### **Corrective Measures:**

- Squatting exercises
- Horse riding exercise
- Balanced diet rich in calcium

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## **30. Components of Balanced Diet**

- Carbohydrates – Energy source
- Proteins – Body building
- Fats – Energy reserve
- Vitamins & Minerals – Body regulation
- Water – Hydration

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## **31. Coordinative Abilities**

- Reaction ability
- Balance ability
- Rhythm ability
- Orientation ability
- Differentiation ability

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## **32. Psychological Benefits of Physical Activity**

- Reduces stress
- Improves self-confidence

- Enhances concentration
  - Controls anxiety
  - Improves mood
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## **SECTION D – LONG ANSWERS**

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### **33. Planning and Organising Sports Events in Detail**

Planning and organizing sports events is a systematic process that ensures successful conduct of competitions. Proper planning helps in effective utilization of resources, smooth functioning and achievement of objectives.

The first step is to set clear objectives and prepare a detailed budget. After this, different committees such as organizing committee, technical committee, finance committee and publicity committee are formed. Each committee has specific responsibilities. The technical committee handles ground preparation and equipment arrangement, while the finance committee manages funds.

Preparation of fixtures, time schedules and selection of officials are important aspects. Adequate medical facilities and safety arrangements must be ensured. Publicity through posters, announcements and social media increases participation.

Evaluation after the event helps in identifying strengths and weaknesses for future improvement.

Thus, systematic planning and proper coordination among committees ensure the smooth conduct and success of sports events.

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### **34. Different Training Methods to Improve Endurance and Speed**

Endurance and speed are essential fitness components required in most sports. To improve endurance, continuous training and interval training are widely used. Continuous training involves performing exercise for a long duration without rest, such as long-distance running. It strengthens heart and lungs.

Interval training alternates high-intensity work with rest intervals, improving cardiovascular efficiency. Fartlek training combines speed and endurance by varying pace during running.

To improve speed, sprint training and repetition method are effective. Sprint training includes short-distance high-speed runs. Repetition method involves maximum effort with complete recovery. Strength training also enhances explosive power.

Proper warm-up, balanced diet and adequate rest are essential. Gradual progression in training load prevents injury.

Therefore, systematic training improves stamina, reaction time and overall performance.

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### **35. Classification and Management of Sports Injuries**

Sports injuries are classified into soft tissue injuries (sprains, strains, bruises) and hard tissue injuries (fractures, dislocations). Injuries occur due to improper technique, lack of warm-up, overtraining or accidents.

Immediate management is essential. The RICE method is used for soft tissue injuries. Rest prevents further damage, Ice reduces swelling, Compression controls inflammation and Elevation reduces blood flow. Severe injuries require medical attention.

Rehabilitation exercises restore strength and mobility. Protective equipment and proper training techniques prevent injuries. Balanced diet and hydration support recovery.

Thus, proper classification and timely management ensure quick recovery and safe return to sports activities.

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### **36. Effects of Exercise on Circulatory and Muscular Systems**

Regular exercise strengthens the circulatory and muscular systems. In the circulatory system, exercise increases heart efficiency and stroke volume. It improves blood circulation and oxygen supply to muscles. Resting heart rate decreases, reducing risk of heart diseases.

In the muscular system, exercise increases muscle strength, size and endurance. Muscle fibers become stronger and more flexible. Regular training improves coordination and reduces fatigue.

Exercise also increases hemoglobin levels and improves metabolic efficiency. Proper warm-up and balanced diet enhance results.

In conclusion, regular exercise improves overall health, stamina and sports performance.