

CUET UG Physical Education Sample Paper - 11

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 (NHP) 2017 outlines a "Time-bound" target to achieve '90:90:90' for HIV/AIDS. This means 90% of people living with HIV know their status, 90% of those diagnosed receive antiretroviral therapy, and 90% of those on therapy achieve:

- (A) Viral suppression
- (B) Total immunity
- (C) Weight gain
- (D) Occupational rehabilitation

Q2. Under the NRHM, the 'Janani Shishu Suraksha Karyakram' (JSSK) entitles all pregnant women delivering in public health institutions to:

- (A) Absolutely free and no-expense delivery, including C-sections
- (B) Free life insurance worth ₹ 5 Lakh
- (C) A permanent government job for the mother
- (D) Free international travel for neonatal checkups

Q3. A professional marathon runner who is deeply reflective, prefers solitary training environments, and experiences high anxiety before a race would be classified under Jung's and Big Five theories respectively as:



- (A) Extrovert and High Neuroticism
- (B) Introvert and High Neuroticism
- (C) Ambivert and Low Conscientiousness
- (D) Introvert and High Agreeableness

Q4. Sheldon's 'Mesomorphic' individual is characterized by a 'Somatotonic' temperament. In a competitive sports setting, such an individual is most likely to exhibit:

- (A) Social withdrawal and hypersensitivity to pain
- (B) A love for physical adventure, risk-taking, and dominance
- (C) A relaxed posture and slow reactions
- (D) High levels of complacency and lack of ambition

Q5. Match List-I (Personality Dimension) with List-II (Specific Behavioral Trait):

List-I	List-II
(I) Openness	(A) Punctual, reliable, and hardworking
(II) Conscientiousness	(B) Affectionate, forgiving, and helpful
(III) Agreeableness	(C) Imaginative, curious, and creative
(IV) Extraversion	(D) Talkative, energetic, and assertive

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

Q6. In the game of Handball, what is the specific duration of the 'Team Time-Out' and how many can a team request per half?

- (A) 2 minutes; One per half
- (B) 1 minute; One per half



- (C) 1 minute; Two per half
- (D) 30 seconds; Three per half

Q7. In Cricket, if a ball hits the 'wicket-keeper's helmet' which has been placed on the ground behind the stumps, how many penalty runs are awarded to the batting team?

- (A) 2 Runs
- (B) 4 Runs
- (C) 5 Runs
- (D) 10 Runs

Q8. In Yoga, 'Pranayama' consists of three distinct phases. Identify the correct sequence and meaning:

- (A) Puraka (Exhalation), Kumbhaka (Retention), Rechaka (Inhalation)
- (B) Puraka (Inhalation), Kumbhaka (Retention), Rechaka (Exhalation)
- (C) Rechaka (Inhalation), Puraka (Exhalation), Kumbhaka (Retention)
- (D) Kumbhaka (Inhalation), Rechaka (Retention), Puraka (Exhalation)

Q9. The 'Nauli' Kriya involves the isolation and churning of which specific muscle group?

- (A) Pectoralis Major
- (B) Rectus Abdominis
- (C) Latissimus Dorsi
- (D) Gastrocnemius

Q10. Which type of 'Soft Tissue Injury' is characterized by the stretching or tearing of 'Ligaments' usually caused by a sudden twist in a joint?

- (A) Strain



- (B) Sprain
- (C) Contusion
- (D) Abrasion

Q11. An athlete suffering from 'Osteoporosis' or 'Brittle Bones' is likely deficient in which combination of micro-nutrients?

- (A) Vitamin K and Iron
- (B) Calcium and Vitamin D
- (C) Vitamin A and Magnesium
- (D) Sodium and Vitamin B12

Q12. Which award is specifically reserved for 'Coaches' who have produced medal winners at prestigious International sports events?

- (A) Arjuna Award
- (B) Dronacharya Award
- (C) Maulana Abul Kalam Azad Trophy
- (D) Dhyan Chand Award for Lifetime Achievement

Q13. In training methodology, the 'Interval Training Method' is based on the principle of:

- (A) Continuous work without any rest
- (B) Work with 'Incomplete Recovery'
- (C) Work with 'Full Recovery'
- (D) Only static stretching exercises

Q14. In the Rikli and Jones test, the '8-Foot Up and Go' test is designed to assess which physical quality in senior citizens?

- (A) Static Balance



- (B) Agility and Dynamic Balance
- (C) Aerobic Endurance
- (D) Upper Body Strength

Q15. According to the Principle of Levers, a 'First Class Lever' is one where the:

- (A) Resistance is between the Fulcrum and Effort
- (B) Effort is between the Fulcrum and Resistance
- (C) Fulcrum is between the Effort and Resistance
- (D) Force is equal to the Resistance

Q16. Identify the 'Asana' shown in the image below, which is highly recommended for managing Diabetes by compressing the abdominal organs.



- (A) Bhujangasana
- (B) Mandukasana
- (C) Vajrasana
- (D) Chakrasana

Q17. Identify the 'Postural Deformity' in the image where there is an abnormal lateral (sideways) curvature of the spine.





- (A) Kyphosis
- (B) Lordosis
- (C) Scoliosis
- (D) Bow Legs

Q18. Which specific training method uses the 'Myotatic Stretch Reflex' to produce maximum force in the shortest time?

- (A) Continuous Method
- (B) Plyometric Method
- (C) Fartlek Method
- (D) Isometric Method

Q19. The 'Arjuna Award' winner receives a bronze statuette, a certificate, and a cash prize of:

- (A) ₹ 5 Lakh
- (B) ₹ 10 Lakh
- (C) ₹ 15 Lakh
- (D) ₹ 25 Lakh

Q20. Match the 'Shatkarmas' with their respective cleansing areas:



List-I	List-II
(I) Neti	(A) Colon cleansing
(II) Basti	(B) Frontal sinus cleansing
(III) Kapalbhathi	(C) Nasal passage cleansing
(IV) Trataka	(D) Eye cleansing

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

Q21. In Biomechanics, a person performing a 'Push-up' represents which class of lever system at the feet and the body?

- (A) First Class Lever
- (B) Second Class Lever
- (C) Third Class Lever
- (D) Fourth Class Lever

Q22. The 'SAI Khelo India Fitness Test' for the 5-8 years age group includes which of the following tests to measure 'Coordination'?

- (A) Flamingo Balance Test
- (B) Plate Tapping Test
- (C) 600m Run/Walk
- (D) Sit and Reach Test

Q23. In Kabaddi, when the 'Raider' touches one or more defenders and reaches their home court safely, the points awarded are called:

- (A) Lona



- (B) Technical Points
- (C) Touch Points
- (D) Bonus Points

Q24. Assertion (A): Introverts generally perform better in sports like Shooting or Archery.

Reason (R): Introverts prefer low-stimulation environments and possess high levels of internal concentration.

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

Q25. Which of the following is a 'Complex Carbohydrate' that provides sustained energy for endurance athletes?

- (A) Glucose
- (B) Fructose
- (C) Starch (Glycogen)
- (D) Sucrose

Q26. The 'Newton's Third Law' (Law of Action and Reaction) is best exemplified in swimming when:

- (A) A swimmer floats on the water
- (B) A swimmer pushes the water backward to move forward
- (C) A swimmer dives from the block
- (D) A swimmer holds their breath

Q27. Under the Mid-Day Meal (PM-POSHAN) guidelines, the 'Upper Primary' (Class VI-VIII) meal must provide how many calories?



- (A) 450 Calories
- (B) 700 Calories
- (C) 800 Calories
- (D) 1000 Calories

Q28. What is the weight of a standard 'Handball' used in the Men's category?

- (A) 325-375 grams
- (B) 425-475 grams
- (C) 500-550 grams
- (D) 200-250 grams

Q29. In 'Rikli and Jones Senior Citizen Test', the 'Arm Curl Test' is used to measure:

- (A) Lower body strength
- (B) Upper body strength
- (C) Flexibility
- (D) Aerobic endurance

Case Study 1

Read the following passage and answer the questions 30 to 34:

The National Rural Health Mission (NRHM) was launched on 12th April 2005, to provide accessible, affordable, and quality health care to the rural population, especially the vulnerable groups. One of the key strategies of NRHM is the creation of a cadre of Accredited Social Health Activists (ASHA). ASHAs are community health volunteers who act as a link between the community and the public health system. They are trained to counsel women on birth preparedness, importance of safe delivery, breast-feeding, and immunization. Furthermore, the NRHM emphasizes the 'Janani Suraksha Yojana' (JSY), a safe motherhood intervention that promotes institutional delivery by providing a cash incentive to poor pregnant women.



- Q30.** What is the primary role of an 'ASHA' worker as described in the passage?
- (A) To perform surgeries in rural hospitals
 - (B) To act as a link between the community and the public health system
 - (C) To distribute free sports equipment in villages
 - (D) To teach physical education in primary schools
- Q31.** When was the National Rural Health Mission officially launched?
- (A) 12th April 2000
 - (B) 12th April 2005
 - (C) 15th August 1947
 - (D) 1st January 2010
- Q32.** The 'Janani Suraksha Yojana' (JSY) aims to reduce maternal mortality by:
- (A) Discouraging institutional delivery
 - (B) Promoting institutional delivery through cash incentives
 - (C) Providing free gym memberships to mothers
 - (D) Reducing the number of hospitals
- Q33.** According to the passage, ASHAs are NOT trained for which of the following?
- (A) Counseling on birth preparedness
 - (B) Promoting immunization
 - (C) Managing international sports federations
 - (D) Counseling on breast-feeding
- Q34.** The NRHM's primary focus is on which segment of the population?
- (A) Urban elite population



- (B) Rural population, especially vulnerable groups
- (C) International athletes
- (D) Corporate employees

Case Study 2

Read the following passage and answer the questions 35 to 39:

Yoga is a group of physical, mental, and spiritual practices or disciplines which originated in ancient India. Among the various paths, Hatha Yoga emphasizes 'Shatkarma' or 'Shatkriya', which are six purification techniques. These are essential to balance the three doshas (Vata, Pitta, Kapha) in the body. One of the most common kriyas is 'Kapalbhati', which is a 'frontal brain cleansing' technique involving forceful exhalations and passive inhalations. Another vital practice is 'Trataka', which involves staring at a small object or candle flame without blinking. This is believed to strengthen the eyes and improve 'Dharana' (concentration). Yoga also includes 'Pranayama', the regulation of breath, which helps in controlling the 'Prana' or life force.

- Q35.** The term 'Shatkarma' refers to how many purification techniques?
- (A) Four
 - (B) Five
 - (C) Six
 - (D) Eight
- Q36.** Which kriya is specifically described as a 'frontal brain cleansing' technique?
- (A) Neti
 - (B) Nauli
 - (C) Kapalbhati
 - (D) Basti
- Q37.** According to the passage, what is the primary benefit of 'Trataka'?



- (A) Improved digestion
- (B) Strengthening eyes and improving concentration
- (C) Increased muscle mass
- (D) Better running speed

Q38. The purification techniques in Hatha Yoga are intended to balance what?

- (A) The external environment
- (B) The three Doshas (Vata, Pitta, Kapha)
- (C) The bank account of the practitioner
- (D) The scores in a football match

Q39. What is 'Pranayama' defined as in the passage?

- (A) A series of physical jumps
- (B) The regulation of breath to control life force
- (C) A type of diet plan
- (D) A form of muscular massage

Q40. What is the official height of the Goal Post in Hockey?

- (A) 1.83 meters
- (B) 2.14 meters
- (C) 3.66 meters
- (D) 1.22 meters

Q41. In Kabaddi, the 'Baulk Line' is located at what distance from the Mid-line in a Men's court?

- (A) 3.00 meters
- (B) 3.75 meters



- (C) 4.50 meters
- (D) 2.50 meters

Q42. The 'Arjuna Award' is given to an athlete who has shown good performance over the previous four years and also shows qualities of:

- (A) Leadership, sportsmanship, and discipline
- (B) High aggression and winning at any cost
- (C) Wealth and social influence
- (D) Academic excellence only

Q43. Which type of fracture occurs when a bone is broken and it also damages the internal organs like lungs or heart?

- (A) Simple Fracture
- (B) Compound Fracture
- (C) Complicated Fracture
- (D) Impacted Fracture

Q44. In the Big Five model, high 'Agreeableness' is characterized by being:

- (A) Critical and suspicious
- (B) Cooperative and trusting
- (C) Organized and systematic
- (D) Calm and even-tempered

Q45. Which of the following is a 'Non-Nutritive' component of diet?

- (A) Proteins
- (B) Fats
- (C) Roughage (Fiber)



(D) Carbohydrates

Q46. A 'Stress Fracture' is most common among which type of athletes?

- (A) Weightlifters
- (B) Distance Runners
- (C) Chess Players
- (D) Archers

Q47. What is the duration of a standard Kabaddi match for Men?

- (A) 20 – 5 – 20 minutes
- (B) 15 – 5 – 15 minutes
- (C) 30 – 10 – 30 minutes
- (D) 10 – 2 – 10 minutes

Q48. Newton's First Law of Motion is also known as the:

- (A) Law of Acceleration
- (B) Law of Action and Reaction
- (C) Law of Inertia
- (D) Law of Momentum

Q49. The 'Sit and Reach' test is primarily used to measure the flexibility of which region?

- (A) Upper back and neck
- (B) Lower back and hamstrings
- (C) Shoulders and arms
- (D) Knees and ankles



Q50. Who is the first recipient of the 'Major Dhyan Chand Khel Ratna Award'?

- (A) Sachin Tendulkar
- (B) Viswanathan Anand
- (C) Karnam Malleswari
- (D) Abhinav Bindra



Detailed Solutions**Q1.****Solution****Concept:**

The National Health Policy (NHP) 2017 introduced several "Time-bound" targets to combat the HIV/AIDS epidemic. The '90:90:90' strategy is a global concept adopted by India to ensure that by the target year, the majority of the infected population is diagnosed, treated, and managed effectively to prevent further transmission.

Solution:

1. The first '90' means that 90% of all people living with HIV will know their HIV status through testing. 2. The second '90' means that 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy (ART). 3. The third '90' means that 90% of all people receiving antiretroviral therapy will have 'Viral Suppression.' 4. Viral suppression occurs when the amount of HIV in the blood (viral load) is reduced to undetectable levels, which prevents the progression of the disease and makes the risk of transmitting the virus virtually zero.

Final Answer: The third 90 in the target refers to achieving Viral suppression.

Answer: (A)

Q2.**Solution****Concept:**

The Janani Shishu Suraksha Karyakram (JSSK) was launched on 1st June 2011. It is a major initiative under the National Rural Health Mission (NRHM) to eliminate "out-of-pocket" expenses for both pregnant women and sick infants.

Solution:

1. The scheme is designed to encourage institutional delivery (delivering in a hospital rather than at home) to ensure medical safety for mother and child. 2. Under JSSK, pregnant women are entitled to absolutely free delivery, including Cesarean sections (C-sections), in public health institutions. 3. The "free" aspect covers everything: drugs, consumables, diagnostics (blood/urine tests, ultrasounds), diet during stay, and even transport from home to the facility and back. 4. This removes the financial barrier that often prevents rural families from seeking professional medical help during childbirth.

Final Answer: JSSK entitles pregnant women to absolutely free and no-expense delivery, including C-sections.

Answer: (A)



Q3.

Solution**Concept:**

Personality theories help in understanding an athlete's behavior. Jung's theory focuses on the direction of interest (Introversion vs. Extroversion), while the Big Five (Five-Factor Model) assesses traits like Neuroticism (emotional stability).

Solution:

1. A "reflective" person who "prefers solitary training environments" fits the definition of an **Introvert**. Introverts draw energy from within and often prefer individual sports or quiet settings. 2. "Experiences high anxiety before a race" is a classic indicator of high **Neuroticism**. Neuroticism represents the tendency to experience negative emotions like anxiety, depression, or emotional instability. 3. Therefore, an athlete who is solitary (Introvert) and anxious (High Neuroticism) combines these two specific psychological classifications.

Final Answer: The athlete is classified as an Introvert with High Neuroticism.

Answer: (B)

Q4.

Solution**Concept:**

W.H. Sheldon's theory of Somatotypes links body structure to personality temperaments. He identified three body types: Endomorph, Mesomorph, and Ectomorph, each paired with a specific temperament (Viscerotonia, Somatotonia, and Cerebrotonia).

Solution:

1. The **Mesomorphic** body type is characterized by a sturdy, muscular, and athletic frame with broad shoulders. 2. The associated temperament, **Somatotonia**, is characterized by a desire for physical exertion, power, and physical adventure. 3. In sports, a Somatotonic person is likely to be assertive, competitive, willing to take risks, and often dominant in their field. 4. They are the opposite of Ectomorphs (Cerebrotonia), who are often socially withdrawn or sensitive to pain.

Final Answer: A Mesomorphic/Somatotonic individual exhibits a love for physical adventure, risk-taking, and dominance.

Answer: (B)



Q5.

Solution**Concept:**

The Big Five Personality Theory (OCEAN) is the most widely accepted model in modern psychology. It includes five broad domains: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism.

Solution:

1. **Openness to Experience (I):** This involves curiosity and creativity. A curiosity about new cultures or training methods fits here (C).
2. **Conscientiousness (II):** This trait is about being organized, reliable, and hardworking. A punctual and disciplined athlete scores high here (A).
3. **Agreeableness (III):** This reflects how cooperative and kind a person is. Being helpful and forgiving is the core of this trait (B).
4. **Extraversion (IV):** This relates to sociability and energy. Being talkative and assertive in a team environment is a characteristic of an extrovert (D).
5. Matching: (I)-C, (II)-A, (III)-B, (IV)-D.

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

Answer: (A)

Q6.

Solution**Concept:**

Handball is played on a court measuring 40 m × 20 m. A 'Team Time-Out' is a strategic pause requested by the team official to discuss tactics. The rules governing these are set by the International Handball Federation (IHF).

Solution:

1. According to official IHF regulations, each team is entitled to a maximum of three team time-outs during a match (excluding overtime).
2. However, a team can only request a maximum of two time-outs in each half of the regular playing time.
3. Each individual team time-out has a fixed duration of exactly 1 minute.
4. The request can only be made when the team is in possession of the ball by placing a green card on the table in front of the timekeeper.

Final Answer: The duration is 1 minute, and a team can request two per half (subject to the 3-per-match limit).

Answer: (C)



Q7.

Solution**Concept:**

The Laws of Cricket, maintained by the MCC, include specific provisions for "Illegal Fielding" or "Obstructions" on the field. This includes the placement of protective equipment like the wicket-keeper's helmet.

Solution:

1. If the wicket-keeper or any fielder places their helmet on the field of play and the ball in play strikes it, it is considered a violation. 2. Under Law 28.3 (Protective equipment), if the ball strikes a helmet belonging to the fielding side that is on the ground, the ball becomes 'dead' immediately. 3. As a penalty for this, the umpire awards 5 penalty runs to the batting side. 4. Additionally, any runs completed by the batsmen before the ball struck the helmet, plus the run in progress if they had crossed, are also added to the score.

Final Answer: 5 penalty runs are awarded to the batting team.

Answer: (C)

Q8.

Solution**Concept:**

Pranayama is the fourth limb of Ashtanga Yoga, involving the regulation of vital energy (Prana) through breathing. It consists of three specific physiological actions performed in a rhythmic cycle.

Solution:

1. **Puraka:** This is the act of conscious inhalation. The lungs are filled slowly and steadily with air. 2. **Kumbhaka:** This is the retention of breath. It can be 'Antar Kumbhaka' (holding after inhalation) or 'Bahya Kumbhaka' (holding after exhalation). 3. **Rechaka:** This is the act of conscious exhalation. The air is expelled from the lungs in a controlled manner. 4. The correct physiological and spiritual sequence for a single cycle is Inhalation → Retention → Exhalation.

Final Answer: Puraka (Inhalation), Kumbhaka (Retention), Rechaka (Exhalation).

Answer: (B)



Q9.

Solution**Concept:**

Nauli is one of the 'Shatkarmas' (purification techniques) in Hatha Yoga. It is considered an advanced practice for abdominal health and requires significant control over the core musculature.

Solution:

1. The practice of Nauli involves the isolation of the **Rectus Abdominis** muscles (the "six-pack" muscles). 2. The practitioner first performs 'Uddiyana Bandha' (abdominal lock) and then projects these muscles forward. 3. The "churning" motion (Madhya Nauli, Vama Nauli, and Dakshina Nauli) involves rolling these muscles from side to side. 4. This action provides a deep internal massage to the abdominal viscera, improving digestion and strengthening the core.

Final Answer: Nauli involves the isolation and churning of the Rectus Abdominis.

Answer: (B)

Q10.

Solution**Concept:**

Soft tissue injuries are common in sports and are classified based on the type of tissue affected (muscles, tendons, or ligaments). 'Sprain' and 'Strain' are often confused but refer to different structures.

Solution:

1. A **Sprain** is specifically an injury to a **Ligament**. Ligaments are tough, fibrous tissues that connect bone to bone at a joint. 2. It usually occurs when a joint is forced beyond its normal range of motion, causing the ligament to stretch or tear (e.g., a twisted ankle). 3. A **Strain** is an injury to a **Muscle or Tendon** (tissue connecting muscle to bone), often called a "pulled muscle." 4. Contusions are bruises caused by direct impact, and abrasions are surface-level scrapes on the skin.

Final Answer: A Sprain is the stretching or tearing of Ligaments.

Answer: (B)



Q11.

Solution**Concept:**

Nutrition is a fundamental pillar of bone health in athletes. Osteoporosis is a skeletal condition characterized by decreased bone mineral density and the deterioration of bone micro-architecture, making bones fragile and highly susceptible to fractures.

Solution:

1. Calcium is the primary structural component of bone tissue; approximately 99%. Vitamin D (Calciferol) plays a critical role as it is the primary regulator of calcium absorption in the small intestine. Without adequate Vitamin D, the body can only absorb about 10%. When an athlete is deficient in this combination, the body leaches calcium from the bones to maintain blood calcium levels (essential for muscle contraction and nerve signaling), leading to 'Brittle Bones'. 4. This deficiency is a key component of the "Female Athlete Triad" and is a major risk factor for stress fractures in endurance runners.

Final Answer: Osteoporosis and brittle bones are linked to a deficiency in Calcium and Vitamin D.

Answer: (B)

Q12.

Solution**Concept:**

The National Sports Awards of India are designed to recognize excellence in various facets of sports. While some awards honor the athletes, others honor the support system—specifically the mentors and coaches.

Solution:

1. The **Dronacharya Award** is the highest honor for sports coaches in India. It is awarded to individuals who have demonstrated outstanding merit in training athletes and helping them achieve podium finishes at international events like the Olympics, Asian Games, or World Championships. 2. It was established in 1985 and named after the legendary 'Guru Dronacharya' from the Indian epic Mahabharata, who was a master of advanced military arts. 3. The Arjuna Award is for athletes with four years of consistent performance, while the Dhyani Chand Award is for lifetime contribution to sports development. 4. The Dronacharya Award ensures that the technical expertise and dedication of the coach are recognized alongside the athlete's success.

Final Answer: The Dronacharya Award is specifically reserved for Coaches.

Answer: (B)



Q13.

Solution**Concept:**

The Interval Training Method is a highly sophisticated training system used to build both aerobic and anaerobic endurance. It was pioneered by Woldemar Gerschler and Dr. Hans Reindell in the 1930s.

Solution:

1. The scientific core of this method is the principle of **'Incomplete Recovery.'** 2. Unlike "Repetition Training" where an athlete rests until the heart rate returns to near-normal, Interval Training requires the next bout of high-intensity work to begin while the body is still recovering. 3. Typically, the next interval starts when the heart rate drops to approximately 120–130 beats per minute. 4. This keeps the cardiovascular system under sustained stress, which forces the heart to become larger and more efficient (Athletic Heart), significantly improving the athlete's recovery rate and stamina.

Final Answer: The Interval Training Method is based on the principle of work with 'Incomplete Recovery'.

Answer: (B)

Q14.

Solution**Concept:**

Functional fitness in the elderly is measured by their ability to perform activities of daily living (ADLs). The Rikli and Jones Senior Citizen Fitness Test includes the '8-Foot Up and Go' test to assess mobility.

Solution:

1. The test involves a participant sitting on a chair, then at the signal, standing up and walking as fast as possible (without running) around a cone placed 8 feet away, and returning to the seated position. 2. This test requires a combination of several physical attributes: leg strength (to stand up), walking speed, and the ability to maneuver and turn (Agility). 3. More importantly, it measures **'Dynamic Balance'**, which is the ability to maintain equilibrium while moving. 4. This is a critical predictor of fall risk in senior citizens; a slower time indicates a higher risk of losing balance during daily movement.

Final Answer: The '8-Foot Up and Go' test assesses Agility and Dynamic Balance.

Answer: (B)

Q15.

Solution**Concept:**

A lever is a rigid bar that rotates around a fixed point called a fulcrum. In biomechanics, the human body uses bones as levers and joints as fulcrums to produce movement through muscle effort.

Solution:

1. Levers are classified into three types based on the relative positions of the Fulcrum (F), Effort (E), and Resistance (R). 2. In a **First Class Lever**, the **Fulcrum** is located in the middle, between the Effort and the Resistance ($E - F - R$). 3. A classic anatomical example is the joint between the atlas vertebra and the skull (atlanto-occipital joint). When nodding the head, the joint is the fulcrum, the weight of the face is the resistance, and the neck muscles provide the effort. 4. Second-class levers have the Resistance in the middle (e.g., standing on toes), and third-class levers have the Effort in the middle (e.g., bicep curl).

Final Answer: In a First Class Lever, the Fulcrum is located between the Effort and Resistance.

Answer: (C)

Q16.

Solution**Concept:**

Yoga asanas are often categorized by their physiological impact. For metabolic disorders like Diabetes Mellitus, asanas that provide "intra-abdominal compression" are highly effective. Mandukasana (Frog Pose) is a premier posture for stimulating the pancreas.

Solution:

1. In **Mandukasana**, the practitioner sits in Vajrasana, makes fists with the hands, and places them near the navel. 2. Upon folding forward, the fists exert deep pressure on the abdominal region. 3. This pressure specifically targets the pancreas, stimulating the secretion of insulin, which helps in regulating blood sugar levels. 4. While Bhujangasana is good for the spine and Chakrasana for overall flexibility, Mandukasana is the specific clinical recommendation for diabetic management in the yoga syllabus.

Final Answer: The asana shown is Mandukasana.

Answer: (B)



Q17.

Solution**Concept:**

Postural deformities are abnormalities in the alignment of the skeletal system. Spinal deformities are classified based on the direction of the curve: Kyphosis (backward), Lordosis (forward), and Scoliosis (lateral).

Solution:

1. **Scoliosis** is a condition where the spine curves to the side (laterally) in an 'S' or 'C' shape. 2. This deformity can cause one shoulder to be higher than the other or one hip to be more prominent. 3. It often develops during the growth spurt just before puberty but can also be caused by poor posture or carrying heavy loads on one side consistently. 4. Kyphosis refers to a "hunchback" (thoracic region), and Lordosis refers to a "hollow back" (lumbar region).

Final Answer: The lateral curvature shown is Scoliosis.

Answer: (C)

Q18.

Solution**Concept:**

Plyometric training, also known as "jump training," is used to increase explosive power. It relies on the Stretch-Shortening Cycle (SSC) and the body's natural neurological reflexes.

Solution:

1. The **Myotatic Stretch Reflex** (or stretch reflex) is the body's involuntary response to an external stimulus that stretches the muscles. 2. In plyometrics, a muscle is rapidly stretched (eccentric phase) and then immediately contracted (concentric phase). 3. This rapid stretching triggers the sensory neurons in the muscle spindles, which send a signal to the spinal cord to contract the muscle forcefully to prevent injury. 4. By utilizing this reflex, an athlete can generate significantly more force than they could through a standard muscle contraction, which is essential for activities like sprinting, jumping, or throwing.

Final Answer: The Plyometric Method uses the Myotatic Stretch Reflex.

Answer: (B)



Q19.

Solution**Concept:**

The Arjuna Award, officially known as the Arjuna Awards for Outstanding Performance in Sports and Games, is the second-highest sporting honor in India. The rewards for this award were recently revised by the Ministry of Youth Affairs and Sports.

Solution:

1. For many years, the cash prize for the Arjuna Award was ₹ 5 Lakh. 2. However, in 2020, the government significantly increased the prize money for National Sports Awards. 3. Currently, an Arjuna Awardee receives a bronze statuette of Arjuna, a scroll (certificate), ceremonial dress, and a cash prize of ₹ 15 Lakh. 4. In comparison, the Major Dhyan Chand Khel Ratna awardees now receive ₹ 25 Lakh.

Final Answer: The cash prize for the Arjuna Award is ₹ 15 Lakh.

Answer: (C)

Q20.

Solution**Concept:**

Shatkarmas are the six internal cleansing techniques mentioned in the Hatha Yoga Pradipika and Gheranda Samhita. Each technique targets a specific physiological area to remove toxins and balance the "Doshas."

Solution:

1. **Neti (I):** This involves cleansing the nasal passage using water (Jala Neti) or thread (Sutra Neti) to clear the sinuses (C). 2. **Basti (II):** This is a yogic enema used to cleanse the colon or lower abdomen (A). 3. **Kapalbhati (III):** Technically a breathing kriya, it is used for "frontal brain cleansing" and clearing the mucus from the respiratory tract (B). 4. **Trataka (IV):** This involves staring at a point (usually a candle flame) to cleanse the eyes and improve focus (D). 5.

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

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

Answer: (A)



Q21.

Solution**Concept:**

Biomechanics in sports involves the application of mechanical principles to the human body. Lever systems are a fundamental part of this, classified based on the relative position of the Fulcrum, Resistance, and Effort. A push-up is a complex movement that involves multiple lever actions, primarily acting as a "nutcracker" type system.

Solution:

1. In a push-up, the **Fulcrum** is located at the toes (the pivot point on the ground). 2. The **Resistance** (Load) is the body's center of gravity (the weight of the torso and legs), which acts downwards between the feet and the hands. 3. The **Effort** is provided by the muscles (primarily pectorals and triceps) pushing against the ground at the hands. 4. Since the Resistance (body weight) is located between the Fulcrum (toes) and the Effort (hands), this movement represents a **Second Class Lever**. 5. Second-class levers are designed for mechanical advantage, allowing the athlete to move a large weight (their body) with relatively less effort compared to other lever classes.

Final Answer: A push-up represents a Second Class Lever system.

Answer: (B)

Q22.

Solution**Concept:**

The SAI Khelo India Fitness Test is a standardized battery of tests designed to map the fitness levels of Indian school children. It is divided into two age groups: 5–8 years (Class 1–3) and 9–18 years (Class 4–12), with specific tests for each.

Solution:

1. For the younger age group (5–8 years), the focus is on fundamental movement skills and coordination rather than heavy endurance or power. 2. The **Plate Tapping Test** is the specific tool used to measure speed and coordination of limb movement (specifically hand-eye coordination). 3. In this test, the child must move their preferred hand back and forth between two discs as quickly as possible while the other hand remains on a central rectangular plate. 4. The Flamingo Balance test measures static balance, the 600m run measures endurance (for the older group), and Sit and Reach measures flexibility.

Final Answer: The Plate Tapping Test is used to measure coordination in the 5–8 years age group.

Answer: (B)



Q23.

Solution**Concept:**

Kabaddi is a high-intensity contact sport where points are scored through offensive "raids" and defensive "tackles." The terminology for scoring is strictly defined in the official rulebook of the Amateur Kabaddi Federation of India (AKFI).

Solution:

1. When a raider enters the opponent's court and makes physical contact with one or more defenders (tags them) and successfully returns to their own half without being tackled, it is a successful raid. 2. The points earned for this action are specifically called **Touch Points**. One point is awarded for every defender touched. 3. **Bonus Points** are awarded for crossing the bonus line when there are at least 6 defenders on the mat. 4. **Lona** refers to two extra points awarded when an entire team is declared "out." **Technical Points** are awarded for rule violations or coaching infractions.

Final Answer: Points awarded for touching defenders and returning safely are Touch Points.

Answer: (C)

Q24.

Solution**Concept:**

Sport psychology uses personality traits to match athletes with specific disciplines. Jung's classification of Introversion and Extroversion is particularly relevant to the stimulation levels required for peak performance in different sports.

Solution:

1. **Assertion (A):** Shooting and Archery are sports that require high precision, fine motor control, and extreme mental focus over long periods. **Introverts** naturally excel here because they are comfortable with self-reflection and solitary focus. Thus, Assertion (A) is true. 2. **Reason (R):** Introverts typically have a more sensitive nervous system and prefer low-stimulation environments. This allows them to maintain a high level of **internal concentration** without being distracted by external crowds or noise. This explains why they perform well in "quiet" precision sports. Thus, Reason (R) is true. 3. Since the characteristics of introverts (Reason) directly explain why they are suited for precision sports (Assertion), the Reason is the correct explanation.

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

Answer: (A)



Q25.

Solution**Concept:**

Carbohydrates are the primary fuel source for athletes. They are classified as Simple (Sugars) or Complex (Starches/Fiber) based on their molecular structure and how quickly they are digested and absorbed.

Solution:

1. Simple carbohydrates like glucose and fructose provide a quick "spike" of energy but are used up rapidly. 2. **Complex Carbohydrates**, such as **Starch** (and its animal storage form, **Glycogen**), consist of long chains of sugar molecules. 3. Because these chains must be broken down into glucose before entering the bloodstream, they provide a slow and sustained release of energy. 4. This "sustained release" is vital for endurance athletes (like marathoners or cyclists) to prevent "hitting the wall" (depleting energy) mid-event.

Final Answer: Starch (Glycogen) is a complex carbohydrate that provides sustained energy.

Answer: (C)

Q26.

Solution**Concept:**

Newton's Laws of Motion form the basis of Biomechanics in sports. The Third Law, popularly known as the Law of Action and Reaction, states that for every action, there is an equal and opposite reaction. This principle is fundamental in aquatic locomotion where the medium (water) provides the resistance necessary for propulsion.

Solution:

1. In swimming, to move forward, the swimmer must apply a force against the water. 2. When the swimmer performs a stroke (like in Freestyle or Butterfly), the hands and feet push the water backward and downward. This is the **Action**. 3. Simultaneously, the water exerts an equal and opposite force on the swimmer's body, pushing it forward and upward. This is the **Reaction**. 4. The efficiency of a swimmer depends on how effectively they can apply this "Action" to maximize the "Reaction." 5. Floating is related to Archimedes' Principle (Buoyancy), and holding breath is a physiological function, neither of which are direct examples of the Third Law of Motion.

Final Answer: Swimming exemplifies the Third Law when a swimmer pushes the water backward to move forward.

Answer: (B)



Q27.

Solution**Concept:**

The PM-POSHAN (formerly Mid-Day Meal) scheme is a school meal program in India designed to better the nutritional standing of school-age children nationwide. The nutritional norms are strictly categorized into Primary and Upper Primary levels to meet age-specific caloric and protein needs.

Solution:

1. According to the official guidelines, the nutritional norms for school meals are as follows: 2. For **Primary (Class I to V)**: 450 Calories and 12 grams of Protein. 3. For **Upper Primary (Class VI to VIII)**: 700 Calories and 20 grams of Protein. 4. These standards ensure that the growing body and developing brain of students in the 11–14 year age bracket receive adequate macronutrients during school hours. 5. The increase in requirements for the Upper Primary section reflects the onset of puberty and higher metabolic demands compared to younger children.

Final Answer: The Upper Primary meal must provide 700 Calories.

Answer: (B)

Q28.

Solution**Concept:**

Sports equipment specifications are standardized by international governing bodies to ensure fair competition. For Handball, the International Handball Federation (IHF) defines different ball sizes and weights based on the age and gender of the participants.

Solution:

1. There are three official sizes for handballs: 2. **Size 3**: Used for Men (over 16 years). The circumference is 58–60 cm, and the weight is **425–475 grams**. 3. **Size 2**: Used for Women (over 14 years) and Male youth (12–16 years). The weight is 325–375 grams. 4. **Size 1**: Used for Female youth (8–14 years) and Male youth (8–12 years). The weight is 290–330 grams. 5. Using a ball that is too light or too heavy for the category can affect the aerodynamics of the throw and the safety of the players.

Final Answer: The standard weight for a Men's category Handball is 425–475 grams.

Answer: (B)



Q29.

Solution**Concept:**

The Rikli and Jones Senior Citizen Fitness Test was developed specifically to measure functional fitness in older adults. Each test in the battery targets a specific muscle group or functional ability needed for independent living.

Solution:

1. The **Arm Curl Test** measures the number of bicep curls a person can perform in 30 seconds (using a 5lb weight for women and 8lb for men). 2. Its primary purpose is to assess **Upper Body Strength** and endurance. 3. This is vital for senior citizens to perform daily tasks such as carrying groceries, lifting luggage, or picking up grandchildren. 4. Lower body strength is assessed by the 'Chair Stand Test,' while flexibility is assessed by the 'Sit and Reach' and 'Back Scratch' tests.

Final Answer: The Arm Curl Test is used to measure Upper body strength.

Answer: (B)

Q30.

Solution**Concept:**

The National Rural Health Mission (NRHM) emphasizes community-based healthcare. A central pillar of this strategy is the ASHA (Accredited Social Health Activist) worker, who serves as a vital bridge between the rural population and the formal healthcare system.

Solution:

1. As explicitly stated in the passage: "ASHAs are community health volunteers who act as a link between the community and the public health system." 2. Their role is not clinical (performing surgeries) or educational in a general sense (teaching PE), but rather focused on health advocacy and maternal/child welfare. 3. They live within the community they serve, which allows them to build trust and motivate families toward healthy behaviors. 4. They facilitate access to existing health services (like local clinics or JSY incentives) for the rural and vulnerable populations.

Final Answer: The primary role of an ASHA is to act as a link between the community and the public health system.

Answer: (B)



Q31.

Solution**Concept:**

When a cricket ball is in play, any external object placed on the field of play by the fielding side that interferes with the ball is subject to penalty under the MCC Laws of Cricket. This specifically includes protective equipment like the wicket-keeper's helmet.

Solution:

1. According to **Law 28.3 (Protective equipment on the ground)**, the fielding side must not leave any equipment on the field of play. 2. If a ball in play strikes a helmet that has been placed on the ground by the fielding side, the ball immediately becomes 'dead'. 3. The umpire will then award **5 penalty runs** to the batting side. 4. In addition to these 5 penalty runs, the batting side also receives the runs completed by the batsmen, plus the run in progress if they had crossed before the ball hit the helmet. 5. This rule ensures that the fielding side does not gain an unfair advantage or create an obstacle that alters the natural path of the ball.

Final Answer: 5 penalty runs are awarded to the batting team.

Answer: (B)

Q32.

Solution**Concept:**

The Janani Suraksha Yojana (JSY) is a safe motherhood intervention under the National Rural Health Mission (NRHM). It is a 100% centrally sponsored scheme that integrates cash assistance with delivery and post-delivery care.

Solution:

1. The primary objective of JSY is to reduce maternal and neonatal mortality by **promoting institutional delivery** (births taking place in health facilities) among poor pregnant women. 2. The scheme provides a cash incentive to the mother for delivering in a government or accredited private health facility. 3. In rural areas, the ASHA worker also receives an incentive for motivating the mother and facilitating the institutional birth. 4. By moving births from home to hospitals, the government ensures that skilled birth attendants and emergency obstetric care are available to handle complications, thereby saving lives.

Final Answer: JSY aims to reduce mortality by promoting institutional delivery through cash incentives.

Answer: (B)



Q33.

Solution**Concept:**

ASHA (Accredited Social Health Activist) workers are the backbone of the NRHM. They are community-based health volunteers specifically trained to provide basic health guidance and facilitate access to healthcare services in rural India.

Solution:

1. As per the passage and NRHM guidelines, ASHAs are trained in maternal and child health. This includes counseling on birth preparedness, breast-feeding, and the importance of immunization. 2. They are also trained to act as 'depot holders' for essential items like Oral Rehydration Suction (ORS), Iron Folic Acid tablets, and condoms. 3. However, their training is strictly focused on **community health and grassroots advocacy**. 4. Managing international sports federations or high-level sports administration is entirely outside the scope of their training, which is focused on public health indicators like IMR (Infant Mortality Rate) and MMR (Maternal Mortality Ratio).

Final Answer: ASHAs are NOT trained for managing international sports federations.

Answer: (C)

Q34.

Solution**Concept:**

The National Rural Health Mission (NRHM) was specifically designed to address the healthcare disparities between urban and rural India. It focuses on strengthening the primary healthcare infrastructure in the countryside.

Solution:

1. The passage explicitly states that NRHM aims to "provide accessible, affordable, and quality health care to the **rural population, especially the vulnerable groups**." 2. Vulnerable groups include women, children, and those living in 'High Focus States' where health indicators are poor. 3. While urban health is covered under the NUHM (National Urban Health Mission), the NRHM is the specific component of the National Health Mission (NHM) dedicated to the rural masses. 4. It focuses on architectural correction of the health system to ensure that even the most remote village has access to a trained health activist (ASHA) and a primary health center.

Final Answer: The primary focus of NRHM is the rural population, especially vulnerable groups.

Answer: (B)



Q35.

Solution**Concept:**

In Hatha Yoga, purification of the body is considered a prerequisite for advanced Pranayama and Asana practice. These techniques are collectively known as the 'Shatkarmas'.

Solution:

1. The word 'Shat' in Sanskrit means **Six**, and 'Karma' (or Kriya) means **Action** or technique. 2. Therefore, 'Shatkarma' literally translates to the **Six Actions** of purification. 3. These six techniques are: Neti (nasal cleansing), Dhauti (digestive tract cleansing), Basti (colon cleansing), Nauli (abdominal churning), Kapalbhati (frontal brain cleansing), and Trataka (blinkless gazing). 4. These practices are essential to balance the 'Doshas' and prepare the body for higher spiritual practices by removing physical and energetic blockages.

Final Answer: Shatkarma refers to six purification techniques.

Answer: (C)

Q36.

Solution**Concept:**

Kapalbhati is one of the most popular 'Shatkarmas' (purification techniques) in Hatha Yoga. Although it involves breathing, it is technically classified as a 'Kriya' (cleansing action) rather than a traditional 'Pranayama' because its primary purpose is the detoxification of the respiratory and frontal brain regions.

Solution:

1. The term 'Kapal' means **Forehead** or **Skull**, and 'Bhati' means **Shining** or **Illuminating**. 2. The passage describes it as a **'frontal brain cleansing'** technique. 3. Physically, it involves forceful, rapid exhalations through the contraction of the abdominal muscles, while the inhalation remains passive and spontaneous. 4. This action helps in clearing the mucus from the air passages and increasing the oxygen supply to the brain, which leads to a "shining forehead" or a clear, alert mind. 5. In the hierarchy of Hatha Yoga, Kapalbhati is used to prepare the body for the more advanced stages of meditation by balancing the Kapha dosha.

Final Answer: Kapalbhati is described as a 'frontal brain cleansing' technique.

Answer: (C)



Q37.

Solution**Concept:**

Trataka is a Shatkarma technique that bridges the gap between physical purification and mental concentration (Dharana). It is a simple yet powerful practice for developing one-pointed focus.

Solution:

1. The practice of **Trataka** involves gazing steadily at a small object—most commonly a candle flame, a black dot, or the rising sun—without blinking until the eyes begin to water. 2. According to the passage, this practice is "believed to **strengthen the eyes and improve Dharana (concentration)**." 3. Biologically, it stimulates the tear glands to cleanse the eyes (similar to an internal washing). 4. Psychologically, by fixing the physical gaze on a single point, the wandering mind is forced to become still, which is the foundational step for deep meditation. 5. It does not directly affect running speed or muscle mass, which are physiological traits developed through physical training and nutrition.

Final Answer: The primary benefit of Trataka is strengthening eyes and improving concentration.

Answer: (B)

Q38.

Solution**Concept:**

Ayurveda and Yoga are closely linked through the concept of the 'Tridoshas'. Health is defined as a state of equilibrium between these three biological humors that govern the human body.

Solution:

1. The passage states: "These [Shatkarmas] are essential to **balance the three doshas (Vata, Pitta, Kapha)** in the body." 2. **Vata** represents air/ether (movement), **Pitta** represents fire/water (metabolism), and **Kapha** represents earth/water (structure). 3. An imbalance in these doshas is considered the root cause of physical and mental illness in yogic science. 4. The Shatkarmas use different elements (water for Neti, air for Kapalbhathi, friction for Nauli) to remove the excess of these humors, thereby restoring internal harmony. 5. This balance is necessary before an individual can progress safely to advanced Pranayama.

Final Answer: Shatkarmas are intended to balance the three Doshas (Vata, Pitta, Kapha).

Answer: (B)



Q39.

Solution**Concept:**

Pranayama is often misunderstood as simple "breathing exercises," but in the context of Yoga, it is a sophisticated method of bio-energy control. It is the fourth stage of Patanjali's Yoga Sutras.

Solution:

1. The word is derived from 'Prana' (Life Force) and 'Ayama' (Regulation or Extension). 2. The passage defines it as: "The regulation of breath, which helps in controlling the 'Prana' or life force." 3. By controlling the physical breath (the gross manifestation of Prana), a yogi learns to control the subtle energy channels (Nadis) of the body. 4. This control leads to a calm nervous system and a quiet mind, serving as the gateway to the internal stages of yoga (Pratyahara, Dharana, Dhyana). 5. It is not a diet plan or a muscular massage, although it has secondary benefits for both digestion and muscle relaxation.

Final Answer: Pranayama is the regulation of breath to control life force.

Answer: (B)

Q40.

Solution**Concept:**

Field hockey is played on a specific pitch with standardized goal dimensions regulated by the International Hockey Federation (FIH). Precision in these measurements is critical for both goalkeeping and scoring.

Solution:

1. The official dimensions of a Hockey goal post are defined in both metric and imperial units. 2. The width of the goal (the distance between the two vertical posts) is 3.66 meters (12 feet). 3. The height of the goal (the distance from the ground to the lower edge of the crossbar) is 2.14 meters (7 feet). 4. Understanding these constants is vital for CUET-UG questions on "Basics of Games." 5. 1.83 meters and 1.22 meters are incorrect dimensions for this specific field sport.

Final Answer: The official height of the Goal Post in Hockey is 2.14 meters.

Answer: (B)



Q41.

Solution**Concept:**

In the game of Kabaddi, the court is divided into two halves by a mid-line. Several parallel lines are drawn on each half that define the rules for a valid raid and scoring opportunities. The 'Baulk Line' is the most critical line for a raider to cross to make a raid "valid."

Solution:

1. For a raid to be considered legal or "valid," the raider must cross the **Baulk Line** with at least one foot while the other foot is in the air or also across the line. 2. In a standard Men's Kabaddi court (which measures 13 meters × 10 meters), the distance from the Mid-line to the Baulk Line is exactly **3.75 meters**. 3. Beyond the Baulk Line lies the 'Bonus Line', which is situated 1 meter further away (at 4.75 meters from the mid-line). 4. If a raider fails to cross the Baulk Line during a raid and returns to their half, they are declared "out" unless they have touched a defender or the raid is a "Third Raid" (Do-or-Die).

Final Answer: The Baulk Line is located at 3.75 meters from the Mid-line.

Answer: (B)

Q42.

Solution**Concept:**

The Arjuna Award is one of the most prestigious sporting honors in India. It is not just a reward for winning; the Ministry of Youth Affairs and Sports has set strict "Statutory Criteria" regarding the character and conduct of the recipient.

Solution:

1. To be eligible for the Arjuna Award, an athlete must have performed consistently at the international level (Olympics, World Championships, etc.) for the **preceding four years**. 2. Beyond the medal tally, the athlete must have demonstrated qualities of **Leadership, Sportsmanship, and a sense of Discipline**. 3. This means the athlete should be a role model for the youth, showing respect for opponents, officials, and the rules of the game. 4. Any athlete found guilty of doping or unsportsmanlike conduct is disqualified from consideration, regardless of their performance.

Final Answer: The award requires qualities of Leadership, sportsmanship, and discipline.

Answer: (A)



Q43.

Solution**Concept:**

Fractures are categorized based on the severity and the impact on the surrounding physiological structures. When a bone break is accompanied by damage to vital internal systems, it moves from a 'Simple' to a 'Complicated' classification.

Solution:

1. A **Simple Fracture** is a clean break where the bone does not pierce the skin. 2. A **Compound Fracture** is when the broken bone pierces the skin, creating an external wound. 3. A **Complicated Fracture** is a technical term used when the broken bone or its fragments cause injury to internal organs (like the lungs, heart, or liver), nerves, or major blood vessels. 4. For example, a fractured rib that punctures a lung is a classic case of a complicated fracture. This requires immediate and specialized medical intervention due to the risk of internal bleeding or organ failure.

Final Answer: A fracture that damages internal organs is a Complicated Fracture.

Answer: (C)

Q44.

Solution**Concept:**

In the Big Five Personality Model (OCEAN), 'Agreeableness' describes an individual's orientation toward interpersonal relationships. It measures how a person interacts with others in a social or team environment.

Solution:

1. Individuals who score high on **Agreeableness** are characterized by being **Cooperative, Trusting, and Kind**. 2. They value social harmony and are often willing to compromise their own interests for the sake of the group. In sports, these athletes are excellent "team players" who follow the coach's instructions and support their teammates. 3. In contrast, those who score low are often competitive, critical, or suspicious of others' motives. 4. "Organized" refers to Conscientiousness, and "Calm" refers to Emotional Stability (Low Neuroticism).

Final Answer: High Agreeableness is characterized by being Cooperative and trusting.

Answer: (B)



Q45.

Solution**Concept:**

Components of diet are divided into 'Nutritive' and 'Non-Nutritive.' Nutritive components (Macronutrients and Micronutrients) provide energy or aid in growth and repair. Non-nutritive components are those that do not provide calories or nutrients but are still essential for health.

Solution:

1. Proteins, Fats, and Carbohydrates are Nutritive components because they provide 4, 9, and 4 calories per gram, respectively, and support bodily functions. 2. **Roughage (Fiber)** is a **Non-Nutritive** component. It consists of indigestible plant matter (cellulose). 3. Although it provides zero calories and zero vitamins, it is essential for the digestive system as it adds bulk to the stool and prevents constipation. 4. Other non-nutritive components include water, color compounds, and flavor compounds found in food.

Final Answer: Roughage (Fiber) is a Non-Nutritive component of diet.

Answer: (C)

Q46.

Solution**Concept:**

A 'Stress Fracture' is a specific type of overuse injury that differs from acute fractures caused by a single traumatic event. It is characterized by microscopic cracks in the bone surface, typically occurring in weight-bearing bones due to repetitive sub-maximal loading.

Solution:

1. Unlike a clean break caused by a fall, a stress fracture develops over time when muscles become fatigued and are no longer able to absorb the shock of repeated impact. 2. The fatigued muscle transfers the overload of stress to the bone, causing a tiny crack. 3. This is most common among **Distance Runners** (marathoners, cross-country runners) because their training involves thousands of repetitive foot strikes on hard surfaces. 4. The most common sites for these fractures are the second and third metatarsals of the foot, the tibia (shin bone), and the fibula. 5. Prevention involves proper footwear, gradual increase in mileage, and ensuring adequate recovery time for bone remodeling.

Final Answer: Stress fractures are most common among Distance Runners.

Answer: (B)



Q47.

Solution**Concept:**

The duration of a sports match is standardized to ensure consistency across international competitions. Kabaddi matches are structured into two halves with a designated break for teams to change sides and rest.

Solution:

1. According to the Amateur Kabaddi Federation of India (AKFI) and International Kabaddi Federation (IKF) rules, a standard match for **Men** consists of two halves of 20 minutes each. 2. There is a mandatory 5-minute interval between the two halves, denoted as **20 – 5 – 20 minutes**.
3. For Women and Juniors (Boys/Girls), the match duration is slightly shorter, consisting of two halves of 15 minutes each with a 5-minute break (15 – 5 – 15).
4. If the match ends in a tie during a knockout stage, a "Golden Raid" or "Five-Five Raid" rule is applied to determine the winner.

Final Answer: The duration of a Men's Kabaddi match is 20 – 5 – 20 minutes.

Answer: (A)

Q48.

Solution**Concept:**

Sir Isaac Newton formulated three fundamental laws of motion that govern the movement of all objects. The First Law, often referred to as the 'Law of Inertia,' describes the behavior of objects when the net force acting on them is zero.

Solution:

1. The Law of Inertia states that "An object at rest remains at rest, and an object in motion remains in motion at a constant speed and in a straight line unless acted on by an unbalanced force." 2. **Inertia** is the inherent property of an object to resist any change in its state of rest or motion.
3. In sports, this is seen when a ball remains stationary on the penalty spot until kicked (force applied), or when a goalkeeper has to apply force to stop a moving ball.
4. The Second Law is the Law of Acceleration ($F = ma$), and the Third Law is the Law of Action and Reaction.

Final Answer: Newton's First Law of Motion is also known as the Law of Inertia.

Answer: (C)



Q49.

Solution**Concept:**

Flexibility is a health-related component of physical fitness. The 'Sit and Reach' test is one of the most common field tests used to assess the range of motion of the posterior chain of the body.

Solution:

1. The test is performed using a Sit and Reach box. The participant sits on the floor with legs extended and reaches forward as far as possible. 2. It specifically measures the flexibility of the **Lower back and Hamstrings**. 3. Tightness in these areas is often linked to lower back pain and reduced athletic performance in sports requiring explosive leg movements. 4. While it also involves the shoulders and calves to some extent, the primary clinical focus of the measurement is the extensibility of the hamstrings and the lumbar spine.

Final Answer: The Sit and Reach test measures the flexibility of the lower back and hamstrings.

Answer: (B)

Q50.

Solution**Concept:**

The Major Dhyan Chand Khel Ratna Award (formerly Rajiv Gandhi Khel Ratna) is the highest sporting honor in the Republic of India. It was instituted in 1991-92 to recognize spectacular and outstanding performance by a sportsperson.

Solution:

1. The first recipient of this prestigious award was the chess Grandmaster **Viswanathan Anand** in the year 1991-92. 2. He was recognized for his extraordinary achievements in international chess, which put India on the global map of the sport. 3. Later recipients include Karnam Malleswari (the first woman to receive it), Sachin Tendulkar, and Abhinav Bindra. 4. The award now carries a cash prize of ₹ 25 Lakh and is presented by the President of India.

Final Answer: Viswanathan Anand was the first recipient of the Khel Ratna Award.

Answer: (B)



Answer Key

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

