PHYSICAL EDUCATION (048)
Class XII
2025-26
Answer Key

TIME ALLOWED: 3 HRS MAX MARKS: 70

Q No.	Answer	Marks
	SECTION A	
Q1.	B. Double league tournament	1
Q2.	A. A is true, R is false	1
Q3.	A. A-(iv), B-(iii), C-(i), D-(ii)	1
Q4.	C. Dynamic process in which consumed food is digested	1
Q5.	C. Dhanur asana	1
Q6.	C. Paschimottan asana	1
Q7.	B. Children and adults with intellectual disabilities	1
Q8.	B. Oligomenorrhea	1
Q9.	D. Iron	1
Q10.	C. 15 × 2 feet	1
Q11.	C. Muscular hypertrophy	1
Q12.	B. Dislocation	1
Q13.	B. Sliding fiction	1
Q14.	C. Buoyant force	1
Q15.	A. Internal thoughts	1
Q16.	D. Both (A) and (R) are true but R is not the correct explanation of (A).	1
Q17.	B. Interval Training	1
Q18.	A. Orientation ability	1
	SECTION B	
Q19.	Differentiate between the three types of spinal deformity. Kyphosis ● Outward curvature of the thoracic spine (hunchback appearance) ● Head and shoulders lean forward ● Common in older adults or due to poor posture ● Can cause breathing issues and back pain in severe cases Lordosis ● Excessive inward curvature of the lumbar spine (swayback) ● Abdomen and buttocks protrude outward ● Often caused by weak abdominal muscles or obesity ● May lead to lower back discomfort and postural imbalance Scoliosis ● Lateral (sideways) curvature of the spine in 'S' or 'C' shape ● Uneven shoulders or hips may be visible ● Can be congenital or develop during adolescence ● Severe cases may affect lung and heart function (any two)	[1+1]
Q20.	What is balanced diet? Mention its importance Balanced Diet – Definition [1]	[2]

	● Contains all essential nutrients in correct proportion. Importance of Balanced Diet (Any 2-3 points): ● Provides energy ● Supports growth and repay ● Boosts immunity ● Prevents deficiencies and diseases ● Maintains body functions efficiently	
Q21.	A male student performed the Harvard Step Test for 4 minutes. His pulse was recorded during the recovery periods as 58 beats in the first half-minute, 50 beats in the second, and 42 beats in the third. Using the Harvard Step Test formula, calculate his Fitness Index and state whether his score falls in the Excellent, Good, or Average category Formula: Fitness Index = (Duration of exercise in seconds × 100) ÷ (2 × Sum of pulse counts in recovery) Step 1: Duration = 4 minutes = 240 seconds Sum of pulse = 58 + 50 + 42 = 150 beats Step 2: Fitness Index = (240 × 100) ÷ (2 × 150) = 24000/300 = 80 Category - Good	[2]
Q22.	Enlist any four types of fracture. i. Simple Fracture ii. Compound Fracture iii. Comminuted Fracture iv. Greenstick Fracture v. Transverse Fracture vi. Oblique Fracture vii. Impacted Fracture (any four)	[1/2*4]
Q23.	Write a short note on Self Talk. Sports psychology is a field that studies how psychological factors influence athletic performance and participation in sports, exercise, and physical activity. It examines the mental aspects of sports, including motivation, anxiety, stress, and the impact of sports on well-being. Key Areas of Focus: • **Performance Enhancement:** Sports psychologists help athletes improve their performance by using psychological techniques like goal setting, visualization, relaxation, and self-talk. • **Mental Health and Well-being:** They also address the impact of sports on an individual's mental health, including issues like burnout, anxiety, and depression. • **Team Dynamics:** Sports psychology can also help improve team dynamics and communication, fostering a more positive and collaborative environment. • **Coaching and Training:** They work with coaches to understand how to create effective training programs	[1/2*4]

	that incorporate psychological principles. • **Social and Developmental Aspects:** Sports psychologists study how sports participation affects an individual's social development and overall well-being. (any four)	
Q24.	A football player wants to improve his acceleration and quick reaction during a match. Suggest two suitable training methods and justify how each will help improve his performance. 1. Acceleration Sprints – Improve the player's ability to quickly reach top speed during sudden movements in a match. 2. Reaction Drills – Enhance response time to game situations like passes or opponent movements.	[1+1]
	SECTION C	
Q25.	League tournament is a better way to judge the best team of the tournament. Comment. ● Equal opportunities to all the teams ● League matches minimize impact of luck or unexpected outcomes ● Judged on basis of multiple matches ● Ranking of basis of points earned ● Less pressure on teams with compassion to knockout tournament ● Scope of improvement	[3]
Q26.	Discuss the exercise guidelines for different age groups. Children (Under 5 years): o At least 180 minutes/day of physical activity. o Tummy time (30 mins) for infants who aren't mobile. o Avoid being restrained for over 1 hour at a time. o Limit or avoid screen time, depending on age. Adolescents (5–17 years) o Minimum 60 minutes/day of moderate to vigorous activity. o Include muscle and bone-strengthening exercises 3 days/week. o Prefer aerobic activities like running, swimming, cycling. o Limit screen time and reduce sedentary behavior. Senior Citizens (65+ years): o 150–300 minutes/week of moderate aerobic activity. o Do balance and strength exercises 2–3 days/week. o Be physically active daily; avoid long sitting hours. o Adapt intensity as per health conditions and ability.	[1+1+1]
Q27.	Explain strategies to make Physical Activities Accessible for CWSN. Strategies to Make Physical Activities Accessible for CWSN: 1. **Sensory Integration** – Reduce loud music, use natural lighting, and provide	[3]

	headphones/sunglasses. 2. **Positive Behaviour Support (PBIS)** – Use picture schedules and encourage positive interactions. 3. **Team Building Activities** – Focus on creative, cooperative games over competition. 4. **Accessible Surfaces** – Use gym mats or level fields to support mobility and wheelchair use. 5. **Inclusive Classrooms** – Educate CWSN alongside others to promote acceptance. 6. **Assistive Technology** – Use tools like large balls, bells, or string-attached equipment. 7. **Adaptive Physical Education** – Modify rules and games based on individual needs. 8. **Creative Game Focus** – Use imaginative games to build confidence and reduce pressure. (4 points)	
Q28.	Discuss the importance of pre, during and post competition diet in detail. Pre-Competition Diet o Provides energy, prevents early fatigue, and ensures smooth digestion before performance. o Consume high-carbohydrate foods like rice, pasta, or bread for sustained energy. o Prefer easily digestible, low-fat, and non-fried meals taken 3–4 hours before the event. During Competition Diet o Maintains hydration, energy, and electrolyte balance to avoid fatigue and muscle cramps. o Sip on glucose-rich drinks or electrolyte solutions to maintain blood sugar and sodium levels. o Include small portions of quick energy foods like banana or energy gels if needed. Post-Competition Diet o Supports recovery by replenishing lost fluids and restoring glycogen levels in muscles. o Eat carbohydrate-rich foods such as fruits, sandwiches, or energy bars immediately after. o Rehydrate with fluids like water, juice, or sports drinks to replace lost electrolytes.	[1+1+1]
Q29.	A gymnast maintains a handstand position on the balance beam, then performs a flip. Differentiate between the types of equilibrium shown and explain how they help in performance. a) Static equilibrium – ● Shown during handstand; ● Body is balanced and at rest. b) Dynamic equilibrium – ● Shown during flip; ● Stability maintained while in motion. o Helps maintain balance, control, and fluidity during transitions and	[2+1]

	performance.	
Q30.	Describe personality. Explain dimensions of personality. >Personality is the combination of physical, mental, psychological, and emotional traits that make an individual unique. 1. Physical Dimension o Height and weight o Body structure and posture o Facial appearance and complexion 2. Mental Dimension o Intellect and reasoning ability o Decision-making power o Memory and concentration 3. Psychological Dimension o Emotions and mood stability o Self-confidence and motivation o Willpower and attitude	[3]
Q31.	1. b) Knockout method 2. d) N - 1 3. c) Knockout tournament takes less time and is economical 4. a) Bye	[1*4=4]
Q32.	1. (c) Deaflympics 2. (d) Iris 3. (b) 1924 4. (b) Red, Blue, Green, Yellow	[1*4=4]
Q33.	1. (c) Impacted Fracture 2. (b) (b) 3. (c) Comminuted Fracture 4. (c) Transverse Fracture (FOR VISUALLY IMPAIRED) 1. b) Vitamin B 2. d) Beri Beri 3. c) D 4. c) K	[1*4=4]
Q34.	What do you mean by Asthma. Mention its symptoms. Explain the procedure, benefits and contraindications of an asana beneficial for the patient of asthma. Asthma is a chronic respiratory condition where the airways become inflamed and narrow, leading to difficulty in breathing. It often triggers coughing, wheezing, shortness of breath, and chest tightness. Symptoms of Asthma: ● Difficulty in breathing ● Wheezing (whistling sound while breathing)	[1+2+2]

	● Tightness in chest ● Frequent coughing, especially at night or early morning ● Fatigue during physical activity Mats asana (Fish Pose) Procedure 1. Lie flat on your back with legs extended and hands beside the thighs. 2. Place the hands underneath the hips with palms facing down. 3. Lift the chest upward while arching the back and tilt the head backward so that the crown touches the floor. 4. Hold the posture while breathing deeply and slowly. 5. Return to the starting position gently. Benefits: ❖ Expands the chest and improves lung capacity. ❖ Helps ease respiratory issues like asthma and bronchitis. ❖ Stimulates the throat and opens nasal passages for easier breathing. ❖ Strengthens the upper back and neck muscles. ❖ Reduces anxiety and stress, which can trigger asthma. Contraindications: ❖ Avoid in case of serious neck or back injury. ❖ Not suitable for individuals with high blood pressure or migraines. ❖ Should be performed under guidance if suffering from spinal disorder.	
Q35.	Make a table of test items listed under fitness test by SAI (Age group 9-18 yrs) Explain the Procedure and Scoring of 50 MTS Run and Partial Curl Up. AGE GROUP: 9-18+ YEARS | CLASS 4 to 12 For 1. Body Composition (BMI) 2. Strength a. Abdominal (Partial Curl-up) b. Muscular Endurance (Push Ups for Boys, Modified Push Ups for Girls) 3. Flexibility (Sit and Reach Test) 4. Cardiovascular Endurance (600 Meter Run/Walk) 5. Speed (50 mt. Dash) 50 MTR DASH (STANDING START) Procedure: A thorough warm up should be given, including some practice starts and accelerations. Start from a stationary position, with one foot in front of the other. The front foot must be on or behind the starting line. This starting position should be static (dead start). The tester should provide hints for maximizing speed (such as keeping low, driving hard with the arms and legs) and encouraged to continue running hard through the finish line.	[2.5+2.5]

	Scoring: Time taken for completion ABDOMINAL (PARTIAL CURL-UP) Procedure: The subject lies on a cushioned, flat, clean surface with knees flexed, usually at 90 degrees, with hands straight on the sides (palms facing downwards) closer to the ground, parallel to the body. The subject raises the trunk in a smooth motion, keeping the arms in position, curling up the desired amount (at least 6 inches above/along the ground towards the parallel strip). The trunk is lowered back to the floor so that the shoulder blades or upper back touch the floor. Scoring: Record the maximum number of Curl ups in a certain time period (30 seconds).	
Q36.	What do you understand by circuit training? How a coach will plan circuit training sessions with 6 stations to develop fitness of his new trainees? Explain 1. A training method where different exercises are performed in a sequence (stations) with minimal rest. 2. Each station targets a specific fitness component or muscle group. 3. Helps improve overall fitness efficiently in limited time. 6 Sample Stations (Exercises): ● 1. Push-ups ● 2. Squats ● 3. Skipping ● 4. Sit-ups ● 5. Shuttle runs ● 6. Plank hold (Or any other suitable) Components to be Developed in New Trainees: ● Strength ● Endurance ● Flexibility ● Speed ● Agility ● Coordination (Explanation of each point along with a circuit)	[1+4]
Q37.	What is a lever? Explain the types of levers with the help of example. A Lever is a simple machine that provides mechanical advantage to magnify the force necessary to overcome a resistance. There are three types of levers ● Class 1 lever (see saw/ seated dumbbell triceps) ● Class 2 lever (pushing against the block in sprint start/ calf raises) ● Class 3 lever (fishing rod/ leg extensions)	[1+3+1]

	(each type to be explain with help of examples)	