CUET UG Physical Education Sample Paper - 10

Duration: 1 Hour **Maximum Marks: 250**

Instructions

- This paper contains a total of 50 Multiple Choice Questions.
- Each correct answer carries **+5 marks**.
- Each incorrect answer carries **-1 mark**.
- No negative marking for unattempted questions.

Q1. The 'National Health Policy 2017' aimed to increase public health expenditure to what percentage of the GDP by 2025?

(A) 1.5%

(B) 2.5%

(C) 5.0%

(D) 3.5%

Q2. Under the Mid-Day Meal guidelines for Upper Primary (Class VI-VIII), the minimum protein requirement per meal is set at:

(A) 12 Grams

(B) 20 Grams

(C) 15 Grams

(D) 30 Grams

Q3. In Jung's classification, an 'Ambivert' is an individual who:

(A) Is purely focused on internal thoughts

(B) Exhibits characteristics of both introversion and extroversion depending on the situation

(C) Is highly aggressive and impulsive in all social settings

(D) Prefers only individual sports like Archery or Chess

Q4. Which personality dimension from the Big Five is characterized by a person's willingness to try new training methods and their curiosity toward different cultures in sports?

(A) Conscientiousness

(B) Neuroticism

(C) Openness to Experience

(D) Extraversion

Q5. Match List-I (Social Factor) with List-II (Definition in PE) and select the correct option:

List-I (Factor)	**List-II (Definition)**
(I) Social Cohesion	(A) The influence of others on an individual's performance
(II) Social Loafing	(B) The tendency to exert less effort when working in a group
(III) Social Facilitation	(C) The bond that keeps team members together for a common
(IV) Socialization	(D) The process of learning the norms and values of a society

(A) (I)-(C), (II)-(B), (III)-(A), (IV)-(D)

(B) (I)-(B), (II)-(C), (III)-(D), (IV)-(A)

(C) (I)-(A), (II)-(D), (III)-(B), (IV)-(C)

(D) (I)-(C), (II)-(A), (III)-(B), (IV)-(D)

Q6. What is the distance of the 'Penalty Spot' from the goal line in a standard field of Field Hockey?

(A) 7.00 Meters

(B) 6.475 Meters (7 Yards)

(C) 9.15 Meters

(D) 5.50 Meters

Q7. In Kabaddi, a 'Super Catch' (Super Tackle) is credited to the defending team when they capture a raider while having:

(A) 5 or more players on the court

(B) 3 or fewer players on the court

(C) Exactly 7 players on the court

(D) Only the captain on the court

Q8. The 'Neti' kriya specifically uses a special pot known as a 'Neti Lota'. Which physiological benefit is primarily targeted by this practice?

(A) Strengthening the abdominal muscles

(B) Desensitization of the nasal mucosa to allergens

(C) Increasing the flexibility of the hip joints

(D) Improving the vision by gazing at a flame

Q9. Which 'Pranayama' is specifically recommended for cooling the body and reducing high blood pressure after intense exercise?

(A) Bhastrika

(B) Surya Bhedana

(C) Sitali

(D) Kapalbhati

Q10. Assertion (A): High-fiber diets are recommended for athletes several hours before a marathon.
Reason (R): Fiber is a type of carbohydrate that provides a rapid burst of energy during high-intensity sprinting.

(A) Both (A) and (R) are true, and (R) is the correct explanation.

(B) Both (A) and (R) are true, but (R) is NOT the correct explanation.

(C) (A) is true, but (R) is false.

(D) Both (A) and (R) are false.

Case Study 1

Read the following passage and answer the questions 11 to 15:

Modern training methodologies emphasize 'Periodization', which is the systematic planning of physical training. Within this, the 'General Adaptation Syndrome' (GAS) explains how the body responds to stress. It consists of three stages: Alarm, Resistance, and Exhaustion. To avoid exhaustion, coaches use different types of exercises. 'Isotonic' exercises, like a barbell squat, involve a change in muscle length. In contrast, 'Isokinetic' exercises require a constant speed regardless of force. For flexibility, 'Ballistic' stretching was popular but is now often replaced by PNF because ballistic stretching can trigger the 'stretch reflex', potentially causing muscle tears.

Q11. According to the passage, the 'General Adaptation Syndrome' is a model used to explain:

(A) The psychological motivation of a coach

(B) How the body responds and adapts to the stress of training

(C) The nutritional intake required for a marathon

(D) The history of the Olympic Games

Q12. Which type of exercise described in the text involves a change in muscle length, such as a squat?

(A) Isometric

(B) Isotonic

(C) Isokinetic

(D) Static

Q13. Why is 'Ballistic' stretching currently considered risky according to the passage?

(A) It is too slow to be effective

(B) It can trigger the 'stretch reflex' and cause injury

(C) It does not require any physical effort

(D) It can only be done with heavy machinery

Q14. What is the characteristic feature of 'Isokinetic' exercise as mentioned in the text?

(A) Resistance remains zero

(B) Speed of movement remains constant

(C) Muscle length remains constant

(D) It is only used for warm-ups

Q15. In the GAS model mentioned, 'Exhaustion' occurs when:

(A) The body successfully adapts to the load

(B) Training stress is too high or recovery is insufficient

(C) The athlete wins a gold medal

(D) The warm-up is completed

Q16. The 'Back Scratch Test' in the Rikli Jones battery is specifically used to assess:

(A) Lower body flexibility

(B) Shoulder (Upper body) flexibility

(C) Abdominal strength

(D) Cardiovascular endurance

Q17. In the context of 'CWSN', what does the term 'Adaptive Physical Education' primarily refer to?

(A) A program only for elite athletes with disabilities

(B) A modified program of physical activities designed to meet the unique needs of individuals with disabilities

(C) A program that excludes students with physical impairments from regular sports

(D) A specialized diet plan for Olympic para-athletes

Q18. Which of the following is an 'Official Signal' in Handball when a player or official is warned for a foul?

(A) Showing a Green Card

(B) Showing a Yellow Card

(C) Blowing a long whistle twice

(D) Raising both hands in the air

Q19. Identify the 'Asana' based on this description: "The practitioner sits with legs stretched forward, then folds one leg and places the foot on the opposite thigh, while twisting the torso and looking back."

(A) Paschimottanasana

(B) Ardha Matsyendrasana

(C) Vajrasana

(D) Gomukhasana

Q20. A 'Compound Fracture' is characterized by which of the following?

(A) The bone is broken into many small pieces

(B) The broken bone pierces the skin, creating an open wound

(C) There is only a small crack in the bone

(D) The bone is bent but not broken

Q21. Match List-I (Yoga Practice) with List-II (Key Benefit) and select the correct option:

List-I (Practice)	**List-II (Benefit)**
(I) Shavasana	(A) Improved digestion and sitting posture
(II) Vajrasana	(B) Deep relaxation and stress relief
(III) Tadasana	(C) Strengthening the spine and back muscles
(IV) Bhujangasana	(D) Improving height and body alignment

(A) (I)-(B), (II)-(A), (III)-(D), (IV)-(C)

(B) (I)-(A), (II)-(B), (III)-(C), (IV)-(D)

(C) (I)-(B), (II)-(C), (III)-(A), (IV)-(D)

(D) (I)-(D), (II)-(A), (III)-(B), (IV)-(C)

Q22. Which training method involves a series of exercises performed at different 'stations' with little to no rest in between?

(A) Continuous Method

(B) Interval Training

(C) Circuit Training

(D) Fartlek Training

Q23. In the 'Partial Curl-Up' test, what is the standard distance between the two parallel lines on the mat for the movement of fingers?

(A) 15 cm

(B) 6 inches (approx. 15.2 cm)

(C) 30 cm

(D) 2 inches

Q24. The postural deformity 'Flat Foot' is scientifically known as:

(A) Genu Valgum

(B) Pes Planus

(C) Genu Varum

(D) Talipes Equinovarus

Q25. Which type of lever is described as having the 'Fulcrum' positioned between the Effort and the Resistance?

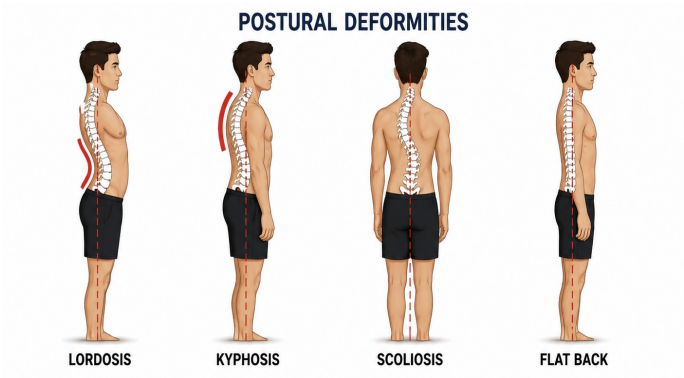
(A) First Class Lever

(B) Second Class Lever

(C) Third Class Lever

(D) Fourth Class Lever

Q26. Identify the postural deformity characterized by an exaggerated outward curve of the thoracic (upper back) spine, often resulting in a "hunchback" appearance.



(A) Lordosis

(B) Kyphosis

(C) Scoliosis

(D) Flat Back

Q27. Look at the diagram of a 'Push-Up' in the upward phase. Which specific joint action is occurring at the elbow joint during this movement?

(A) Flexion

(B) Extension

(C) Abduction

(D) Adduction

Q28. In a standard 'Kabaddi' match, what is the maximum duration allowed for a single 'Raid'?

(A) 20 Seconds

(B) 30 Seconds

(C) 45 Seconds

(D) 1 Minute

Q29. Which of the following is a 'Non-Communicable' lifestyle disease that is primarily linked to high sodium intake and stress?

(A) Malaria

(B) Typhoid

(C) Hypertension

(D) Cholera

Q30. The 'Interval Training' method is based on the principle of:

(A) Continuous effort without any break

(B) Effort followed by 'Incomplete Recovery'

(C) Exercising only once a week

(D) Using maximum weights for every set

Case Study 2

Read the following passage and answer the questions 31 to 35:

Projectiles are objects thrown or projected into the air, subject only to acceleration by gravity and air resistance. In sports like Javelin Throw, Shot-put, and Basketball, understanding the 'Angle of Release' is vital. Theoretically, in a vacuum, a 45° angle provides maximum distance. However, due to air resistance and the height of release (the athlete's height), the optimal angle for a Shot-put is usually around 37° – 42°. Furthermore, 'Stability' plays a role; a wider base of support and a lower 'Center of Gravity' (COG) increase an athlete's balance, which is why wrestlers crouch low.

Q31. According to the passage, why is the optimal angle for a Shot-put less than 45°?

(A) Because the athlete wants to throw it higher

(B) Because of air resistance and the height of release

(C) Because the shot-put is too heavy to lift higher

(D) Because gravity does not act on a shot-put

Q32. What happens to an athlete's stability when they lower their 'Center of Gravity' (COG)?

(A) Stability decreases

(B) Stability increases

(C) Stability remains unaffected

(D) The athlete becomes lighter

Q33. In the context of the passage, a 'Wrestler's crouch' is an application of which biomechanical principle?

(A) Increasing air resistance

(B) Enhancing stability through a lower COG and wider base

(C) Maximizing the angle of release

(D) Reducing the weight of the body

Q34. Theoretically, what is the angle for maximum distance for a projectile in a vacuum?

(A) 30°

(B) 45°

(C) 60°

(D) 90°

Q35. What are the two primary forces mentioned that act upon a 'Projectile' once it is in the air?

(A) Friction and Magnetism

(B) Gravity and Air Resistance

(C) Muscular force and Tension

(D) Buoyancy and Centripetal force

Q36. The 'Chair Stand Test' in the Rikli Jones battery is used to measure:

(A) Upper body strength

(B) Lower body strength

(C) Aerobic endurance

(D) Agility

Q37. Which type of 'Aggression' is often praised by coaches because it involves high intensity and hard physical contact within the rules of the game?

(A) Hostile Aggression

(B) Instrumental Aggression

(C) Assertive Behavior

(D) Violence

Q38. Which nutrient is known as the 'Body Builder' and is essential for repairing muscle micro-tears after weight training?

(A) Vitamin C

(B) Carbohydrates

(C) Proteins

(D) Fats

Q39. An athlete who is highly organized, punctual for training, and consistently works toward their long-term goals would score high on:

(A) Agreeableness

(B) Extraversion

(C) Conscientiousness

(D) Neuroticism

Q40. What is the weight of a standard 'Discus' for Senior Men in Athletics?

(A) 1 kg

(B) 1.5 kg

(C) 2 kg

(D) 2.5 kg

Q41. Which specific component of 'Health-Related Fitness' is primarily assessed using the 'Modified Push-Up' test for girls?

(A) Muscular Strength
(B) Muscular Endurance of the upper body
(C) Cardiovascular efficiency
(D) Explosive power

Q42. The 'Step Test' (Harvard Step Test) is used to monitor the development of the athlete's cardiovascular system. The 'Fitness Index Score' is calculated using which variable besides the duration of exercise?

(A) Body Weight
(B) Sum of heart rates during recovery
(C) Maximum speed achieved
(D) Height of the athlete

Q43. Which biomechanical principle explains why a gymnast pulls their arms and legs in close to their body while performing a mid-air somersault?

(A) Conservation of Angular Momentum
(B) Magnus Effect
(C) Bernoulli's Principle
(D) Newton's Third Law

Q44. In the 'Five-Factor Model' of personality, an individual who is frequently worried, insecure, and emotionally unstable would score high on:

(A) Extraversion
(B) Agreeableness
(C) Neuroticism

(D) Conscientiousness

Q45. Match List-I (Sports Injury) with List-II (Body Part Affected):

List-I (Injury)	**List-II (Part)**
(I) Tennis Elbow	(A) Ligaments of the ankle/knee
(II) Sprain	(B) Tendons of the forearm
(III) Strain	(C) Surface of the skin
(IV) Abrasion	(D) Muscle or tendon fibers

(A) (I)-(B), (II)-(A), (III)-(D), (IV)-(C)

(B) (I)-(A), (II)-(B), (III)-(C), (IV)-(D)

(C) (I)-(D), (II)-(C), (III)-(B), (IV)-(A)

(D) (I)-(B), (II)-(D), (III)-(A), (IV)-(C)

Q46. The 'Female Athlete Triad' is a syndrome consisting of three interrelated conditions. Which of the following is NOT part of this triad?

(A) Osteoporosis

(B) Disordered Eating

(C) Amenorrhea

(D) Hypertension

Q47. What is the total duration of a standard 'Handball' match for Senior Men and Women (excluding half-time)?

(A) 40 Minutes

(B) 60 Minutes (two halves of 30 minutes)

(C) 90 Minutes

(D) 30 Minutes

Q48. Which 'Shatkriya' involves a yogic technique of cleaning the stomach by swallowing a long strip of thin cloth and then withdrawing it?

(A) Basti

(B) Dhauti

(C) Nauli

(D) Kapalbhati

Q49. Assertion (A): Soft tissue injuries like 'Contusions' are common in contact sports like Boxing and Kabaddi.
Reason (R): A contusion is caused by a direct blow from a blunt object, resulting in crushed blood vessels under the skin (bruising).

(A) Both (A) and (R) are true, and (R) is the correct explanation.

(B) Both (A) and (R) are true, but (R) is NOT the correct explanation.

(C) (A) is true, but (R) is false.

(D) Both (A) and (R) are false.

Q50. Which organization is responsible for conducting the 'Khelo India' fitness assessment in schools across India?

(A) World Health Organization (WHO)

(B) Sports Authority of India (SAI)

(C) Indian Olympic Association (IOA)

(D) Ministry of Health and Family Welfare

Detailed Solutions

Q1.

Solution

Concept:

The National Health Policy (NHP) 2017 is a comprehensive framework aimed at achieving the highest possible level of health and well-being for all Indians. A critical component of this policy is increasing the financial resources dedicated to the public health sector.

Solution:

1. The NHP 2017 recognized that India's public health spending was historically low compared to global averages. 2. To address this, the policy explicitly set a target to increase government health expenditure. 3. The specific goal is to raise public health spending to **2.54. This increase is intended to ensure "Universal Health Coverage" and reduce out-of-pocket expenses for citizens. 5. Other figures like 5

Final Answer: The National Health Policy 2017 target is 2.5

Answer: (B)

Q2.

Solution

Concept:

The nutritional norms for the Mid-Day Meal (PM-POSHAN) scheme are categorized based on the age group of the students. "Upper Primary" refers to students in classes VI to VIII (typically aged 11–14).

Solution:

1. For Primary classes (I–V), the requirement is 450 calories and 12g of protein. 2. For **Upper Primary classes (VI–VIII)**, the nutritional requirement is increased to match the growth spurts associated with early adolescence. 3. The energy requirement is set at 700 calories per meal. 4. The minimum **protein requirement for Upper Primary is 20 grams per meal**. 5. This higher protein intake is essential for muscle development and metabolic health during these critical developmental years.

Final Answer: The minimum protein requirement for Upper Primary is 20 Grams.

Answer: (B)

Q3.

Solution

Concept:

While Carl Jung is famous for his Introvert-Extrovert dichotomy, modern psychological adaptations of his work recognize a middle category. Most people do not fall into the extreme ends of the spectrum.

Solution:

1. An **Ambivert** is an individual who falls in the middle of the introversion-extroversion scale. 2. They possess a balance of traits; for example, they might enjoy social gatherings (extroversion) but also require time alone to recharge (introversion). 3. In sports, an ambivert might be equally comfortable playing a high-interaction team sport like Basketball or a high-focus individual sport like Tennis. 4. Their behavior is often **context-dependent**, meaning they can adapt their social energy based on the needs of the situation. 5. This flexibility often makes them very resilient and adaptable athletes.

Final Answer: An Ambivert exhibits characteristics of both introversion and extroversion depending on the situation.

Answer: (B)

Q4.

Solution

Concept:

In the Big Five Personality Model, the dimension of "Openness" (often called Openness to Experience) measures a person's cognitive style and their appetite for novelty.

Solution:

1. **Openness to Experience** describes an individual who is imaginative, curious, and open-minded. 2. In the context of sports, an athlete scoring high in this trait would be eager to experiment with **new training methods**, try unconventional tactics, or play in foreign leagues to experience different cultures. 3. They are less likely to be "stuck in their ways" and more likely to seek out creative solutions to performance plateaus. 4. Conscientiousness is about discipline, and Neuroticism is about emotional instability; neither specifically addresses curiosity or novelty.

Final Answer: Openness to Experience is characterized by curiosity toward new methods and cultures.

Answer: (C)

Q5.

Solution

Concept:

Sports Sociology examines how social dynamics influence individual and group performance. Understanding these terms helps coaches manage team chemistry and individual output.

Solution:

1. **Social Cohesion (I):** This refers to the strength of the bonds and the sense of "togetherness" that keeps a team focused on a shared objective; thus, (I) matches with (C). 2. **Social Loafing (II):** This is a phenomenon where individuals work less hard when they are part of a group than when they are alone (e.g., pulling less hard in a tug-of-war); thus, (II) matches with (B). 3. **Social Facilitation (III):** This describes how the presence of others (spectators or teammates) can improve an individual's performance on well-learned tasks; thus, (III) matches with (A). 4. **Socialization (IV):** This is the lifelong process of inheriting and disseminating norms, customs, and ideologies through sports; thus, (IV) matches with (D). 5. Combining these matches: (I)-(C), (II)-(B), (III)-(A), (IV)-(D).

Final Answer: The correct matching sequence is (I)-(C), (II)-(B), (III)-(A), (IV)-(D).

Answer: (A)

Q6.

Solution

Concept:

Field dimensions and markings for Hockey are regulated by the International Hockey Federation (FIH). The penalty spot is a specific mark within the shooting circle from which a penalty stroke is taken.

Solution:

1. In Field Hockey, the penalty stroke is the most severe penalty awarded against a defender for a foul inside the circle that prevents a goal. 2. The penalty spot is located directly in front of the center of the goal. 3. According to the FIH Rules of Hockey, the distance from the inner edge of the goal line to the center of the penalty spot is exactly **6.475 meters**. 4. This distance is historically derived from **7 yards**, which remains the standard measurement for the spot in international play. 5. Other measurements like 9.15m refer to the center circle in football, and 7.00m refers to the penalty line in Handball.

Final Answer: The distance of the Penalty Spot in Hockey is 6.475 Meters (7 Yards).

Answer: (B)

Q7.

Solution

Concept:

The 'Super Tackle' (or Super Catch) rule in Pro Kabaddi was introduced to provide a tactical advantage to a defending team that is low on players, making the game more exciting and rewarding skillful defense under pressure.

Solution:

1. Normally, tackling a raider earns the defending team 1 point. 2. However, a 'Super Tackle' situation is triggered when the defending team has **3 or fewer players** left on the court. 3. If the defense successfully captures the raider during this situation, they are awarded **2 points** instead of the usual 1 point. 4. This rule encourages the remaining defenders to take risks rather than simply letting the raider escape to avoid an 'All Out'. 5. Having 5 or 7 players on the court results in a regular 1-point tackle.

Final Answer: A Super Catch is credited when there are 3 or fewer players on the court.

Answer: (B)

Q8.

Solution

Concept:

Jala Neti is a Shatkriya (cleansing technique) that involves pouring lukewarm saline water through the nostrils to clean the nasal passage. It is performed using a specialized vessel called a 'Neti Lota'.

Solution:

1. The primary purpose of Neti is to remove excess mucus, pollutants, and allergens from the nasal cavity. 2. Regular practice leads to the **desensitization of the nasal mucosa**, making the practitioner less reactive to environmental triggers like dust or pollen. 3. It helps in maintaining the health of the upper respiratory tract and is often cited as a remedy for sinusitis and hay fever. 4. While it may indirectly affect concentration, its direct physiological benefit is the hygiene and desensitization of the nasal lining. 5. Abdominal strength is targeted by Nauli, and vision is targeted by Trataka.

Final Answer: Neti primarily targets the desensitization of the nasal mucosa to allergens.

Answer: (B)

Q9.

Solution

Concept:

Different types of Pranayama have varying thermal effects on the body. Some are 'heating' (like Bhastrika or Surya Bhedana), while others are 'cooling'.

Solution:

1. **Sitali Pranayama** (and its variant Sitkari) is specifically known as the "Cooling Breath." 2. It involves inhaling air through a curled tongue (or through teeth in Sitkari), which cools the air before it enters the lungs. 3. This practice lowers the body temperature and has a soothing effect on the nervous system. 4. It is highly recommended for cooling down after high-intensity sports or for individuals suffering from high blood pressure or acidity. 5. Surya Bhedana (Right nostril breathing) is used specifically to heat the body, which is the opposite of the requirement.

Final Answer: Sitali is recommended for cooling the body and reducing blood pressure.

Answer: (C)

Q10.

Solution

Concept:

The timing of nutrient intake is critical for performance. Fiber is a structural carbohydrate found in plants that the human body cannot fully digest.

Solution:

1. **Assertion (A):** High-fiber diets are actually **not** recommended immediately before a race. Fiber slows down digestion and can cause gastrointestinal distress, bloating, and cramping during intense activity. Athletes prefer low-fiber, high-glycemic carbohydrates for pre-race meals. Thus, (A) is false. 2. **Reason (R):** Fiber does not provide a "rapid burst of energy." Because it is largely indigestible, it does not convert to glucose quickly. Its primary role is aiding digestion and maintaining bowel health over the long term. Thus, (R) is also false. 3. Since both the claim and the explanation are scientifically incorrect in the context of pre-competition nutrition, both are false.

Final Answer: Both (A) and (R) are false.

Answer: (D)

Q11.

Solution

Concept:

The General Adaptation Syndrome (GAS) is a biological model developed by Hans Selye. It explains how any living organism—including an athlete—responds to a stressor (training load) through a predictable physiological process.

Solution:

1. The passage identifies GAS as a way to explain "how the body responds to stress." 2. In sports training, the "stress" is the exercise load. 3. The model describes the cycle of initial fatigue (Alarm), the body's recovery and strengthening (Resistance), and the potential failure if the load is never reduced (Exhaustion). 4. Understanding this allows coaches to "periodize" training so that the athlete spends more time in the Resistance/Adaptation phase and avoids injury.

Final Answer: The General Adaptation Syndrome explains how the body responds and adapts to the stress of training.

Answer: (B)

Q12.

Solution

Concept:

Isotonic contractions involve a change in muscle length to produce movement. This is the most common form of weight training.

Solution:

1. The passage defines 'Isotonic' exercises by stating they "involve a change in muscle length." 2. It provides the "barbell squat" as a specific example. 3. During a squat, the quadriceps lengthen (eccentric) as you go down and shorten (concentric) as you stand up. 4. Isometric involves no change in length, and Isokinetic involves constant speed; therefore, Isotonic is the correct term for movement-based lifting like squats.

Final Answer: Isotonic exercises involve a change in muscle length.

Answer: (B)

Q13.

Solution

Concept:

Ballistic stretching uses momentum and "bouncing" movements to force a joint beyond its normal range. This triggers a protective mechanism in the nervous system.

Solution:

1. The text states that ballistic stretching is often replaced because it "can trigger the 'stretch reflex'." 2. The stretch reflex is an automatic muscle contraction that occurs when a muscle is stretched too far or too fast; it is the body's way of preventing a tear. 3. However, if the momentum of the "bounce" is too strong, the muscle may tear while trying to contract against the stretch. 4. This creates a high risk of injury, which is why PNF or static stretching is preferred in modern sports.

Final Answer: Ballistic stretching is risky because it can trigger the 'stretch reflex' and cause injury.

Answer: (B)

Q14.

Solution

Concept:

Isokinetic exercises are performed on specialized machines (like Cybex or Biodex). These machines match the force applied by the user to maintain a specific velocity.

Solution:

1. The passage explicitly defines 'Isokinetic' exercises by stating they "require a constant speed regardless of force." 2. This is the defining characteristic: no matter how hard an athlete pushes, the machine will only allow the limb to move at the pre-set speed. 3. This allows for maximum tension throughout the entire range of motion, which is highly effective for rehabilitation.

Final Answer: The characteristic feature of Isokinetic exercise is that the speed of movement remains constant.

Answer: (B)

Q15.

Solution

Concept:

The "Exhaustion" stage of GAS is the final and most dangerous phase for an athlete. It represents a failure of the body's homeostatic mechanisms.

Solution:

1. The passage notes that coaches use specific methodologies to "avoid exhaustion." 2. Exhaustion occurs when the "training stress is too high" or "recovery is insufficient" to allow for the Resistance stage to complete. 3. In this phase, the athlete's performance drops, the immune system weakens, and the risk of chronic injury or "overtraining syndrome" becomes very high. 4. Winning a medal or finishing a warm-up would be part of the successful adaptation or session, not exhaustion.

Final Answer: Exhaustion occurs when training stress is too high or recovery is insufficient.

Answer: (B)

Q16.

Solution

Concept:

The Rikli Jones Senior Citizen Fitness Test is designed to evaluate functional fitness. Upper body flexibility is critical for seniors to perform tasks such as dressing (reaching for a zipper or sleeve) and personal hygiene.

Solution:

1. The **Back Scratch Test** measures how close the hands can come together behind the back. 2. The participant places one hand over the shoulder and the other hand reaching up from the waist. 3. The distance (overlap or gap) between the middle fingers is measured. 4. This specifically evaluates the range of motion of the **shoulder girdle** (Upper body flexibility). 5. Lower body flexibility is measured by the Chair Sit and Reach, and strength is measured by the Arm Curl or Chair Stand tests.

Final Answer: The Back Scratch Test is used to assess shoulder (upper body) flexibility.

Answer: (B)

Q17.

Solution

Concept:

Adaptive Physical Education (APE) is a sub-discipline of Physical Education. It is not a separate entity but a "diversified" version of the standard program.

Solution:

1. 'CWSN' stands for Children with Special Needs. 2. **Adaptive Physical Education** refers to the modification of traditional physical education activities so they are safe, personally satisfying, and successful for students with disabilities. 3. It involves modifying the equipment (e.g., larger balls), the rules (e.g., allowing more bounces in tennis), and the environment. 4. The goal is "inclusion" and ensuring that every individual, regardless of their physical or cognitive impairment, has access to the benefits of physical activity. 5. It is a mandatory requirement in many educational systems to ensure equity.

Final Answer: Adaptive PE is a modified program designed to meet the unique needs of individuals with disabilities.

Answer: (B)

Q18.

Solution

Concept:

Handball uses a "Progressive Punishment" system. Referees use cards of different colors to signify the severity of a foul or unsportsmanlike behavior.

Solution:

1. A **Yellow Card** is the official signal for a "Warning." 2. Each player is usually allowed one yellow card; if they commit another foul of similar severity, they receive a 2-minute suspension. 3. A team is generally limited to three yellow cards total for players, after which further fouls lead directly to suspensions. 4. A Red Card signifies a disqualification (the player must leave for the rest of the game), and a Blue Card (rare) indicates a written report will follow the red card. 5. Therefore, the yellow card is the standard signal for an initial warning.

Final Answer: Showing a Yellow Card is the official signal for a warning in Handball.

Answer: (B)

Q19.

Solution

Concept:

Twisting asanas are vital for spinal health and digestive stimulation. The description provided belongs to one of the most famous seated twists in Hatha Yoga.

Solution:

1. "Sitting with legs stretched forward" is the starting position (Dandasana). 2. Folding one leg and placing the foot on the opposite thigh/ground, then twisting the torso, is the hallmark of **Ardha Matsyendrasana** (Half Lord of the Fishes Pose). 3. In this pose, one arm typically braces against the folded knee to deepen the twist, while the gaze is directed over the back shoulder. 4. Paschimottanasana is a forward fold, Vajrasana is kneeling, and Gomukhasana (Cow Face Pose) focuses more on the shoulders and hips without a major spinal twist.

Final Answer: The asana described is Ardha Matsyendrasana.

Answer: (B)

Q20.

Solution

Concept:

Fractures are broadly categorized into "Closed" (Simple) and "Open" (Compound). The primary distinction is whether the internal injury is exposed to the external environment.

Solution:

1. A **Compound Fracture** (Open Fracture) occurs when the force of the break causes the bone to move so much that it **pierces through the skin**. 2. This creates an open wound, which significantly increases the risk of infection (osteomyelitis) because bacteria can enter the body and reach the bone. 3. This is an emergency situation requiring immediate surgical intervention. 4. A "bone broken into many pieces" is Comminuted, and a "small crack" is a Stress or Greenstick fracture. 5. Therefore, the presence of an open wound/skin piercing defines a Compound fracture.

Final Answer: A Compound Fracture is characterized by the broken bone piercing the skin.

Answer: (B)

Q21.

Solution

Concept:

Yoga practices are multifaceted, offering physiological, psychological, and structural benefits. Matching a practice to its primary recognized benefit is key to understanding yogic science.

Solution:

1. **Shavasana (I):** Known as the "Corpse Pose," it is the ultimate practice for **deep relaxation** and nervous system recovery. Thus, (I) matches with (B). 2. **Vajrasana (II):** The "Thunderbolt Pose" is unique because it can be performed immediately after meals to **improve digestion** by altering blood flow to the pelvic region. Thus, (II) matches with (A). 3. **Tadasana (III):** The "Mountain Pose" focuses on vertical alignment and stretching the whole body upward, which is often used in physical education to help **improve height and posture**. Thus, (III) matches with (D). 4. **Bhujangasana (IV):** The "Cobra Pose" involves a deep back-bend that specifically targets the **strength and flexibility of the spine**. Thus, (IV) matches with (C). 5. Combining these: (I)-(B), (II)-(A), (III)-(D), (IV)-(C).

Final Answer: The correct matching sequence is (I)-(B), (II)-(A), (III)-(D), (IV)-(C).

Answer: (A)

Q22.

Solution

Concept:

Circuit Training is a versatile conditioning method developed by Morgan and Adamson in 1953. It combines resistance training with endurance.

Solution:

1. In **Circuit Training**, several exercises (usually 6 to 12) are arranged in a specific sequence or "stations" in a circular fashion. 2. The athlete moves from one station (e.g., push-ups) to the next (e.g., star jumps) with **minimal rest** (usually 15–30 seconds) or no rest at all. 3. Once all stations are completed, it counts as one "circuit." 4. This method is highly effective for improving both strength and cardiovascular endurance simultaneously. 5. Interval training focuses on running/rest ratios, and Fartlek is based on speed play in nature.

Final Answer: The method involving stations with little rest is Circuit Training.

Answer: (C)

Q23.

Solution

Concept:

The Partial Curl-Up test is used to measure abdominal strength and endurance while minimizing the involvement of the hip flexors and reducing strain on the lower back.

Solution:

1. The subject lies on a mat with knees flexed. Two parallel lines are marked on the mat (or a metronome strip is used). 2. The fingers must slide from the first line to the second line during the contraction. 3. For the standard protocol (often used in the FitnessGram or Khelo India battery), the distance the fingers must travel between the lines is **6 inches (approximately 15.2 cm)**. 4. If the subject is younger (e.g., under 10 years), the distance is sometimes reduced to 3 inches, but 6 inches is the standard adult/senior school measurement. 5. This specific distance ensures a sufficient range of motion to activate the Rectus Abdominis.

Final Answer: The standard distance for finger movement in a Partial Curl-Up is 6 inches.

Answer: (B)

Q24.

Solution

Concept:

Medical terminology in sports science is used to describe orthopedic conditions. Flat Foot is a condition where the entire sole of the foot touches the floor while standing.

Solution:

1. The longitudinal arch of the foot provides a "spring" for walking and running. 2. The scientific name for the loss or absence of this arch is **Pes Planus**. 3. **Genu Valgum** refers to Knock Knees, **Genu Varum** refers to Bow Legs, and **Talipes Equinovarus** refers to Club Foot. 4. Pes Planus can lead to fatigue in the feet and pain in the knees or lower back due to poor shock absorption.

Final Answer: Flat Foot is scientifically known as Pes Planus.

Answer: (B)

Q25.

Solution

Concept:

A lever consists of three parts: the Fulcrum (turning point), the Effort (applied force), and the Resistance (load). Their relative positions determine the class of the lever.

Solution:

1. **First Class Lever:** The **Fulcrum is in the middle**, between the effort and the resistance. (Memory cue: F is in the middle). 2. A classic human example is the atlanto-occipital joint in the neck (nodding the head), where the joint is the fulcrum, the weight of the head is the resistance, and the neck muscles provide the effort. 3. In a Second Class lever, the Resistance is in the middle; in a Third Class lever, the Effort is in the middle. 4. Therefore, the description provided matches a First Class Lever.

Final Answer: A lever with the Fulcrum in the middle is a First Class Lever.

Answer: (A)

Q26.

Solution

Concept:

Spinal deformities are categorized by the direction of the abnormal curvature. Kyphosis specifically affects the thoracic region (upper back).

Solution:

1. **Kyphosis** is an increased front-to-back curve of the upper spine. 2. It causes the shoulders to round forward and the upper back to appear hunched. 3. This is often caused by poor sitting habits, weak back muscles, or conditions like Scheuermann's disease. 4. Corrective measures include back-stretching asanas like **Bhujangasana** (Cobra) or **Chakrasana** (Wheel). 5. In contrast, Lordosis is an inward curve of the lower back, and Scoliosis is a sideways curve.

Final Answer: The outward curve of the thoracic spine is Kyphosis.

Answer: (B)

Q27.

Solution

Concept:

Joint actions are defined by the change in the angle between bones. Extension increases the angle at a joint, while flexion decreases it.

Solution:

1. During the **upward phase** of a push-up, the athlete is pushing their body away from the floor. 2. This requires the Triceps Brachii muscle to contract to straighten the arm. 3. Straightening the arm at the elbow increases the angle between the humerus and the radius/ulna. 4. This action is scientifically termed **Extension**. 5. Flexion occurs during the downward phase when the body is lowered and the elbow angle decreases.

Final Answer: The joint action at the elbow during the upward phase of a push-up is Extension.

Answer: (B)

Q28.

Solution

Concept:

Kabaddi is a game of speed and lung capacity. Historically, the raider had to chant "Kabaddi" in a single breath. In modern professional play, this is regulated by a digital countdown timer to ensure consistency.

Solution:

1. According to the standard rules of Pro Kabaddi and the International Kabaddi Federation, a raider is given a fixed time to enter the opponent's court, attempt a touch, and return to their own half. 2. The maximum duration for a single raid is **30 Seconds**. 3. If the raider does not return to their half within these 30 seconds, they are declared "out," and the defending team is awarded a point. 4. This "30-second rule" has made the game faster and more tactical, preventing players from stalling the clock.

Final Answer: The maximum duration allowed for a single Raid is 30 Seconds.

Answer: (B)

Q29.

Solution

Concept:

Non-communicable diseases (NCDs) are chronic conditions that do not spread from person to person. Hypertension, or high blood pressure, is often called a "silent killer" because it may show no symptoms while damaging the cardiovascular system.

Solution:

1. Malaria, Typhoid, and Cholera are all infectious (communicable) diseases caused by parasites or bacteria. 2. **Hypertension** is a lifestyle-related condition. 3. High **sodium (salt) intake** causes the body to retain fluid, which increases blood volume and pressure. 4. **Stress** triggers the release of hormones like adrenaline, which constrict blood vessels and increase heart rate. 5. Over time, these factors lead to a chronic elevation in blood pressure, which is a major risk factor for heart attacks and strokes.

Final Answer: Hypertension is the lifestyle disease linked to high sodium and stress.

Answer: (C)

Q30.

Solution

Concept:

Interval Training involves periods of high-intensity work followed by periods of lower-intensity recovery. The effectiveness of this method depends on the "Recovery" phase.

Solution:

1. The core principle of Interval Training is to perform a bout of exercise at a high heart rate. 2. Instead of waiting for the heart rate to return to a complete resting state, the next bout is started when the body has only partially recovered. 3. This is known as **Incomplete Recovery**. 4. Typically, the next interval begins when the heart rate drops to about 120–130 bpm (depending on the athlete's fitness). 5. This forces the body to adapt to high-intensity loads while in a fatigued state, which is excellent for improving both aerobic and anaerobic power.

Final Answer: Interval training is based on the principle of effort followed by Incomplete Recovery.

Answer: (B)

Q31.

Solution

Concept:

Projectile motion is influenced by several factors including the angle, initial velocity, and the environmental conditions. While 45° is mathematically ideal in a vacuum, real-world sports involve air resistance and a release height that is not at ground level.

Solution:

1. The passage explains that in a vacuum, 45° provides the maximum distance. 2. However, for a shot-putter, the "height of release" is the athlete's hand (around 2 meters above the ground), not the ground itself. 3. When the release point is higher than the landing point, a lower angle (less than 45°) allows the object to stay in the air for a proportional amount of time while maximizing horizontal velocity. 4. Additionally, **air resistance** acts against the projectile. 5. Therefore, as stated in the text, the optimal angle for a Shot-put is around $37° - 42°$ due to these two specific factors.

Final Answer: The optimal angle is less than 45° because of air resistance and the height of release.

Answer: (B)

Q32.

Solution

Concept:

Stability is the ability of a body to resist being moved or to return to its original position after being disturbed. In biomechanics, stability is directly related to the position of the Center of Gravity (COG).

Solution:

1. The **Center of Gravity** is the point where the entire weight of the body is concentrated. 2. The lower the COG is to the ground (base of support), the more stable the object becomes. 3. The passage explicitly states: "a lower 'Center of Gravity' (COG) increase an athlete's balance." 4. This is because a lower COG requires a much larger tilt or force to move the line of gravity outside the base of support. 5. Therefore, lowering the COG increases stability.

Final Answer: When an athlete lowers their COG, stability increases.

Answer: (B)

Q33.

Solution

Concept:

Wrestling requires high defensive stability to prevent an opponent from throwing or pushing the athlete. Wrestlers instinctively apply biomechanical principles to maintain their balance.

Solution:

1. The passage mentions that "wrestlers crouch low" to increase balance. 2. By crouching, the wrestler is performing two actions: widening their **base of support** and **lowering their Center of Gravity**. 3. This makes it physically much harder for an opponent to disrupt their equilibrium or lift them. 4. This is a direct application of the principle of stability mentioned in the text. 5. It has nothing to do with air resistance or weight reduction.

Final Answer: A wrestler's crouch is an application of enhancing stability through a lower COG and wider base.

Answer: (B)

Q34.

Solution

Concept:

In pure physics (kinematics), the range of a projectile depends on the sine of the angle of release.

Solution:

1. The passage provides a theoretical baseline for projectile motion. 2. It states: "Theoretically, in a vacuum, a 45° angle provides maximum distance." 3. In a vacuum, there is no air resistance to slow the object down, and if we assume the landing and release heights are equal, 45° is the perfect balance between vertical lift and horizontal speed. 4. This is a fundamental law of physics taught in biomechanics to compare real-world performance against theoretical ideals.

Final Answer: Theoretically, 45° is the angle for maximum distance in a vacuum.

Answer: (B)

Q35.

Solution

Concept:

Once a projectile (like a ball or javelin) leaves the hand, the athlete can no longer control it. Its path (parabola) is determined by the forces acting upon it in the environment.

Solution:

1. The definition of a projectile provided in the text is an object "subject only to acceleration by gravity and air resistance." 2. **Gravity** pulls the object downward toward the earth at 9.8 m/s^2, creating the downward curve of the flight. 3. **Air Resistance** (drag) acts in the opposite direction of the flight, slowing the object's horizontal velocity. 4. While muscular force starts the motion, it is not acting on the object while it is "in the air." 5. Therefore, Gravity and Air Resistance are the two primary forces.

Final Answer: The two primary forces acting on a projectile are Gravity and Air Resistance.

Answer: (B)

Q36.

Solution

Concept:

The 'Chair Stand Test' is a key component of the Rikli Jones battery, designed specifically for older adults to assess their functional capacity for activities like getting out of a car or rising from a chair without assistance.

Solution:

1. The test requires the participant to sit in the middle of a chair with feet flat on the floor and arms crossed over the chest. 2. On the signal "go," the participant stands up completely and sits back down as many times as possible in 30 seconds. 3. This repetitive movement primarily taxes the quadriceps, hamstrings, and gluteal muscles. 4. Therefore, it is a direct measurement of **Lower Body Strength**. 5. It is distinct from the 'Arm Curl Test' which measures upper body strength.

Final Answer: The Chair Stand Test is used to measure lower body strength.

Answer: (B)

Q37.

Solution

Concept:

Psychologists and sports scientists distinguish between harmful aggression and productive intensity. Assertive behavior is often the "ideal" state for a competitive athlete.

Solution:

1. **Assertive Behavior** involves playing with high intensity, using legitimate physical force, and being proactive, but all within the rules of the game. 2. Unlike Hostile or Instrumental aggression, there is no "intent to harm" the opponent in assertive behavior. 3. Coaches praise this because it shows dominance and effort without risking penalties or disqualifications. 4. Violence and Hostile aggression are generally discouraged as they lead to unsportsmanlike conduct and injuries.

Final Answer: Assertive Behavior involves high intensity and physical contact within the rules.

Answer: (C)

Q38.

Solution

Concept:

Each macronutrient plays a specific role in the body. Proteins are unique because they contain nitrogen and are the primary structural component of all cells, including muscle fibers.

Solution:

1. During intense training, muscle fibers undergo microscopic damage (micro-tears). 2. **Proteins** provide the amino acids necessary to repair these tears and build new muscle tissue (anabolism). 3. This is why proteins are universally known as the "Body Builders" of the nutrition world. 4. Carbohydrates provide energy, and Vitamins (like Vitamin C) assist in metabolic reactions but do not build tissue mass directly.

Final Answer: Proteins are the 'Body Builder' nutrient essential for muscle repair.

Answer: (C)

Q39.

Solution

Concept:

The Big Five model is a robust framework for predicting behavior. Each trait describes a specific pattern of thought and action.

Solution:

1. **Conscientiousness** is the tendency to be organized, dependable, and disciplined. 2. An athlete with high conscientiousness will have a structured training log, will never be late for the team bus, and will stick to a recovery plan even when it is tedious. 3. This trait is often a better predictor of long-term success in individual sports than raw talent alone. 4. Neuroticism refers to emotional instability, which would be the opposite of being dependable and focused.

Final Answer: An organized and goal-oriented athlete would score high on Conscientiousness.

Answer: (C)

Q40.

Solution

Concept:

Throwing events in Athletics have specific weight requirements for the implements based on the gender and age of the participants, as regulated by World Athletics.

Solution:

1. The Discus for **Senior Men** has a standard weight of **2 kg**. 2. For Senior Women, the Discus is lighter, weighing exactly 1 kg. 3. Junior categories use weights in between, such as 1.5 kg or 1.75 kg. 4. The 2 kg weight ensures that the power and technique of male throwers are tested consistently at the Olympic and World Championship levels.

Final Answer: The weight of a standard Discus for Senior Men is 2 kg.

Answer: (C)

Q41.

Solution

Concept: Health-related physical fitness focuses on components that improve health and functional capacity. Muscular endurance is the ability of a muscle or group of muscles to perform repetitive contractions against a force for an extended period without fatigue.

Solution:

1. The **Modified Push-Up** test is specifically designed to evaluate the strength and endurance of the upper body, particularly the chest (pectorals), shoulders (deltoids), and the back of the arms (triceps). 2. For girls, the "modified" version involves supporting the lower body on the knees rather than the toes, which adjusts the resistance to be more appropriate for testing sustained repetitions. 3. Because the test requires the subject to perform as many repetitions as possible until exhaustion, it primarily measures **Muscular Endurance** rather than a single maximal effort (strength) or explosive movement (power). 4. Cardiovascular efficiency is unrelated as it pertains to heart and lung function during aerobic activity.

Final Answer: (B) Muscular Endurance of the upper body

Answer: (B)

Q42.

Solution

Concept: The Harvard Step Test is a cardiovascular fitness test designed to measure aerobic capacity and the heart's ability to recover after intense exercise. The resulting Fitness Index Score (FIS) serves as a numerical representation of an athlete's physical efficiency.

Solution:

1. The Harvard Step Test involves stepping up and down on a platform for a set duration (usually 5 minutes) or until exhaustion. 2. The core of the assessment lies in the **recovery phase**. Once the exercise stops, the subject's pulse is taken at specific intervals (usually 1–1.5 min, 2–2.5 min, and 3–3.5 min post-exercise). 3. The formula for the Fitness Index Score is:

$$FIS = \frac{\text{Duration of Exercise in seconds} \times 100}{2 \times (\text{Sum of heart rates during recovery})}$$

4. Variables like body weight, height, or maximum speed are not part of the standard FIS calculation, as the focus is strictly on the heart's recovery rate.

Final Answer: (B) Sum of heart rates during recovery

Answer: (B)

Q43.

Solution

Concept: Angular momentum is a measure of the amount of rotation an object has, taking into account its mass, shape, and speed. In a closed system where no external torque acts, the total angular momentum remains constant.

Solution:

1. The principle at play is the **Conservation of Angular Momentum**, expressed by the formula $L = I\omega$, where L is angular momentum, I is the moment of inertia, and ω is angular velocity. 2. When a gymnast pulls their arms and legs in (tucking), they decrease their **moment of inertia** (I) by bringing their mass closer to the axis of rotation. 3. Since L must remain constant and I has decreased, the **angular velocity** (ω) must increase to compensate. This allows the gymnast to spin faster and complete the somersault. 4. The Magnus effect and Bernoulli's principle relate to fluid dynamics (air/water pressure), and Newton's Third Law relates to equal and opposite reaction forces, none of which primarily explain the change in rotation speed during flight.

Final Answer: (A) Conservation of Angular Momentum

Answer: (A)

Q44.

Solution

Concept: The **Five-Factor Model** (also known as the Big Five) is a widely accepted psychological framework that categorizes personality into five broad dimensions: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (OCEAN).

Solution:

1. **Neuroticism** is the dimension that assesses emotional stability and the tendency to experience negative emotions. 2. Individuals who score high in Neuroticism are more likely to experience feelings such as anxiety, worry, fear, anger, frustration, and loneliness. They often struggle with stress and may interpret ordinary situations as threatening. 3. In contrast, **Extraversion** relates to sociability, **Agreeableness** to cooperativeness, and **Conscientiousness** to self-discipline and organization. 4. Therefore, being "frequently worried, insecure, and emotionally unstable" is the classic definition of high Neuroticism.

Final Answer: (C) Neuroticism

Answer: (C)

Q45.

Solution

Concept: Sports injuries are generally classified into soft tissue injuries (ligaments, muscles, tendons) and skin injuries. Understanding the specific anatomical structures involved is crucial for correct diagnosis and treatment.

Solution:

1. **Tennis Elbow (Lateral Epicondylitis):** This is an overuse injury involving the **tendons of the forearm** that attach to the lateral side of the elbow. 2. **Sprain:** This specifically refers to the stretching or tearing of **ligaments**, which are the tough bands of fibrous tissue that connect two bones together in your joints (commonly the ankle or knee). 3. **Strain:** Often confused with a sprain, a strain is an injury to **muscle or tendon fibers**. It occurs when these fibers are overstretched or torn. 4. **Abrasion:** This is a superficial skin injury caused by friction or scraping against a rough surface, affecting the **surface of the skin**.

Matching these: (I)-(B), (II)-(A), (III)-(D), (IV)-(C).

Final Answer: (A) (I)-(B), (II)-(A), (III)-(D), (IV)-(C)

Answer: (A)

Q46.

Solution

Concept: The **Female Athlete Triad** is a medical syndrome observed in physically active females, involving three distinct but deeply interconnected health components related to energy availability and hormonal balance.

Solution:

1. **Disordered Eating / Low Energy Availability:** This is the cornerstone of the triad, where the athlete does not consume enough calories to support the energy body requires for both exercise and normal physiological functions. 2. **Amenorrhea:** The lack of energy causes hormonal disruptions (specifically a drop in estrogen), leading to the absence of menstruation for three months or more. 3. **Osteoporosis:** Lower estrogen levels and poor nutrition lead to weakened bones and low bone mineral density, significantly increasing the risk of stress fractures. 4. **Hypertension** (high blood pressure) is not a component of this triad; in fact, athletes with the triad may actually exhibit low blood pressure (hypotension) due to malnutrition or dehydration.

Final Answer: (D) Hypertension

Answer: (D)

Q47.

Solution

Concept: The International Handball Federation (IHF) establishes the official duration of play for various age groups. A standard match consists of two equal periods of play to ensure a balanced assessment of team performance and endurance.

Solution:

1. For all teams with players aged 16 and over (Senior Men and Women), the official duration of a standard match is **60 minutes**. 2. This is divided into **two halves of 30 minutes** each. 3. Between the two halves, there is a regular interval, usually 10 minutes. 4. In the event of a tie during a knockout game, overtime periods consist of two halves of 5 minutes each. However, the standard regulation time remains 60 minutes. 5. Options like 40 minutes (used for younger age groups) or 90 minutes (standard for football/soccer) are incorrect for senior-level handball.

Final Answer: (B) 60 Minutes (two halves of 30 minutes)

Answer: (B)

Q48.

Solution

Concept: In Hatha Yoga, the **Shatkriyas** (or Shatkarmas) are six purification techniques used to cleanse the internal organs and balance the body's doshas. Each technique targets a specific area of the body.

Solution:

1. **Dhauti** is the cleansing of the upper digestive tract. Specifically, **Vastra Dhauti** involves swallowing a long, thin strip of cotton cloth (moistened with warm water) to clean the stomach walls before gently withdrawing it. 2. **Basti** is a technique for colon cleansing (similar to a natural enema). 3. **Nauli** involves the abdominal massage and isolation of the rectus abdominis muscles to stimulate the digestive fire. 4. **Kapalbhati** is a breathing technique primarily intended for frontal brain purification and respiratory cleansing. 5. Therefore, the specific act of using a cloth for stomach cleansing is uniquely associated with Dhauti.

Final Answer: (B) Dhauti

Answer: (B)

Q49.

Solution

Concept: Soft tissue injuries are common in sports and involve damage to muscles, ligaments, or tendons. A contusion is a specific type of soft tissue injury that occurs without breaking the surface of the skin.

Solution:

1. **Assertion (A)** is true: In high-contact sports like Boxing and Kabaddi, athletes frequently experience physical collisions, punches, or tackles. These impacts often lead to contusions. 2. **Reason (R)** is true: A contusion occurs when a direct, blunt impact (like a fist or a knee) strikes the body. This force crushes the underlying muscle fibers and small blood vessels (capillaries) without breaking the skin. 3. The blood that leaks from these crushed vessels pools under the skin, creating the characteristic bluish-purple discoloration known as a bruise. 4. Since the nature of contact sports (A) directly leads to the mechanism of injury described (R), the Reason is the correct explanation for the Assertion.

Final Answer: (A) Both (A) and (R) are true, and (R) is the correct explanation.

Answer: (A)

Q50.

Solution

Concept: "Khelo India" (Play India) is a national program launched by the Government of India to revive the sports culture at the grass-root level by building a strong framework for all sports played in the country.

Solution:

1. The **Sports Authority of India (SAI)** is the apex national sports body in India, established by the Ministry of Youth Affairs and Sports. 2. SAI is the primary organization responsible for the implementation of the "Khelo India" scheme, including the **Khelo India Fitness Assessment** through the "Khelo India Mobile App." 3. This assessment aims to identify sporting talent and monitor the physical fitness of school-going children (ages 5–18) across the country. 4. While the Ministry of Youth Affairs and Sports provides the policy framework, SAI executes the on-ground testing, data collection, and teacher training (PEOs) for these assessments.

Final Answer: (B) Sports Authority of India (SAI)

Answer: (B)

Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	B	2	B	3	B	4	C	5	A
6	B	7	B	8	B	9	C	10	D
11	B	12	B	13	B	14	B	15	B
16	B	17	B	18	B	19	B	20	B
21	A	22	C	23	B	24	B	25	A
26	B	27	B	28	B	29	C	30	B
31	B	32	B	33	B	34	B	35	B
36	B	37	C	38	C	39	C	40	C
41	B	42	B	43	A	44	C	45	A
46	D	47	B	48	B	49	A	50	B