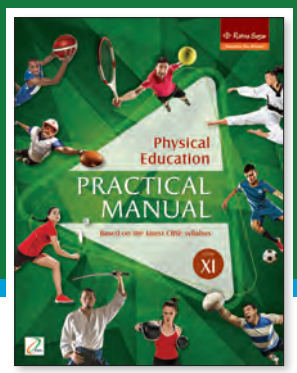


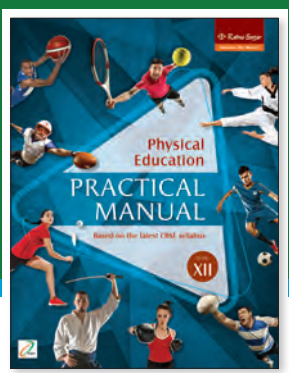
— SUPPLEMENT —

(As per the CBSE Curriculum for the Academic Year 2022–23)

Physical Education

PRACTICAL MANUAL

Classes XI and XII



SAI KHELO INDIA TEST

The SAI Khelo India battery of Fitness Assessment Tests has been developed and finalised by the Expert Committee of Physical Fitness Assessment. These tests are as follows:

BATTERY OF TESTS

AGE GROUP 5–8 YEARS (CLASSES 1 to 3)

Children should acquire Fundamental Movement Skills (FMS) in primary classes 1 to 3 having the age group between 5 and 8 years. They should learn the specific physical activities at the later stages. To become successful in various sports and physical activities, they should have locomotor, manipulative and body management abilities at their primary class level. The following components need to be measured and tracked for controlling the body in various situations.

1. Body Composition (BMI)
2. Coordination (Plate Tapping)
3. Balance (Flamingo Balance)

AGE GROUP: 9–18+ YEARS (CLASSES 4 to 12)

Further, students of classes 4 to 12 must have an overall physical fitness. The following components need to be measured to assess their Physical Health and Fitness Profile.

1. Body Composition (BMI)
2. Strength
   a. Abdominal (Partial Curl-up)
   b. Muscular Endurance (Push Ups for Boys, Modified Push Ups for Girls)
3. Flexibility (Sit and Reach Test)
4. Cardiovascular Endurance (600 Metre Run/Walk)
5. Speed (50 Metre Dash)

TEST DESCRIPTIONS FOR CHILDREN

AGE GROUP 5–8 YEARS (CLASSES 1 to 3)

Body Mass Index (Body Composition)

Body composition is a physiological characteristic that affects the individual's capacity of doing daily activity. It is the ratio of the muscle/protein mass and the fat content of the body. Body size such as height, length and circumference are also grouped under this component. The BMI is calculated from body weight (W) and height (H).

$$\text{BMI} = \frac{W}{(H \times H)},$$

where W = body weight in kilograms and H = height in metres. The higher score usually indicates higher levels of body fat.

Purpose: To calculate the body fat of a person.

Equipment: Stadiometre

Procedure:

How to Measure Height

1. Stand straight with heels placed together. Remove shoes or any heavy clothes. Keep arms normally by the side.
2. Both heels must touch the base of the stadiometre.

Figure 1 Measuring height accurately is important to calculate the BMI.

3. The student is instructed to look straight ahead and take a deep breath and hold for few seconds.
4. Mark the highest point on the skull.
5. Measure the height before exhalation.
6. Measurement is taken to the nearest 0.1 cm.

How to Measure Weight

1. Take a digital scale and place it on a horizontal floor.
2. The student is instructed to remove shoes and heavy clothing.
3. The student is directed to stand with both feet in the centre of the scale.
4. Record the weight to the nearest decimal fraction (for example, 26.1 kg).

Figure 2 Measurement of weight

Plate Tapping Test (Coordination)

Purpose: To test the speed and coordination of limb movement.

Equipment: Table (adjustable height), 2 yellow discs (10 cm radius), rectangle (30 × 20 cm), stopwatch

Procedure:

1. Adjust the table height so that the student can stand comfortably in front of the discs. The two yellow discs are placed with their centres 60 cm apart on the table. The rectangle is placed equidistant between both discs.
2. The non-preferred hand is placed on the rectangle. The student should move her/his preferred hand back and forth between the discs, over the hand placed in the middle as quickly as possible.
3. Repeat this action for 25 full cycles (50 taps).

Figure 3 Plate tapping test

Scoring: The teacher/coach records the time taken to complete 25 cycles.

Flamingo Balance Test (Balance)

Purpose: To check the ability to balance successfully on a single leg.

Objective: This single leg balance test is conducted to assess the strength of the leg, pelvic and trunk muscles as well as static balance.

Equipment: Non-slippery even surface, stopwatch; this can be done by just standing on a beam.

Procedure:

1. Stand on the beam. Maintain balance by holding the instructor's hand (if required to start).
2. While balancing on the preferred leg, the free leg is flexed at the knee and the foot of this leg is held close to the buttocks.
3. Start the watch as the instructor lets go of the participant /student.
4. Pause the stopwatch each time the student loses balance (either by falling off the beam or by letting go of the foot being held).
5. Resume the timing again until she/he loses balance. Count the number of falls in 60 seconds of balancing.

Figure 4 Flamingo balance test

Scoring: The total number of falls or loss of balance in 60 seconds of balancing is recorded.

If there are more than 15 falls in the first 30 seconds, the test is terminated.

AGE GROUP: 9–18+ YEARS (CLASSES 4 to 12)

Body Composition (BMI): Refer to the previous section

Partial Curl-up

Purpose: To test the abdominal strength and endurance.

Objective: To perform as many partial curl-ups as possible in the given time.

Equipment: A flat and clean surface, a mat with two parallel strips six inches apart, and stopwatch.

Procedure:

1. Lie on the back and keep the knees bent at an angle of 90 degrees and place the feet about 12 inches from the buttock.
2. Feet cannot be held or rest against an object. The arms to be kept straight and parallel to the trunk with palms of hands resting on the mat.
3. Adjust to a specified pace, complete as many repetitions as possible.

Figure 5 Partial curl-up

4. The student raises her/his body up, reaching the appropriate position, i.e. scapula two inches off the ground and lowers down the body with the shoulders touching the mat. The heels of the feet must remain in contact with the floor. There is no pause in the upward or downward position.
5. The student should not be allowed to rest between the assessment. Her/his movement should be slow and controlled.

Scoring: Record the total number of correctly performed curl-ups in 30 seconds. A curl-up is complete each time the student's head returns to the mat. Curl-up will not be counted in the following conditions: 1. Not raising shoulders up to two inches; 2. Head touching mat; 3. Heels coming off the mat; 4. Being off cadence. 5. The test is terminated if the student has any two misses.

Push-ups (Boys)

Purpose: To test or measure the upper body endurance, strength and trunk stability.

Objective: To perform as many push-ups as possible in the given time.

Equipment: Gym mat and paper to record the basic information of the student.

Procedure: The push-up begins with the hands and toes touching the ground, and the body and legs in a straight line. The feet are kept slightly apart; the arms are at shoulder width apart, extended and at a right angle to the body. Keeping the back and knees straight, the student lowers the body until there is a 90-degree angle at the elbows, then returns to the starting position with the arms extended. The action is repeated until exhaustion or until the time limit is reached.

Figure 6 Push-ups (boys)

Scoring: Record the total number of push-ups correctly completed.

Modified Push-ups (Girls)

A modified version of push-ups is performed for girls in which all positions are similar to push-ups for boys except that the knees of girls should touch the ground.

Purpose: To test or measure the upper body endurance, strength and trunk stability.

Objective: To perform as many push-ups as possible in the given time.

Equipment: Gym mat and paper to record the basic information of the student.

Procedure: The push-up begins in a kneeling position, with the hands and knees touching the ground. The knees are kept slightly apart; the arms are at shoulder width apart, extended and at a right angle to the body. Keeping the back straight and holding the core tight, the student lowers the body until there is a 90-degree angle at the elbows, then returns to the starting position with the arms extended.

Figure 7 Modified push-ups (girls)

Scoring: The action is repeated until exhaustion or until the time limit is reached. In case of timed tests, the maximum number of correct push-ups performed are noted.

Sit-and-Reach Test

Purpose: To measure the flexibility of the lower back and hamstring muscles.

Objective: To monitor the forward bending of the lower back of a student.

Equipment: Sit and reach box of 12" × 10" (sides), 12" × 10" (front and back), 12" × 21" (top) dimension, mat, ruler.

Figure 8 Sit-and-reach test

Procedure: After warming-up, the students are asked to sit on a flat surface with their legs extended in front of them, toes pointing up and feet slightly apart. The soles of the feet should rest against the base of the flat vertical surface. A ruler is placed on the ground between the legs. Placing one hand on top of the other, students are asked to reach slowly forward. At the point of their greatest reach, they should hold this position for a couple of seconds, and the distance reached is measured.

Scoring: The score is recorded to the nearest cm and mm as the distance reached by the hands.

600 m Run/Walk

Purpose: To measure cardiovascular endurance.

Objective: To cover the set distance as fast as possible.

Equipment: Marked track (200 m or 400 m), two stopwatches for two officials.

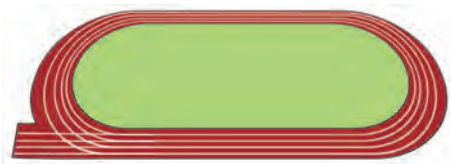


Figure 9 Track for 600 m run

Procedure: The student is asked to run or walk for a distance of 600 m from a starting line and the time taken is recorded in minutes and seconds.

50 m Dash or 50 m Standing Start

Purpose: To measure speed and acceleration.

Figure 10 50 m dash test

Objective: To cover the set distance as fast as possible.

Equipment: Marked track and two stopwatches for two officials.

Procedure: The student is asked to run 50 metres and the time taken is recorded as the score in seconds to the nearest tenth of a second. The time taken is the amount of time between the starter's signal and the instant the student crosses the finish line.

VIVA VOCE

1. What is the full form of SAI?

Ans. Sports Authority of India.

2. Why is the 50 m dash test done?

Ans. To test the speed.

3. What is the aim of the partial curl-up test?

Ans. It is conducted to test the abdominal strength and endurance of the students.

4. Why is the sit-and-reach test conducted?

Ans. Sit-and-reach test is conducted to test the flexibility of the lower back and hamstring muscles.

5. Why is the 600 m Walk/Run test done?

Ans. It is done to test the endurance of the students.

6. Which tests are done to measure the abilities of the students of age group 5 to 8?

Ans. BMI, Flamingo balance test and Plate tapping test are done to measure the abilities of the students of the age group 5 to 8.

BROCKPORT PHYSICAL FITNESS TEST (BPFT)

BROCKPORT PHYSICAL FITNESS TEST

The Brockport Physical Fitness Test (BPFT) is a health-related, criterion-referenced test of fitness. The BPFT is designed primarily for use among youngsters with disability. This test was developed by the College at Brockport, State University of New York (1993–98). It includes 27 test items, but usually only 4 to 6 items are needed in order to assess the health-related physical fitness of an individual. The BPFT was targeted for use among youngsters with disability – specifically, those with visual impairment, intellectual disability, or orthopaedic impairment, including cerebral palsy,

spinal cord injury, congenital anomaly, and amputation. The test items of BPFT are as follows:

Aerobic Functioning

- PACER (20-metre and 15-metre)
- Target aerobic movement test (TAMT)
- ONE-MILE RUN/WALK

Body Composition

- PERCENT BODY FAT – SKINFOLDS
- Body mass index (BMI)
- Percent body fat – bioelectrical impedance analysis

Muscular Strength and Endurance

- Bench press
- Curl-up
- Modified curl-up
- Dumbbell press
- Extended-arm hang
- FLEXED-ARM HANG
- Dominant grip strength
- Isometric push-up
- Pull-up
- Modified pull-up
- Push-up
- 40-metre push/walk
- Reverse curl
- Seated push-up
- Trunk lift
- Wheelchair ramp test

Range of Motion or Flexibility

- Modified Apley test
- Back-saver sit-and-reach
- SHOULDER STRETCH
- Modified Thomas test
- Target stretch test (TST)

Now let us discuss four test items, taking one from each component.

One-mile Run/Walk

Purpose: The test is used to measure aerobic capacity.

Objective: To cover the distance of one mile (1,760 yards or 1,609 metres) as fast as possible.

Equipment: A stopwatch, scorecards, pencils, a clipboard.

Figure 11 One-mile run/walk test

Procedure: In this test, students run or walk one mile in the shortest time possible. They should be instructed to run or walk one mile at the fastest pace possible. The one-mile run/walk can be conducted on a track or any other flat, measured area. For example, a rectangle measuring 35 by 75 yards (32 m × 68.6 m), for which eight laps total one mile. Thus, fields, playground areas, other grassy areas, and indoor courts can all be measured and marked to serve as an appropriate running area.

Scoring and Trials

The one-mile run/walk is scored in minutes and seconds. One test trial is given. It is noted that in order to calculate aerobic capacity using the one-mile run/ walk, height and weight measures for each student must be collected in addition to performance time. Aerobic capacity is not calculated on the basis of the one-mile run/ walk for times over 13 minutes. When a student's time is greater than 13 minutes, the PE teacher should record and save the time as a measure of aerobic functioning and a baseline for comparison in future administrations of the test. Alternatively, the PE teacher may choose to give the PACER or TAMT to youngsters who are unable to run or walk a mile in less than 13 minutes.

Test Modifications

Runners who are blind may run with assistance from a partner. Assistance can involve using a short tether rope, touching or grasping the elbow of a sighted partner, or running alongside a sighted partner who gives verbal direction and encouragement. Once the method of ambulation is determined, one must ensure that it does not unduly inhibit running performance. For purposes of validity, a runner who is blind must be given the opportunity to perform optimally. The runner should practice using the selected method of assistance until she/he is comfortable with it.

Suggestions for Test Administration

- Before the day of testing, provide practice as necessary for the required distance.
- Participants should warm-up properly before walking or running vigorously.
- Warm-up should include stretching exercises.
- Youngsters should not be tested in environments where temperature plus humidity are excessive.
- After the completion of the test, students should cool down by walking for several minutes.

Skinfolds

Purpose: To determine the thickness of skinfolds at selected sites of the body.

Objective: To estimate the body fat of the students.

Equipment: A skinfold caliper of good quality should be used to obtain skinfold measurements (see figure 12). The instrument should provide constant pressure on the skinfold of 10 grams per square millimetre.

Figure 12 Lange skinfold caliper

Procedure: Skinfold measurements can be taken at three sites: triceps, subscapular, and calf. The triceps skinfold measurement is taken over the triceps muscle at a location midway between the tip of the shoulder and the elbow (figure 13a). The subscapular skinfold is taken at a site approximately 1 inch (2.5 cm) below the tip of the scapula (inferior angle) and 1 inch towards the midline of the body (figure 13b). The calf skinfold measurement is taken on the inside of the leg at about the level of maximal calf girth (figure 13c). The foot should be placed flat on an elevated surface with the knee flexed at a 90-degree angle. These measures should be taken on the student's dominant or preferred side. Once the sites have been identified, the recommended testing procedure is as follows:

1. Grasp the skinfold firmly between the thumb and the forefinger and pull slightly from the body, while being careful to include only subcutaneous fat tissue, and not muscle, in the fold. The triceps and calf skinfolds are vertical folds, while the subscapular skinfold is an oblique fold.

a. Triceps

b. Subscapular

c. Calf

Figure 13 Skinfold measurements

2. Place the tips of the caliper slightly (0.5 inch or 1.3 cm) above or below the fingers grasping the skinfold.
3. Remove thumb pressure from the caliper slowly, allowing it to exert full pressure on the fold.
4. Record the thickness of the fold to the nearest millimetre once the needle settles (1 to 2 seconds).
5. Open the caliper completely before removing it so as not to pinch the student.

Scoring and Trials

Take three measurements at each selected skinfold site. The median (middle) score should be the criterion score. If a skinfold reading at the same site differs from other readings by 2 mm or more, take an additional measurement. Ignore the measurement which is substantially different.

Test Modifications

Measurements should not be taken at sites with scar tissue, at sites where subdural or intramuscular injections have been received repeatedly, or on limbs that have muscular atrophy. In some cases, it may not be possible to attain skinfold measurements at a site.

Suggestions for Test Administration

- PE teachers should master administering the skinfold test before using it.
- PE teachers can help distinguish muscle and fat by having students tense and relax the triceps muscle.
- The subscapular skinfold is an oblique fold, in line with the natural cleavage lines of the skin. PE teachers may be aided in finding the line by having subjects bend the elbow and place the arm on the back so that the back of the hand touches the spine while standing. The top of the fold should be medial to the bottom of the fold.
- It is recommended that females being tested wear a thin T-shirt or similar garment for measuring the subscapular skinfold. The shirt can be raised to allow access to the skinfold sites, or the measurement can be taken over the shirt. In such an instance, it would be necessary to subtract the fold of the T-shirt. For females wearing bras, the strap should be pushed upward only 2 to 3 inches (5 to 8 cm) to allow the measurement. If possible, girls should be measured by women.
- It is recommended that one measurement be taken at each site before taking second and third measurements at any site.

Flexed-Arm Hang

Purpose: To measure hand, arm and shoulder strength and endurance.

Objective: This test aims to monitor the muscular endurance of the student's elbow flexors and shoulder extensors.

Equipment: A pull-up bar about 1.5 inches (3.8 cm) in diameter at a height exceeding the height of the student, a gym mat should be placed under the bar, a stopwatch, an assistant.

Procedure: In this test, the student maintains a flexed-arm position while hanging from a bar for as long as possible. The student should grasp the bar with an overhand grip and be assisted to a position where the body is close to the bar and the chin is clearly over, but not touching, the bar (figure 14). The student holds this position for as long as possible. The body must not swing, the knees must not be bent, and the legs must not kick during performance of the task. If a physical disability prohibits grasping, weight bearing, or reasonable execution, this item should not be administered.

Scoring and Trials

One trial should be given to each student. The PE teacher/assistant records the length of time (to the nearest second) for which the student maintains the flexed-arm position. Timing stops when the head tilts back or the chin touches or drops below the bar.

Suggestions for Test Administration

- The assistant can place an arm across the student's thighs to restrict unwanted movement.
- Be sure that the student understands how to perform the test before taking a score. Student should be given sufficient time to learn the activity.

Shoulder Stretch

Purpose: To measure the upper-body flexibility.

Objective: To touch or overlap the fingertips together behind the back.

Procedure: This test is done in standing position. The measure is designated right or left on the basis of the arm reaching over the shoulder; for example, when the right arm stretches over the right shoulder, it is a right-arm stretch.

Scoring and Trials

One test trial is permitted. The test is scored on a

Figure 14 Flexed-arm hang test

Figure 15 Shoulder stretch test

pass/fail basis. The student passes if the fingers touch and fails if the fingers do not touch.

Test Modifications

Physical assistance and verbal direction may be given to students as they practice the test. However, physical assistance may not be given during the test itself.

Suggestions for Test Administration

- Give enough time to practice this testing procedure.
- The recommended warm-up is for upper-body stretching, including approximations of the test itself.

VIVA VOCE

1. What is the Brockport Physical Fitness Test?

Ans. BPFT is a health-related, criterion-referenced test of fitness.

2. Name the place where the BPFT test was developed.

Ans. The BPFT was developed by the College at Brockport, State University of New York.

3. How many test items are there in BPFT?

Ans. There are 27 test items in the BPFT.

4. How many yards are there in one mile?

Ans. 1760 yards

5. What is measured through skinfold test?

Ans. The thickness of skinfolds at selected sites of the body is measured through skinfold test.

6. What is the objective of flexed arm hang test?

Ans. This test aims to monitor the muscular endurance of the student's elbow flexors and shoulder extensors.

7. Why is shoulder stretch test conducted?

Ans. Shoulder stretch test is conducted to measure the upper-body flexibility.

CHANGING TRENDS IN SPORTS AND GAMES

CHANGES IN PLAYING SURFACE, WEARABLE GEARS, EQUIPMENT, TECHNOLOGICAL ADVANCEMENTS*

Playing Surfaces

Many of today's most popular sports have been around for centuries. Looking at what they did with their surfaces back then is a fantastic place to start. Sports surfaces have evolved along with the advancement of techniques, skills and technology. The use of various playing surfaces denotes the technical standard and now it dominates the nature of the game. For example, the game of tennis was started on grass court and later various surfaces like hard court, clay court and artificial grass were used. Tournaments like Australian and US Open are played on hard court, the French Open is played on clay court, and the Wimbledon is played on grass court (figure 16). Accordingly, the nature of the game is also different in these grand slam tournaments.

Various surfaces used in other sports are cemented courts and acrylic courts used in basketball, badminton, etc. which are considered as hard and all-weather outdoor surface. For indoor games like volleyball, basketball and other similar games, wooden surface is used for the construction of the courts. For games like gymnastics, karate, judo, wrestling, etc. where balance, stability and safety are prominent, rubber mattresses of various thickness are used to prepare the playing arena.

The most prominent example of playing surface dominating and impacting any game is field hockey. Till the time hockey was played on natural turf, India used to dominate the game with all skills. But the introduction of artificial turf in 1976 has made the game faster and fitness dominating. Since then, India is struggling to get back its lost glory in the field of hockey.

Wearable Gears

Sports gears are mostly worn to ensure basic safety related to the game/ sport. Sports injury is the only limitation for the players to sustain their sports performance. So, all the respective sports have their minimum requirement of wearing sports gears as laid down in their regulations. Extra safety gears can be used by the players as and when required under the jurisdiction of their respective federations/associations. The material used to manufacture the gears depends on the tentative and nature of impact during the game or practice session.

* This topic is only for Physical Education Practical Manual Class 11.

Figure 16 Different types of tennis courts

Few common sports gears used are: Batting/kipping gloves, pads, helmets/ head gears used in various sports, shin/abdominal guards, caps used in various joints knee caps, etc.

There are various gears used in sports to collect data related to training, research, performance assessment, etc. These smart wearable gears assist both amateur and professional athletes in tracking their training progress and sporting successes, monitoring their health, and avoiding injuries during games and practices. Wearable electronics, such as fitness bracelets, sensors integrated into athletes' equipment or clothing, or sensors placed throughout the gym or playing field, assist in collecting a large amount of data on various categories, storing it in the cloud, and analysing it for use by team managers, coaches, advertisers, and other stakeholders.

Sports Equipment

Many of the sports we participate in have their origin around centuries back, yet they no longer look the same as they did hundreds of years ago. The sports equipment are the reflection of the technological advancements and research done in that sports. As the level of the game changes, equipment are also updated accordingly. For example, the cricket bat, tennis rackets, size of basketball and football, etc. are different according to the age group of the players. Nowadays training equipment are also different according to the level of the players. This ensures safety and fast learning and adaptation. For example, use of various coloured tennis rubber balls having different density and weight during training helps the learner to gain more confidence and technical learning. Research and technology have also helped to create, produce and test new features for hockey sticks, improved aerodynamic cycling helmets, flame-resistant F-1 racing outfits, and many more equipment. Use of advance sports equipment also ensures better performance with adequate skills. For example, steel, aluminum or aluminum alloy javelins are used by the advance athletes to ensure highest level of performance. Beginners are also seen using wooden, bamboo or even javelin made of different material to learn the basic techniques and develop interest in the event. In the international football, the players demonstrate high level of skills. So, the balls are also designed with light materials like polyurethane (PU) skin featuring micro and macro textures and a new 20-piece panel shape which has the potential of demonstrating high level of mechanics. That is why, the ball if hit with correct force, point and with perfect angle shows technical aerodynamic movements.

Technological Advancements

Technological advancements dominated the sporting extravaganza. Technology not only helps in introducing new equipment, gears, playing surface and advance techniques of skills but it also makes any sport more spectacular on the field and off the field. It is technology only that has given the advance equipment and gears like: improved hockey sticks, cricket bats, rackets, improved balls in cricket, basketball, football, helmets, and guards used in various sports. The introduction of various playing surfaces is also the reflection of technological advancements.

Technological advancement has also made the officiating field very easy and non-controversial. Technologies like 'Hawk-Eye' used in tennis, cricket, badminton, etc. have given an alternate review system to the officials for giving a perfect judgement. Another example is from football wherein since the 2020 season onwards, virtual reviews system has changed the nature of the game. In the Premier League and at every level of the Champions League in what FIFA calls it as a 'game-changing decisions', perfection has been achieved in the legality of goals, penalties, red cards, and offsides.

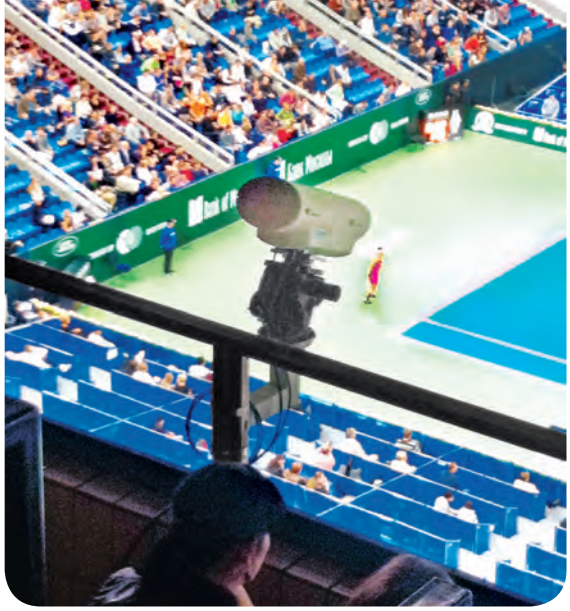


Figure 17 Hawk eye technology

At athletic events, technology has enhanced the accuracy, enjoyment, and experiences of both participants and spectators. During track race, picture finish technology takes 3,000 photographs per second. This has made it easy for officials to decide and declare the winners even during close finish.

In total, technology has made sports more technical, spectacular and precise for the sports-persons, spectators, officials, coaches, trainers, researchers, and others.

Hawk Eye Technology

Hawk Eye System employs six to seven very powerful cameras which are fixed at various positions of the stadium to track and get the clear view of the ball from different angles in games like cricket, football, tennis, etc. This powerful and strong combination ensures that no shot is missed to be tracked by it. It also provides 3D animation of the path of the ball.

VIVA VOCE

1. Which tennis tournaments are played on hard court?

Ans. The Australian Open and the US Open are played on hard court.

2. Which tennis tournament is played on clay court?

Ans. The French Open is played on clay court.

3. The Wimbledon is played on which type of playing court?

Ans. The Wimbledon is played on grass court.

4. Why is the use of advance sport equipment recommended?

Ans. The use of advance sport equipment is recommended to ensure better performance with adequate skills.

5. Name any two new technologies used in games and sports.

Ans. Hawk eye technology and picture finish technology.

6. What is Hawk eye technology?

Ans. Hawk eye technology comprises six to seven very powerful cameras fixed at various positions of the playing arena to get the clear view of ball. It also provides 3D animation of the path of the ball. It provides alternative review system to the officials.

7. What is picture finish technology?

Ans. Picture finish technology takes 3000 photographs per second during track events. It helps the officials to decide and declare the winners even during close finish.

GAMES AND SPORTS FOR CHILDREN WITH SPECIAL NEEDS (CWSN)

SITTING VOLLEYBALL

Sitting volleyball is also known as the Paralympic volleyball. It is a form of volleyball for athletes with a disability. Athletes with disabilities like spinal cord injuries, brain injuries, stroke, cerebral palsy and amputees can compete in sitting volleyball.

History

Sitting volleyball was first featured in the Paralympic Games as a demonstration sport at the 1976 Toronto Games. Men's sitting volleyball was first included in the 1980 Paralympic Games with the women's version following in 2004. After the London 2012 games, VolleySLIDE was founded by Matt Rogers to promote and develop the sport globally. Eight men's and eight women's teams competed in the 2020 Tokyo Paralympic Games. The sport is governed by World ParaVolley. There are male and female events with a requirement of six on the court at a given time.

Figure 18 Sitting volleyball

Playing Field and Equipment

Court dimension: The playing court is a rectangle measuring 10 × 6 m, surrounded by a free zone which is a minimum of 3 m wide on all sides. The free playing space is the space above the playing area which is free from any obstructions. The free playing space shall measure a minimum of 7 m in height from the playing surface.

Net: The net is 0.80 m wide and 6.5 to 7 m long (with 25 to 50 cm of each side of the side bands), made of 10 cm square black mesh. Placed vertically over the centre line, there is a net whose top is set at the height of 1.15 m for men and 1.05 m for women. So, it has a smaller court than regular volleyball, and also a lower net. It has a specific best-of-five set format in which it is played. The first team to reach 25 points along with a lead of two points wins the game.

Ball: The ball shall be spherical, made of a flexible leather or synthetic leather case with a bladder inside, made of rubber or a similar material. Its colour may be a uniform light colour or a combination of colours. Its circumference is 65 to 67 cm and its weight is 260 to 280 g.

Rules of the Game

1. Classifications of sitting volleyball athletes by disability are placed into two categories: MD and D. MD stands for 'Minimally Disabled', and D stands for 'Disabled'. Minimally Disabled athletes have lost only a fraction of their muscular strength and flexibility in a joint, preventing them from successfully playing standing volleyball. Disabled athletes have lost all of their muscular strength and flexibility in that joint. Only two MD players are allowed on the roster for the Paralympic Games and only one is allowed on the court at a time; this is to keep the competition fair between opposite teams. The rest of the team must be classified as D players.
2. It is essential for an athlete to make sure that her/his pelvis is touching the ground at all times. During the game, taking steps or attempting to rise or stand is not allowed. There are only two scenarios in which a brief loss of contact is allowed. First scenario is an attempt to save the ball while making a defensive play in the back zone and the second scenario is while making a defensive play in the front zone. Service blocks are allowed.

Fundamental Skills and Terminology

Most fundamental skills and terminologies are identical to the sport of volleyball. Few of them are as follows:

Ace: A serve that lands in the opponent's court without being touched.

Attack: An attempt by a player to win a point by hitting the ball over the net.

Block: To block an opposing player from spiking the ball by jumping at the net with arms in the air.

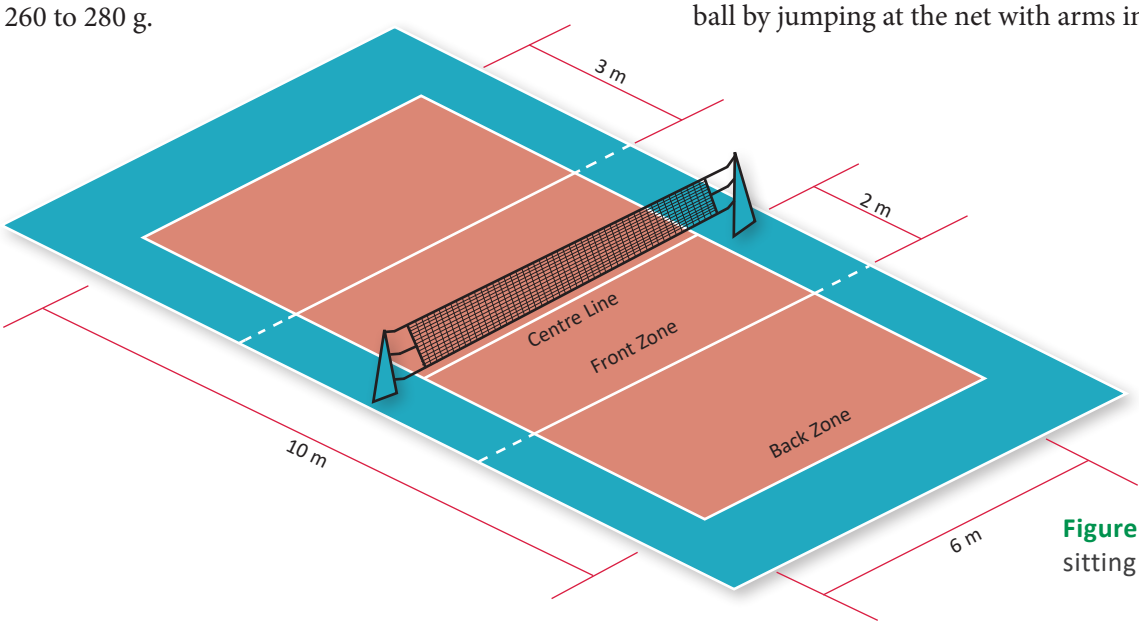


Figure 19 Layout of sitting volleyball court

Centre line: In indoor volleyball, the imaginary line running directly under the net and dividing the court in half.

Crossing space: The zone above the net and between two antennae through which the ball must pass during a rally.

Dig: A defensive move in which both arms are placed together in an attempt to bounce a hard-hit ball up into the air.

End line: A back boundary line of the court.

Fault: A foul or error which results in the loss of the rally.

Ground: To hit the ball to the ground, preferably on the other team's court.

Hit: To touch the ball as an offensive player, one of three 'hits' allowed a team in getting the ball back over the net.

Hold: To let the ball settle into the hands briefly on a shot instead of releasing it immediately.

Joust: A joust occurs above the net between two or more opposing players that forces the ball to become stationary. Point is replayed.

Kill: To smash the ball overarm into the opponent's court; also called a 'spike'.

Libero: A substitute defensive player especially adept at digging.

Mintonette: The original name for volleyball.

Pass: The attempt by a team to properly handle the opponent's serve, or any form of attack.

Rally: The exchange of plays that decides each point.

Rotate: In indoor volleyball, to move to the next position on the floor in a clockwise manner.

Serve: The stroke used to put the ball in play at the start of each rally.

Set: i. The part of a match completed when one side has scored enough points to win a single contest. ii. To position the ball so a teammate can attack.

Setter: A player who excels in setting up teammates to attack.

Sideline: A side boundary line on a court.

Spike: To smash the ball overarm into the opponent's court

Windmill Spike: Hand movement during spike follows motion of windmill.

Important Tournaments

Paralympics, World ParaVolley (formerly World Organisation Volleyball for Disabled, WOVD) World Championships, etc.

For more information, please visit:
https://rsgr.in/rules1

WHEELCHAIR BASKETBALL

Basically the game of wheelchair basketball is regular basketball played while sitting on a wheelchair. This sport is usually played by disabled people. This game is one of the major disabled sports which is practised. The game dates back to the 1940's.

Figure 20 Wheelchair basketball

HISTORY

Wheelchair basketball was first played at two USA World War II veterans' administration hospitals in 1945.

In 1948, British war veterans started playing wheelchair netball independently under Dr Ludwig Guttmann (GER) at Stoke Mandeville Hospital.

The first national wheelchair basketball tournament was held in Illinois, USA, with six teams in 1949. In the same year, the National Wheelchair Basketball Association (NWBA) was founded in the USA.

The Pan Am Jets of USA brought wheelchair basketball to Europe when they were invited to play at the International Stoke Mandeville Games in 1955, initially having to settle for wheelchair netball. After dominating the competition, their performance initiated the switch from wheelchair netball to wheelchair basketball for future games.

Wheelchair basketball was one of the sports at the inaugural Rome 1960 Paralympic Games.

The sport is controlled by the International Wheelchair Basketball Federation. FIBA has actually recognized this sport. There are various competitions

worldwide for this sport, including the Paralympic Games. A Wheelchair Basketball World Championship is usually held every two years between Paralympic Games.

Playing Field

Wheelchair basketball is played on a standard sized basketball court, which is 28 m × 15 m. For adults, the height of the basket, distance to the foul line, three point line, etc. are the same measurements as able-bodied basketball.

Rules of the Game

1. Wheelchair basketball is played by two teams of five players where the object is to shoot the ball into the opposing team's basket to score points.
2. Every team comprises five players and seven substitutes. The match consists of four periods of ten minutes. If the score is tied at the end of playing time for the fourth period, the match will be continued with an extra period of five minutes or with as many such periods of five minutes as are necessary to break the tie.
3. Wheelchair basketball rules are very similar to running basketball, but over time, they have evolved as well.
4. In 1964, basic international rules were adopted which included minor adjustments to meet the needs of the game in a wheelchair. Wheelchair basketball is played in accordance with the International Wheelchair Basketball Federation (IWBF) rules which have been modified from *Federation Internationale de Basketball* (FIBA).
5. **Scoring rules:** A goal is credited to the team attacking the basket into which the ball has entered as follows:
   - A goal from a free throw counts one (1) point.
   - A goal from the two-point field goal area counts two (2) points.
   - A goal from the three-point field goal area counts three (3) points.
6. Every team has 24 seconds to complete its attempt to score a basket. If the team with the ball exceeds this time limit, then the ball and the right of play are granted to the opposing team.
7. **Dribbling rules:** A player may wheel the chair and bounce the ball simultaneously, however, if the ball is picked up and/or placed on the player's lap, she/he is only allowed to push twice before they are obligated to shoot, pass, or dribble the ball again. There is no double dribble rule in wheelchair basketball. A travelling violation occurs if the player takes more than two pushes while in possession of the ball without dribbling. A player is not allowed to touch the playing surface with her/his feet while in possession of the ball.
8. **Fouls:** The wheelchair is considered part of the player's body in relation to establishing responsibility for contact on the court in the case of charging, blocking, going out of bounds, and other violations.

   An offensive player may not remain in the key area for more than three seconds. In addition to the technical fouls that may be assessed from time to time as in stand up basketball, a player lifting her/his legs to gain an advantage or lifting out of her/his chair is given a technical foul.

   The player must remain firmly seated in her/his chair and must not use her/his lower limbs to steer the chair or gain an unfair advantage. In the event that a player falls out of her/his chair, a referee may stop the play if in her/his opinion the player is at risk of being injured, otherwise play will continue.

   On an inbound play, the offensive player is not allowed to go into the key until the ball is handed to the inbounding player by the referee.

Important Terminology

Throw-in, time out, lifting, technical fouls, travelling, free throws, etc.

For more information about wheelchair basketball, please visit:
https://rsgr.in/rules

UNIFIED BADMINTON

Unified sports brings together people with and without intellectual disabilities in the same team. It was inspired by a simple principle: training together and playing together is a quick path to friendship and understanding. In unified sports, teams are made up of people of similar age and ability. This decreases the potential for domination by higher ability teammates.

People with intellectual disabilities are classified as Special Olympics Athletes, and people without intellectual disabilities are classified as unified partners. At the World Games level, all unified sports are meant to be competitive.

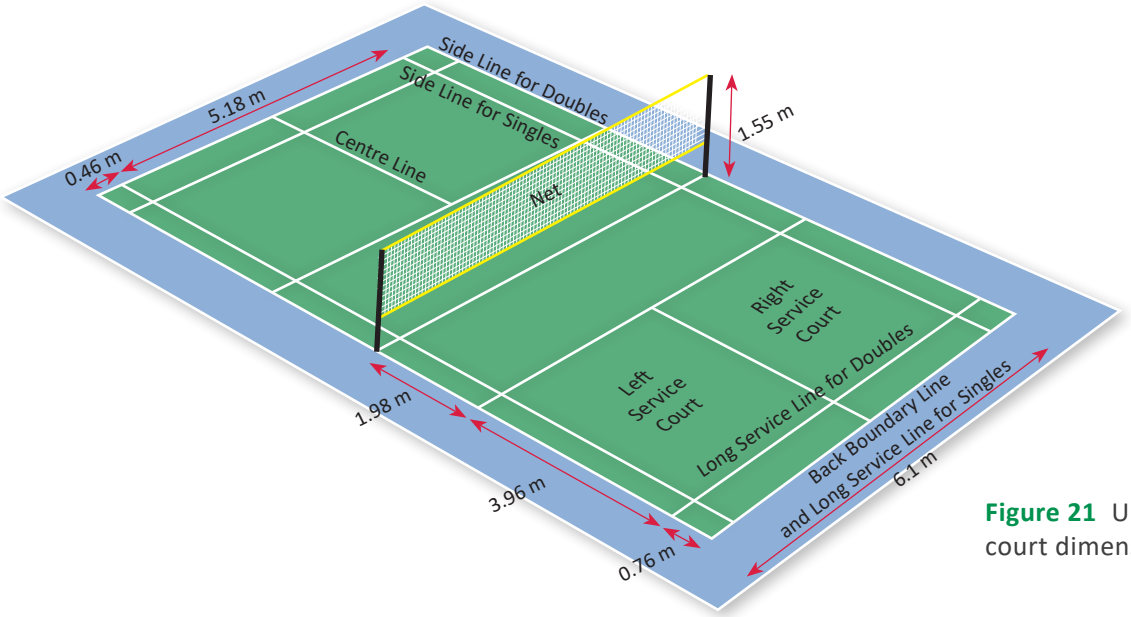


Figure 21 Unified badminton court dimension

Unified sports teams need to emphasize the principle of meaningful involvement which ensures every member is presented with opportunities to contribute to their team's performance.

Playing Field

The dimension of unified badminton court is similar to badminton.

Rules of the Game (Unified Badminton Doubles)

Each unified badminton doubles team consists of one Special Olympics athlete and one unified partner.

Role of observers:

Unified sports observers are in place to assist the competition management staff and sport technical delegate. Their role is to be an objective observer of the unified sports teams, with an emphasis on watching and noting patterns of meaningful involvement. The observers should never interfere with the competition or confront players, coaches or officials. All findings should be reported to competition management staff.

Examples of Meaningful Involvement not being followed:

1. A player consistently displays superior skills and dominates individually on either the serving or receiving end of the court.
2. One player scores virtually all of the points in a game.
3. Teammates do not communicate with each other during the games.
4. Negative or disparaging comments are made by a player towards her/his teammate or the opposing team's players.

What to do if you see any of the above:

- Do not approach the players, coaches or officials.
- Continue to observe and determine if this is a pattern of behaviour, or an isolated occurrence.
- Document what you observe in the notes section.
- If you think an unfavourable pattern of behaviour is identified, contact the technical delegate.

Important Notes:

- Player dominance and meaningful involvement may include or exclude both athletes and partners.

UNIFIED FOOTBALL

Special Olympics Unified Sports is an inclusive sports programme that brings together an approximately equal number of Special Olympics athletes (individuals with intellectual disabilities) and partners (Individuals without intellectual disabilities) on teams for training and competition. Unified football is a particularly appropriate sport for individuals with intellectual disabilities as it

- involves all participants constantly.
- is easy to teach and immediately rewarding to play.
- allows rapid initial improvement in skills and basic game understanding.

Above all, football is a fun, exciting and engaging team sport.

Unified football has players with and without intellectual disabilities playing together; in the same team at the same time, against other teams with the same make up. Unified sports break down barriers, enabling young people to play side by side in inclusive competition, building positive experiences and confidence.

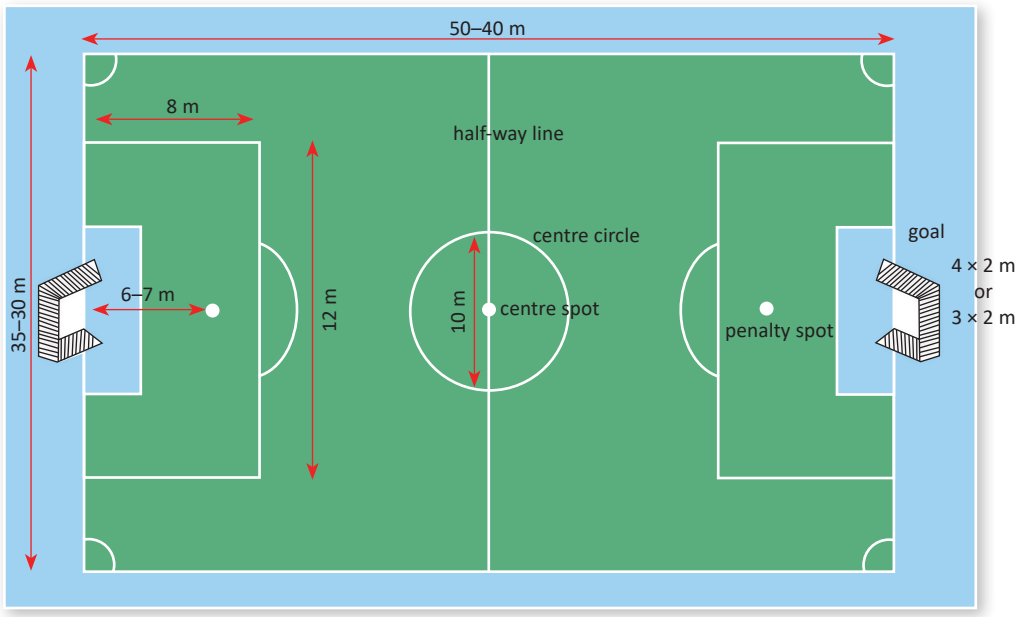


Figure 22 Unified football playground layout

There are many versions of unified football. These are 5,7,11-a-side unified football/soccer. Each unified football team should not consist of more unified partners than athletes on a team or on the field. Each team must have a minimum of three players for 5-a-side, five players for 7-a-side and seven players for 11-a-side on the field at all times, including the start of a match. If a team cannot comply with the minimum roster size at the start of the game, the team must forfeit.

Rules of the Game

1. **The Field of Play:** The 5-a-side field shall be a rectangle: maximum dimensions of 50 metres by 35 metres, minimum dimensions of 40 metres by 30 metres. The smaller field is recommended for lower ability teams.
2. The goal size shall be between 4 m by 2 m and 3 m by 2 m. The goal/penalty area shall be 8 m by 12 m. The penalty mark shall be at 7 m or 6 m for smaller goals. The recommended playing surface is grass.
3. **The Ball:** Size 5 ball, not more than 70 cm (28 in) and not less than 68 cm (27 in).
4. Substitutions are unlimited in number (players may return to the field after being substituted). Substitutions can be made at any time the ball is out of bounds, between halves, after a goal is scored or during an injury timeout.
5. Shin pads are required by all players.
6. It is recommended that the duration of the game for 5-a-side is two equal 15-minute halves (for 7-a side 20 minutes) with a half time interval of five minutes.
7. If the score is level at full time, two five-minute overtime periods are used. If the game is still tied, penalty kicks will be used to decide the winner.
8. For the start of play the ball must be kicked forward from the centre spot before being touched by another player. A goal can be scored directly from a kick off.
9. **Ball in and out of play:** Ball over the touch line results in a kick in. Ball over the end line results in a goal kick or corner kick. The ball must be completely over the goal line to be considered out of play.
10. There is no offside.
11. All freekicks are direct.
12. A penalty kick is taken from the penalty mark.
13. **Free kick:** Opposing players must be at least five metres from the ball.
14. A corner kick is awarded to the attacking team when a player from the defending team kicks the ball over their own goal line.
15. Players with physical disabilities can participate as unified partners.

BLIND CRICKET

Blind cricket is a modified version of cricket which is designed to be played by blind and partially sighted athletes. The sport was invented in Australia in 1922. Nowadays, blind cricket is played in all cricket playing countries. Partially sighted and blind players fall under one such category – special players. An adapted version of the game known as blind cricket was designed for partially sighted and blind players. The central authority to supervise blind cricket is the World Blind Cricket Council (WBCC). The game is played under special rules which are suited to the visually impaired players.

Figure 23 Blind cricket

Blind cricket is played by all Test-playing nations. However, it is particularly prevalent in India, Pakistan, South Africa, Australia and England. This version of cricket has been governed by the central authority since 1996.

Playing Field and Equipment

Blind cricket is played under the rules most of which are similar to the ones in the original format. However, as the game is adapted for the visually impaired players, a few changes have been made to the traditional set of rules.

In blind cricket, a bowler must bowl only underarm. The delivery must pitch twice before reaching the batsman. The batsman generally uses a sweep shot in blind cricket to ensure the best possible chance of the bat hitting the ball. The field is slightly shorter than that in the original form of cricket, with the boundaries being 45 yards as a minimum and a maximum of 55 yards.

The bowler says 'ready' when she/he is ready to bowl and the batsman replies with a 'yes'. When delivering the ball, the bowler must shout 'play' to the batsman and the ball has to bounce at least twice for a totally blind batsman and at least once for a partially sighted batsman.

If failed to do so, it will result in a delivery being called a no-ball by the umpire. The umpire also has the power to announce any ball a no-ball if she/he believes the 'play' came too early or too late.

Rules of the Game

1. All the rules connected to taking wickets or scoring runs are similar for blind cricket. However, the pitch used for the game is artificial. The stumps used are made either of wood or of plastic. The wickets must be fluorescent orange or red. In addition, there are no bails in blind cricket.
2. Major differences from regular cricket in terms of the equipment used are the ball and the stumps. The ball used is significantly larger than the regular cricket ball and is filled with ball bearings that provide audible signals about the whereabouts of the ball to visually challenged players. The stumps used are also much larger than regular cricket stumps.
3. In terms of players getting out, a totally blind player cannot get out by stumping, will be declared as out only if they get Leg Before Wicket (LBW) twice, and will be declared out if a totally blind player catches the ball on one bounce.
4. As a team consists of blind, partially blind and partially sighted players, the rules about the composition of a team are rather strict. It is allowed for a team to have a maximum of four partially sighted players, whereas each team must include three players who are partially blind. A team must have a minimum of four completely blind players.
5. Such rules have been introduced in order to ensure equality for all teams. A 40-over game, which is equivalent to the ODI, a three-day game, comparable to Tests, and T20 are the three game formats played in blind cricket.

Important Tournaments

A world cup for ODI and a world cup for the T20 format are the two major competitions conducted for the sport.

Blind Cricket World Cup

In the history of blind cricket, the association has organised five world cups. The first world cup was played in 1998 in New Delhi. India, Australia, Pakistan, and South Africa were the four semi-finalists, whereas South Africa and Pakistan faced each other in the finals. South Africa emerged as the winner of the hard-fought battle.

The second blind cricket world cup was played in Chennai. The same two teams qualified for the finals and Pakistan managed to defeat South Africa. Again, Pakistan won the third world cup played in Pakistan. They beat India in the final match.

The fourth time the championship was organised in 2014, after a gap of eight years. India showed their dominance by defeating the champions Pakistan in the final played in Cape Town, South Africa. The Indian team scored the second victory in the fifth edition of the tournament in 2018 playing against Pakistan in Sharjah.

Other than 40-over games, blind cricket has also had its share in T20 Cricket. The association has organised two 20-over World Cups played in Bengaluru in 2012 and 2017. India defeated Pakistan in both finals.

GOALBALL

Goalball is an indoor team sport. This game was specifically designed for blind athletes. The sport originated as a rehabilitation activity, and was later officially codified. Both men and women play the sport at a competitive level. Goalball is currently a part of the Paralympics.

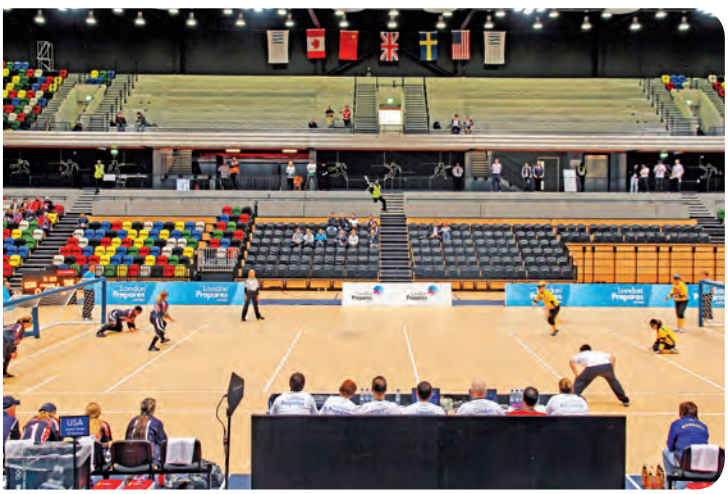


Figure 24 Goalball

Rules of the Game

1. Goalball is played on a rectangular court between two teams with three players on each team. The court is split into six zones along its width. Two zones on either ends are allocated for each team and the middle two zones are the neutral area. The entire end line along the width is considered as the goal line. The ball used is specially designed with bells, which enables athletes to audibly track the ball.
2. Two players on each team position themselves on both ends of the team's inner zone, and act as offensive players. One player is positioned in the centre of the outer zone, and acts as a defensive player. Offensive players on both teams throw the ball towards the opponent's goal line. Balls thrown are required to bounce once within the team's own zone and once in the neutral zone. A team is awarded a point if the ball crosses the opponent's goal line.
3. A match is played in two 10-minute periods, where a team that scores more goals is the winner. If the match is tied at the end of regulation time, overtime play and penalty shootouts are used to decide the winner.

FLOORBALL

Floorball is a type of floor hockey. Developed in the 1970s in Sweden, it is played in a rink with five field players and a goalkeeper in each team. Men and women play indoors with 96–115.5 cm-long (37.8–45.5 in) sticks and a 70–72 mm-diameter (2.76–2.83 in) plastic ball with holes. Matches are played in three 20-minute periods.

Figure 25 Floorball

Rules of the Game

The basic rules of floorball were established in 1979 when the first floorball club in the world, Sala IBK, from Sala, was founded in Sweden. Official rules for matches were first written down in 1981.

This indoor game has similarities with hockey sports and the main objective is to score more goals than the opposite team.

For Special Olympics, the game is slightly modified from the 'regular' form of floorball. Matches are played 3 versus 3 with goalkeepers, on a smaller court that measures 20 m long by 12 m wide. This form of floorball was developed for the intellectually disabled, and demonstrated at the 2013 Special Olympics World Winter Games in Korea.

WHEELCHAIR RACES AND THROWS

Wheelchair racing is a type of racing in which athletes with physical disabilities compete with the help of a wheelchair. The sport evolved out of rehabilitation process used for disabled war veterans. Wheelchair

Figure 26 A wheelchair race is in progress.

racing is currently a major part of the Summer Paralympics.

Wheelchair racing is open to athletes with any qualifying type of disability, amputees, spinal cord injuries, cerebral palsy and partially sighted (when combined with another disability). Athletes are classified in accordance with the nature and severity of their disability or combinations of disabilities.

Class T51 – T58 is for amputees or athletes with a spinal cord injury. T51 – T54 are for disabled athletes competing in track events, and T55 – T58 are for athletes competing in field events. Athletes with cerebral palsy are classified as T32 – T38. Separate races are conducted for athletes in each class.

Like running, it can take place on a track or as a road race. The main competitions take place at the Summer Paralympics which wheelchair racing and athletics has been a part of since 1960. The wheelchairs used are specially designed for racing purpose and have a lot of specifications around it. Competitors compete in specialised wheelchairs which allow the athletes to reach speeds of 30 km/h (18.6 mph) or more.

Wheelchair Races – Events

The distances involved in wheelchair racing include sprint distances of 100 m (109.4 yards), 200 m (218.7 yards) and 400 m (437.4 yards), middle distances of 800 m (874.9 yards) and 1500 m (1640.4 yards), long distances of 5000 m (3.1 miles) and 10,000 m (6.2 miles) and relay races of 4 × 100 m (109.4 yards) and 4 × 400 m (437.4 yards). There is also a road event which is the wheelchair marathon.

Athletes who are in a wheelchair can also participate in field events as well; these include shot put, javelin, and discus. There are also combined events such as the pentathlon, where the athlete participates in track and road events, and jumping and throwing events, depending on the athletes' disability and classification.

Track Measurements

The length of a standard running track is 400 m. It consists of two parallel straights and two bends whose radii are equal. The inside of the track is bordered by a kerb of suitable material that is coloured white, with a height of 50 mm to 65 mm and a width of 50 mm to 250 mm. The kerb on the two straights may be omitted and a white line 50 mm wide substituted.

Rules of the Game

1. Wheelchairs are a necessary piece of equipment for athletes competing in wheelchair racing and track and field events. Many of the wheelchairs tend to be very lightweight, with pneumatic (filled with air) tyres, and with the dimensions and features on the wheelchairs clearly specified in the IPC Athletics rules.
2. The wheelchair shall have at least two large wheels and one small wheel. No part of the frame of the wheelchair, or any attachments to it, shall extend forward beyond the hub of the front wheel nor backwards beyond the rearmost vertical plane of the rear wheels (including tyres). Additionally, the width of the frame, and any of its attachments, shall not be wider than the inclined plane of the pushing rims.
3. No part of the body of the chair may extend forwards beyond the hub of the front wheel and be wider than the inside of the hubs of the two rear

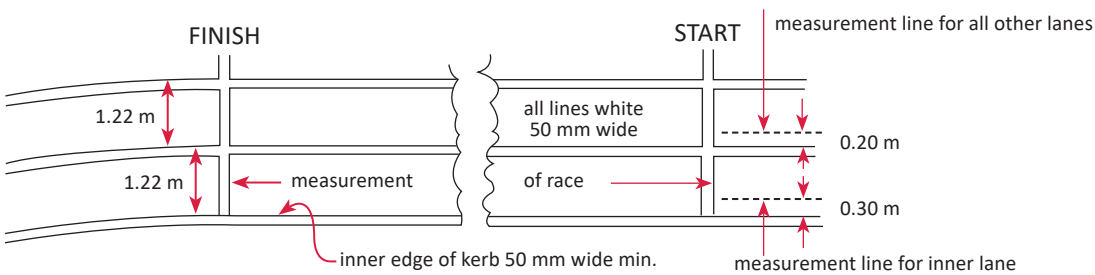


Figure 27 Track measurements (infield view)

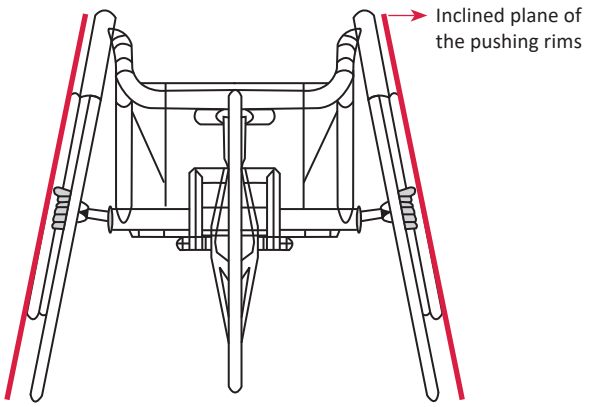


Figure 28 Inclined plane of the pushing rims of a wheelchair

wheels. The maximum height from the ground of the main body of the chair shall be 50 cm (1.6 ft).

4. The maximum diameter of the large wheel including the inflated tyre shall not exceed 70 cm. The maximum diameter of the small wheel including the inflated tyre shall not exceed 50 cm.
5. Only one plain, round, hand rim is allowed for each large wheel. This rule may be waived for persons requiring a single arm drive chair, if so stated on their medical and games identity cards.
6. No mechanical gears or levers shall be allowed, which may be used to propel the chair. Only hand-operated, mechanical steering devices will be allowed.
7. In all races of 800 metres or over, the athlete should be able to turn the front wheel(s) manually both to the left and the right.
8. The use of mirrors is not permitted in track or road races. No part of the chair may protrude behind the vertical plane of the back edge of the rear tyres.
9. It will be the responsibility of the competitor to ensure the wheelchair conforms to all the above rules, and no event shall be delayed whilst a competitor makes adjustments to the athletes chair.
10. Chairs will be measured in the Marshalling Area, and may not leave that area before the start of the event. Chairs that have been examined may be liable to re-examination before or after the event by the official in charge of the event.
11. It shall be the responsibility, in the first instance, of the official conducting the event, to rule on the safety of the chair.
12. Athletes must ensure that no part of their lower limbs can fall to the ground or track during the event.

Important Terminology

Starting blocks, start, false start, obstruction, lane infringement, leaving the track, check-marks, wind measurement, finish, photo finish, etc.

THROWS

Throws can be divided into two parts: First, throwing events for ambulant athletes and second throwing events for seated athletes

Throwing Events for Ambulant Athletes

Let us first understand the term 'ambulant'. Ambulant means a person who is able to walk and not confined to bed. Throwing events for ambulant athletes include shot put, javelin throw and discus throw.

Rules of the Game

1. The implements used for these events shall comply with International Association of Athletics Federations (IAAF) specifications. The throwing circle, the javelin throw runway or the landing sector, discus cage, etc. are similar to main throwing events of athletics, but dimensions may vary.
2. The inside diameter of the circle shall be 2.135 m ± 0.005 m in the shot put and 2.50 m ± 0.005 mm in the discus throw. The rim of the circle shall be at least 6 mm thick and shall be white.

Throwing Events for Seated Athletes

All seated throwing events (Shot Put, Discus Throw, Javelin Throw and Club Throw) should be conducted from a circle with diameter of 2.135 m ± 0.005 m or 2.50 m ± 0.005 m, using a 34.92 degree sector. The rim of the circle shall be at least 6 mm thick and shall be white. The use of movable platforms meeting these specifications is permissible. It is noted that the circular ring should preferably be coloured other than white so that the white lines required by this rule are clearly visible. Discus Throw and Club Throw shall be conducted from a cage.

Seated Throwing Technique, Lifting and Failure

1. In Seated Throw Events, all athletes (Sport Classes F31–34, F51–57) shall throw implements from a Throwing Frame in a seated position. The seated position is defined as follows:
   a. The athlete must sit so that both legs are in contact with the seat surface from the back of the knee to

the back of the buttock. For athletes with lower limb above and through knee amputation, the residual length of the leg(s) must be in contact with the seat surface till the back of the buttock.

b. This sitting position must be maintained throughout the throwing action until the implement has landed. Strapping across the upper thighs and or pelvis is encouraged.

It is noted that the intention of this rule is to minimise the contribution of the legs to the athlete's performance. If an athlete presents with anatomical limitation that prevents adherence to the above requirements, then an assessment shall to be made by the World Para Athletics (WPA) in advance of the event.

The WPA shall establish a process for such exception to be granted so that the athlete is throwing within the spirit of the rules. For the purpose of this rule, the back of the buttock refers to the most posterior part of the buttock which remains in contact with the seat surface when the athlete is seated and bends as far forward as possible at the hips, so that chest goes towards the knees and the ischial tuberosities remain in contact with the seat surface.

2. An athlete shall commence her/his trial from a stationary seated position.
3. It shall be a failure if an athlete moves from the seated position from the time the athlete takes the implement into the starting position of the trial until the implement has landed. It is not a failure as long as any part of the back of the knee is in contact with the seat during the throwing action until the implement has landed.

Club Throw

Club throw is an athletic throwing event of throwing the wooden club.

Rules of the Game

1. The club shall be held at its neck and/or head with one hand only. It may be thrown either from a position facing the landing sector or from a position facing backward and throwing overhead.
2. The club shall consist of four main parts: a head, a neck, a body and an end. The head, neck and body shall be solid and made of wood so as to constitute a fixed and integrated whole. The body shall have fixed it to a cylindrical end constructed of metal without indentations, projections or sharp edges.
3. The surface of the head, neck and body shall be smooth and have no dimples or pimples, grooves or ridges, holes or roughness.
4. The head shall be spherical or cylindrical in shape and immediately taper towards the neck. The diameter of the widest part of the body shall not exceed 60 mm, may be cylindrical. The club shall taper regularly towards the neck and slightly towards the metal end.

For more information, please visit:
https://rsgr.in/rules2

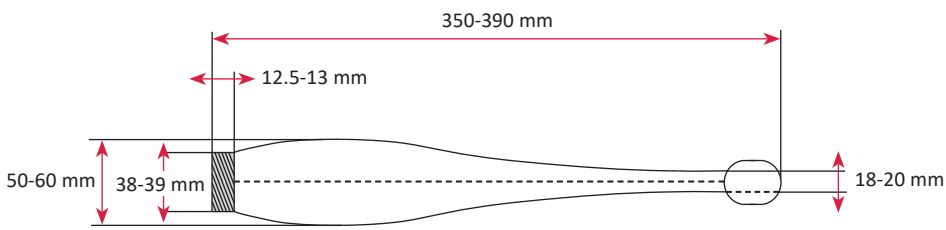


Figure 28 Club

List of Indian Olympic Association (IOA) recognised Sports/Games

Summer: Cycling, Golf, Swimming, Tennis, Athletics, Weightlifting, Table Tennis, Shooting, Archery, Badminton, Basketball, Billiards & Snooker, Bowling, Boxing, Equestrian, Fencing, Football, Gymnastics, Handball, Hockey, Judo, Kabaddi, Karate, Kayaking & Canoeing, Kho Kho, Modern Pentathalon, Netball, Rowing, Rugby, Sailing, Squash, Taekwondo, Triathlon, Volleyball, Wrestling, Wushu

Winter: Ice Hockey, Ice Skating, Luge, Skiing