

**Physical Education (Theory)**  
**CISCE**  
**Academic Year: 2023-2024**  
**Date & Time: 22nd March 2024, 2:00 pm**

**Duration: 3h**

**Marks: 70**

1. Candidates are allowed an additional 15 minutes to read the paper only.
2. They must NOT start writing during this time.
3. Answer all questions in Section A and Section B.
4. Answer all questions on any two games in Section C.
5. The intended marks for questions or parts of questions are given in brackets [ ].

**SECTION-A (15 Marks)**

**Q1.**

1.1. One of the causes for chronic respiratory diseases is \_\_\_\_\_ pollution.

**Solution**

One of the causes for chronic respiratory diseases is air pollution.

**Explanation:**

Polluted air contains harmful gases and compounds that cause chronic respiratory diseases.

1.2. Sejal is an athlete of 400 m race. After an intense session of practice, her coach makes her do stretching to ease and relax her body. The type of exercise that Sejal's coach makes her do is \_\_\_\_\_ exercise.

**Solution**

Sejal is an athlete of 400 m race. After an intense session of practice, her coach makes her do stretching to ease and relax her body. The type of exercise that Sejal's coach makes her do is limbering exercise.

**Explanation:**

After an intense exercise session, limbering down is necessary to ease and relax the body.

1.3. \_\_\_\_\_ is a method by which strong teams are placed in the fixture in such a way that they do not compete against each other in the beginning of the competition.

### **Solution**

**Seeding** is a method by which strong teams are placed in the fixture in such a way that they do not compete against each other in the beginning of the competition.

### **Explanation:**

Seeding is a method for keeping the stronger player or strong team apart during the early stages of a knockout competition.

1.4. \_\_\_\_\_ are hard and thick layers of skin that develop from the skin's response to friction and pressure.

### **Solution**

**Corns** are hard and thick layers of skin that develop from the skin's response to friction and pressure.

### **Explanation:**

Corns are round regions of thickened skin that form as a result of frequent friction or pressure.

1.5. During a cricket match, a batsman gets injured on his shoulder (deltoid) after getting hit by the ball. The injury causes acute pain and discoloration of skin. This soft tissue injury that the player suffers from is known as \_\_\_\_\_.

### **Solution**

During a cricket match, a batsman gets injured on his shoulder (deltoid) after getting hit by the ball. The injury causes acute pain and discoloration of skin. This soft tissue injury that the player suffers from is known as **contusion**.

### **Explanation:**

Contusion is a soft tissue injury caused by a blow or blunt object that results in intense pain and skin discoloration.

1.6. Which one of the following chemicals is formed in the body while engaging in sports activities?

1. Chloric acid
2. Lactic acid
3. Acetic acid
4. Hydrochloric acid

**Solution**

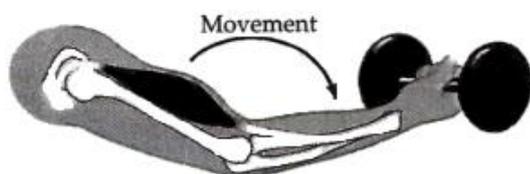
Lactic acid

**Explanation:**

Lactic acid is a molecule produced by the human body, mostly in muscle cells and red blood cells, during the breakdown of carbohydrates for energy.

Any activity that causes the body to use more oxygen than usual can cause cells to create lactic acid.

1.7. The image given below shows a type of contraction in which the length of the muscle increases when it is under load. Identify the type of contraction shown below.



1. Concentric
2. Decentric
3. Extrinsic
4. Eccentric

**Solution**

Eccentric

**Explanation:**

Eccentric contraction is an isotonic contraction in which the muscle length increases when tension is applied.

1.8. In \_\_\_\_\_ method, games are arranged in a sequential pattern and no bye is given to any team as there is no requirement for an odd or even number of teams.

1. Staircase
2. Tabular
3. Cyclic
4. Knock-out

### Solution

In **staircase** method, games are arranged in a sequential pattern and no bye is given to any team as there is no requirement for an odd or even number of teams.

### Explanation:

The staircase method of league tournaments is a way in which games are arranged in a sequential order with no bye provided to any team because there is no necessity for an odd or even number of teams.

1.9. The image given below shows a physical condition in which legs curve outward keeping the knees apart. Identify the physical condition shown below.



1. Flat foot
2. Scoliosis
3. Bowleg
4. Lordosis

### Solution

Bowleg

### Explanation:

Bowleg is a postural deformity that involves lateral bowing or angulation of the knee. Standing with your feet together reveals a large gap between the knees.

**1.10. Statement 1:** Isometric exercises are recommended to people going through the process of Rehabilitation.

**Statement 2:** Isometric exercises involve rigorous physical activities.

1. **Statement 1 is true and Statement 2 is false.**
2. Statement 1 is false and Statement 2 is true.
3. Both the Statements are true.
4. Both the Statements are false.

**Solution**

Statement 1 is true and Statement 2 is false.

**Explanation:**

Isometric workouts are advised for patients undergoing rehabilitation since they entail contracting muscles without moving the joints.

It provides a dual advantage of injury prevention and recovery while also increasing strength.

The statement that isometric exercises require strenuous physical activities is false. In this sort of exercise, a muscle tenses but does not move.

**1.11.** What is meant by culture?

**Solution**

Culture refers to the customs, art and social institutions of a specific group of people.

**1.12.** Give the meaning of posture.

**Solution**

Posture refers to the position or pose of the body, as well as the overall carriage of the body.

**1.13.** What is a round robin tournament?

**Solution**

League tournaments, often known as round robin tournaments, require every team to play each other once or twice.

1.14. Expand IOC.

**Solution**

The International Olympic Committee (IOC) is an international, non-profit, non-governmental organisation that promotes and supports sports as well as youth education through sports.

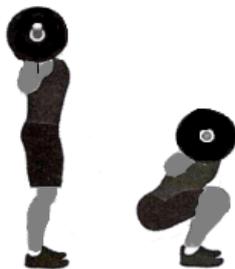
1.15. State any one objective of SAI.

**Solution**

SAI stands for Sports Authority of India. One goal of SAI is to implement schemes or programmes to achieve excellence in sports in many disciplines at the world level in order to establish india as a major sporting power.

**SECTION-B (25 Marks)**

Q2. Identify the training method shown below. Write any four advantages of this method.



**Solution**

The training method shown in the given figure is weight training.

The four advantages of this method are as follows:

1. Weight training increases functional strength and flexibility, which enhances functional health. Functional health helps to keep one safe while performing daily activities and reduces the risk of falling or other injuries.
2. It helps to increase muscle strength and mass. Basic strength training with weights is beneficial for body modification and muscle mass gain.
3. It aids in increasing speed. It promotes the growth of larger, harder and more powerful muscles, which enhances speed and exposes strength.
4. Weight training can help you lose body fat. It promotes fat loss as well as muscle tone.

Q3.

3.1. Answer the following questions:

3.1. (a) Discuss the role of Physical Education in National Integration.

### **Solution**

Sports and games encourage national integration and pride, as well as friendship, amity and a spirit of sportsmanship. National integration refers to the awareness of a common identity among a country's population. National integration is critical for developing a strong and prosperous nation. Physical education, which encompasses sports and games, health and hygiene, marching and so on, helps to promote national integration.

1. Physical education dissipates, reduces and eliminates communalism, linguistic differences and casteism.
2. In physical education, everyone participates in sports and group activities where one's performance and contribution to the team are valued over community linguistic differences and casteism.
3. Physical education develops the components of national integration. Participating in physical education programmes allows for the development of qualities such as cooperation, attitude, sympathy, friendliness, fellow feeling, willingness, respect for others, coordination, motivation, tolerance, integrity, oneness, trustworthiness and identification.

3.1. (b) (i) What is rehabilitation?

### **Solution**

Rehabilitation is the combined and coordinated use of medical, social, educational and occupational methods to train and maintain an individual's functional ability to the greatest extent possible. It encompasses all strategies targeted at mitigating the impact of injuries, disabling and handicapping conditions while also allowing people to achieve the highest level of functional ability.

3.1. (b) (ii) Name any three organisations working in the field of rehabilitation in India.

### **Solution**

The three-organisation working in the field of rehabilitation in India are:

1. Rehabilitation Council of India, New Delhi.
2. National Institute of Rehabilitation Training and Research, Cuttack, Orissa.
3. Society for Rehabilitation and Research of the handicapped, New Delhi.

**OR**

**3.2. (a)** Write a short note on the following.

Continuous Training Method

### **Solution**

O Astrand and Gosta Halner first introduced the continuous training method. This strategy is highly effective at increasing aerobic and anaerobic fitness. As the name suggests, it entails training with no rest or recovery intervals.

There are three types of continuous training i.e.

1. Slow continuous training
2. Fast continuous training
3. Varied pace training

The advantages of continuous training methods are:

1. Continuous training depletes carbohydrate storage.
2. It increases maximum oxygen intake.
3. It improves the efficiency of the heart and lungs.

The disadvantages of continuous training methods are:

1. This training method requires strong knowledge of time and pace management.
2. For some individuals, this training method might be extremely boring because longer sessions are boring.
3. It does not enhance speed or agility.

**3.2. (b)** Write a short note on the following.

Fracture

### **Solution**

Fractures are medical conditions in which the continuity of a bone is broken. A fracture occurs when a bone cracks or breaks. There are various types of fractures, including simple, compound, multiple, greenstick, spiral, commuted and impacted fracture.

Symptoms of fracture:

1. Pain in or near the injured site.
2. Blush colour, swelling or visible deformity in the damaged area.
3. The movement at the injured site appears and feels strange.
4. Irregular bone can be felt near the skin.

Causes

1. Fracture can occur as a result of the direct force involved in a strong strike.
2. A fall may cause a bone to fracture.
3. It may be caused by an accidental twisting of the joint.

First Aid for Fracture

The PRICE principle is the most efficient method to reduce negative local responses to fractures.

P – Protection, R – Rest, I – Ice, C – Compression and E – elevation.

**Q4.**

4.1. Show a league tournament fixture consisting of nine teams by using the Cyclic Method.

**Solution**

Cyclic fixture of nine teams

Number of Teams = 9

Number of Rounds = 9

$$\begin{aligned}\text{Number of Matches} &= \frac{N(N - 1)}{2} \\ &= \frac{9(9 - 1)}{2}\end{aligned}$$

= 36

Round I	Round II	Round III	Round IV	Round V	Round VI	Round VII	Round VIII	Round IX
9 ↔ Bye	8 ↔ Bye	7 ↔ Bye	6 ↔ Bye	5 ↔ Bye	4 ↔ Bye	3 ↔ Bye	2 ↔ Bye	1 ↔ Bye
8 ↔ 1	7 ↔ 9	6 ↔ 8	5 ↔ 7	4 ↔ 6	3 ↔ 5	2 ↔ 4	1 ↔ 3	9 ↔ 2
7 ↔ 2	6 ↔ 1	5 ↔ 9	4 ↔ 8	3 ↔ 7	2 ↔ 6	1 ↔ 5	9 ↔ 4	8 ↔ 3
6 ↔ 3	5 ↔ 2	4 ↔ 1	3 ↔ 9	2 ↔ 8	1 ↔ 7	9 ↔ 6	8 ↔ 5	7 ↔ 4
5 ↔ 4	4 ↔ 3	3 ↔ 2	2 ↔ 1	1 ↔ 9	9 ↔ 8	8 ↔ 7	7 ↔ 6	6 ↔ 5

OR

4.2. (a) Which sports institute is located at Patiala?

**Solution**

Netaji Subhash National Institute of Sports (NSNIS) is a sports institution in Patiala.

4.2. (b) Write any four functions of Netaji Subhash National Institute of Sports Institute (NSNIS).

**Solution**

The four functions of NSNIS institute are as follows:

1. Teaching: This institute organises sports education programmes for the training of sports professionals. For example, coaches, doctors and scientists for various sporting duties, as well as the organising of refresher courses, seminars, conferences, workshops and so on to update and upgrade the expertise of scientists, coaches, sports officials and athletes.
2. Research: NSNIS conducts and promotes research in the fields of sports and sports sciences.
3. Coaching: The institute conducts training camps for international professionals. It provides material, logistical and scientific support for the organisation of national coaching camps, which train elite athletes for international competitions under the national coaching scheme.
4. Scientific support: This centre provides scientific support to outstanding athletes that attend the national coaching camp.

Q5. (a) What is sports training?

**Solution**

Sports training is a pedagogical procedure based on scientific concepts that aims to prepare athletes for better sports performance in competition.

(b) Explain any four points on the importance of Sports Training.

**Solution**

The importance of sports training is as follows:

1. Improves physical fitness: A scientific, systematic, and planned training procedure can increase strength, speed, flexibility, coordination, and endurance. Sports training provides methods or procedures for developing physical fitness components.
2. Improves knowledge of their sports: Sports training provides knowledge of the most recent laws and regulations, techniques and tactics, ways of training various components of physical fitness, and psychological training.
3. Speeds up Recovery time: A well-designed sports training programme considers both the intensity and volume of the load to ensure that the body has enough time to recover and develop. Accelerating recovery time allows the body to prepare for the next training session.
4. More resistant to injury and illness: Sports training aids in the development of a strategy to keep a sportsperson from becoming injured. Sports training includes warm-up and cool-down, wearing appropriate sports clothing, resting before and after training, eating well, focusing on skill and technique and developing physical fitness and psychological qualities. Training that focuses on all of the above makes individuals more resistant to injury and illness.

Q6. Ramya is a badminton player. She used to practice vigorously every day. In one of her practice sessions, she skipped the warming up exercises. As a result, her ankle twisted during the practice. She was diagnosed with ligament tear and advised by the doctor to take complete rest for few weeks.

- i. Identify the type of injury Ramya suffered.
- ii. Write the steps of First Aid that can be given in such cases.

**Solution**

- i. Ramya suffered an ankle sprain. A sprain is an injury caused by overstretching or rupture of the support ligament.
- ii. First aid for Ankle Sprain is as follows:
  1. Make an immediate stop to all activity.
  2. Apply the R.I.C.E. Principle for the first 48 hours.
    - a. Rest: Rest the injured part until it becomes less painful.
    - b. Ice: Wrap an ice pack or cold compress in a towel and apply it to the damaged area immediately, continue for no more than 20 minutes at a time.
    - c. Compression: An elastic compression bandage can help support the ankle.
    - d. Elevation: Raise the injured part above the level of the heart to reduce blood flow.

**SECTION - C (30 Marks) (Attempt all questions on any two games from this Section.)**

**Q7. FOOTBALL**

7.1. Answer the following questions:

7.1. (a) Explain dropped ball.

**Solution**

1. In football, a "dropped ball" occurs when the referee stops play for a non-foul reason, such as a player's injury or the ball being defective.
2. The referee places the ball where it was when play was halted and signals for one player from each team to contest control. This restarts the game and is supposed to be a fair way to resume play.
3. Before attempting to play the ball, the players must wait until it touches the ground.
4. Dropped balls have been less common in recent years, with referees often choosing to restart play with a contested drop ball only in cases where the break in play was particularly unusual or unforeseen.

7.1. (b) During a match, if the goalkeeper collects the ball directly by a throw-in by his teammate, what will be the referee's decision?

**Solution**

During the match, if the goalkeeper takes the ball directly from a throw-in by a teammate, the referee will award the goal kick to the opposing team.

7.1. (c) During a kick-off, the player touches the ball a second time before it is touched by another player. What will be the referee's decision?

**Solution**

The referee will award an indirect free kick if a player touches the ball a second time before another player touches it.

7.2. (a) (i) What is meant by wall formation?

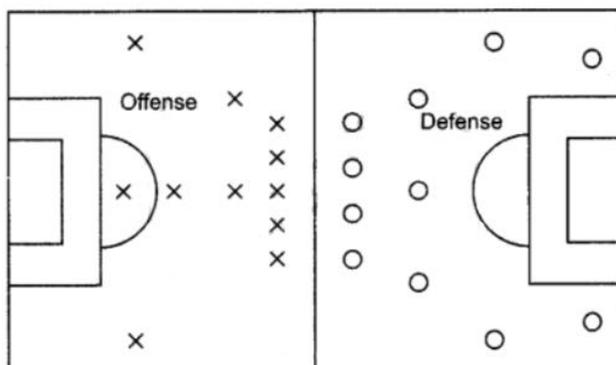
**Solution**

A team-organised line of players who stand shoulder to shoulder in an attempt to prevent a free kick from being scored. A wall is designed to obscure the kicker's view of the goal and limit the target he can shoot at. As a result, we may conclude that the wall's primary function is to block the shooter's angle to the post closest to the free kick location.

7.2. (a) (ii) Explain the procedure of Wall Formation in the game of football.

**Solution**

The relationship and understanding between the wingers and their fullbacks, the striking partnership up front and the discipline of the centre midfielders are all important components of the system. As with any formation, the team that works best as a unit wins out and given the balance that 4-4-2 provides, this is particularly true with this timeless system.



OR

7.2. (b) State any five circumstances under which time is lost during a game of football.

## Solution

It's a waste of time during the game. Extra time in football compensates for time lost in activities other than football play, such as substitutions, fouls, injuries and yellow and red cards, respectively. This is calculated by match officials outside the ground. The referee is the official timekeeper for the match. The referee's watch stops every time play stops, but the clock continues and when the 90 minute mark is reached on the referee's watch, the match officials outside the playing field display extra time on an LED board.

The circumstances under which time is lost during a game of football are:

1. Substitutions: Players are substituted and time is lost. The clock continues to run until the substitution is completed.
2. Injuries: When a player is injured and requires medical attention, the referee may pause the clock until the player is treated and play restarts.
3. Time-wasting: If a team intentionally delays the restart of play (for example, by waiting too long for throw-ins, goal kicks or free kicks), the referee may add extra time at the end of the half.
4. Goal celebrations: Excessive celebrations after a goal can result in time being lost, which the referee will add back at the end of the half.
5. Ball retrieval: When the ball exits play and must be recovered, time is lost, especially if it travels far from the field.

7.3. (a) Explain the following term in football:

VAR

## Solution

VAR (Video Assistant Referee) is a technology used in football to help match officials make decisions during games. It involves using video footage and a team of officials watching the game remotely to assess specific situations that occur on the field.

The key aspects of VAR are:

1. Reviewable Incidents: VAR can be used to examine four categories of situations: goals, penalty decisions, direct red card incidents and cases of mistaken identity involving yellow or red cards.

2. Process: When a potentially reviewable incident happens, the match referee can confer with VAR. The VAR staff examines the footage and advises the referee if there has been an obvious error or a serious missed occurrence.
3. On-field Review: In some situations, the referee may choose to check incident footage on a pitch-side monitor before making a final decision.
4. Communication: VAR communication is normally done by a headset system between the match referee and the VAR staff, which is located in a centralised video control room.
5. Decision-Making: The on-field referee always makes the final decision. VAR's purpose is to assist and advise, but the referee retains the ability to make decisions based on their own judgement.

7.3. (b) Explain the following term in football:

Sudden death

### **Solution**

If the game is tied at the end of normal time, followed by extra time, a penalty shootout is used. In a penalty shootout, each team takes a set number of penalties, usually five, to determine who wins. Sudden death occurs if the score is tied after five penalties. If the teams remain tied after the original assigned number of penalty shootouts, the game goes to sudden death penalties, in which each team takes one more penalty, which is repeated until only one team scores, resulting in the game's victory. Sudden death play concludes when one player is ahead of the others and that competitor wins. Sudden death results in a contest victory without the need for a set time limit. It may be called "next score wins" or something similar, but in some games, the winner may be determined by penalising the other participant for a mistake.

Procedure for sudden death

The procedure for sudden death is the same as kicks from the penalty mark. Kicks from the penalty mark are taken after the game has concluded and unless otherwise stated, the appropriate Laws of the Game apply.

## **Q8. CRICKET**

8.1. Answer the following questions:

8.1. (a) Write any three situations when an umpire adds a penalty of five runs to the opponent team.

### **Solution**

The situations when five penalty runs are awarded by the umpire to the opponent team are:

1. The player returns without the umpire's consent and fields the ball in play.
2. Tampering with the ball. First, a final warning is issued, followed by a penalty run.
3. Distracting the striker deliberately while receiving the ball. The penalty run is awarded after the first final warning.
4. Time is wasted by fielding a team. First, there is a final warning, followed by the penalty run.
5. Damage to the pitch. First, a final warning is issued, followed by a penalty run.

8.1. (b) During a match, there is a close call for a run-out. The umpire on the field is unable to take a decision. What should the umpire on the field do in this situation?

### **Solution**

A close call for a run-out occurs during the match. If the umpire on the field is unable to make a decision, he will refer the same choice to the third umpire, who will check it and declare his decision.

8.1. (c) If an umpire touches his right shoulder with his right hand during a game, what signal is he giving?

### **Solution**

If an umpire uses his right hand to touch his right shoulder during a game, he is signalling the One Short.

8.2. (a) List any five variations of Spin-bowling.

### **Solution**

The five variations of the spin bowling are:

1. Leg-spin: The off spinner spins the ball from the off side to the leg side (left to right), assuming that both the bowler and the batsman are right-handed. They twist their hands in a clockwise way before releasing.
2. The Doosra: The bowler delivers the ball with the same finger motion as a standard off break but cocks his wrist such that the back of his hand faces the batsman. A right-handed batsman faces a spin bowl that comes from outside to inside (leg side to off side). Its goal is to confuse the batsman into making a weak shot.
3. Arm Ball: An arm ball is delivered by rolling the fingers down the ball's side during delivery. This means the ball has backspin and does not turn significantly off the pitch.
4. Googly: The ball spins clockwise and bounces towards the batsman. The movement is from the off-side to the leg side. To achieve spin, the bowler twists his wrist such that the back of his hand faces the batsman and releases the ball from that position.
5. Flipper: It is squeezed out of the front of the hand using the thumb, first and second fingers; it remains deceptively low after pitching and can be quite difficult to play. In essence, it is a back spin ball.

OR

8.2. (b) List any five decisions taken by the Third umpire in the game of cricket.

### **Solution**

The five decisions taken by the third umpire in the game of cricket are:

1. To determine whether the technical instrument used for checking and validating the decision is operational.
2. Learn the technique of operating the technical equipment before the match.
3. Must arrive at the field at least two hours before the scheduled start of the first day's play and at least 1.5 hours before the scheduled start of play.
4. If the equipment fails, the replay umpire signals a no-decision. The replay umpire can only make decisions on runouts and stumpings.
5. Review the game in detail with the other umpires.

8.3. (a) Explain the following term in cricket:

An appeal

**Solution**

In cricket, an appeal is the act of a fielding team player requesting an umpire for a decision on whether or not a batsman is out.

8.3. (b) Explain the following term in cricket:

Bump ball

**Solution**

A ball which is played off the bat almost instantly into the ground and caught by a fielder, often having the appearance of being a clean catch.

**Q9. HOCKEY**

9.1. Answer the following questions:

9.1. (a) (i) Enlist any three International Tournaments of Hockey.

**Solution**

The three international tournaments of Hockey are:

1. Sultan Azlan Shah Hockey Tournament
2. World Hockey Cup
3. Champions trophy

9.1. (a) (ii) Name any three national tournaments in hockey.

**Solution**

National tournaments in hockey are:

1. Nehru Senior Hockey Tournament.
2. All India Gurmeet Memorial Hockey Tournament, Chandigarh.
3. All India Chhatrapati Shivaji Hockey Tournament, Delhi.
4. All India Indira Gold Cup Hockey Tournament, Jammu.

9.1. (b) A player strikes the ball with the rounded back of the hockey stick during the match. What will be the decision of the umpire?

**Solution**

When a player strikes the ball with the rounded back of a hockey stick during a match, the referee will award the backstick.

9.1. (c) What will be the decision of the umpire if a defender commits a foul within the striking circle that prevents an attacker from having a clear goal-scoring opportunity?

**Solution**

If a defender commits a foul within the striking circle, preventing an attacker from having a clear goal-scoring opportunity, the umpire will award a penalty kick.

9.2. (a) (i) Name the different types of Penalty Cards shown during the game of hockey.

**Solution**

A player who breaches the rules, whether by rough or dangerous play, misconduct or intentional offences, may be shown a green, yellow or red card. During the shoot-out tournament, a player can be suspended for a yellow or red card but not for a green card.

9.2. (a) (ii) Explain any two Penalty cards.

**Solution**

1. Green: This is an official warning to the hockey player that he should not break the rules.
2. Yellow: This results in a hockey player being sent off the pitch for 5 minutes after committing an offence.
3. Red: A red card is a more serious offence that results in an early shower.

**OR**

9.2. (b) State any five duties of the Captain of a Hockey team.

**Solution**

The duties of the captain of a hockey team are:

1. To motivate the team both on and off the pitch, function as a team spokesperson and point of contact between players.
2. They are responsible for the behaviour of their entire team.
3. They are responsible for ensuring that player replacements on their team are done correctly.
4. Understanding different game methods, as well as the most recent rules and regulations, allows you to make plays on the field.
5. Work hard to build relationships between the players and the coach(es).

9.3. (a) Explain the following term in hockey:

Substitution

### **Solution**

A team may choose between these options by making a substitution.

1. Substitution is possible at any moment except during the interval between the award of a penalty corner and when it is completed during this period, substitution is only permitted for injury or suspension of the defending goalkeeper or defending player with goalkeeping privileges.
2. The number of players who can be substituted at the same time is unlimited, as is the number of times any player can substitute or be substituted.
3. A player may be substituted only after he or she has left the field.
4. Substitutions are not permitted for suspended players while they are suspended.
5. After completing a suspension, a player may be substituted without first returning to the field.
6. Field players must leave or enter the field for substitutions within 3 metres of the centre line and on a side of the field agreed upon by the umpires.
7. Goalkeepers may leave or enter the field for substitutions near the goal they are defending.

8. Field players who leave the field for injury treatment, refreshment, equipment changes or other reasons are only allowed to re-enter between the 23-metre sections on the side of the pitch used for substitution.

9.3. (b) Explain the following term in hockey:

16-yard hit

### **Solution**

A 16-yard hit is a type of free hit awarded for defence when the ball is completely over the backline and the attacking team is the last to touch it in any way. It was taken up to 14.63 m from when the ball crossed the back line. When a penalty stroke has been completed and no goal has been scored, a defender takes a free hit 15 yards in front of the centre of the goal line to restart the game. A free hit occurs when the ball remains stationary. Umpires are not always stringent enough in needing the ball to be stationary, even if just for a little moment, for a free hit, especially if it is taken with a self-pass.

## **Q10. BASKETBALL**

10.1. Answer the following questions:

10.1. (a) (i) Explain Game Clock.

### **Solution**

The main game clock shall:

1. Be a digital countdown clock with an automatic signal that sounds at the end of the quarter or overtime when the display shows zero (0.0).
2. Have the ability to indicate remaining time in minutes and seconds, as well as tenths (1/10) of a second, only during the final minute of the quarter or overtime period.
3. Place it such that it is clearly visible to everyone involved in the game, including the spectators.

10.1. (a) (ii) Explain Shot Clock.

### **Solution**

The shot clock shall have:

1. A separate control unit was provided for the shot clock operator, along with a very loud automatic signal to announce the end of the shot clock period.
2. A display unit with a digital countdown that shows the time in seconds.

**10.1. (b)** What will be the decision of the referee if a technical foul is committed by a team's coach?

**Solution**

If a technical foul is committed by the team's coach, the referee will award the free throw.

**10.1. (c)** What decision will be given by the referee if a player deliberately scores a basket on his own side?

**Solution**

If a player deliberately scores on his own side, the referee will award the points to the opposing team.

**10.2. (a)** List any ten-equipment used in the game of Basketball.

**Solution**

The ten-equipment used in the game of basketball are:

1. Backstop unit
2. Timer
3. Basketballs
4. Score sheet
5. Game clock
6. Player foul markers
7. Scoreboard
8. Team foul markers
9. Shot clock
10. Alternating possession arrow.

**OR**

**10.2. (b)** State any five conditions for scoring in the game of Basketball.

**Solution**

The five conditions for scoring in the basketball are:

1. **Field Goals:** During live play, points are scored by shooting from the field into the opponent's basket. A field goal can be worth two or three points, depending on the shooter's position on the floor in relation to the three-point line.
2. **Free Throws:** Players are awarded free throws when they are fouled while shooting or when the opposition team commits a particular number of fouls in a given time frame. Each successful free throw earns one point.
3. **Three-Pointers:** Three points are awarded for shots taken beyond the three-point arc, which is around 23.75 feet (7.24 metres) from the basket in the NBA and varies in other leagues.
4. **Dunks and Layups:** During live play, common ways to score include dunks (slamming the ball through the hoop with force) and layups (a close-range shot near the basket often made with one hand).
5. **Tip-ins:** When a player tips or taps a missed shot into the basket while it is still in play (but not controlled with both hands), it counts as a score.

**10.3. (a)** Explain the following term in basketball:

Screening

**Solution**

A screen is when a player blocks a defender to protect his teammate and help him get an open shot. Screening should be done carefully to avoid illegal screening. A legal screening occurs when one player remains stationary and allows the defender to run into another player.

**10.3. (b)** Explain the following term in basketball:

3 seconds rule

**Solution**

A player may not remain in the opponent's restricted area for more than three (3) consecutive seconds while his side has a live ball in the frontcourt and the game clock is running.

## **Q11. VOLLEYBALL**

**11.1.** Answer the following questions:

**11.1. (a)** Explain the different types of blocking during the game of Volleyball.

### **Solution**

Blocking is a volleyball ability that prevents the opponent from making a successful attack. A block technique is used to deflect a ball coming from an attacker.

1. **Block:** A block is a defensive play at the net. A block can be made by one front row player or a group of front row players jumping near the net in front of the opposing attacker. The goal is to stop the spiked ball with your hands or arms, preventing the spiker from making a successful attack.
2. **Double Block:** A double block occurs when two players cooperate together to deflect an attacking ball towards the net. It is a good idea to set up a double block as often as possible to help prevent successful attacks.
3. **Triple Block:** A triple block occurs when three players jump up together to block at the net. It is generally difficult for a team to successfully form a triple block at the net. Because each side has three players at the net who may be ready to attack, it can be difficult for blockers to get into the proper position to put up a triple block because you never know who will be set.

**11.1. (b)** During a serve, the server serves the ball without tossing it. What will be the referee's decision?

### **Solution**

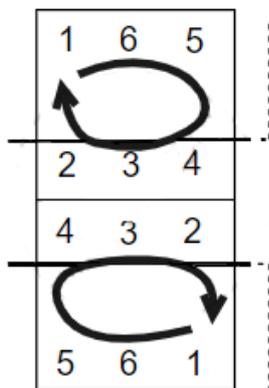
When the server serves the ball without tossing it, the referee will request a replay.

**11.1. (c)** A server serves the ball and the opponents are not even able to touch the ball when it is within the court. What is the term used to denote this situation?

### **Solution**

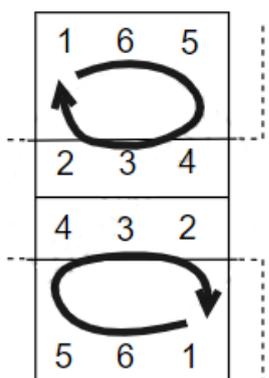
A server serves the ball and opponents are unable to touch it while it is within the court; this is referred to as Ace.

11.2. (a) Explain rotation with the help of a diagram.



### Solution

After recovering service from the opponent, each of the six players on the team rotates positions. This is the key to indoor volleyball tactics: one cannot simply keep the best blocks and spikers at the net or the best defenders in the backcourt. After serving from position one, players rotate to position six (middle back), then five (left back), four (left front), three (middle front) and two (right front) before returning to serve. Before the serve is played, the team must be in the proper rotation order. After the ball is served, players can change positions, but backcourt players are unable to move to the net to block or spike. They must attack from behind the attack line (hence the backcourt assault, which allows outstanding spikers to participate in all six rotations). The rotation rule explains why a setter appears to be "hiding" behind his or her teammates before a point. Before rushing to the net, the setter must be in the proper rotation sequence or the opposing team will score a point.



OR

11.2. (b) State any five duties of the Line Judge in the game of Volleyball.

### Solution

The duties of the line judge in the game of volleyball are:

1. **Marking the Ball In or Out:** A line judge's primary duty is to observe and signal whether a ball landed within or outside of the court boundaries. This includes keeping track of the sidelines and end lines.
2. **Foot Faults:** Line judges are in charge of observing and signalling foot faults during serves. A foot fault happens when the server walks on or over the baseline before making contact with the ball.
3. **Contact with the Net or Antenna:** Although it is primarily the referee's role, line judges may assist in determining if the ball impacts the net outside the antenna (showing that the ball is out of play) or whether a player touches the net or antenna during play, which is not permitted.
4. **Ball Touches:** Line judges help identify touches made by a player on a ball that is headed out of bounds. If a ball on the way out is touched by a player from the opposing side, the line judge signals this touch, indicating that the ball is awarded to the team whose player did not touch it last.
5. **Communication and Coordination with the Referee:** Line judges must communicate clearly and consistently with the head referee. This includes promptly signalling choices and paying attention to the referee's instructions or clarifications during the match.

**11.3. (a)** Explain the term double contact in volleyball.

### **Solution**

A player hits the ball twice in succession or the ball contacts various parts of his body in sequence.

**11.3. (b)** Explain the following term in volleyball:

Procedure of Substitution

### **Solution**

In volleyball, the substitute procedure is designed to guarantee that lineup changes are handled efficiently and in conformity with the game's official rules.

The general outline of the substitution procedure typically followed in volleyball:

1. Request for Substitution: The coach or designated team representative signals the second referee for a substitution.
2. Position at the Substitution Zone: The player exiting the court should approach the substitution zone, which is located in front of the scoreboard, close to the attack line.
3. Verification by the Second Referee: The second referee confirms the substitution by determining whether it is acceptable under the match's rules, including the number of substitutions allowed per set, and whether the players are authorised to substitute.
4. Signal to Enter: Once the substitution has been verified, the second referee instructs the coming player to enter the court and the outgoing player to exit. The scorer records the substitution.
5. Execution of Substitution: The entering player enters the court, and the exiting player leaves. The substitution is completed quickly in order to prevent delaying the game.
6. Limits and Restrictions: It is important to note that the number of substitutes allowed in a game is limited and varies based on the tournament or league's rules.
7. Return to Play: After the substitution has been completed and recorded, the serve is resumed. To avoid delays, the team that requested the substitution must be prepared to resume the game right away.

## Q12. TENNIS

12.1. Answer the following questions:

12.1. (a) (i) Briefly explain match point.

### Solution

At the start of the game, both players have 'love' (zero) points. Unlike other racket sports, points do not increase in regular increments, but rather follow the set system outlined below:

1. No points – 'Love'
2. First point – '15'

3. Second point – '30'
4. Third point – '40'
5. Fourth point – 'Game'

As a result, the first player to score four points wins the game.

12.1. (a) (ii) Briefly explain set point.

### **Solution**

When a tennis player needs just one point to win the set.

12.1. (b) If the racket breaks during rally, what will be the Chair Umpire's decision?

### **Solution**

If the racket breaks during a rally, the chair umpire's decision will be based on whether continuing to play with the broken racket constitutes a hindrance or a safety risk for either player. If the play continued without incident and the point was completed, the result stands as played.

12.1. (c) During a match, a player deliberately wastes time which breaks the flow of the game and makes the opponent lose focus. What will be the decision of the Chair Umpire?

### **Solution**

When a player deliberately wastes time during a match, disrupting the flow of the game and causing the opponent to lose focus, the chair umpire's decision will be that the player be penalised in accordance with the normal rules of tennis.

12.2. (a) Mention any five fundamental skills that a Tennis player must possess.

### **Solution**

The five fundamental skills that a Tennis player must possess are:

1. Forehand: In tennis, a forehand is a shot made by swinging the racket across one's body, palm first. Except for the phrase forehand volley, the term refers to a type of groundstroke in which the ball bounces before being struck. For a right-handed player, the forehand stroke begins on the right side of the body, moves across the body as contact is made with the ball and ends on the left side of the body.

2. Backhand: The backhand is a tennis stroke in which the racquet swings around the player's body with the back of the hand ahead of the palm. Except for the phrase "backhand volley," the term refers to a groundstroke (in which the ball bounces before being struck).
3. Chopper grip: The Continental Grip (chopper grip) is achieved by putting the hand so that the base knuckle of the index finger is right on panel 2. It naturally occurs when holding the racket as if it were an axe, hence the second name "Chopper grip".
4. Correct grip: The grip is proper if there is a finger-width gap between your fingertips and palm. A proper tennis grip should feel firm but not tight, like a firm handshake. The fingers should be in an angled position along the handle.
5. Smash: In tennis, a smash is a shot hit above the hitter's head with a serve-like action. It is sometimes called an overhead. A smash is typically hit with a lot of force and is often a shot that ends with a point.

**OR**

12.2. (b) (i) State the following dimensions:

Height of the net at the pole in the Tennis court

**Solution**

Height of the net at the pole of the tennis court is 3-1/2 feet (1.07 m)

12.2. (b) (ii) State the following dimensions:

Size of Single's tennis court

**Solution**

The single tennis court is 78 feet (23.77 metres) × 27 feet (8.23 metres).

12.2. (b) (iii) State the following dimensions:

Distance between Base line and Service line

**Solution**

The distance between the base line and service line can be up to 4 inches (10 cm) wide.

12.2. (b) (iv) State the following dimensions:

Minimum distance between the net post and the side line

### **Solution**

The minimum distance between the net post and the side line cannot be more than 1 inch (2.5 cm) above the top of the net cord.

12.2. (b) (v) State the following dimensions:

Weight of the ball.

### **Solution**

The weight of the ball is 2 and 21/16 oz.

12.3. (a) Explain the following term in tennis:

Drive

### **Solution**

Hit with a long forward swing from a position farther back on the court. All drives, forehand or backhand, should be executed with a strong, locked wrist. There is no wrist movement in a proper drive. Top spin is produced by the arm, not the wrist. Drives should have depth.

The average driver should be behind the service line. A good drive. Base knuckle. Continental Base knuckle on the upper part of panel 2 should be within 3 feet of the baseline. A cross-court drive should be shorter than a straight drive to maximise the available angle.

12.3. (b) Explain the following term in tennis:

Chip Shot

### **Solution**

A chip shot in tennis is a defensive or strategic stroke that uses backspin to keep the ball low after it has bounced on the opponent's side of the court. The method entails a slicing motion over the back of the ball, which adds backspin, slows the ball and changes its direction after rebounding low and skidding. This shot is particularly effective on grass courts or fast surfaces since the ball naturally stays lower and moves faster, making it more difficult for the opponent to make powerful returns or attack aggressively from the baseline.

## Q13. BADMINTON

13.1. Answer the following questions:

13.1. (a) Explain any four duties of the service judge.

Mention any three duties of Service Judge in badminton.

### Solution

The duties of the Service judge are:

1. The service judge is responsible for making a 'service fault' call and providing shuttles to the players.
2. To see that the server shall not serve before the receiver is ready.
3. To see that there is no undue delay in the service delivery.
4. In doubles, the partners are ready and have taken positions that do not give insight into the other players.

13.1. (b) If a player serves the shuttle cock from the wrong side of the court, what will be the decision of the umpire?

### Solution

If the player serves the shuttle cock from the wrong side of the court, the umpire will call it a service court error, which will be immediately corrected.

13.1. (c) What will be decision of the umpire if a server serves above the waistline?

### Solution

If a server serves over the waistline, the umpire will declare it a fault.

13.2. (a) Enlist any five International Badminton tournaments.

### Solution

The five international badminton tournaments are:

1. The BWF World Championships (previously the IBF World Championships, also known as the World Badminton Championships) is a badminton tournament sanctioned by the Badminton World Federation (BWF). The tournament, along with the Summer Olympics badminton tournaments, provides the highest ranking points.

2. The BWF World Junior Championships (also known as the World Junior Badminton Championships) is a tournament organised by the Badminton World Federation (BWF) to crown the world's best junior badminton players (under-19). The championship is contested annually and consists of two competitions: a mixed team championship (Suhandinata Cup) and an individual championship (Eye Level Cups).
3. The Uber Cup, also known as the World Team Championships for Women, is a major international badminton competition between women's national badminton teams. It was first held in 1956 – 1957 and fought every three years until 1984, when it was moved to every two years.
4. The Thomas Cup, also known as the World Men's Team Championships, is an international badminton competition for teams representing member nations of the Badminton World Federation (BWF), the sport's global governing body. Since the 1982 tournament, the championships have been held every two years, rather than every three years since the first tournament in 1948 – 1949.
5. The BWF World Senior Championships is a badminton tournament sanctioned by the Badminton World Federation. The winners will be crowned as "World Senior Champions" and receive gold medals. It does not, however, give any cash money. The tournament began in 2003 and is now held biennially.

13.2. (b) Answer the following questions:

13.2. (b) (i) State the dimensions of the badminton court in a Double's game.

**Solution**

The dimensions of a badminton court in a doubles game are 13.400 metres in length and 6.100 metres in breadth.

13.2. (b) (ii) What is the number of points in each set in a game of Badminton?

**Solution**

Each set in a badminton game is worth 21 points.

13.2. (b) (iii) What is the weight of the shuttle cock?

**Solution**

The shuttle cock weighs 4.74 to 5.50 grammes.

13.2. (b) (iv) Mention the height of the net at the centre of the court.

**Solution**

The net at the centre of the court is 5 feet high.

13.2. (b) (v) Name any two officials present during a match of Badminton.

**Solution**

The officials present during a badminton match are service and line judges.

13.3. (a) Explain the following term in badminton:

Testing mark

**Solution**

In badminton, the word "testing mark" does not appear in the official rules or common vernacular related gameplay or scoring. If you are referring to a specific area of badminton, such as equipment testing, performance standards or a notion in coaching or training, it may be good to add some context. However, if you're talking about how equipment, like shuttlecocks, is checked for suitability in match play, there are specific standards and tests. For example, shuttlecocks used in formal events must meet certain speed, flight and stability requirements.

13.3. (b) Explain the following term in badminton:

Net drop

**Solution**

The net drop is a fundamental and highly strategic shot in badminton that is completed close to the net with the goal of making the shuttlecock just clear the net before dropping sharply on the opponent's side, ideally as close to the net as possible. This shot is used to create scoring opportunities or to pull an opponent out of their comfortable rallying position, which may result in a weak return that can be exploited.

Q14.

14.1. Answer the following questions:

14.1. (a) Explain synchronized swimming.

**Solution**

Synchronised swimming, now officially known as artistic swimming by international governing bodies, is a mix of swimming, dance and gymnastics in which swimmers perform a synchronised routine of intricate motions in the water while accompanied by music. It is a physically challenging sport that requires participants to have strength, flexibility, artistry and precise timing, as well as excellent breath control while upside down underwater.

**14.1. (b)** In a swimming event, a swimmer makes an early start before the signal is given by the starter. What will be the decision of the judge?

### **Solution**

In a swimming event, if a swimmer starts too early before the starter gives the signal, the judge will disqualify the swimmer from the event.

**14.1. (c)** In a swimming event, two swimmers touch the finish wall almost at the same time, making it difficult for the judge to determine the winner. How will the judge decide the winner?

### **Solution**

In a swimming event, two swimmers almost touch the finish wall at the same time, making it difficult for the judge to determine the winner. In this case, the judge's judgement will be based on the electronic timing system. These systems provide a level of accuracy and fame that manual timing methods cannot match, ensuring that the correct winner is decided, even in the closest of finishes.

**14.2. (a)** State any five rules of Diving.

### **Solution**

Diving as a competitive activity is governed by a comprehensive set of rules that ensure competition safety, fairness, and consistency. These rules, overseen by the Fédération Internationale de Natation (FINA), apply to a wide range of aspects of the sport, from athlete conduct to specialised diving methods.

Here are five fundamental rules of competitive diving:

1. **Dive Categories and Positions:** Divers must conduct dives from a set of recognised categories, which include forward, backwards, reverse, inward and twisting dives, and arm, stands for platform diving.

2. Dive Announcement: Divers must announce or have their coach announce the dive they will attempt, including its category, position and whether or not it incorporates twists, before performing. The announcement must correspond with the dive conducted; otherwise, the dive may be penalised or ruled a failure.
3. Board work: Divers in springboard diving are evaluated not only on the dive itself but also on their approach to and takeoff the board. An ideal takeoff shows control, balance and smart use of the board's spring to maximise height.
4. Execution and Entry: The quality of the dive is assessed from takeoff to entry into the water. The judges look for grace, strength, flexibility and form throughout the dive.
5. Failed Dives: A dive is considered failed if the diver deviates significantly from the announced dive, falls off the board or platform before executing the dive, performs an additional bounce on the springboard or reaches the water in a position that is significantly different than the intended one.

OR

14.2. (b) Name any five International Swimming Tournaments.

### **Solution**

The international swimming tournaments are:

1. FINA World Championships or World Aquatics Championships: The FINA World Championships, also known as the World Aquatics Championships, are the championships for aquatic sports such as swimming, diving, high diving, open water swimming, artistic swimming and water polo. They are organised by FINA and all swimming events take place in a 50-meter-long course pool.
2. FINA World Open Water Swimming Championships: The FINA World Open Water Swimming Championships, sometimes known as the "Open Water Worlds," were a bi-annual FINA open water swimming tournament contested in even years from 2000 to 2010, inclusive.
3. FINA Marathon Swim World Series: The FINA Marathon Swim World Series, previously known as the 10 km Marathon Swimming World Cup, is an annual

series of 10-kilometer open water swimming races that have been conducted since 2007.

4. FINA Diving World Cup: The FINA Diving World Cup is a biennial international diving competition that originally took place in 1979 at the Woodlands, Texas.
5. FINA Women's Water Polo World Cup: The FINA Women's Water Polo World Cup is an international water polo championship played by women's national water polo teams from FINA, the world governing body for aquatic sports.

**14.3.** (a) Explain the following term in swimming:

Escort craft

### **Solution**

Escort craft are essential in open water swimming events for the swimmers' safety, navigation and overall assistance. Depending on the scale of the event, the course, and the number of competitors, these can vary from kayaks and paddleboards to motorboats. Escort vessels are critical to the success of open water swimming events, ensuring that they are carried out safely, fairly and enjoyable for all participants.

**14.3.** (b) Explain the following term in swimming:

Marathon swimming

### **Solution**

Marathon swimming is a demanding and challenging discipline that includes swimming long distances in open water, usually lakes, rivers or seas. Marathon swimming, unlike pool swimming, takes place in natural bodies of water, where swimmers must contend with a variety of environmental conditions such as currents, tides, wind and changes in water temperature. Marathon swimming is a journey of self-discovery, tenacity and drive, as well as a physical endurance challenge. It forces swimmers to push themselves, accept the unknown and experience the natural world's beauty and power in a unique and profound way.

## **Q15. ATHLETICS**

**15.1.** Answer the following questions:

**15.1.** (a) (i) Explain marking radius.

### **Solution**

The running distance radius is an imaginary line over which the athlete is expected to run. What is really used to mark the track is known as the curve distance radius or the marking distance radius.

15.1. (a) (ii) Explain running radius.

### Solution

RDR (Running Distance Radius) is the imaginary line over which the athlete is required to run; for example, if the straight is 80 m, the distance between the two curves is 240 m.

15.1. (b) After release, the discus touches the pole of safety case and lands inside the sector. What will be the decision of the judge?

### Solution

The decision of the judge will be foul throw, when after the release, the discus, touches the pole of safety case and lands inside the sector.

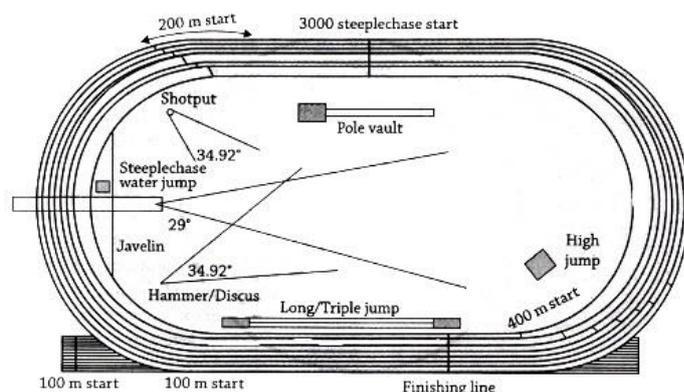
15.1. (c) What will be the decision of the judge if an athlete falls back after landing in a long jump event?

### Solution

If an athlete falls back after landing in a long jump event, the judge will decide whether the athlete remained within the authorised landing area, the jump is legitimate and the distance is measured for scoring reasons. If the athlete lands outside of the landing area, it is considered a foul jump, and the attempt is disallowed.

15.2. (a) Draw a neat diagram of a standard 400 m track with all its dimensions and specifications.

### Solution



OR

15.2. (b) (i) What is meant by decathlon?

**Solution**

Decathlon is a men's athletic competition combining 10 track and field events. An all-round athletics test, the 10-event contest covers the whole range of athletics disciplines spread over two days.

15.2. (b) (ii) List the events and their order in the decathlon competition.

**Solution**

1. The first day consists of (in order):

1. 100 m
2. Long jump
3. Shot put
4. High jump
5. 400 m.

2. The second day's events are

1. 110 m hurdles
2. Discus
3. Pole vault
4. Javelin
5. 1500 m

Competitors earn points for their performance in each discipline and the overall winner is the athlete who scores the most points.

15.3. (a) Explain the following term in athletics:

Shoulder shrug

**Solution**

Shoulder shrugs are a versatile exercise and movement pattern that can help athletes improve mobility and flexibility while also increasing strength and power in sport-

specific movements. Incorporating shoulder shrugs into training regimens can help athletes improve performance and reduce the chance of injury.

15.3. (b) Explain the following term in athletics:

Straddle jump

**Solution**

The straddle jump needs coordination, flexibility and timing to be executed correctly. While it may be less extensively employed at elite levels, it remains a vital core technique in both high jump and pole vault training.