

Practical Part

Chapter-1

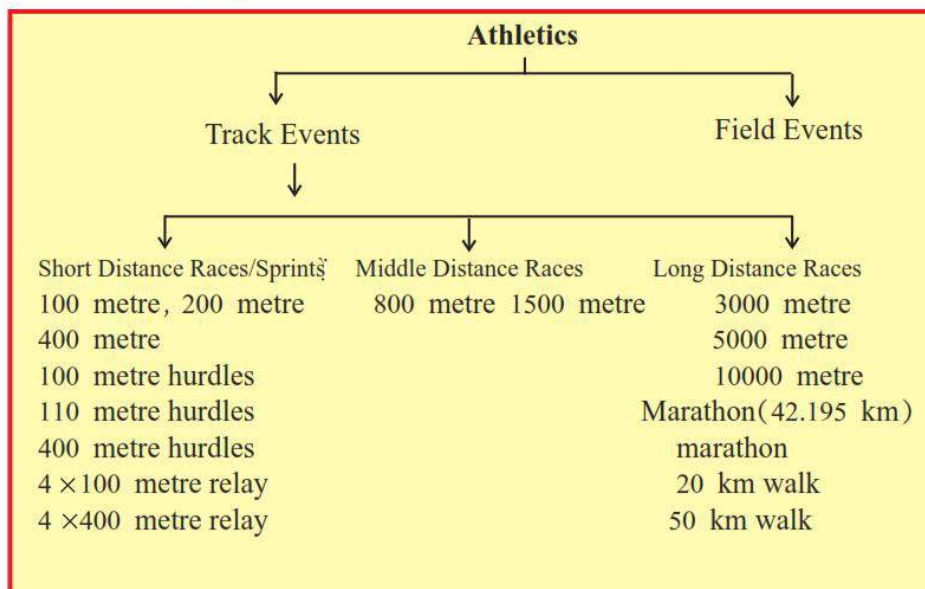
Athletics

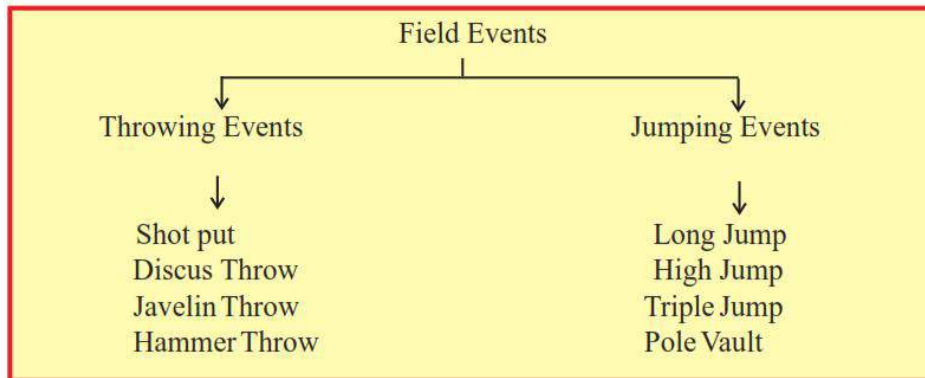
In olden times, the word Athletics was used less. All these activities were jointly called 'Track and Field Events'. In 12th century in England the term 'track and field' was exchanged with the term 'Athletics'. Since then Athletics has been known with this name. Today athletics is popular amongst sports events at International level. Therefore, in the world of sports, athletics is known as the mother of all sports.

The word, 'Athletics' has been derived from the Greek word 'athlos' which means 'contest' or 'Tast'. Different events such as races, throwing events and jump are examples of athletics. The players who participate in these events are called 'athletes'. These days various athletic competitions are held in schools, colleges, universities and other educational institutions.

Athletics is divided into two types of events

1. Track events
2. Field events





Track: There are two types of track.

1. 400 metre Standard Track
2. 200 metre Practice Track

A track is made up of 2 straights and 2 curves. It is oval in shape.

Each track has 8-10 lanes. The width of each track lane is 1.22 m.

All the lines of a track are 5 cm thick. Track can be made of soil, grass or synthetic.

Formula of Marking Standard Track:

If the length of Straight is known:

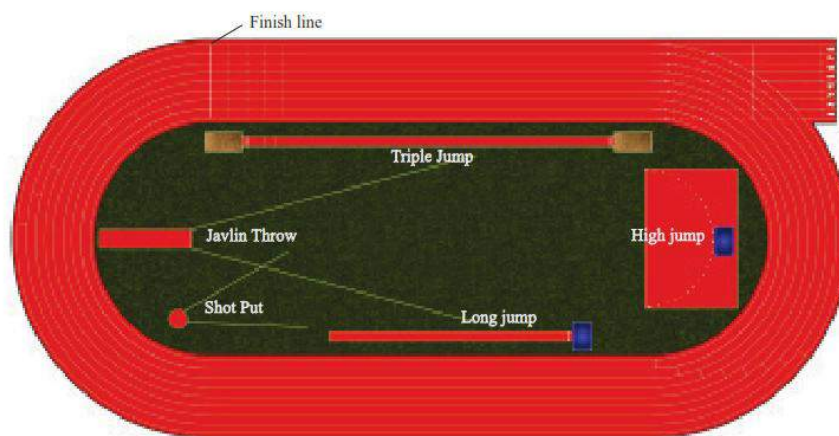
Total Length= 400 m

Length of straight=84.39 m

Length of two straights= $84.39 \times 2 = 168.78$ metre

Length of two curves= $400 - 168.78 = 231.22$ m

Length of one curve= $\frac{231.22}{2} = 115.61$ m



400 Meter standard track

Formula to find curve radius:

Curve Radius= Total distance of Curve = 2π

$\pi = 3.1416$

Length of two curves = $\frac{231.22}{2 \times 3.1416}$

Curve Radius = $\frac{231.22}{6.2832}$
= 36.7997

Curve Radius = 36.80 metre

Stagger:

When the athlete has to complete his race in his lane, which includes the curve, then the stagger is given to equalise the surplus distance (created due to curve) with the first lane.

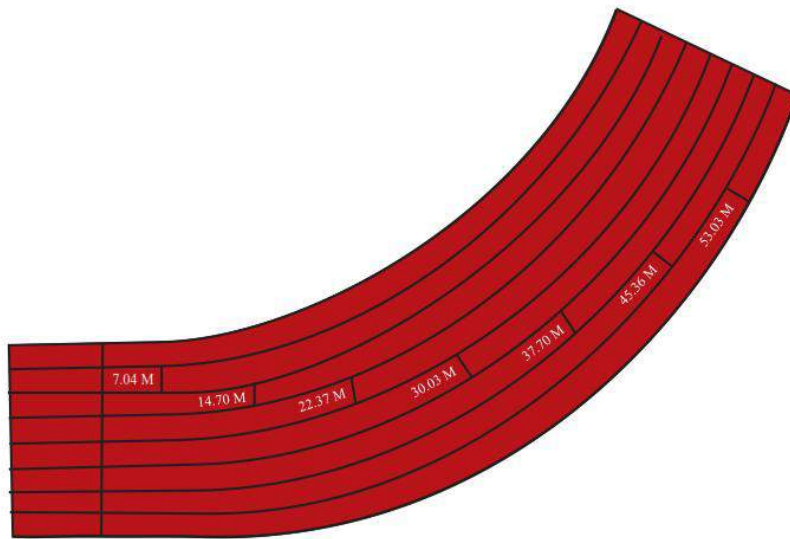
Formula to calculate Stagger:

$[W(N-1) - 0.10\text{cm}] 2\pi$

W = Width of Lane

N = Number of Lane

$\pi = 3.1416$



Full Stagger

Full Stagger and Half stagger:

Lane	Full Stagger	Half Stagger
1	Nil	Nil
2	7.04 metre	3.52 metre
3	14.70 metre	7.35 metre
4	22.37 metre	11.18 metre
5	30.03 metre	15.01 metre
6	37.70 metre	18.85 metre
7	45.36 metre	22.68 metre
8	53.03 metre	26.51 metre

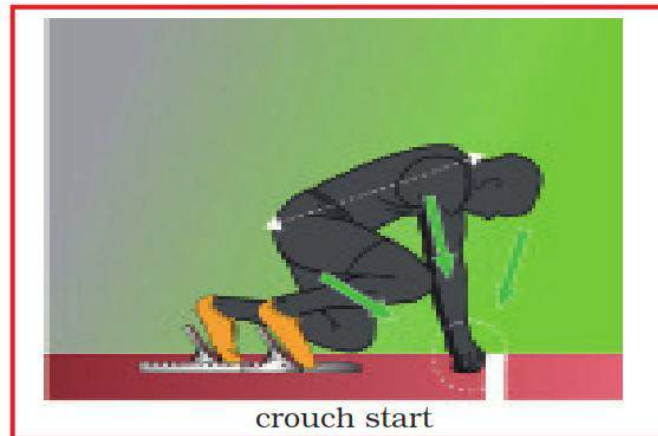
Types of Start:

Any type of race begins with a start. There are two types of start.

1. Crouch Start
2. Standing Start

1. **Crouch Start:**

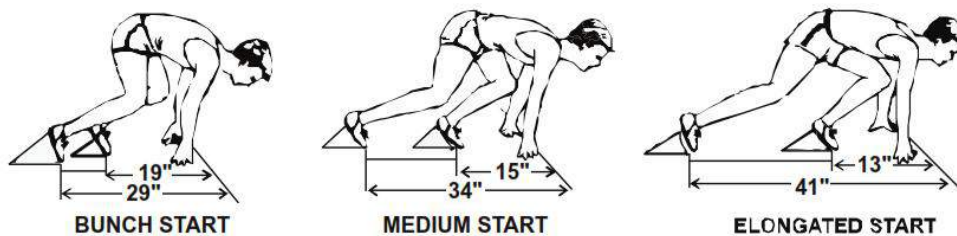
This start is used in short distance races or sprints. It is compulsory to take crouch start in sprints.



There are three types of crouch start.

- (i) Bunch Start
- (ii) Medium Start
- (iii) Elongated Start

(i) Bunch Start: This start is used by athletes who are short heighted. In this type of start, the distance between the two blocks is 8 to 10 inches. The front block is at a distance of 19 inches from the starting line. The body of the athlete is bent forward. The toes of the rear foot and the heel of the front foot are parallel. The hands are kept behind the starting line forming a bridge. This is the most unstable start. When the referee says 'set', the athlete raises his hips.

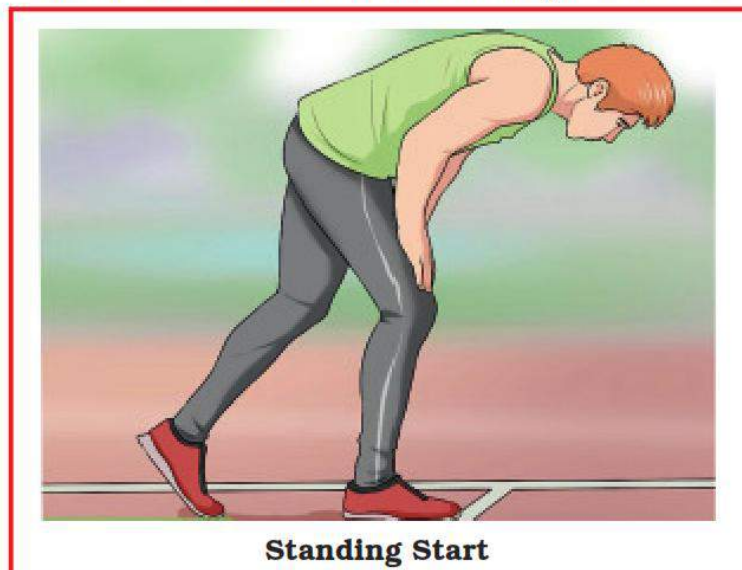


(ii) Medium Start: In medium start, the distance between the two blocks is 10 to 13 inches. The front block is at a distance of 15 inches from the starting line. In this type of start, the knee of the rear leg and the middle part of the front foot of the athlete are parallel to each other. Inset position, the hips and the shoulders will be at the same height. Often, this is taken by player of the middle height.

(iii) Elongated Start: In elongated start, the distance between the two blocks is 25 to 28 inches. The front block is at a distance of 13 inches from the starting line. In this start the knee of the rear leg and the heel of the front leg are parallel to each other. Often this start is taken by the players who are tall.

2. Standing Start:

This start is used in medium and long distance races.



How to take start: The following instructions are followed in the beginning of a race.

1. On Your Marks
2. Set
3. Go or Gun Fire

1. **On Your Marks:** When the referee gives the command, 'On Your Marks', the athlete stands at the starting line of the race. The hands, feet or knees of athletes should touch the starting line.
2. **Set:** When the referee gives the command, 'Set', the athlete raises his hips. The eyes are fixed at the starting block. In this position, the head and neck should be straight in line. The athlete keeps himself ready for the next command.
3. **Go or Gun Fire:** When the referee gives the command, 'Go' or Fire the gun, the athlete starts the race by moving his arms. After 20-25 steps, the athlete straightens his body.

Finish:

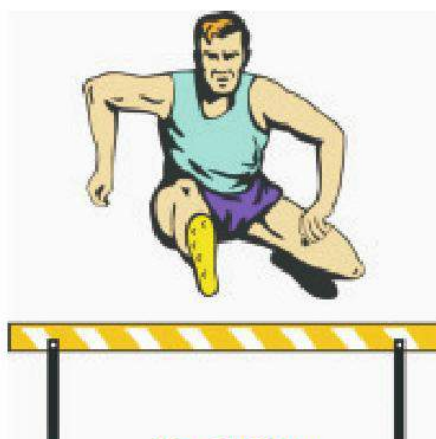
A race is considered to be finished when the athlete touches or crosses the finish line. Often, athletes finish their race in three ways.

1. **Run Through:** In this type of finish, the athlete crosses the finish line with full speed.
2. **Lunge Forward:** In this type of finish, just two steps before the finish line, the athlete takes his both arms backward and touches the finish line with his chest
3. **Shoulder Shrug:** In this type of finish, the athlete touches the finish line by bringing one shoulder and arm forward. The other arm and shoulder move backwards in this position.

Hurdles

Hurdles:

This race is a combination of two activities race and jump. In this race, each athlete runs in his own lane and finishes the race. An athlete finishes the race by jumping over all the hurdles using all his strength.



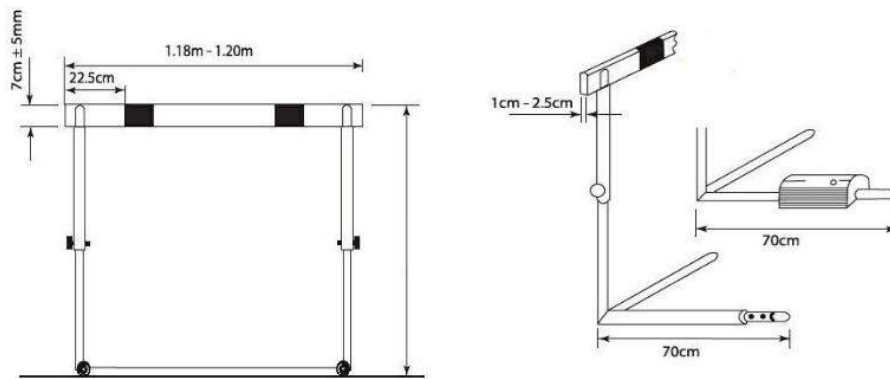
Hurdle Race

Men and Women Events of Hurdle Races

Hurdle Race	Height	Distance of the first hurdle from the starting line	Distance between the hurdles	Distance of the last hurdle from the finish line
110 metre Men	106.7metre	13.72 metre	9.14 metre	14.02 metre
400 metre Men	91.4 cm	45 metre	35 metre	40 metre
100 metre women	0.84 metre	13 metre	8.50 metre	10.50metre
400 metre women	76.4 cm	45 metre	35 metre	40 metre

Specification of Hurdle:

1. Maximum length of a hurdle= 0.70 m
2. Maximum width of a hurdle=1.22 m
3. Width of top bar=70 mm
4. Thickness of top bar=10.25 mm
5. Weight of hurdle=10 kg



(Relay Races)

Relay Races

This race is run by four athletes for a team. In this race, each athlete runs an equal distance with the baton of the team and passes it over to the next athlete in the relay.



Relay Race

Specification of Baton:

Length of baton	=	28 to 30 cm
Diameter of baton	=	12 to 13 cm
Weight of baton	=	At least 50 gm

Relay Events:

Sr. No.	Events for Men	Events for Women
1.	4 x 100 metre	4 x 100 metre
2.	4 x 400 metre	4 x 400 metre

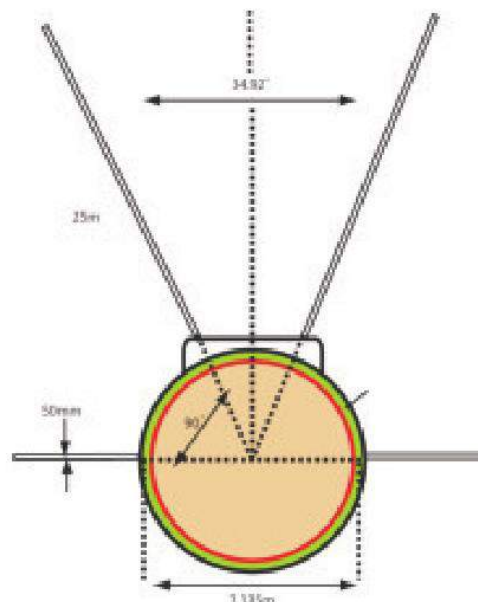
Throwing Events

There are four types of throwing events.

1. Shot Put
2. Discus Throw
3. Javelin Throw
4. Hammer Throw

1. Shot Put:

In Shot Put, the shot is always thrown or pushed within the throwing sector or circle. Shot is made up of a metallic ball.



Shot Put Throwing Sector

The measurements of the Throwing Sector of Shot Put:

Sr. No.	Description	Measurements
1	Diameter of the Shot put sector	2.135 m
2	Radius of the Shot put sector	1.0675m
3	Length of the line drawn outside the sector	0.75m
4	Angle of the throwing sector	34.92°
5	Length of the throwing sector	25 m
6	Length of Stop board	1.21 m -1.23 m
7	Breadth of Stop board	11.2 cm-30 cm
8	Height of Stop board	98 mm-102 mm
9	Colour of Stop board	White
10	Breadth of lines	5 cm
11	Weight and circumference of Shot (For Men)	7.260 kg and 110 to 130 mm
12	Weight and circumference of Shot (For Women)	4 kg and 95 -110 mm
13	The thickness of the rim around the circle	6 mm
14	The height of the rim from the inside the circle	14 mm 26mm

Technique of Shot Put:**Parry-O-Brien Technique:**

This technique was started by the American athlete parry O' Brien in 1952. This athlete kept his back towards the throwing sector while throwing the shot. Using this technique, he was able to throw the shot at a greater distance. Therefore, this technique was named after him.

Phases of Shot Put:

(a) Grip or Holding: The shot is kept at the base of the fingers. The shot is held tightly with the support of fingers and thumb.

(b) Placement of Shot: The shot is placed on the neck, under the jaw-bone, underneath the ear on the collar bone.

(c) Starting Position: The athlete stands with his back towards the throwing sector. Glide athlete will shift the weight of his body on the right foot. Bending the upper part of his body, the athlete will raise his left foot. His left leg will swing around in the direction of the throw. At the same moment, the right leg swings around. The movement of the shot put increases. The left foot of the athlete will kick speedily and hip will move forward with the same pace. The athlete will land on the ground on his right foot. The body of the athlete will balance on the left foot with folded toes. Thus, the feet land on the ground and the shoulders bend backwards.

(d) Release: Athlete's knee and toes of the right foot will spin towards the right side, and both of his feet will be in one line. Throwing hand will throw the shot towards front at an angle of 45° . Both feet of the athlete will rise up.

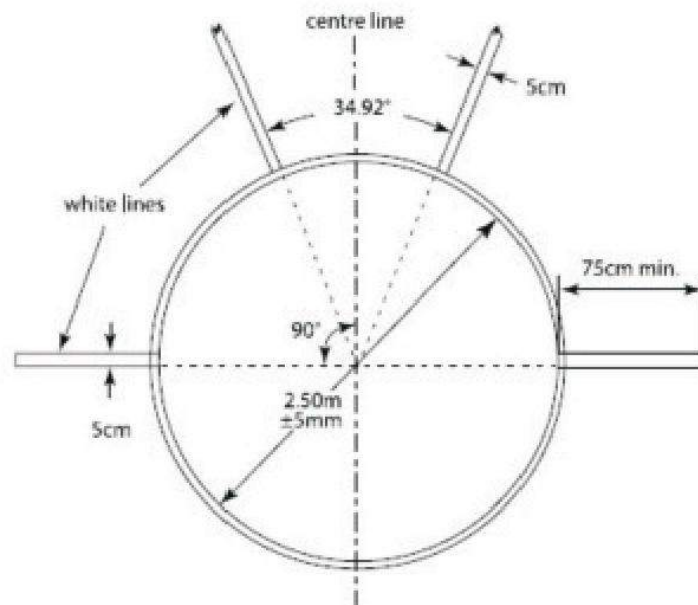
General Rules of Shot Put

1. Each athlete will be given three attempts to throw shot.
2. The athlete who throws the shot at the maximum distance following all the rules will be declared the winner.
3. The athlete cannot touch any line while throwing the shot. If he touches the line during an attempt, the attempt will be invalid.
4. The athlete will enter the throwing sector from backwards and leave it from behind the restraining lines only after throwing the shot.

5. The athlete will enter the throwing sector only after being called by the game official.
6. The athlete will throw the shot in the throwing sector only. If he throws it out of the throwing sector, it will be a foul.
7. The athlete can throw the shot with any hand without wearing gloves.

2. Discus Throw:

Discus is thrown from within a circle of diameter 2.5 metre using either hand. The discus should fall within the throwing sector.



Discus Throwing Sector

Important Measurements of Discus Throw

Sr. No.	Description	Measurement
1.	Diameter of the discus sector	2.50 m
2.	Length of the lines drawn outside from the centre of the circle (restraining lines)	0.75 m

3.	Angle of the throwing sector	34.92°
4.	Thickness of the rim of the discus at the edge	6 mm
5.	Height of the inner part of the discus from the rim	14 mm to 26 mm
6.	Width of the lines	5 cm
7.	Weight of discus (for men)	2 kg
8.	Diameter of discus (for men)	219 mm -221mm
9.	Weight of discus (for women)	1 kg
10.	Diameter of discus (for women)	180 mm -182 mm
11.	Thickness of the rim of discus	10-12 mm
12.	Circumference of the metal of discus	50-57 mm

Techniques of throwing Discus

Phases of Discus Throw

(a) Holding the Discus: The athlete holds the discus in the stretched throwing hand. The thumb of the athlete is used to maintain the balance of the discus.

(b) Initial Position: The athlete will stand in the circle with his back towards the throwing sector. The weight of the athlete's body will be evenly distributed over both feet.

(c) Preliminary Swing: Initially, the athlete may swing his body twice or thrice. The athlete will rotate his torso (trunk) in a rhythmic movement and bring the throwing arm backward as quickly as possible.

(d) Turns: At the first turn, the left foot of the athlete will leave the ground. The left foot will move forward in the direction of the throw while the right leg will be bent at the knee. At the half rotation, the athlete will move forward his left side. The left hand will be bent at the elbow and positioned in front of the chest. The head and the neck of will be straight.

(e) Release: Using his right leg as the lever, the athlete quickly straightens his body. Both the feet will be on the ground. The

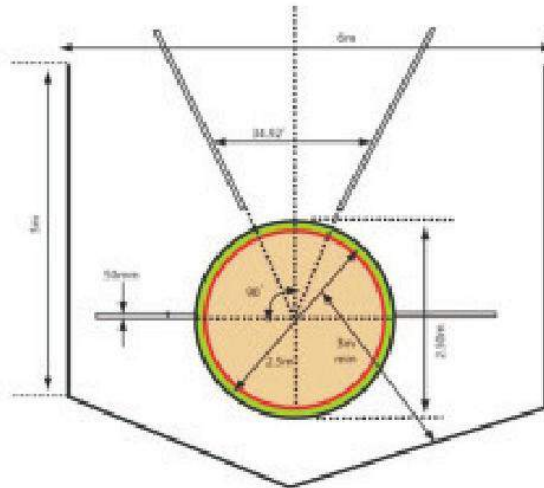
athlete will stretch his arm and throw the discus using all his strength.

General Rules of Discus Throw

1. Each athlete will be given three chances for throwing the discus.
2. The athlete who throws the discus at the maximum distance following all the rules will be declared winner.
3. The athlete cannot touch any line while throwing the discus. If he touches the line during an attempt, the attempt will be invalid.
4. The discus that falls only within the throwing sector will be considered valid.
5. The athlete will enter the throwing sector from backwards and leave it from behind the restraining lines only after throwing the discus.
6. The athlete will enter the throwing circle only when called by the Game Officer.

3. Hammer Throw

Hammer is thrown from the throwing circle within the throwing sector. The hammer that falls outside the throwing sector will be considered invalid. The hammer is thrown using both the hands.



Hammer Throwing Sector

Hammer Throwing Sector
Important Measurements of Hammer Throw

Sr. No.	Description	Measurement
1.	Diameter of the Hammer throwing sector	2.135m
2.	The angle of the throwing sector	34.92°
3.	Width of the lines	5cm
4.	Weight of the Hammer (for men)	7.260 kg
5.	Circumference of Hammer (for men)	219-221 mm
6.	Weight of the Hammer (for women)	4 kg
7.	Circumference of Hammer (for women)	180-182 mm
8.	The length of the wire of the Hammer (for men)	117.5 cm to 121.5
9.	Diameter of the Hammer	110-130 mm
10.	Thickness of the Hammer	102-120 mm
11.	The length of the wire of the Hammer (for women)	116 cm-119.5 cm
12.	Thickness of the wire	3 mm
13.	Length of the grip	11cm
14.	Thickness of the rim	6 mm
15.	Shape of the safety cage	U shaped

Technique of the Hammer Throw:

Phases of the Hammer Throw

- 1. Hold:** A right handed athlete will first hold the grip of the hammer with his left hand. Then the athlete will grip his left hand with his right hand as tightly as possible.
- 2. Initial Position:** The athlete will stand in the throwing circle with his back towards the throwing sector. The feet will be drawn apart in line with the shoulders.
- 3. Initial Rotation:** The athlete keeps the hammer on the ground on his right side and rotates the hammer completely towards left side. The hammer reaches the left side completely. The athlete rotates the hammer with such a force that after some time it reaches its peak position. The hammer is at its highest position at the back towards the left of athlete's head and at its lowest position in front of him towards his right.
- 4. Rotation:** When the head of the hammer reaches its lowest position in the last rotation, the athlete stills his arms and hammer in front of his body and takes his first turn. The athlete bends on his heel towards his left and turns on his right foot. While throwing hammer, he takes three turns.
- 5. Release:** The athlete uses all his force in the turns. When the hammer reaches just in front of the body, the athlete releases the hammer.

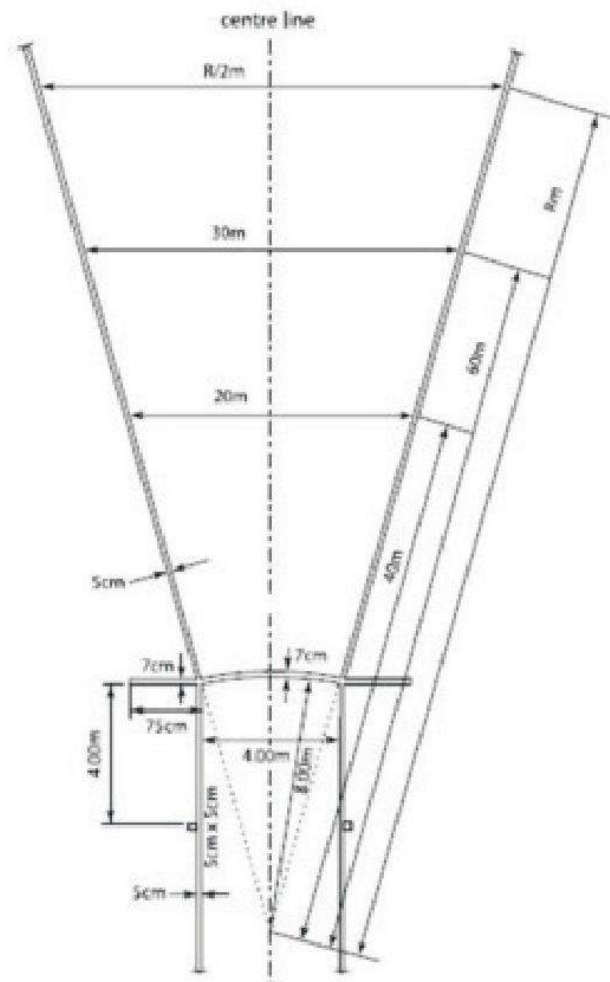
General Rules of Hammer Throw:

1. The athlete will be given three chances to throw hammer.
2. The athlete who throws the hammer at the maximum distance following all the rules will be declared winner.
3. The athlete will enter the throwing sector from backwards. He cannot touch any line while throwing hammer.
4. After throwing the hammer, the athlete will leave the throwing sector from behind the restraining lines without touching the lines.
5. The athlete can keep the hammer in throwing circle before throwing it.

6. Only the throw which is thrown in the throwing sector will be considered valid.
7. The athlete will enter the throwing circle only when called by the Game Officer.

4. Javelin Throw:

The athlete holds the javelin with its grip and throws it into the throwing sector from above his shoulders. The athlete does not throw the javelin with turns. The only throw which is considered the right throw is the one in which the tip of the javelin touches the ground without any foul. The athlete can throw javelin with any hand.



Javelin throwing Sector

Important Measurements of Javelin Throw

Sr. No.	Description	Measurement
1.	Length of runway	30-36.5 metre
2.	Width of runway	4 metre
3.	Length of side lines	0.75 metre
4.	Angle of throwing sector	28.95 degree
5.	Thickness of lines	5 cm
6.	Thickness of the arc line	° 7 cm
7.	Length of javelin (for men)	2.60-2.70 metre
8.	Weight of javelin (for men)	800 gm
9.	Length of javelin (for men)	2.20-2.30 metre
10.	Weight of javelin (for men)	600 gm
11.	Length of metal head (nail)	250-330 mm

Techniques of Javelin Throw:

1.Hold: Before throwing the javelin, the technique of holding the javelin is more important. The athlete holds the javelin by the cord coiled around it with the help of index finger and thumb and covers it with his palm. Javelin can be held in many ways. The athlete keeps the javelin above the shoulder of the same hand which he uses to throw the javelin.

Phases of Javelin Throw:

A. Approach Run: The athlete acquires the maximum speed by running on the runway for 30-35 metre. The last five to seven steps of the athlete are very important. The athlete moves ahead in rhythmic steps and brings the javelin towards front from above the shoulder. The athlete must have a check mark along the runway before the last five strides.

B. Transitional Phase: The athlete starts bringing the javelin near his body. Five strides before the throwing position, he keeps the javelin parallel with the line of his shoulder and slowly moves his trunk backwards so that he may throw the javelin with full strength. The athlete stretches his right arm at the back, bent slightly at elbow and palm facing the sky. The left arm is in front of chest and remains folded.

C. Release: The performance of the athlete depends on this step. When the athlete releases the javelin from his hand, he must allow his body to move in follow through so as to keep his body in balance. If the athlete loses control over his body, it may be a foul throw.

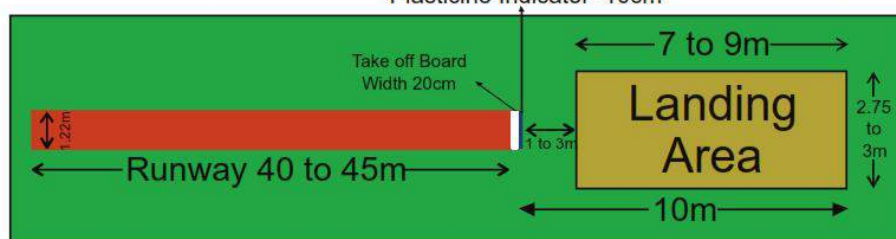
Jumping Events

There are four types of Jumping Events:

1. Long Jump
2. High Jump
3. Triple Jump
4. Pole Vault

1. Long Jump

Long jump is also known as Broad Jump. The athlete runs on the runway, takes a jump from take-off board with one foot and falls in the pit of long jump. The distance between the take-off board and the place where any part of the athlete's body part



Important Measurements of Long Jump

Sr. No.	Description	Measurement
1.	Length of the runway	40-45 metre
2.	Width of the runway	1.22 metre
3.	Length of take-off board	1.22 metre
4.	Width of take-off board	20 cm
5.	Thickness of take-off board	10 cm
6.	Width of plasticine indicator board	10 cm
7.	Angle of plasticine indicator board towards runway	30 degree
8.	Length of landing pit	7-9 metre

9.	Width of landing pit	2-3 metre
10.	Depth of landing pit	50 cm
11.	Distance of landing pit from take-off board	1-3 metre
12.	Colour of take-off board	White

Technique of Long Jump: Generally, there are three techniques of Long Jump

(i) Sail Method (ii) Hang Style (iii) Hitch Kick Method

Phases of Long Jump

(a) Runway: For long jump, the athlete will run for 40-45 metre and achieve the maximum speed. The athlete will take off with his strong foot by pushing his feet against the take-off board. The athlete can mark a check mark for his convenience, but he cannot dig a pit in the runway.

(b) Take Off: The athlete's last stride is a little shorter. The athlete strikes his strong foot against the take-off board. He stretches both his arms and raises his body. He raises his front leg and his knee is bent.

(c) Flight: After taking the take-off the athlete takes his flight towards landing pit. During flight, the athlete can use Hitch Kick Technique or Hang Technique according to his capacity.

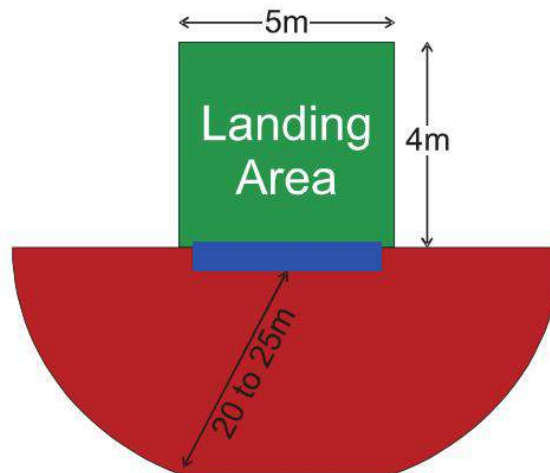
(d) Landing: When the athlete lands in the pit on both his feet, he should try his best not to allow any part of his body touch the take-off board. It is very important for the athlete to keep his body balanced while landing in the pit.

General Rules of Long Jump

1. The athlete will enter the runway only when called by the Game Officer.
2. The athlete will be given three chances for jump. The athletes will be given three more chances if number of athletes are less than 8, then 6 chances are given.
3. The athlete cannot have any check mark in the landing pit.
4. The athlete who covers the maximum distance from the take-off board is declared the winner.
5. If the athlete touches the plasticine board while jumping from the take-off board, it will be a foul.
6. Measurement of the distance of the jump will be from take-off board to the nearest mark in the landing area made by any part of the body.

2. High Jump

In high jump, the athlete takes-off on one foot and crosses the cross bar without touching it or letting it fall.



High Jump

Important Measurements of High Jump

Sr. No.	Description	Measurement
1.	Length of runway (marked as arch)	20-25 metre
2.	Length of landing mat	5 metre
3.	Width of landing mat	4 metre
4.	Height of landing mat	60 cm
5.	Distance between uprights	4 metre to 4.04 metre
6.	Length of cross bar	3.98-4.02 metre
7.	Weight of cross bar	2 kg
8.	Thickness of the cross bar	25-30 mm

Techniques of High Jump

1. Scissor Cut
2. Western Roll
3. Straddle Roll
4. Fosbury Flop

Phases of High Jump:

(a) Runway: The athlete comes running in a circular motion from a distance of 7-8 strides according to his capacity. The last three strides of the athlete are very fast. In front of the cross bar, the athlete bends down his body to get the take-off.

(b) Take Off: The athlete remains focused at the take-off. He uses the technique of take off according to his capacity. He jumps as high as he can and tries to cross the cross bar.

(c) Flight: At this stage, the athlete chooses a technique of flight according to his capacity and tries to cross the cross bar without touching it or letting it fall.

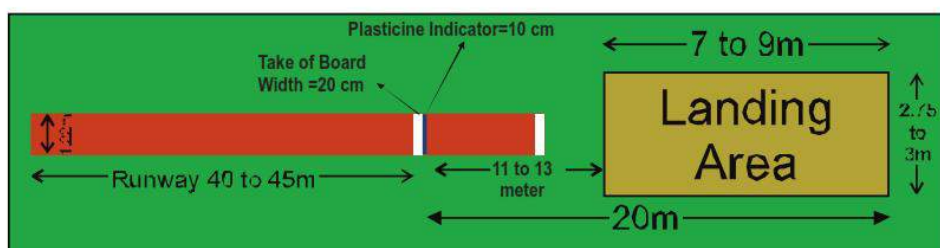
(d) Landing: After crossing the cross bar, the athlete will land on the landing mat or sand pit. The athlete should come out of the land pit or land mat as soon as he lands because in case the cross bar falls, but the athlete has already left the landing area, the jump will be considered valid.

General Rules of High Jump

1. Each athlete will be given three chances for high jump.
2. The athlete can mark a check mark on the runway, but cannot dig a cut or pit for it.
3. If the cross bar falls while the athlete crosses it, it will be a foul.
4. The athlete is free to choose the height from where he wants to jump.
5. The athlete can get the take-off with any foot.
6. If the athletes cross the cross bar with the same height, the athlete who crosses it in least number of attempts, will be declared the winner.

3. Triple Jump

In triple jump, the athlete will land on the same foot which he uses for take-off. He can land his other foot (sleeping foot) on the ground only after that. Finally, he will take another jump and land on his both feet. If any athlete breaks this sequence, it will be considered a foul. The athlete can start the jump with any foot. Triple jump is also called Hop-Step-Jump.



Triple Jump

Important Measurements of Triple Jump

Sr. No.	Description	Measurement
1.	Length of runway	40-45 m
2.	Width of runway	1.22 m
3.	Length of take-off board	1.22 m
4.	Width of take-off board	20 cm
5.	Thickness of take-off board	10 cm
6.	Width of plasticine board	10 cm
7.	Angle of plasticine board towards runaway	30 degree
8.	Length of landing pit	7-9 m
9.	Width of landing pit	2.75-3 m
10.	Distance of the starting line of landing pit from take-off board	11-13 m

Techniques of Triple Jump

There are three phases of triple jump.

(i) Hop (ii) Step (iii) Jump

Generally, the following three techniques are used in triple jump.

(i) Flat Technique:

Hop-34%, Step-30%, Jump-36%

(ii) Steep Technique:

Hop-38%, Step-30%, Jump-32%

(iii) Mixed Technique

Hop-37%, Step-30%, Jump-33%

Phases of Triple Jump

(a) Runway: The athlete runs for some distance as fast as he can, according to his capacity. Generally, athletes run for 18-22 strides for triple jump.

(b) Take Off: The upper part of the athlete's body will remain vertical. Both his arms will be backwards. The sleeping leg of the athlete will quickly form the split position.

(c) Hop: After the take-off, the athlete will bring his active in front, his body will be in vertical position and his arms will extend forward. The athlete will land on the same foot.

(d) Step: When the athlete lands on the landing leg, his landing leg will go backward and the sleeping leg will come to the front. Now the athlete will land on the same foot.

(e) Jump: Now the athlete will again raise the same landing foot with which he lands first of all and jump on it.

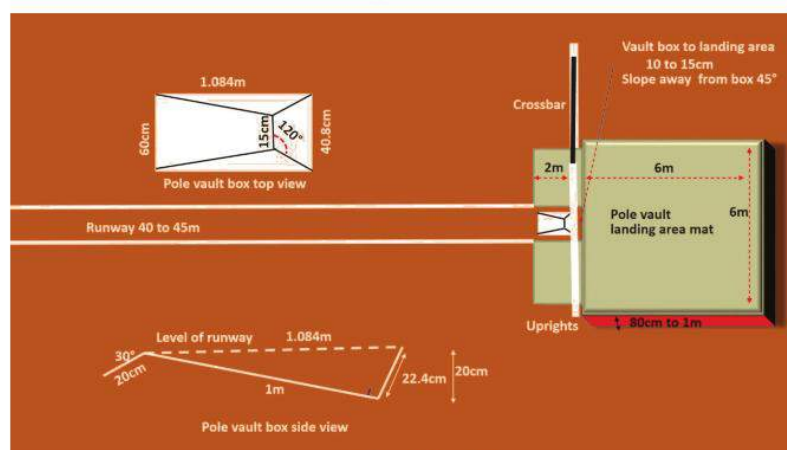
(f) Landing: At this step, the athlete will land using both his feet. He will keep his body balanced and try to land towards the front of the landing pit.

General Rules of Triple Jump:

1. The athlete will enter the runway only when called by the game officer.
2. Each athlete will get three chances for triple jump.
3. The athlete can jump only in the sequence of hop, step and jump.
4. The athlete can take off with any foot.
5. If the athlete touches the plasticine board at the time of take off, it will be a foul.
6. The final eight athletes will get three attempts for triple jump.
7. The athlete who covers the maximum distance following the rules will be declared the winner.
8. The athlete cannot mark any check mark in the landing pit.
9. Measurement of the distance of the jump will be from take-off board to the nearest mark in the landing area made by any part of the body.

4. Pole Vault

Pole Vault is the only jumping event in which the athlete jumps with the help of a pole. In comparison to the other events, pole vault is more difficult and complex.



Pole Vault

Important Measurements of Pole Vault

Sr. No.	Description	Measurement
1.	Length of runway	40 m - 45 m
2.	Width of runway	1.22 m
3.	Length of landing mat	5 m
4.	Width of landing mat	5 m
5.	Height of landing mat	61 cm-91 cm
6.	Distance between uprights	4.30 m - 4.37 m
7.	Length of cross bar	4.48 m - 4.52 m
8.	Weight of cross bar	2 Kg
9.	Circumference of cross bar	25 mm - 30 mm
10.	Length of vaulting box	1 m
11.	Width of vaulting box (at the back)	60 cm
12.	Width of vaulting box (in the front)	40 cm
13.	Area of steel line in the vaulting box	80 cm
14.	Depth of vaulting box	22.4 m in triangular form and 20 cm in the front.

Types of Pole Vault

- | | |
|----------------|---------------------|
| 1. Bamboo Pole | 2. Aluminium Pole |
| 3. Steel Pole | 4. Fibre Glass Pole |

Methods of Holding the Pole:

- (i) High Carry (ii) Medium Carry (iii) Low Carry

Phases of Pole Vault:

(a) Runway or Approach Run: The athlete will decide the number of strides he wants to take before the vault according to his capacity. The athlete will choose the technique of holding the pole according to his convenience and run towards the vaulting box.

(b) Planting the Pole: The vaulting box is fixed near the cross bar in front of the run way. When the athlete reaches near the vaulting box, he slows down his pace a little and plants the pole in the planting box.

(c) Take Off: When the athlete takes off, his right knee will come forward. This will raise his body upward and his chest will come close to the Pole. The hands and arms will be stretched at the time of take-off. When the athlete swings along the pole, his right leg will come in front of his chest.

(d) Clearing the Crossbar: At this stage, the athlete crosses the cross bar. While doing so, he pushes the pole towards the runway. The athlete bend his body once it crosses the cross bar.

(e) Landing: After crossing the cross bar successfully, the athlete lands in the landing pit.

General Rules of Pole Vault:

1. The athlete will use his own pole. He is free to use any kind of pole.

2. It is essential for the athlete to plant the pole in the vaulting box.
3. If the pole of the athlete breaks at the time of his vault, he is given another chance.
4. The athlete can use the powder, magnesium carbonate or any other, to hold the pole.
5. The athlete will enter the runway only on being called by the game officer.
6. The athlete can keep something as a check mark along the runway.
7. If the cross bar falls due to pole after the athlete's crossing the bar, it will be considered a foul.
8. The athlete will be given three attempts to cross each height.

Athletes who have won the Arjuna Award in Athletics:

Gurbachan Singh Randhawa (1961), P.T. Usha (1993), Neelam Jaswant Singh (1998), Suneeta Rani (1999), Paramjeet Singh (1998), Gulab Chand (1999), Anju B. Jaraj (2002), Manjeet Kaur (2005), Krishna Punia (2010) and Tinku Looka (2014).

Coaches to have won the Dronacharya Award in Athletics:

Joginder Singh Saini (1997), K.O. Bosen (1999), Jaswant Singh (2002), Robert Bobby George (2003), A. Kutty (2010), Varinder Poonia (2012), Harbans Singh (2015) and N. Ramesh (2016)

Athletes to have won the Rajeev Gandhi Khel Ratan Award in Athletics:

Hemant Takalkar (1982-83), S.S. Prakash (1983-84), Jyotima Sikandara (1998-99), Shobha Narayan (1998-99) Anju Bobby George (2003),

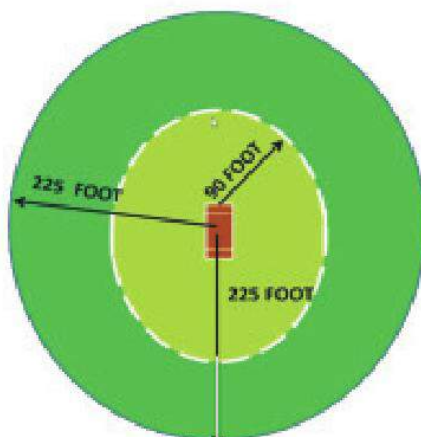
Dronacharya winner coach: Fadke Gopal Purshottam (2000) Farad K. Gopal Purshottam (2010),

Chapter-2

Cricket

Some Important Information about Cricket

Sr. No.	Description	Measurement
1.	Number of players in a cricket team	11 + 5 =16 (reserve)
2.	Number of umpires in a cricket match	2 +1=3 (third umpire)]
3.	Score count	2
4.	Length of cricket bat length	38 inch (96.5 cm)
5.	Width of cricket bat	4.5 inch (10.8 cm)
6.	Weight of cricket bat	155.9 g - 163 g
7.	Circumfrence of cricket ball	8 inch - 9 inch 22.4c.m to 22.9 c.m
8.	Colour of cricket ball	Red/white
9.	Distance from centre to outer boundary	75 yard and 85 yard
10.	Distance from centre to inner boundary	30 yard
11.	Distance between wickets	22 yard
12.	Width of wickets	9 inch
13.	Length of bails	4.5 inch
14.	Width of pitch	8 feet 8 inch
15.	Types of matches	50-50, 20-20, one-day, Test
16.	Interval for changing innings	10 minutes
17.	Interval for changing players	2 minutes
18.	Site screen	9.14 X 3.65 m



Cricket Ground

History of Cricket

England is considered to be the birthplace of Cricket. This game is believed to have been started in 13th century. The first match of cricket was played between Kent and Middlesex in 1719. The initial rules of the game were laid down in 1744. Melbourn Cricket Club was established in 1787 in Lords. In 1835, this game was given the right direction with its rules. Officially, the first international match of cricket was played between England and Australia in 1887.

Cricket was brought to India by the British towards the end of the 18th century. This game was popularised in the Commonwealth Games in 20th century. India played its first cricket test match with England in 1932. The first Ranji Trophy cricket match was played in 1935 in India.

1. Player, Umpire and Scorer

(i) Player : A cricket match is always played between two teams. Each team has 11 players and 5 reserved players. If a player gets injured, he may be replaced with a reserved player. However, the player who replaces the injured can only do the fielding. He cannot do batting or balling.

(ii) Umpire: Two umpires are appointed to execute a cricket match properly. The umpire calls the captains of both the teams and gets the toss done. The team that wins the toss is invited by the umpire to decide between fielding or batting. During a match, if both the umpires fail to take a decision, they give a signal to take the help of the third umpire.

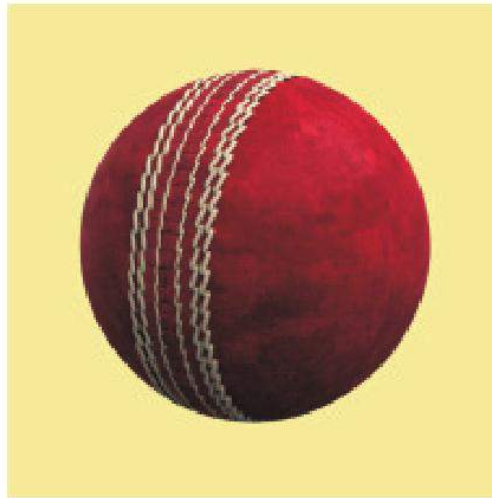
(iii) Scorer: In a cricket match, two scorers are appointed to keep a record of the runs. The scorers always count the score following the directions of the umpire.

2. Cricket Field and Equipment

(i) Cricket Field: A cricket field can be oval shaped or round. The boundary line of the field is 75 to 85 yards.

(ii) Pitch: The place where the balling is done is called the pitch. The width of the pitch is 8 feet 8 inches.

(iii) Wickets: The wickets are fixed from one stump to another, parallel to each other, at a distance of 22 yards. The width of either wicket is 9 inches. The height of wickets from the ground is 28 inches. At either side, three stumps are fixed with two bails. The length of bails is 4.75 inches.



Cricket Ball

(iv) Ball: The minimum weight of cricket ball is 5.5 ounce and the maximum weight is 5.75 ounce. The minimum circumference of the ball is $8\frac{13}{16}$ inches and the maximum is 9 inches. The match is started with a new ball. If the match is played during day, a red ball is used. If the match is played at night, a white ball is used. In case a ball is lost during a match, the umpire will replace the lost ball with a similar ball.

(v) Bat: The length of cricket bat should be 38 inches. The broad area of the bat should not be more than 4.5 inches. A normal bat weighs 2.25 ounce.

Cricket Kit:

A cricket kit is essential for a cricket match. A cricket kit is a sports kit which comprises the following things: a lower, t-shirt, shoes, pair of socks, hand gloves, abdominal guard, helmet for the batsman and the wicketkeeper.

The Game:

Innings: Before the game starts, the umpire conducts a toss between the two teams. The captain who wins the toss decides which team will bat or field first. Once a captain takes a decision, he can't change it.

Follow-on: In a test match, if a team has a greater score than its opponent team, it may invite the opponent team for the follow-on.

A team may invite the other team for the follow-on only if it excels the other team with 200 runs in five days, 150 runs in three days, 100 runs in two days and 75 runs in one day.

Declaring the Innings:

The captain of a team may declare the innings closed even before all the players of the team get out. He can do so only when the team is in a strong position having scored more than enough runs.

The Start, End and Interval of the Game: The game always starts at the fixed time. Every day after two hours, the players get an interval of 45 minutes for meal. Then after another two hours, the players get an interval of 20 minutes for tea. Each new batsman gets maximum two minutes to come for batting. For each innings, 10 minutes are given.

Boundary Line: The boundary line of the game is a white line made of powdered calcium carbonate. The width of the boundary line is 5 cm. If a ball hit by the batsman touches the ground and then crosses the boundary line, it is considered a four. If a ball hit by the batsman crosses the boundary without touching the ground, it is called a six.

Over: There are six balls in an over. A bowler cannot bowl for two overs together. A wide ball or a no ball is not counted in an over.

Appeal: The umpire does not declare a batsman out unless the fielder appeals. A fielder must appeal as soon as possible. If a batsman plays another ball before a fielder makes an appeal, the appeal will be considered invalid.

The Missing of the Ball: If a ball is lost during a match, the umpire replaces the lost ball with a similar ball.

Result: During a match, the team, that scores more numbers of runs in both the innings, is declared the winner. If the match remains unfinished due to any reason, the match is declared to be a draw.

3. Dead Ball: In the following situations, a ball is considered a dead ball.

- I. When the ball is in the hands of a bowler or a wicket-keeper.
- II. When the batsman is out.
- III. When the ball gets stuck in the clothes of a umpire or batsman.
- IV. When the ball reaches near the boundary line or abounces.
- V. Announcement of time or over by the umpire.

4. No Ball:

While bowling during a match, if the whole front foot of the bowler crosses the batting crease or returning crease, the umpire stretches one of his arms and signals that the ball delivered by the bowler is a No Ball. The runs scored by a batsman for a no ball are counted. In addition to that he gets one more run. If the batsman scores no run for a No Ball, he is given only one run.

5. Wide Ball

While bowling during a match, if a bowler throws a ball higher or wider than the wickets, and the ball cannot be played by the batsman, the umpire declares it to be a wide ball. In case of a wide ball, a run is added to the runs scored by a team.

6. Bye and Leg Bye: If a ball does not touch the bat or clothes of the batsman, and the batsman scores run(s) for it, the ball is declared a 'bye'. If the ball touches any part of the batsman's body except his hand and the batsman scores run(s) for it, it is declared to be a 'leg-bye'. The condition for a 'bye' or 'leg bye' is that it should not be a 'no ball' or a 'wide ball'.

Types of Cricket Match

- 1. Test Match:** This match is played between two teams for five days. In this match, each team gets two innings to play. In one match, if chasing team scores more runs than the total runs scored by the team which bats first in both the innings, the chasing team is declared the winning team.
- 2. One Day Match:** This match is played between two teams for 50-50 overs. The team that scores more runs than the other team is declared the winner.
- 3. 20-20 Match:** This match is played between two teams for 20-20 overs. In this match, each team throws 20 overs in 75 minutes. The team that scores more runs than the other is declared the winner.

Situations When the Batsman is declared out:

- 1. Fall of Wicket:** When the ball delivered by the bowler hits the wickets or touches any part of the body of the batsman, it is considered to be a fall of wicket for the batsman.
- 2. Leg before Wicket (LBW):** When the ball touches the body of the batsman without touching his bat and fails to hit the wicket, and the umpire feels that the ball could have hit the wickets, the appeal is considered and the batsman is declared LBW out.
- 3. Catch Out:** During the match when the batsman hits the ball with his bat, the ball goes up in the air. When this ball is caught by a fielder of the opponent team before it touches the ground, the batsman is declared catch out.
- 4. Run Out:** The batsman hits the ball and runs for scoring a run. and a fielder hits his wicket before his coming back to the crease, the batsman is declared run out.

- 5. Stumped Out:** When the batsman goes beyond his fixed area while batting, and the wicket keeper hits the wickets with the ball, the batsman is considered to be stumped out.
- 6. Touching the Ball:** If the ball is in movement and the batsman touches the ball, he is declared out.
- 7. Touching the Wicket:** While batting, if the batsman or any part of his body touches the wickets or drops them, he is declared out.
- 8. Preventing the Game:** If a batsman causes an obstruction in fielder's catching the ball, he is declared out.
- 9. Hitting the ball twice:** No batsman can hit a ball twice. If he touches or hits the ball twice, he is declared out. If the ball is about to touch the wickets, he can stop it with the help of the bat.
- 10. Retiring of batsman:** If a batsman gets injured while batting, he can retire. If he wants to resume batting, he can do so only if the captain of the opponent team allows him to do so.

Field, Weather and Light

Before a match starts, the captains of both the teams inspect the field, weather and arrangements of light. They will ensure whether the field is appropriate for the match or not. If both the captains fail to agree, the umpire gives the final decision.

A match can be stopped only if it is impossible for the players to play the match. For example: Due to heavy rain the ground becomes so slippery that it turns risky for the players to play. In such a situation, the umpire inspects the field twice before stopping the match. When the field is again ready for the match to

be resumed, the umpire can call the players back to the field.

Players to have Won Arjuna Award in Cricket

Bishan Singh Bedi (1969), Sunil Gavaskar (1975), Kapil Dev (1979-80), Anil Kumble (1995), Saurav Ganguli (1997), Rahul Dravid (1998), Virender Sehwag (2002), Harbhajan Singh (2003), Jgeer Khan (2011), Yuvraj Singh (2012), Veerat Kohli (2013), R. Ashvin (2014) And Rohit Sharma (2015)

Coaches to have Won Dronacharya Award in Cricket

Desh Prem Azad (1986), Gurcharan Singh (1987), Ramakant Achrekar (1990), Sunita Sharma (2004) and Raj Kumar Sharma (2016)

Players to have Won Rajeev Gandhi Khel Ratan Award

Sachin tendulkar (1997-98) and M.S. Dhoni (2007)

In 2014, Sachin Tendulkar was conferres 'Bharat Ratan', India's highest civilian award.

Chapter-3

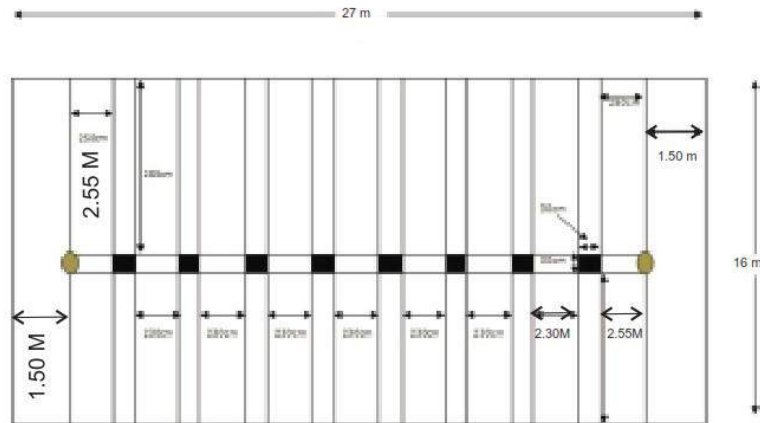
Kho-Kho

Some Important Information about Kho-Kho

Sr. No.	Description	Measurement
1.	Shape of Kho-Kho ground	Rectangular
2.	Length of Kho-Kho ground	27 m
3.	Width of Kho-Kho ground	16 m
4.	Free zone on two sides	1.50 m
5.	Number of players in Kho-Kho team	12 players
6.	Number of players playing in Kho-Kho ground	9 players
7.	Length from one pole to another	24 m
8.	Height of pole from ground	1-1.20 m
9.	Match duration for men and women	9-3-9 5 9-3-9
10.	Match duration for sub-junior players	7-3-7 5 7-3-7
11.	Height and width of chaser player	35 X 30 cm
12.	Game officials	1-referee, 2-umpire, 1-time keeper, 2-scorer
13.	Diameter of pole	9 cm - 10 cm

The History of Kho-Kho

Kho-kho is a very popular game in India. This game was started in India. This game was started at Gymkhana Club in the state of Maharashtra. The first competition of kho-kho was played in 1914 in India. The rules of kho-kho were first published by Gymkhana Baroda, Gujrat in 1924. 'Akhil Maharashtra Sharirik Mandal' started a training course for this game. In 1935, 'Akhil Maharashtra Sharirik Mandal' published a book related to rules of kho-kho. Kho-Kho Federation of India was established in 1960. It was in the same year (1960) that the first National Kho-kho Championship was organised at Vijaywada (Andhra Pradesh). In 1982, the exhibition match of Kho-kho was played in Asian Games.



Field of Kho-Kho: The field of kho-kho is rectangular. The length of the kho-kho field is 27 metre and the width is 16 metre. The length of the central lane is 24 metre and the width is 30 centimetre. There are eight chaser blocks with the dimension of 35 cm X 30 cm.

Poles: At each end of the central lane is a pole. The height of each pole from the ground is from 1m to 1.20 m. The diameter of the poles is 9-10 cm.

Central Lane: There is a central lane between the two poles. The length of the central lane is 24 metre, and the width is 30 centimetre.

Cross Lane: Each cross lane in the kho-kho field is 16 metre in length and 35 centimetre in width. It crosses the central lane at an angle of 90 degree. The cross lane is divided in two parts.

Chaser Block: The place where the central lane is crossed by each cross lane makes a chaser block. The dimension of each chaser block is 35 cm X 30 cm. The chaser sits in this chaser block.

Post Line: The line which is parallel to the cross lane is called the post line.

Chaser: The player who sits in the chaser block is called the chaser. The player of the opponent team who runs is called the runner. The

player who runs to catch the runner is called Active Chaser.

Runner: The player who runs to save himself from being touched or caught by the chaser is called the runner.

To give/pass Kho: In this game, the active chaser touches the chaser sitting in the chaser block at his back and speaks the word, 'Kho'. Both the touching and speaking the word 'Kho' should occur together. If they both don't occur together, it is considered a foul. When the chaser is passed the appropriate 'kho', he starts chasing the runner.

Taking the Direction: During a game, after getting 'kho' from the active chaser, a player goes from one post line to another post line. This is called taking the direction.

Taking Wrong Turn:

While chasing the runner in a particular direction, if a chaser turns back in the opposite direction, it is known as taking wrong turn.

Out of Field: When both the feet of a runner lose contact with the kho-kho ground, he is considered out of field.

Sitting Block:

Sitting block is the place outside the lobby of the kho-kho ground. Here, the reserved players, coach and the manager sit.

To leave the Post Line:

When the active chaser gets away from the pole or the pose line, he is considered to have left the post line.

Lona: When nine runners of the opponent team get out of the game in nine minutes of the game, it is called a 'lona' against the opponent team. However, no score is credited for a 'Lona'.

General Rules of Kho-Kho

1. The referee will call both the captains and conduct a toss. The toss-winning captain will decide if his team is a chaser or a runner.
2. Before the game starts, eight players of the chaser team will sit in the chaser block with their faces in the opposite direction alternatively and the ninth player will stand near the pole in free zone.

3. When the game starts, three players of the runner team will start running in the ground. When these three players get out, the next three players will run.
4. The players sitting in the chaser block cannot get up unless they are passed the 'kho'. The players sitting in the chaser block can not spread their limbs.
5. Once a chaser is passed the kho, he becomes the active chaser. The active chaser immediately starts chasing the runner in a particular direction. Once he chooses a direction, he cannot change it. However, he can change his direction in the free zone.
6. During the game, if a chaser touches a runner while following all the rules, the runner gets out.
7. Neither the chaser nor the runner can violate any rule of the game. If anyone does so, it is considered a foul.
8. If a chaser violates any rule, the referee will command him to change the direction.
9. The player who passes the 'kho' will immediately sit in the chaser block.
10. The active chaser can go out of the kho ground even during the game. However, he has to follow the rules of direction.
11. No runner can touch the player sitting in the chaser block. If he does so, he is given a warning for once. If he does so again, he is declared out.
12. If the runner moves out of the ground, he is declared out.
13. If the active chaser touches the runner during a foul, the runner will not be considered out.
14. During the game, the active chaser cannot touch the central lane.

The Game Officials: The following game officials are appointed for successful organisation of the game.

(i) Referee (ii) umpire (iii) time-keeper (iv) scorer

Referee: In order to organise the game successfully, a referee is appointed. The referee follows the following rules.

- (i) When both the umpires are unable to take any decision during the game, it is the referee who takes the decision.
- (ii) The referee has the right to penalise the player who tries to stop the game or hampers in some way.
- (iii) The referee will check the score sheet after each inning.
- (iv) In case of an argument or dead lock, it is the referee who takes the decision.
- (v) At the end of the game, the referee will announce the score of each team and declare the results.

Players who have Won Arjuna Award in Kho-Kho

Hemant Tkalkar (1982-83), S.S. Prakash (1983-84), Shobha Narayan (1998-99)

Coaches who have Won Dronacharya Award

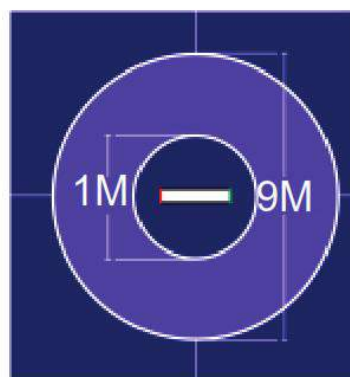
Fadke Gopal Purshottam (2000)

Chapter-4

Wrestling

Sr. No.	Description	Measurement
1.	Shape of mat	9 m (circular)
2.	Empty space around mat	1.50M
3.	Height of platform	1.10 meter
4.	Colour of corners of the mat	Red and blue
5.	Time for wrestling	2 rounds of 3-3 minutes
6.	Time for rest	30 seconds
7.	Officials	1-mat chairman, 1-referee, 1-judge

Mat: The wrestling area on the mat should be circular in shape with diameter 9 metre. The mat should be extended by 1.50 metre all around the circular part. The height of the mat from the ground should be 1.10 metre. The mat should be coloured blue or red at the corners. A circle is drawn on the mat.



wrestling match

Game Officials: Three officials are appointed to organise a wrestling match: one mat chairman, one referee and one judge. No reface can be changes during the match. If any official gets injured, he can be replaced only on the basis of doctor's report.

1. The weight of the wrestlers is measured one day before the wrestling match. The wrestlers also have to undergo a medical check-up one hour before the wrestling match.
2. The wrestler should be physically fit.
3. The wrestler should have his nails trimmed.
4. While making the pairs of the wrestlers, if two wrestlers of the same place are paired, they will fight against each other in the first round.
5. For each round, the wrestlers are paired to fight against each other through toss.
6. The wrestlers are weighed without clothes.

Costume: The wrestlers will enter the wrestling area through the allotted corners. The wrestlers should wear the red or blue uniform allotted to him. The wrestlers cannot wear shoes with heels or spikes. The wrestler's beard must be freshly shaven or not having been shaven for more than a month.

Important Rules of Wrestling:

1. No wrestler can wind any bandage around his wrists, arms or ankles without any injury.
2. No wrestler is allowed to wear a wrist watch, ring, chain around neck, bracelet etc.
3. No wrestler is allowed to apply any oily substance over his body.
4. No wrestler is allowed to enter the wrestling area with sweat on his body.

Start of the Game:

Each round of wrestling lasts for six minutes. This duration will be divided in two slots of three minutes each. After the first three minutes, the wrestlers will get rest for 30 seconds. After that the match will again last for three minutes. The wrestling will continue until one of the wrestlers is knocked down or the duration of six minutes is over.

If a wrestler does not enter the wrestling area on being called, he will be called thrice after a gap of 30 seconds. If a wrestler fails to enter the wrestling area even after three more calls, he will be disqualified and the opponent wrestler will be declared the winner.

End of the Game:

1. At the end of first three minutes, each wrestler is sent back to his allotted corner.
2. During the 30 seconds of rest, the coach or the fellow of a wrestler can wipe off his sweat or coach him.
3. No wrestler can be coached during wrestling. If a coach does so, the referee will warn him not to do so. If a coach coaches a wrestler even after the warning, his trainee wrestler can be disqualified.
4. The rest time gets over immediately after the bell.
5. When the duration of wrestling is over, the time keeper rings a bell and the referee immediately blows his whistle to end the match. Both the wrestlers come near the referee and shake hands. The referee raises the hand of the winner and declares him the winner. If the match ends in a draw, the referee raises the hands of both the wrestlers.

Foul: It will be considered a foul in the following situations:

1. Touching the hair, ears, flesh or sports kit of the opponent wrestler
2. Twisting the fingers of the opponent wrestler, fighting, pushing
3. Trying to strangle the opponent wrestler
4. Holding the opponent wrestler in such a way that it might be fatal for him
5. Touching the opponent's face (from eyebrows to chin)
6. Throwing the opponent wrestler on mat in bridge position
7. Holding the opponent's head with both hands
8. To hit the opponent's abdomen with elbow or knee.
9. Holding the mat

Warning:

1. Still Hold
2. Handing over foul
3. Indiscipline during wrestling
4. Violation of rules/technical violation
 - (a) These warnings issued by the referee are counted as the second foul.

- (b) If a wrestler is issued three warnings, he is declared as defeated.
- (c) If a wrestler is found guilty of a major violation of a rule, he can be ousted from the game.

Scores:

(a) One Point

1. If a wrestler pins down his opponent on the mat and keeps his control over him maintained, he scores one point.
2. If a wrestler manages to come out from under his opponent and controls him, he scores one point.
3. If a wrestler gets a warning, the opponent wrestler gets one point.

(b) Two Points

When a wrestler positions his opponent's shoulder in a dangerous situation, he gets two points.

(c) Three Points

If a wrestler picks up his opponent in the air in a dangerous situation in such a way that he makes an angle of more than 90 degree with the mat, he gets three points.

(d) Five Points

If a wrestler throws his opponent on the mat from above vertically (at an angle of 90 degree), he gets five points.

If the match ends without any wrestler's winning the match in six minutes, the wrestler who scores more points is declared winner.

Rules for the Final Round:

In the final round, all the wrestlers compete according to the draw. In the second round, all the winners will compete against each other whereas all the runners up will compete against each other in different pools. Thus the first and the second winner will be selected from the pool of winners. The third and the fourth winner will be selected from the pool of the runners up.

Important Competitions of Wrestling

Olympic Games, Asian Games, Commonwealth Games,

International Wrestling Championship, National Junior Wrestling Championship

Wrestlers who have won Arjuna Award:

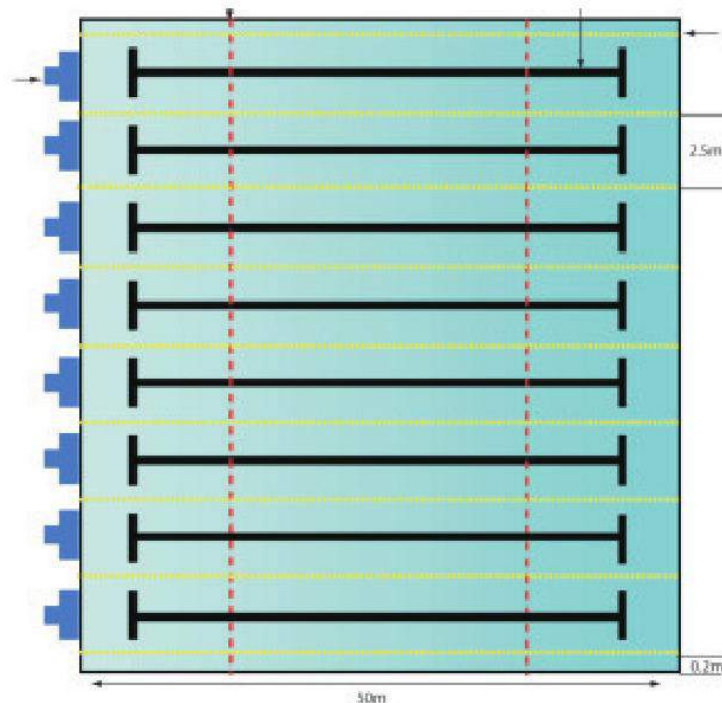
Kartar Singh (1982), Mahaveer Singh (1985), Rajesh Kumar, Satyavan (1989), Pappu Yadav (1992), Ashok Kumar (1993), Sushil Kumar (2002), Shokendra Tomar (2004), Ravinder Singh (2005), Palwinder Cheema (2011), Narsingh Yadav (2012), Rajinder Kumar, Geeta Phogat (2012), Dharminder Dalal (2013), Suneel Kumar Rana (2014), Bajrang Punia, Babita Kumari (2015), Vinesh Vairat, Ankit Watts (2016), Satyawrat Kadia (2017), Sumit Malik (2018)

Chapter-5

Swimming

Important Information about Swimming

Sr. No.	Description	Measurement
1.	Length of Swimming pool	50 m
2.	Width of Swimming pool	25 m
3.	Maximum depth of Swimming pool	1.80 m
4.	Total number of lanes in Swimming pool	8 or 10
5.	Width of a lane in Swimming pool	2.5 m
6.	Temperature of water in Swimming pool	25° to 28°
7.	Sports Kit	Transparent goggles, costume, cap and ear protectors
8.	Officials:	
I.	Referee	1
II.	Stroke Judge	4
III.	Starter	2
IV.	Turn Inspector	3
V.	Record (Desk control)	2
VI.	Clerk of course	2
VII.	Announcer	1
VIII.	Time keeper	6
IX.	Finishing judge	1 in each lane
X.	Main judge	1
XI.	Main time keeper	1
XII.	Spare time keeper	1



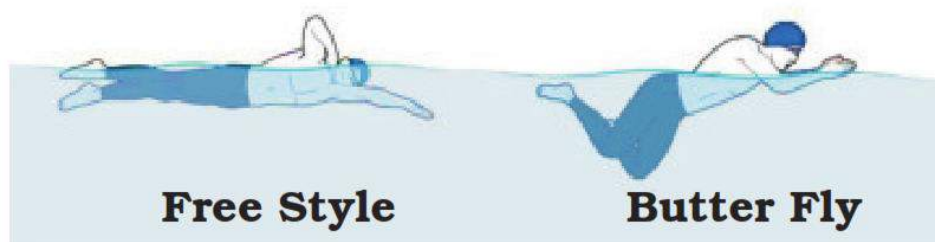
Swimming Pool

History of Swimming

Swimming is a very old sport. It was a part of primary education of men in Greece and Rome. This sport was considered compulsory for army training. Human beings learned this sport from animals. The first book on swimming was written by Professor Nikolas of Germany in 1538. The first swimming club was made in Australia in 1846. Swimming got recognition and popularity on international level in 1896 when it was included in the first modern Olympic Games. At that time only men could participate in this sport. However, women competitions of swimming were also included in the Olympic Games from 1912 onwards. Swimming was included in the Asian Games in to be checked 1951. In India. Swimming Association was established in 1940. India participated in swimming competitions in the Olympic Games for the first time in 1928.

Competitions of Swimming Organizing :-

Sr. No.	Stroke	For Men	For Women
1.	Free style	50 m, 100 m, 200 m, 400 m, 500m, 1500 m	50 m, 100 m, 200m, 400m, 800 m
2.	Back Stroke	100 m, 200 m	100 m, 200 m
3.	Breast Stroke	100 m, 200 m	100 m, 200 m
4.	Butterfly	100 m, 200 m	100m, 200 m
5.	Relay	4 X 100 m and 4 X 200 m	4 X 100 m and 4 X 200 m



For a swimming competition, the length of the swimming pool should be 50 metre and the width should be 25 metre. The depth of water in the pool is 1 metre. On national level there are 8 lanes in a pool whereas on the international level, there are 10 lanes in a pool. The temperature of the water in the pool should be 25° C - 28° C.

Medical Checkup:

A medical Checkup of the swimmers before any competition is very important. A person suffering from any skin disease or some other contagious disease cannot participate in swimming because if such a person enters the pool, the other swimmers may get infected with some disease.

Rules of Swimming:

Important rules of swimming are as the following:

1. No swimmer can wear any dress (sports kit) which may be helpful in accelerating his swimming speed.
2. If a swimmer tries to create obstacles in the path of the other swimmer, he is disqualified.
3. No swimmer can change his lane. If a swimmer enters the lane of some other swimmer due to any reason but returns without obstructing his way, it is not considered a foul.
4. During a swimming competition, a swimmer can stand on the bottom of the pool but cannot walk.
5. If a swimmer moves forward without obstructing the way of some other swimmer, the referee may allow him to participate again in the competition.

(i) Rules of Free Style Swimming:

In free style swimming, the swimmer can swim in any style. His style of swimming should be different from the one used in butterfly swimming, breast stroke swimming or back stroke swimming. In this style, it is compulsory for a swimmer to touch the pool side while turning or at the end of swimming.

(ii) Rules of Butterfly Swimming:

- (a) Both the arms of the swimmers should move backward or forward simultaneously.

- (b) The swimmer will swim using the force of his chest.
- (c) Both the shoulders of the swimmer should remain straight in water.
- (d) All the movements of feet of the swimmer should be the same.
- (e) Use of side stroke is prohibited. If a swimmer uses it, he will be disqualified.
- (f) While turning or at the end of the competition, the swimmer should touch the pool side with both hands at the same time.

(iii) Rules of Back Stroke Swimming:

- (a) At the beginning of the swimming competition, the swimmers will stand in the pool in their respective lanes forming a starting grip with both hands on the pool side, and their faces towards the pool side.
- (b) At receiving the signal for swimming, the swimmers will complete the whole swimming event by swimming on their backs.
- (c) If a swimmer does not swim on his back, he will be disqualified.

(iv) Rules of Breast Stroke Swimming

- (a) Both arms and both legs must have the same movements.
- (b) In this event, both the hands and the chest move forward or backward simultaneously in the water.
- (c) In this style of swimming, kicking like a dolphin is prohibited.
- (d) The head of the swimmer should remain above water.
- (e) While turning or at the end of the competition, the swimmer should touch the pool side with both hands at the same time.

Popular Tournaments of Swimming

Olympic Games, Asian Games, SAF Games, International Championship, National Games

Swimmers who have won the Arjuna Awards

Khajaan Singh (1984), Bhanu Sachdeva (1998), Nisha Silette (2000), J. Abhijeet (2001), Rehan Poncha (2010), Sandhya Ranu (2011),

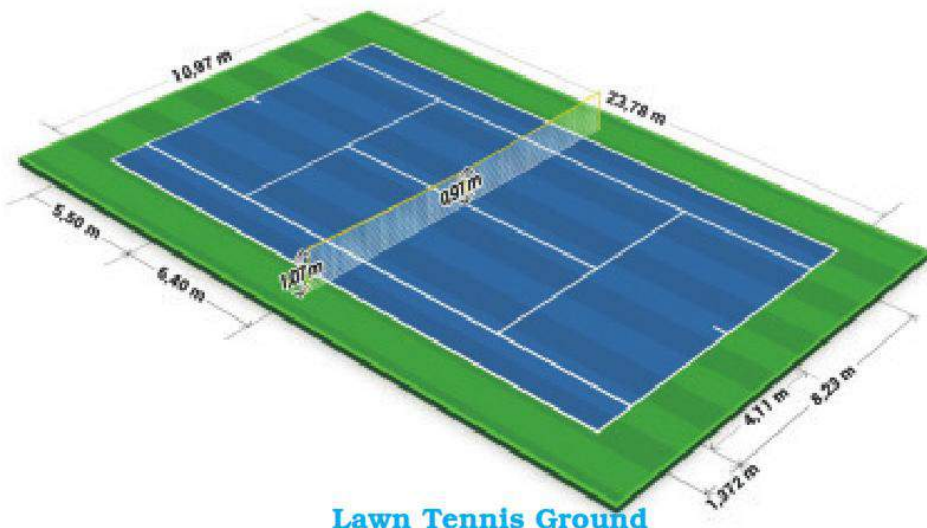
Swimming Coaches who have won the Dronacharya Awards

Pradeep Kumar (2016)

Chapter-6

Lawn Tennis

Sr. No.	Description	Measurement
1.	Length of lawn tennis court	78 feet (23.77 m)
2.	Width of lawn tennis court	27 feet (8.23 m) for singles and 36 feet (10.97 m) for doubles
3.	Height of poles	3 feet 6 inch (1.07 m)
4.	Height of net	3' Feet (0.914 meter)
5.	Diameter of poles	6 inch (15 cm)
6.	Weight of ball	2 ounce - $2\frac{1}{6}$ ounce (56.7 g - 58 g)
7.	Diameter of ball	$2\frac{1}{2}$ inch - $2\frac{5}{8}$ inch (6.33 cm - 6.67 cm)
8.	Bounce of ball from	53 inch to - 58 inch (135-147 cm)
9.	Length of lawn tennis racket	39.4 cm
10.	Width of lawn tennis	29.2 cm
11.	Weight of lawn tennis racket (for men)	13 ounce to 14 ounce
12.	Weight of lawn tennis racket (for women)	13 ounce - 13.5 ounce
13.	Length of centre mark	4 inch (10 cm)
14.	Width of centre mark	2 inch (5 cm)
15.	Width of court service line	2 inch (5 cm)
16.	Distance of service lines from net	21 feet (6.40 m)
17.	Total number of sets for men	5 sets
18.	Total number of sets for women	3 sets
19.	Game Officials	1 umpire, 1 match referee, 4-8 line men



Lawn Tennis Ground

History of Lawn Tennis:

Lawn Tennis is a popular sport in the world. This sport was started in France in 12 century. Initially this game was played with hands on a grassy ground. Later on this sport developed, and the credit for its development goes to W. C. Wingfield. He gave this sport recognition on the international level in England in 19th century. The first tennis club was established at Spain in 1872. The first World Tennis Championship for men was organised at Wimbledon in 1877. The first Wimbledon Championship for women was organised in 1884. This sport was included in Modern Olympic Games for men in 1896 and for women in 1900. It remained a part of Olympic Games till 1924. Later on, in 1988, it was again included in the Olympic Games held at Seoul. Liender Pace, an Indian Lawn Tennis Player won a bronze medal in the Olympic Games in 1996.

Lawn Tennis Court:

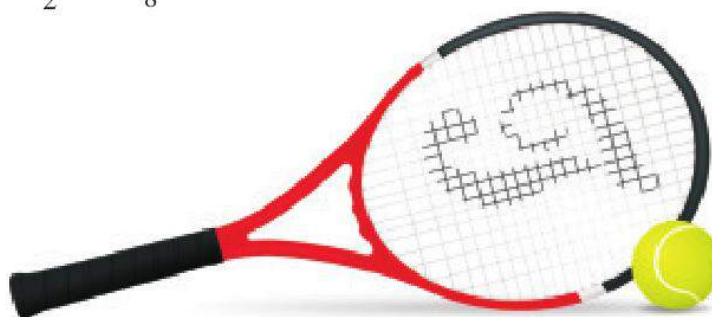
A lawn tennis court is rectangular in shape. The length of the court is 78 feet and the width is 36 feet. This court can be prepared in many ways. For example: grass court, clay court and

synthetic court. In the middle of the court is a line which is called the middle line or central line. The net is installed over this line.

Net: The net of a lawn tennis court is installed with the help of two poles each outside the central line. The net is tied with the poles on both sides using a wire or rope with the diameter of $\frac{1}{3}$ cm. The diameter of poles is 6 inches 15 cm. The height of the pole from the ground should be 3 feet 6 inches. The height of the net from the central line should be 3 feet (0.914). The net should be stretched tightly. The upper white strap of the net should not be broader than 2 inch 5 cm.

Lines of Tennis Court: The lines at the side of the court are called the side lines, and the lines at the back are called the base lines.

Lawn Tennis Ball: The outer layer of lawn tennis ball should be smooth. It should not be rough. It is white or yellow in colour. The ball should be stitched seamlessly. The weight of the ball should be from 2 ounce to $2\frac{1}{6}$ ounce. The diameter of the ball should be from $2\frac{1}{2}$ to $2\frac{5}{8}$ inches.



Lawn Tennis and Ball

Lawn Tennis Racket:

The length of lawn tennis racket including the handle should be 73 cm and the width should be 31 cm. The area from where the ball is hit should be 39 cm in length and 29 cm in width. The weight of the racket is 13.5 ounce 14 ounce for men and 13 ounce 13.5 ounce for women.

Players:

The umpire calls the captains or individual players of both the teams and conducts a toss. The player who wins the toss decides if he wants to choose side or service. Either the teams or players take their respective positions on their side. The player, who chooses service, does the service. He is called the 'server'. The other player is called the 'receiver'.

Kit for the Players:

In lawn tennis sport, the men wear jersey, knickers, tennis shoes, and socks. The women wear blouse, skirt, tennis shoes and socks.

Service:

The service is always done from behind a fixed area behind the base line. While doing the service, the ball is thrown up in the air and then hit with the racket to throw it into the opponent's court. The opponent player cannot change his position during service. If the server touches the base line during service, the service is considered a foul.

Rules of Lawn Tennis:

1. Before starting the game, the umpire conducts a toss and gets the service or side decided.
2. The server cannot do the service until the receiver is ready.
3. If, after the service, the ball touches the strap of the net but the service is done well, it is considered to be a let.
4. The correct service is the one in which the ball is hit with racket.
5. Situations in which service is considered a foul:
 - (a) If the server fails to hit the ball with racket after throwing it into air.
 - (b) If the server's foot is at fault while doing service.
 - (c) If the service turns to be at fault, the server should keep his foot at the same place where the service turned to be a fault.

- (d) If the service is done well but the ball drops out of the opponent's court
- 6. Situations in which service is considered a let:
 - (a) If the ball touches the strap of the net after the service but the service is served immediately, it is considered to be a let.
 - (b) When the server does the service before the opponent (receiver) is ready
 - (c) If the ball touches the receiver before touching the ground
- 7. In lawn tennis game, a player gets 15 points at the first point, 30 points at the second score and 40 score at the third point. If both the players get 40 points each, the score becomes a deuce. In such a situation, the player who scores two points together is declared the winner.
- 8. The court of the player is changed at the end of each set. Each player gets maximum one minute to change the court.
- 9. If the server repeats a foul, the opponent player gets one point.
- 10. The situations in which the opponent player gets one point:
 - (a) When the ball touches the player or his uniform
 - (b) When the player hits the ball by throwing the racket down
 - (c) When the player re-hits the ball with his racket
 - (d) When the player's racket touches the net post or the opponent's court

Rules of Double Game:

1. Court: The double court of lawn tennis is 36 feet wide. The line between the single side lines and the two service lines is called side line. The other specifications of the court remain the same as those of a single game court.
2. In a double game, the players who are supposed to do the

service mutually decide who between them will be the server. Similarly, the opponent team will also finalise their server in the second set. Who server does the service, he will do the service first in the third set. The layer who does the service in the second game will do the service in fourth game.

3. Rule for receiving the service

(a) Out of the two players of a team, the player who receives the service first will also receive the service in the third set.

(b) Similarly, the players of the opponent team will also decide who between them will be the receiver. They will receive the next service in the same sequence.

4. If a player does the service when it is not his turn, the service will be done in the correct order as soon as the mistake is realised, and the points earned will not be considered.

5. If the player who is supposed to receive the service breaks the sequence, he will continue to play till the end of the set. However, the player will play at his fixed position in the next set.

6. If the ball touches the body or the racket of the co-player of the server, the service will be considered a fault. However, if the ball touches the body or the clothes of the co-player of the receiver and it is not let before it touches the ground; the server will get a point.

7. If the players of a team hit the ball alternatively and a player violates this rule by touching the ball with his racket, the opponent team will get a point.

Popular Tournaments of Lawn Tennis:

Olympics Games, Wimbledon Championship, U.S. Open, Australian Open, French Open and Davis Cup

Lawn Tennis Players who have received the Arjuna Awards:

Naresh Kumar 1962, Leander Pace, 1990 Mahesh Bhupati, 1995 Sania Mirza and 2004 Somdev Devgan 2011.

Lawn Tennis Players who have received the Rajeev Gandhi Khel Ratan Award:

Leander Pace 1999 and Sania Mirza 2015

Lawn Tennis Players who have received the Padam Shree

Amrit Raj 1983, Leander Pace 1999, Sh. Vijay Prakash 2003 and Sania Mirza, 2016

Lawn Tennis Players who have received the Dhyan Chand Award

Jeeshan Ali and Shiv Prakash

Chapter-7

Hockey

Sr. No.	Description	Measurement
1.	Length of hockey ground	100 yard (91.40 m)
2.	Width of hockey ground	60 yard (54.86 m)
3.	Number of player	11+5
4.	Time for game	35-5-35 minutes
5.	Length of hockey stick	37-38 inch
6.	Weight of hockey stick	Maximum 737 g
7.	Weight of hockey ball	156-163 g
8.	Circumference of hockey ball	8-9 inch
9.	Distance of penalty spot from the goal line	6.40 m
10.	Circumference of penalty spot	0.15 m
11.	Length of flag	1.20 m - 1.50 m

The History of Hockey in India:

Hockey was started in India by the English during the British Empire. By the end of the 19th century, this sport had become very popular in India. The Bagton Cup of Hockey at Kolkata and the Aga Khan Tournament of Hockey at Mumbai were organised in 1895. The tremendous success of the hockey tournament organised at Lahor in the beginning of the 20th century initiated the establishment of hockey associations in various states. A conference of these hockey associations of different states was held at Gwalior on November 7, 1925 in which the foundation of Indian Hockey Association (IHF) was laid. With International Hockey Federation's approval to Indian Hockey Federation in 1927, a new epoch of hockey started in India.

For the first time, Indian hockey team participated in Amsterdam Olympic Games held in 1928 under the captaincy of Jaipal Singh.

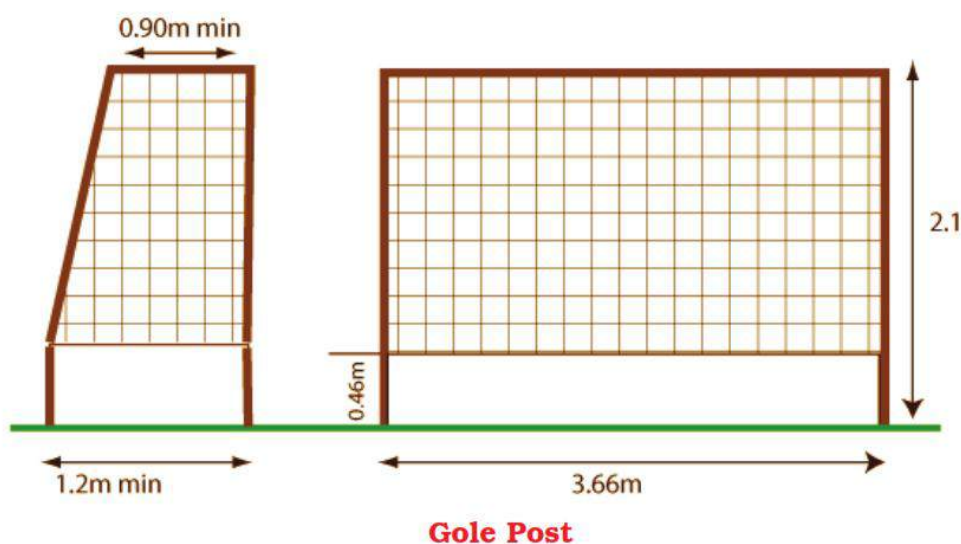
Hockey Field

The diagram shows a rectangular green field with a total width of 91.4m and a total height of 54.86m. The field is divided into four vertical sections by three white lines. The distance between the first and second vertical lines is 22.9m. On the left side, there is a semi-circular area with a radius of 14.63m and a width of 3.66m. The distance from the left edge to the center of this semi-circle is 2.19m. On the right side, there is a semi-circular area with a radius of 6.4m. The field is surrounded by a dashed line.

150

Goal Post:

At both the goal lines of the field opening towards the field are the two goal posts. Goal posts are situated in the middle of the goal lines. The width of the goal post is 4 yards (3.66 m) and the height is 7 feet (2.14m). The poles of the goal post are joined by a cross bar which is 2 inch wide and 3 inch long. A 4 yard long and 18 inch high plank is joined with the goal post at the back of it. This is called goal board. At the back of the goal post, there is a strong net tied to the goal post. The perimeter of each square of the net should not be more than 6 inch.

**Hockey Stick:**

The hockey stick that the player uses should be appropriate in terms of length and weight. Apart from it, the shape of the hockey also matters. The face of the stick should be such that cannot be passed easily from a ring of diameter 2 inch.

Uniform:

According to the rules of hockey, the players should wear the uniform approved by their club or team. Except the goal keeper, all other players should wear the same uniform. The colour

of the uniform should be different from that of the opponent team's uniform so that there is no difficulty in recognising a player during the match. The field player should wear t-shirt, knickers, shin guard, socks and shoes whereas the goal keeper should also wear helmet, chest guard, leg guard and gloves with the uniform.

Match Officials:

The chief responsibility of conducting a hockey match lies with two officials who are called umpires. These two umpires remain in the hockey field throughout the match. The whole match is controlled by these two umpires. Apart from giving a decision during the match, they also have three different coloured cards, which they use to warn or penalise the player who makes a mistake or violates a rule. These cards are green, yellow and red. The green card is used to issue a light warning to a player. The yellow card is used to expel a player from the field for five minutes. The red card is issued when a player makes a serious mistake. Using a red card, a player is expelled from the field during the whole game. Besides two umpires, there is also a result umpire, a technical official and two judges so that the match may be executed well.

General Rules of Hockey:

1. The ball should be hit only with the flat side (face) of the hockey.
2. At the start and end of hitting the ball, the stick can go over the shoulder, but the hit should not be dangerous.
3. The ball should not be hit in such a way that it becomes dangerous for the other players.
4. Except hockey, no part of the body can stop the ball.
5. The goal keeper is allowed to stop the ball using any part of his body while he is inside the shooting circle.
6. It is prohibited to hit, hook, disturb or obstruct the stick of the other player.
7. No player is allowed to run in between the ball and the other player and cause any obstruction. He cannot even obstruct the other player's way with his stick.
8. If the ball hits the umpire, the game continues.

9. No player is allowed to play dangerously or with an intention of revenge. Nor will a player be allowed to behave in a way which is deemed inappropriate by the umpire.

Penalty: If a player violates any rule, the following penalties may be imposed in different situations.

1. If the violation occurs outside the shooting circle, the opponent team is given a free hit. If the umpire thinks that the violation is done intentionally by a player within 25 yard line, the opponent team will be given a penalty corner.
2. If the violation is done by the attacking team within the circle, the opponent team will be given a free hit inside the circle from any parallel point. If the violation is done by the defender team in the circle, the opponent team is given a penalty corner or penalty stroke.
3. In case of inappropriate or rude behaviour of a player during the game, the umpire can: (i) warn a player (Green Card) (ii) can expel him temporarily (Yellow card) (iii) can prevent him from taking part in rest of the game (Red Card)

Hockey Players who have received the Arjuna Award

Prithipal Singh(1961), Ajeetpal Singh(1970), Rajbeer Kaur (1984), Pargat Singh (1989), Jagbeer Singh(1990), Dhanraj Pillai(1995), Daleep Singh (2002), Gagan Ajeet Singh (2003) Rajpal Singh (2011), Sardar Singh(2012)

Hockey Coaches who have received the Dronacharya Award

Jafar Iqbal Singh(2005), Rajinder Singh (2009), Baldev Singh(2009), Ajay Kumar Bansal(2010), Harinder Singh(2012), Narinder Singh Saini (2013)

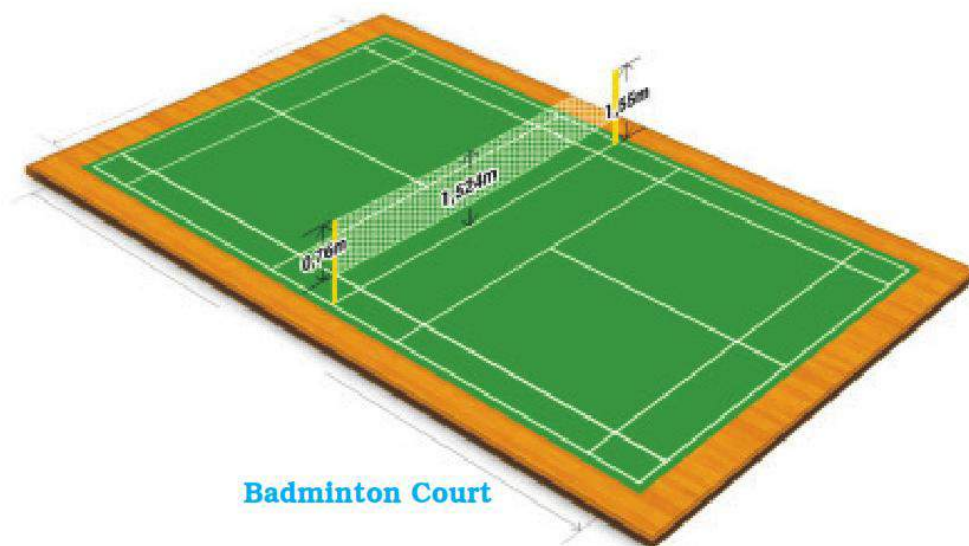
Chapter-8

Badminton

Sr. No.	Description	Measurement
1.	Size of court for singles play	44 feet (13.40 m) long and 20 feet (6.10 m) wide
2.	Size of court for doubles play	44 feet (13.40 m) long and 17 feet (5.18 m) wide
3.	Width of net	760 mm
4.	Height of net from ground	5 feet 1 inch
5.	Weight of shuttle	4.74 g to 5.50 g
6.	Count of shuttle feathers	14 to 16
7.	Length of shuttle feathers	62 mm to 70 mm
8.	Size of side gallery	1 foot 6 inch
9.	Size of back gallery	2 feet 6 inch
10.	Score count for singles play	21 points
11.	Score count for doubles play	21 points
12.	Officials	1 referee, 1 umpire, 2 line men

History of Badminton:

This sport was started in England. This game was played for the first time in England in 1876. The first Badminton Championship for men was held in England in 1899. The next year, badminton competitions for women were held. In ancient times, this sport was very popular in Greece, China and India. In India, this sport started at Pune in 1870.



Rules of Badminton

1. Types of Badminton: There are two types of badminton:

- (i) Single Game
- (ii) Double Game

(i) Single Game:

- (a) The length of the badminton court for single game is 44 feet, and the width is 17 feet.
- (b) In single game, one player fights against the other player.
- (c) The total number of points in this game is 21.
- (d) The side gallery is not included in single game.

(ii) Double Game:

- (a) The length of the badminton court for double game is 44 feet, and the width is 20 feet.
- (b) In double game, two players fight against 2 players.
- (c) The total number of points in this game is 21.
- (d) Total three sets of game are played in this game. The team that wins two out of three sets is declared the winner.

2. Before playing a single or double game, a toss is conducted. The team or the player that wins the toss decides whether to choose service or side.
3. A player must keep the following things in mind while doing the service.
 - (a) A player must do the service from his own court only whether it is the right side or the left.
 - (b) A player should always do the service in his opponent's court beyond the short service line.
 - (c) A player should ensure that the opponent player or team is ready before he does the service. The service should be done only when the opponent player or team is ready.
 - (d) Before doing the service, a player should inspect the shuttle well.
4. No whistle is used in this game.
5. This is an indoor game.
6. Net: The net is made of cotton threads. It is coloured. Each square in the net should measure 3x3 inch. The width of the net is 2 feet 6 inches. Its height from the poles is 5 feet 1 inch. It is tied tightly with the poles.
7. The weight of the shuttle cock is 4.74 gm – 5.50 gm. There should be 14-16 feathers in the shuttle. The length of the feathers should be 62 to 70 mm.

8. Fouls:

- (a) At the time of service in a single game, if the shuttle falls in the side gallery of the opponent player, the opponent player gets one point.
- (b) At the time of service in a double game, if the shuttle falls in the back gallery of the opponent

(C) While serving, if the feet of the player are not in the half area, or middle area, it is considered a foul.

(d) While playing if the Shuttle passes through the boxes of the net, it is considered a foul.

(e) if the player deliberately creates obstructions while the opponent server, it is considered a foul.

Arjun Award winner - P. Gonguly, Madhumita Bisht (1982), Rajeev Bagga (1991), Pullela Gopi Chand (2000), Gorge Thomas (2004), Aparna Popat-(2005), Chetan Anand (2006), Rohit Bhakar (Physical Challenged) -2006, Anoop Sridhar (2008), Saina Nehwal (2009), Ashwani Ponnappa, Parupalli Kashap (2012), P.V. Sindhu (2013), V. Diju (2014) and K. Srikanth (2015)

Dronacharya Award Winner- S.M. Arif (2000), Pullela Gopi Chand (2009)

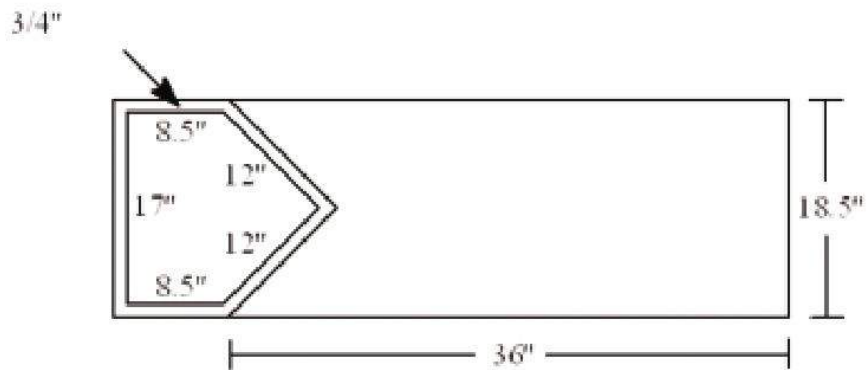
Chapter-9

Soft Ball

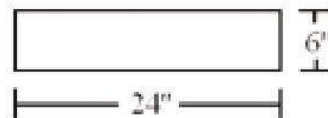
Sr. No.	Description	Measurement
1.	Length of home line of diamond	60 feet
2.	Pitch distance in diamond for men	46feet
3.	Pitch distance in diamond for women	40 feet
4.	Length of slugger (bat)	34 inch
5.	Maximum diameter of the biggest part of slugger	2.25 inch
6.	Maximum length of the safety handle	10 inch
7.	Minimum diameter of the softball	11.5 inch
8.	Maximum diameter of the softball	12.25 inch
9.	Length of launch line	24 inch
10.	Width of launch line	6 inch
11.	Total number of players	16 [9+7]
12.	Innings	5
13.	Time out	2-2 (in each inning to both teams)
14.	Duration of time out	1 minute
15.	Diamond	17 inch wide (made out of rubber)

History of Softball:

This sport was first played at a boat club in Shikago in 1887. This sport was named as Softball by Walter Hawkson at National Recreation Congress Meeting in 1926. This sport is similar to baseball. The rule book of this sport was written by George Hancock in 1889. The first world championship of softball was organised in 1965. This sport was included in summer Olympic Games at Atlanta in 1996.



Diamond or Home Plate



Pitcher Plate

Pitcher Plate: Pitcher plate is made of rubber or wood. It is 24 inch long and 6 inch wide. It will be equal to the upper layer of the plate. The front line of plate. The next line of the plate , from the outer angle of the diamond plate, is 46 feet. for men and 40 feet for women.

Sport Kit: Each player wears leather gloves while playing this game. It is compulsory for the players to wear shoes while playing the game, but the sole of the shoes should not be smooth. The catcher has to wear a mask.

Players: Total 16 players participate in this game. Out of 16 players, 9 players play and 7 players are reserved.

Position of the Players: One pitcher, one catcher, first baseman, second baseman, third baseman, the player who stops from near, left fielder, central fielder and right fielder.

This game is played between two teams. Each team has 9 players. A toss is conducted between the captains of both teams. After the toss, one team decides to bat and the other team pitches.

The pitcher of the pitching team delivers ball to the batter of the opponent team from the pitcher plate in the ground. The batter hits the ball with the slugger and tries to throw the ball as far as possible in the playground. After hitting the ball, if the batter runs to first base, second base, third base and comes back to home base without getting out, he gets one run. The players of the pitching team throw the ball towards one another to get the batter out. When the batter comes out or gets out, the next batter comes to bat. Five innings are played in this game. When the pitcher throws the ball, he keeps the ball in front of his body, and the batter keeps his both feet properly footed on the ground.

The pitcher's feet should keep in touch with the ball pitcher plate for at least one second before removing one hand from the ball at the start of wide-up or backswing. The pitcher should move his arm parallel to the line of ball's direction. The batsman should hold the slugger by the head and keep it down after The batter should keep his arm away from body and the elbow should be raised as high as shoulders. At the time of hit, the batter should spin his slugger foreword and come back to his previous situation after hitting the ball.

Appeal: In softball game, the umpire does not give any decision until a player makes an appeal. It is important for pitcher to make an appeal before throwing a new ball.

Batter Base Runner: After hitting the ball, the batter runs towards the next base. If he reaches the base without getting out, he is called base runner.

Catch: During the game when the batter hits the ball and the ball is in air, the player of the pitching team catches the ball in his hands. This is called the catch and the batter gets catch out.

Dead Ball: The ball is considered dead when it is not in use in the game. It is considered dead unless the pitcher throws the ball towards the batter and the game officer shouts 'play'.

Bunt: The ball that is hit slowly by the batter is considered a safe shot.

Innings: When both the teams play one after the other following the rules, it is known as innings.

Outer Field: If the ball hit by the batter neither falls in the area between the first and the third base, nor crosses it, the ball is considered to be in the outer field.

Batting Order: Before the softball game starts, both the captains give the batting order in written. Both the teams have to play in the batting order already decided by the teams. If a team violates the batting order, and it gets into notice when the innings of the wrong order batting ends, the batter who was supposed to play in the correct order will be declared out and all the runs scored by him will be cancelled before the new batsman comes. After that the batters will come in the batter box in the correct order.

If the mistake is realised while the batter is still playing, the actual batter can come and take his position. At this time the runs scored by the wrong batter, the number of strikes, the number of balls and the number of bases are added in the score of the correct batter. Thus the wrong order is rectified and the game is continued.

Rules for Batting Order:

1. Before the game starts, the captain of the batting team will set the batting order of his team and decide the position on which each player will bat.
2. If three batters of a team get out continuously, the batter of the next team will come and bat.
3. If a batter cuts the line of the batter box at the time of hitting the ball, he is declared line cut out.
4. During the game, the batter's slugger should not touch the catcher.
5. The batter cannot throw his slugger in the batter box. If he throws it in the batter box, he will be declared out.

Foul Hit:

If during a game, the batter hits a ball and the ball falls out of the playground, it is considered a foul hit.

Rules for Pitcher:

1. The pitcher can pitch only from within the pitcher circle.
2. At the time of pitching, at first the pitcher's both feet should be on the pitcher plate.
3. If the ball thrown by the pitcher is above the batter's knees up to the chest and falls upon the diamond plate, it is considered a strike.
4. If a pitcher throws four wrong balls at a stretch, the batter gets a free base.
5. The pitcher cannot throw the ball on batter's body.
6. If a batter hits two foul hits together, it is considered a strike.

General Rules of Softball:

1. In this game, before the game starts, the game official will call the captains of both the teams and conduct a toss. The toss winning captain is allowed to opt between batting or pitching.
2. If the ball hit by the batter moves through the space between the first and the third base, it is considered the correct hit.
3. The player standing the home base will always run to first base, second base, third base and return to the home base and touch it. Thus he will score one run. If a batter gets out before returning to the home base, he will not score any run.
4. If a runner gets out while running between the bases, then the next runner comes to the base which the first runner has left. In this way the second runner can not be out on this base, then both the runners being on the same together, the second runner will be out if he touches the base.
5. However, sometimes a batter is given a chance of moving to more than one base in the following situations:
 - (a) The ball thrown by the pitcher, hitting the batter and creating obstructions.
 - (b) If the ball thrown by the pitcher touches the batter
 - (c) If the batter becomes base runner in four balls.

6. The batter is considered out in the following situations:
 - (a) When the batter fails to play three strike balls
 - (b) If the ball comes in the hands of the baseman before the batter leaves the first base after hitting the ball
 - (c) If it becomes a foul while stopping the ball after the second hit
 - (d) If the player of the defender team catches the ball after it has been hit by the batter
7. Situations when the base runner gets out
 - (a) When the player of the defender team catches the ball hit by the batter before it touches the ground
 - (b) When the pitcher remains in the position of pitching the ball and he does not leave the base till he throws the ball as per rule.
 - (c) If the player of the defender team catches the third strike ball according to the rules
 - (d) When the player of the defender team catches the ball hit by the batter and touches the base runner before he leaves the base
 - (e) If the base runner obstructs the way of the player of the defender team while he tries to stop the ball hit by the batter or strikes against him intentionally
8. If the match ends in a draw in five innings, it continues for more innings by the time a team scores more runs or the batting team scores more runs or the batting team scores more runs in its half before his third batter get out.
9. The pitcher cannot take more than one step while throwing the ball. The step taken by the pitcher should be towards

batter

10. The pitcher can adopt any style while throwing the ball, however in the final position, the pitcher's hand should be below hips. The pitcher's wrist should not be away from the elbow.
11. The catcher should stand in the catcher box while the pitcher throws the ball.
12. If the ball thrown by the pitcher fails to be hit by the batter, but touches his body, the umpire will give this ball strike.
13. The ball thrown wrongly by the pitcher will be declared a ball by the umpire.
14. If a team leads by 10 runs, the referee signals for the end of the match.
15. The batter must stand at the base.
16. Any catcher can catch the ball in the area at a distance of 10 feet from the batter box.
17. If a ball goes from above the batter's head or shoulders at the side of diamond, it is called ball
18. A runner standing at any base can run after the catch.
19. A batter standing at any base can run after the batter has hit the ball. If he runs before the batter hits the ball, he is declared Early Way Out.

Chapter-10

Judo

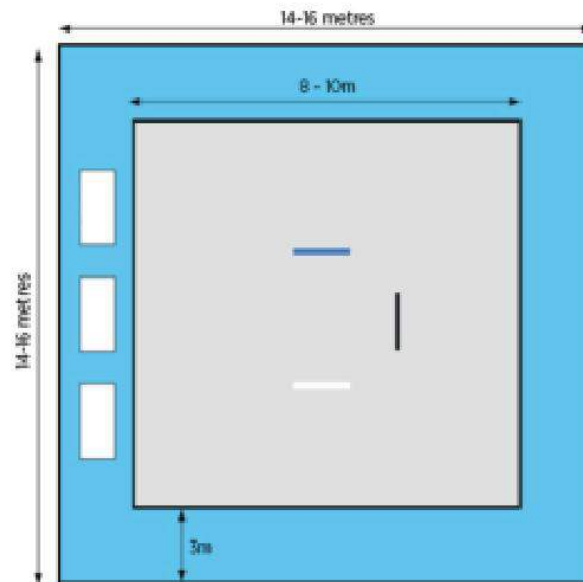
Sr. No.	Description	Measurement
1.	Area of the Ground	14mx14m or 16mx16m
2.	Shape of fighting area	Square
3.	Tatami	Mats on which judo is played
4.	Area of tatami	1 m x 2 m
5.	Number of officials	Referee-1, line judge-2, scorer-1
6.	Distance between players	4m
7.	Costume	1 jacket, 1 Lower up to the waist and a belt
8.	Duration of game	5 minutes for men and 4 minutes for women (under 20 years)

History of Judo:

'Judo' is a Japanese word which means 'the gentle way'. Judo is an art of self defence and a game to be observed and played. It is also called the modern Martial of Japan. International Judo Federation was established in 1957. The first Judo World Championship for men was held at Tokyo in 1956.

Judo was included in Tokyo Olympic Games in 1964. The first Judo Championship for women was held at New York in 1980. In 1992, Judo was included in the Olympic Games for women.

In India, Judo was started by the Japanese travellers who visited India and lived here. Judo Federation of India was established in 1965. The Indian Judo players participated in Judo Championship for the first time in the second Asian Games in 1986.



Mat of Judo

Rules of Judo

- (i) The nails of fingers and toes must be well clipped/pared.
- (ii) The player cannot wear a ring or a bracelet as it may injure the other player.
- (iii) A Judo player should stand at a line at the start, the restart and the end of the game.
- (iv) There is a referee and two line judges in Judo.
- (v) The referee starts the game by saying "Hajiye" and ends the game by saying "set".

Weight Categories

Men: 60 Kg, 60-65 Kg, 66-73 Kg, 73-81 Kg, 81-90 Kg, 90-100 Kg, More than 100 Kg

Women: 48 Kg, 48-52 Kg, 52-57 Kg, 57-63 Kg, 63-70 Kg, 70-78 Kg, More than 78 Kg

Information about the fighting area and the game equipment:

The competition is held on a foam surface. It may be 14mx14m or 16x16 metre in size. The fighting zone is surrounded by a 3 metre wide security zone.

Costume:

The costume worn by Judo players is called Judogi. It includes a jacket, a pair of trousers up to the waist and a belt. If a player does not have a Judogi, he can wear any such dress which has a belt that can be worn around the body twice and after a square knot, three inches of belt is left on each side.



Costume

Winners of Arjuna Award

Sandeep Biala (1992), Kwaj Billi Mogia (1993), Miss Poonam Chopra (1996), Angam Aneeta (1998), Akram Chanu Shah (2003), Miss Tebi Devi (2007) and Yashpal Solanki (2012)

Winners of Dronacharya Award

Gurcharan Yogi (2014) and Jeevan Kumar Sharma (2018)

Chapter-11

Weight Lifting

Important information about weight lifting

Sr. No.	Description	Measurement
1.	Place for competition	A wooden platform (6x6m)
2.	Weight of bar	2 Kg
3.	Weight to be increased every theme	5 Kg
4.	Number of players in team	2 players per category
5.	Diameter of the biggest disk	45 cm
6.	Time of weight measurement of player	1 hour before competition
7.	Duration of weight lifting	2 minutes

Weight Categories for Weightlifting

For Women

44 Kg
48 Kg
54 Kg
59 Kg
67 Kg
70 Kg
76 Kg
83 Kg
83 Kg+

For Men

52 Kg
59 Kg
64 Kg
70 Kg
83 Kg
91 Kg
99 Kg
108 Kg
108 Kg +

Description of Fixed Styles of Weight Lifting

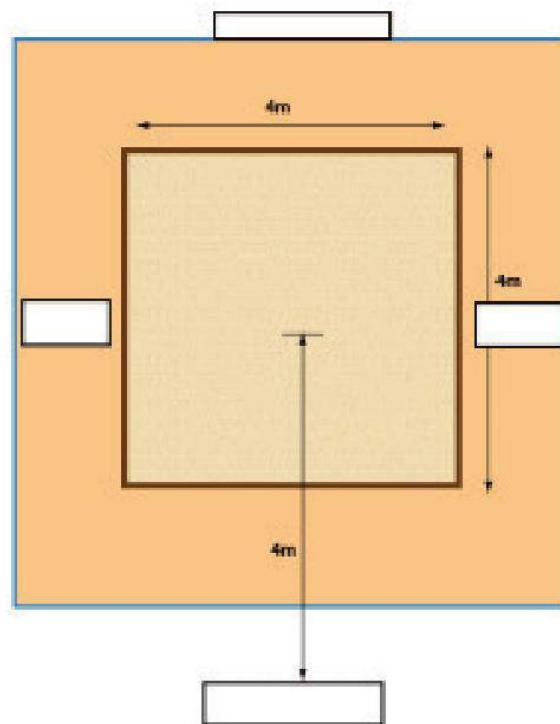
Weight Lifting Federation has fixed the following styles of weight lifting according to rules:

1. First Style: Lifting on Shoulder:

In this position, the bar is kept horizontally parallel near the feet of the weight lifter. It is held with stretched arms and brought straight near the shoulders with only one jerk. The jerk can be given by bending the body or separating the legs.

2. Second Style: Lifting the bar at the referee's signal: In the second style, the bar is lifted only after getting a signal from the referee. The arms are well stretched.

3. Snatching with both hands: At the time of weight lifting, the bar is kept horizontally parallel in front of the legs of the weight lifter. He holds the bar with both hands, lifts it up with a jerk and brings it up to shoulders. At this time he folds or stretches his legs.



Weight Lifting Platform

Rules of Weight Lifting:

1. A weight lifter is given five points for the first position, three points for the second position and one point for the third position.
2. In case of a tie, the weight lifter whose weight is less than the other player is given preference.
3. The team that scores maximum points will be declared the winner.

4. A player has to be ready for lifting the bar within two minutes after being called. After two minutes, the player will be called again. If a player is late by more than three minutes, he is given a warning.
5. If a player keeps his foot outside the platform, he is declared disqualified.
6. A player who misbehaves or talks in a loud voice, is given a warning. After the second warning, he is declared disqualified.

Wrestling Competitions:

- (i) National Weight Lifting Championship
- (ii) State Weight Lifting Championship
- (iii) Inter-University Weight Lifting Championship
- (iv) Asian Weight Lifting Championship
- (v) Olympic Weight Lifting Championship
- (vi) District Weight Lifting Championship

Arjun Award Winners in Weight Lifting

L. K. Dass (1962), K. A. Rao (1963), B. M. Bhatia (1965), M. L. Ghosh (1966), A. K. Mandal (1972), Dalveer Singh (1975), Tara Singh (1982), V. K. Daar (1983), S. C. Bhaskar (1985), R. Chandra (1990), Bharti Singh (1993), K. Malleshwari (1994), Paramjeet Sharma (1997), Satish Rai (1998), T. M. Muthoo (2002), Geeta Rani (2006), K. R. Kumar (2011) and N. M Chanu (2012)

Dronacharya Award Winners in Weight Lifting

Pal Singh Sandhu (1996), Ajay Kumar Sirohi (1999) and Hans Sharma (2000)

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