



Government of Karnataka

Physical Education

10

Tenth Standard

(Revised)

KARNATAKA TEXTBOOK SOCIETY (R)

100 Feet Ring Road, Banashankari 3rd Stage,
Bangalore - 85

Preface

“If education were identical with information, the libraries would be the greatest sages in the world and encyclopedias would be the rishis. We need life building, man making and character forming education Our country needs men with nerves of steel, muscles of iron and gigantic will which nothing can resist, which can penetrate into the mysteries and secrets of the universe and will accomplish their purpose in any fashion even if it meant going down to the depths of the ocean, meeting death face to face.” _ Swamy Vivekananda.

Swamy Vivekananda’s concept of education could be realized only when the system of education provides opportunities for the learner to train his/her body on healthy lines, acquire useful knowledge and competence to translate this knowledge into producing useful goods and services and a strong spirit with the power of Dhi.

The first aspect of education is taken care of physical education, health education and yoga. All the three form part of the curriculum recently revised, based on the principles of NCF 2005 and KCF 2007. Physical education has been a part of the curriculum from class I to X. It is made formal from class VI.

Accordingly textbook committees have been formed with representation from universities, colleges and schools. The syllabus for each class includes physical exercises, sports, games and yoga. The textbooks provide practical suggestions to the learners about various physical activities, sports and games. “Learning by doing” has been the guiding principle in each of the activities provided.

It is for the first time that Physical Education has been made an examination subject and CCE is extended to this subject. Procedures of evaluation both summative and formative have been evolved. Teachers are going to be trained in these aspects.

The Textbook Society expresses grateful thanks to the Chairpersons, Members, Scrutinizers, Artists and the members of the State Editorial Board for helping the Textbook Society in producing these books. The Society also thanks the printers for bringing out the books in a very attractive form.

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Prelude by Chairman....

Five years back, is since 2009-10 Physical Education was integrated into educational curriculum and became an examination subject. Then in 2011-12 the curriculum and syllabus were revised on the bases of NCF-2005 and KCF - 2007. Consequently the textbooks were also recvised. In 2009-10 physical education was introduced in school education from 6th to 9th standards only. Upon the revision of the curriculum and syllabus, physical education is extended to 10th standard as well. Revised curriculum was effected to 6th, 8th and 9th standards since last year is 2013-14. This year the subject is extended to 7th and 10th standards as well.

As per the policy of NCF-2005 and KCF-2007 not only minimum content and skill each child is supposed to learn is introduced in each lesson, activities and projects to stimulate additional learning are also suggested. Similarly at the end of each practical lesson projects for creating new activities are suggested to stimulate creativity among children. The teachers are expected to encourage and stimulate active creativity among children instead of just passive learning.

A novel method of evaluation, is continuous and comprehensives (CCE) has been introduced in our educational system. In this context each teacher has to make use of all opportunities in not only competitive sports, but all forms of physical activities. The teachers, therefore should observe every child very carefully and regularly (continuously) and guide them every moment. Only such an endeavour by the teacher, around development of the child takes place and objectives of physical education are realized. children should not only learn & I master the skills discribed in practical lessons but also experiment them creatively in competition sports. The concepts explained in theory lessons should be understood and used in daily life by each child. Only then the efforts of all those who prepared physical education curriculum, syllabus and text books bear the fruits.

My sineere thanks to all those who dedicated themselves and extended their cooperation in designing and bringing out this text book. Thanks also to all the officials coordinator and director who offered an opportunity to materialize the abstract ideas into the book form. Finally thanks are also due to all those who have helped in our endeavour directly or indirectly.

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About the Revision of Textbooks

Honourable Chief Minister Sri Siddaramaiah who is also the Finance Minister of Karnataka, in his response to the public opinion about the new textbooks from standard I to X, announced, in his 2014-15 budget speech of constituting an expert-committee, to look into the matter. He also spoke of the basic expectations there in, which the textbook experts should follow: “The textbooks should aim at inculcating social equality, moral values, development of personality, scientific temper, critical acumen, secularism and the sense of national commitment”, he said.

Later, for the revision of the textbooks from class I to X, the Department of Education constituted twenty seven committees and passed an order on 24-11-2014. The committees so constituted were subject and class-wise and were in accordance with the standards prescribed. Teachers who are experts in matters of subjects and syllabi were in the committees.

There were already many complaints, and analyses about the textbooks. So, a freehand was given in the order dated 24-11-2014 to the responsible committees to examine and review text and even to prepare new text and revise if necessary. Eventually, a new order was passed on 19-9-2015 which also gave freedom even to re-write the textbooks if necessary. In the same order, it was said that the completely revised textbooks could be put to force from 2017-18 instead of 2016-17.

Many self inspired individuals and institutions, listing out the wrong information and mistakes there in the text, had sent them to the Education Minister and to the Textbook Society. They were rectified. Before rectification we had exchanged ideas by arranging debates. Discussions had taken place with Primary and Secondary Education Teachers’ Associations. Questionnaires were administered among teachers to pool up opinions. Separate meetings were held with teachers, subject inspectors and DIET Principals. Analytical opinions had been collected. To the subject experts of science, social science, mathematics and languages, textbooks were sent in advance and later meetings were held for discussions. Women associations and science related organisations were also invited for discussions. Thus, on the basis of inputs received from various sources, the textbooks have been revised where ever necessary.

Another important aspect has to be shared here. We constituted three expert committees. They were constituted to make suggestions after making a comparative study of the texts of science, mathematics and social science subjects of central schools (NCERT), along with state textbooks. Thus, the state text books have been enriched based on the comparative analysis and suggestions made by the experts. The state textbooks have been guarded not to go lower in standards than the textbooks of central schools. Besides, these textbooks have been examined along side with the textbooks of Andhra Pradesh, Kerala, Tamil Nadu and Maharashtra states.

Another clarification has to be given here. Whatever we have done in the committees is only revision, it is not the total preparation of the textbooks. Therefore, the structure of the already prepared textbooks have in no way been affected or distorted. They have only been revised in the background of gender equality, regional representation, national integrity, equality and social harmony. While doing so, the curriculum frames of both central and state have not been transgressed. Besides, the aspirations of the constitution are incorporated carefully. Further, the reviews of the committees were once given to higher expert committees for examination and their opinions have been inculcated into the textbooks.

Finally, we express our grateful thanks to those who strived in all those 27 committees with complete dedication and also to those who served in higher committees. At the same time, we thank all the supervising officers of the Textbook Society, who sincerely worked hard in forming the committees and managed to see the task reach its logical completion. We thank all the members of the staff who co-operated in this venture. Our thanks are also to the subject experts and to the associations who gave valuable suggestions.

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PRACTICAL GAMES CHAPTER 1 VOLLEYBALL

You will learn the following skills in this game

- Floating service • Body turn and smash
- Blocking and its variations (Single Block and Double Block)

You have learnt some fundamental skills in Volleyball in the previous classes. In this class you will learn a few complex skills and tactics.

1. Floating Service:

This is a skill where the service is executed in such a way that the ball travels in the air in a zig zag manner.

a) **Stance** - The player stands in the service zone in a diagonal stance with the ball held in his left hand. The shoulders are parallel to the neck and the body weight is distributed equally on both feet.

b) **Execution** -

Toss the ball:- The ball is tossed in front and above the head with the left hand. The body movements should be coordinated and there should be no jerky movements.

Service Action:- Transfer the body weight onto the front foot and rotate the hips forwards. Simultaneously push the right hand towards the ball.

Contact:- The ball should be contacted straight in the middle with the full face of the palms, slightly in front of the left shoulder. When hitting in this manner the fingers should not touch the ball. The palms should be fully open with the fingers slightly bent backwards. The wrist should be slightly extended.

Follow through :- After the contact with the ball the player lets his hand firmly hold in the direction of ball.

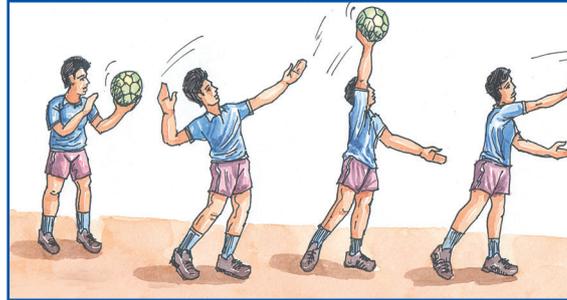


Fig-1.1- Floating Service

2. Body turn smash:

This is a smash skill which is commonly used. In this skill the smasher jumps upward, observes the movement of the blocker and turns his body while in the air and smashes the ball. At the instant of the hit the spiker contacts the ball at the peak of his jump. The body turn is executed swiftly.

a) Stance and Approach: The movement of the player being parallel to the net, he should be standing in a diagonal stance. The first two steps are smaller and the last two steps are bigger. The speed should be controlled in these movements.

b) Execution : 1. Take off and body turn:- The speed should be checked on the last step join the left leg to the right leg. At this moment the momentum is shifted from the heels to the toes and as soon as the jump is made, the body should be turned in the air towards the required direction. The right hand should be brought near the net.

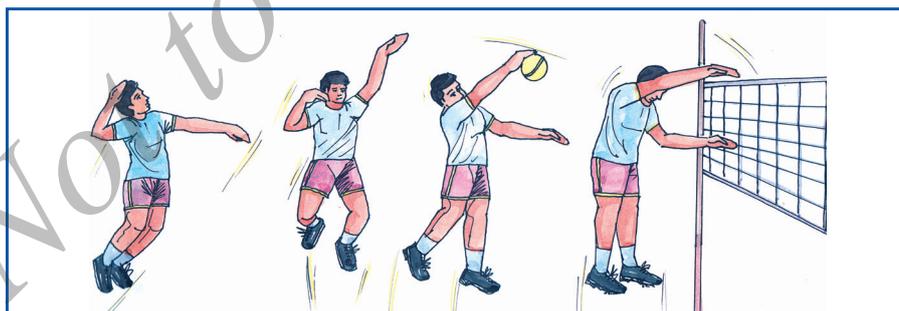


Fig-1.2-Body turn and Smash

Execution : 2 Body position in the air:- The spiker should bend his body backwards like a bow and bring his left hand forwards. The hitting hand (right hand) is withdrawn behind the head in preparation of the hit.

Execution : 3 Ball contact:- The ball should be contacted with the palm of the right hand. In this hit the right hand is closer to the body. This allows the application of maximum force on the ball.

c) Follow through:- The player lets down his hands without touching the net and lands while maintaining his body balance.

3. BLOCKING AND ITS VARIATIONS:

Blocking is very useful in defending the ball hit by the opponent. The block is performed during the attack hit made by the opponent over the net.

This is skill performed by the front row defensive player by jumping and extending his hands over the net. He has to observe the attack by the opponent carefully. The blocker has to extend both his hands upward and palms should be close to each other. He should observe the ball which blocking.

Variations : If the block is performed by a single player, it is called single block. The block performed by two players is called double block. In certain circumstances the block may be performed by three players and such block is called triple block.

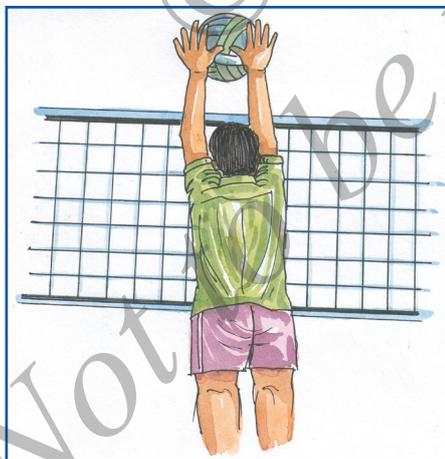


Fig-1.3-Single Block

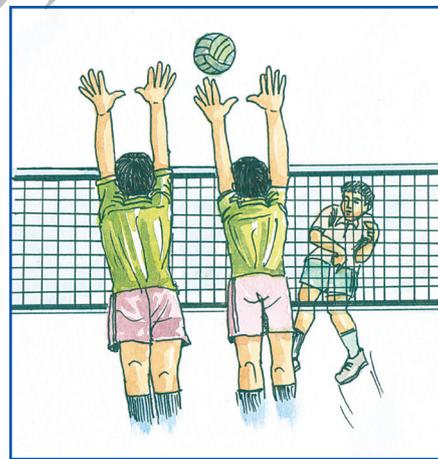


Fig-1.4-Double Block

You should know: The libero players cannot smash or block the ball.

Think: Which is the most appropriate block to counter the attack of the opponents using short, medium, high or wave pass?

CHAPTER - 2

HOCKEY

You will learn the following skills in this lesson

- Long Corner
- Penalty Corner
- Penalty Stroke
- Positional Play
- Goalkeeping

In the eighth and ninth standard you have learnt the fundamental and advanced skills of hockey, also you have played the game to some extent. In this class you will learn set plays, positional play and some tactics.

SET PLAYS

These tactics are pre-planned and executed in such a way as to beat the opponents and score a goal. Corner (long corner), penalty corner and penalty stroke are the setplays. These are planned and implemented in special situations.

LONG CORNER :

In this setplay the ball is placed on the sideline 5 meters from the corner flag. The ball is then hit, pushed or passed to a teammate or moved by oneself in order to send it into the opponents' D circle and score a goal.

Attack: The purpose of the long corner is to send the ball into the scoring area. Keep players in front of the defenders on the top of the circle so that they can be unsighted as the hit is made. As much as possible, hit on the reverse side of the defenders so that the chances of their stopping is less. Select a player or players to deflect the ball into the goal and this player/s should approach the area where the hit will be taken only after it has been made. At the same time the other specified players can make dummy movements to confuse the defenders. Alternatively throw the defenders off balance by making a close pass or passes and change the direction from where the hit is entering the circle.

Defence: Mark the opponent closely and prevent them from getting possession of the ball. Anticipate the movements of the opponents. Concentrate more on the opponents positioned in the dangerous area of the 'D'. Observe not only the movements of the active players but also the players who seem to be inactive and stay afar.

Penalty Corner: The penalty corner is awarded to the attacking team, when the defenders commit a foul in their own D circle or commit an intentional foul within their own 23 meters line.

Attack: One of the attackers pushes the ball from a mark 10 meters from the nearest goal post, his teammates standing outside the D circle, collect the ball outside the D circle, bring it into the circle and try to score a goal. Some attackers stand near the centre line,



Fig- 2.1- Penalty Corner Defense

Defence: Five defenders including the goalkeeper stand behind the goal line or back line and within the 5 meter mark from the goalpost on the side where the penalty corner is taken. The other 6 defenders have to compulsorily stand behind the centre line. As soon as the ball is pushed by the attackers the defenders move towards it in order to prevent a goal.

Think: • Think about the various ways in which a penalty corner can be converted into a goal.

- Think about the various strategies that can be adopted by the defenders while defending a penalty corner, to prevent the attackers scoring a goal.

Variations of taking penalty corner

1. Direct from the left side (single battery): The pusher pushes the ball. The stopper stops it and the drag flicker drags the ball into the circle and then flicks it into the net. In case of a hit the stopper taps the ball into the circle after the stop and the hitter takes a hit at the ball.

2. Direct from the left side (double battery): Here two sets of stoppers and hitters position themselves to confuse the opponents and the attempt is made as above.

3. Indirect Variations: Penalty corners can be taken in many other ways. One way is, after the stop, to pass the ball to the right or left and to make an attempt at the goal. Similarly the ball after being stopped can be faked and hit directly to the pusher who comes in after the push, for deflection into the goal. There can be many variations as per the tactics of the opponents. Since the attackers are more in number than the defenders, the aim of the penalty corner is to take advantage of this and try to score a goal.

Defense: After the ball is pushed- The Goalkeeper moves 3 to 4 steps to reduce the angle of scoring. The first player to run out rushes to the player to whom the ball is pushed on his stick side and tries to disturb the attacker from taking a direct hit. The second and third players position themselves behind the first runner and try to prevent indirect attempts at the goal. The last player stands on the weaker side of the goalkeeper to either deflect the ball or to clear the ball coming off the goalkeeper. The other players standing on the centre line should come as quickly as possible for defending as soon as the push is made.

Though there are no rules regarding the tactics to be followed for attacking or defending a penalty corner, the tactics should be prepared after considering the tactics of the defensive tactics of the opponents.

PENALTY STROKE

In this set play the ball is placed on a mark 6.10 meters (7 yards) from the goal line. The pusher pushes, scoops or flicks the ball into the goal after the whistle is blown by the umpire.

Likewise, the goalkeeper will be standing on the goal line and will try to stop the ball entering into the goal. All the other players will be standing behind the 23 meters line (25 yards).

Attack: The pusher should be confident, and should decide in advance, the area to push the ball. He should focus and without any second thoughts he should push the ball in one action.

Defense: The goalkeeper should spread his hands and legs seeming to widen his body without sacrificing his mobility. This will expose only a small area of the uncovered goalpost to the pusher create doubts in his mind. Focus should be on the ball and not on the movements of the player. Anticipate the direction of the ball, after having an idea about where the favourite area of the pusher is.

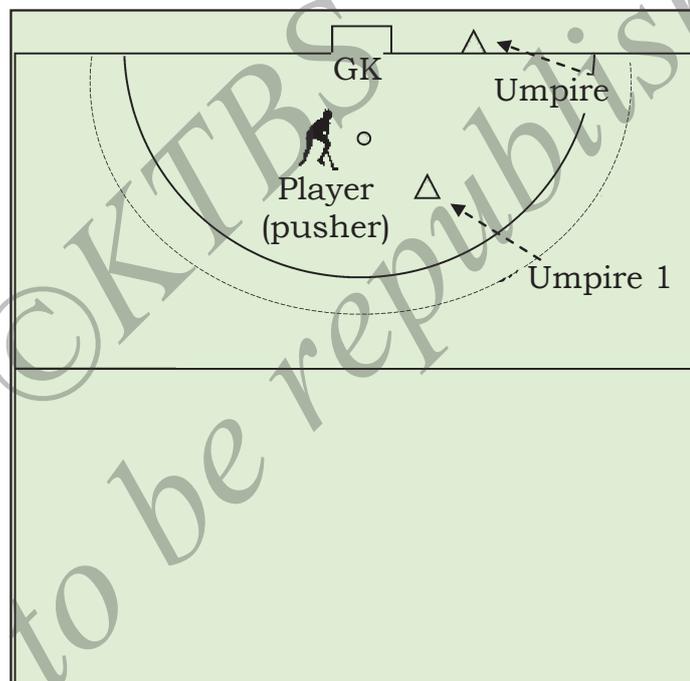


Fig-2.2-Penalty Stroke

POSITIONAL PLAY

The Goalkeeper

The goalkeeper is the last line of defence and the first line of attack. He is also called the custodian since he is in charge of defending the goal. He can play the ball with any part of his body and also save the goal with the stick above the shoulder level. His area of play is only inside the shooting circle and he ceases to have the privileges of a goalkeeper once he comes out of it.

The Full Backs:

The full backs also called defenders should be skilful in tackling, and should have hard hits to clear the ball. The fullback on the right usually marks the opponent left inside and the left full back marks the opponent right inside. The fullbacks take the 16 yards hits and defend the goal during penalty corners.

The centre half:

The centre half is the backbone of the team. He is responsible for building the attack and working with the defence. Being in the pivot position, he should maintain his position in the centre of the field and mark the opponent centre forward. His area of operation is from his own backline to the top of his opponents shooting circle. He is the one who takes most of the free hits in the midfield.

The Right Half-back and the left half back:

The right half back participates more in attack as he is playing on the easier side of the field. The right half has got to mark the opponent outside left and the left half should mark the opponent outside right. Their area of operation is usually from their own back line to the opponents 23 mts. line. The half backs are the links between the full backs and the forwards as they receive the pass from the full backs and pass it further on to their forwards.

The Wing Forwards - Right-out and Left -out:

Outside right and the outside left have the duty to develop the moves on the sides, and therefore must be very fast in developing the attack and running into open spaces. Their attacking duty mainly includes moving the ball on the sidelines and decide to either cut inside or to hit a cross pass or to pass back to half backs to change the side of attack.

The Inside forwards:

The inside forwards are the playmakers of the team as they create gaps in attack by beating the opponents and make opportunities for their centre forward or outside forwards to score. They also participate in defence and with the help of their half backs they change the side of attack. The cross passes from the outside forwards are deflected into the goal by the inside forwards.

The Center forward:

The centre forward takes on the role of the striker and should be opportunistic enough to position himself in open spaces and make use of the scoring opportunities. He should keep moving to disturb his opponents and should be skilful in taking hits at the goal with a minimum of time. He should be fast to make use of counter attacks and skilful to beat more than one opponent.

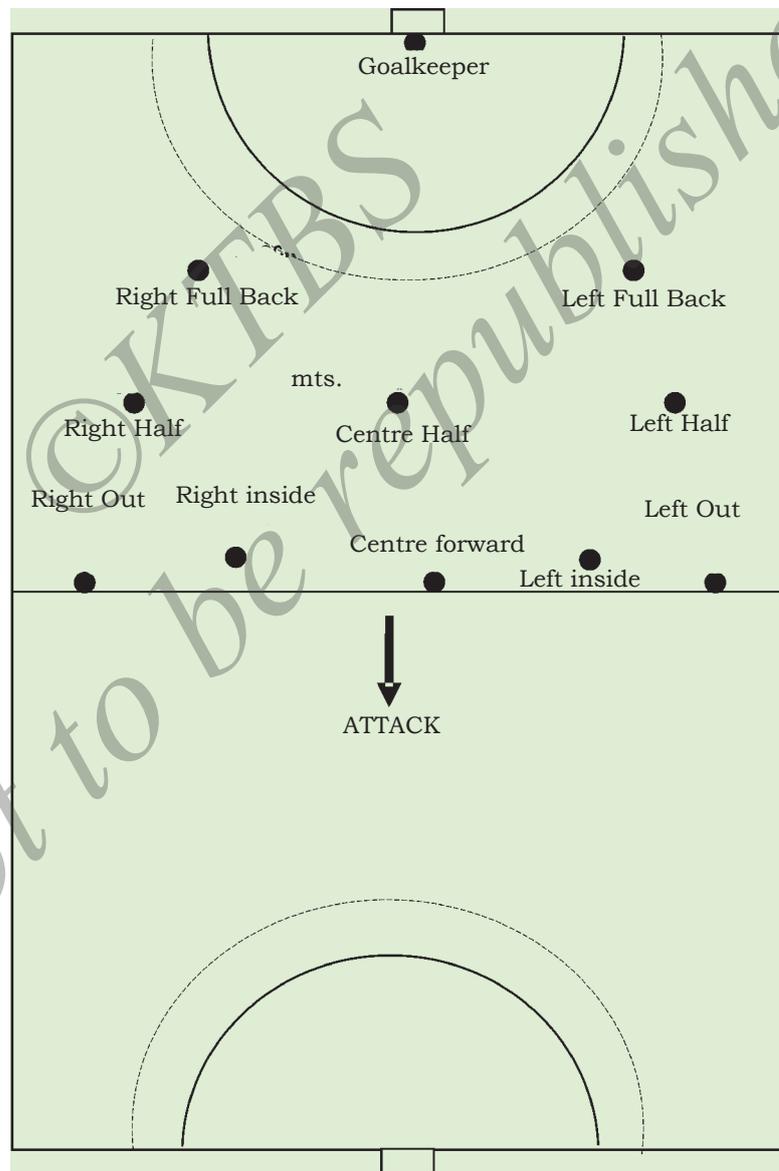


Fig -2.3

GOAL KEEPING:

Blocking with hands: Aerial balls can be brought down after stopping with the gloves or deflected by the gloves either over the post or to its side. Maintaining the same stance and position to cover the angle, the goalkeeper waits for the ball to come within his reach or depending on the situation moves to a position to reach it and gloves it away. If the ball comes straight at the goalkeeper, he blocks it with soft hands so that it drops down in front of him and clears the dropped ball either with his stick or pads.



Fig -2.4- Goal keeper

Blocking with legs: Stand in the basic stance at the top of the imaginary D. As the ball approaches the goal keeper shows the inside of the kickers and pads it away. The goalkeeper should stand in such a position on the imaginary D that if he stretches his leg on either side, then the ball passing his stretched leg should not enter the goal. If the blocked ball remains in the D close to him, he should either clear it with his stick or pad it away.

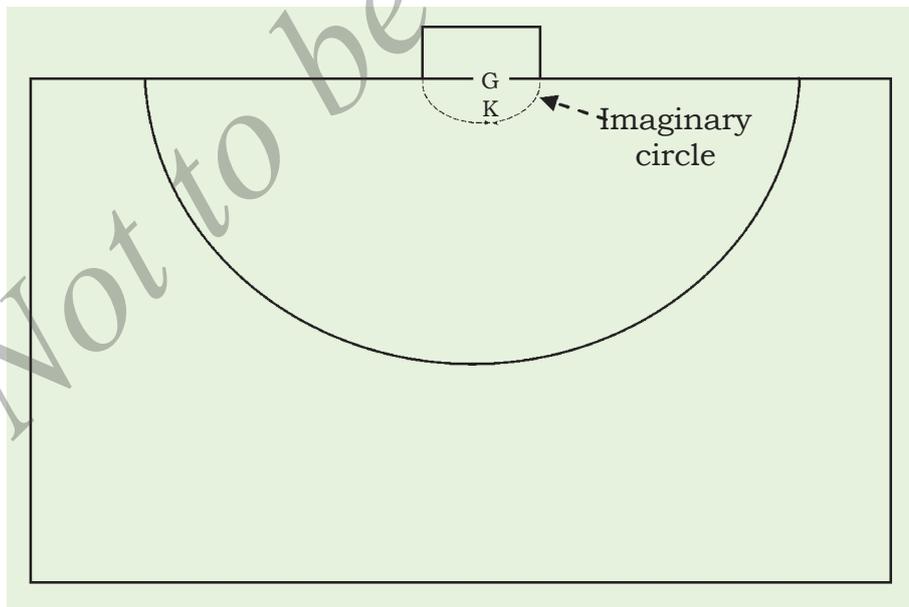


Fig -2.5- Imaginary 'D' of goalkeeper

Kicking: The goalkeeper should stand in his basic stance. He should stand on the imaginary circle in front of the post, be aware of the angles and kick the ball coming his way. He should kick the ball from the inside of the kickers or the toes depending on the situation. As the ball approaches he should move forward with short steps. In this movement he should swiftly reach the ball before his opponents and should kick the ball away from them. While kicking his forehead should be over the ball. He should kick with the inside of the foot on the side on which the ball is approaching or with the toe of the kickers if the ball is coming from the front. The ball should always be kicked to the sides away from the opponents and while kicking in the air, it should be done in a non-dangerous manner.

You should know: While defending the goal the ball should not be held in the hands.

Project:

Design lead up activities to develop the skills in this lesson with the help of the teacher.

CHAPTER - 3

HANDBALL

You will learn the following skills in this game

- Reverse pass
- shot
- Pivot dodge and defending the goal on the corners.

You have learnt the basic and advanced skills along with some game situations in the eighth and ninth standard. In this class you will learn a few more advanced skills as well as some tactics.

1. Reverse pass:

- Stance** : Place the feet wide apart. Hold the ball firmly between the thumb and forefingers.
- Execution** : Keep the left leg forward swing the right hand behind the back and pass the ball to the left.
- Follow through** : The player returns to his original position.

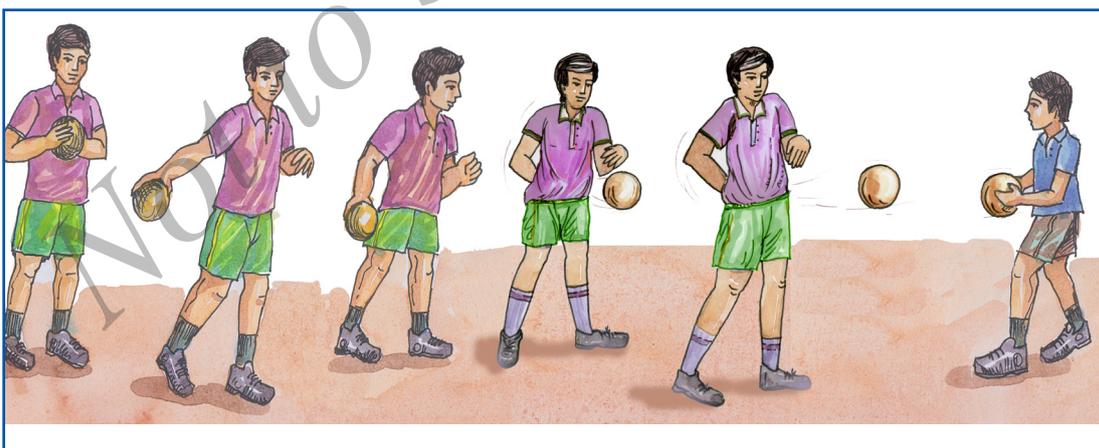


Fig -3.1- Reverse pass

2. Shot: Fall shot

In this skill the player instead of diving, falls down on the ground.

- a) **Stance** : Keep the left leg forward and in a diagonal position.
- b) **Execution** : Lift the right leg and extend it backwards and to the right away from the body. The left shoulder should point towards the goal. Holding the ball in the right hand (throwing hand) extend it away from the body.
- c) **Follow Through** : After throwing the ball towards the goal, fall to the left landing on the left arm and shoulder.

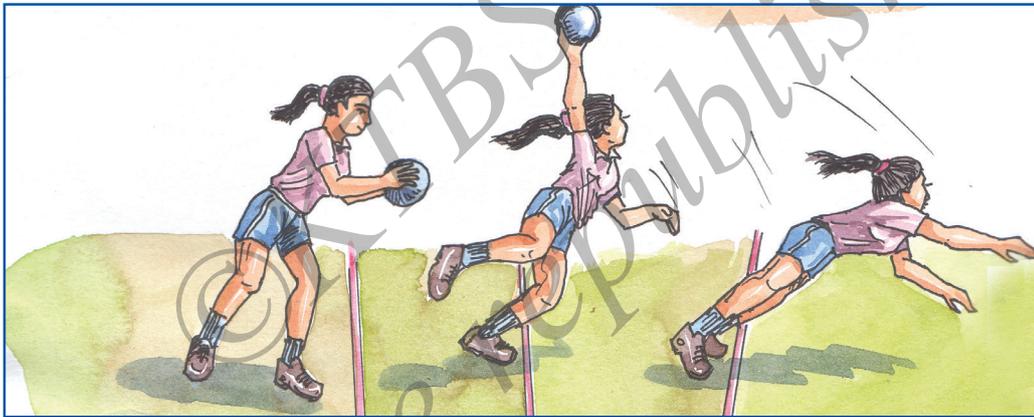


Fig -3.2- Fall shot

3. Dodging: Pivot dodge

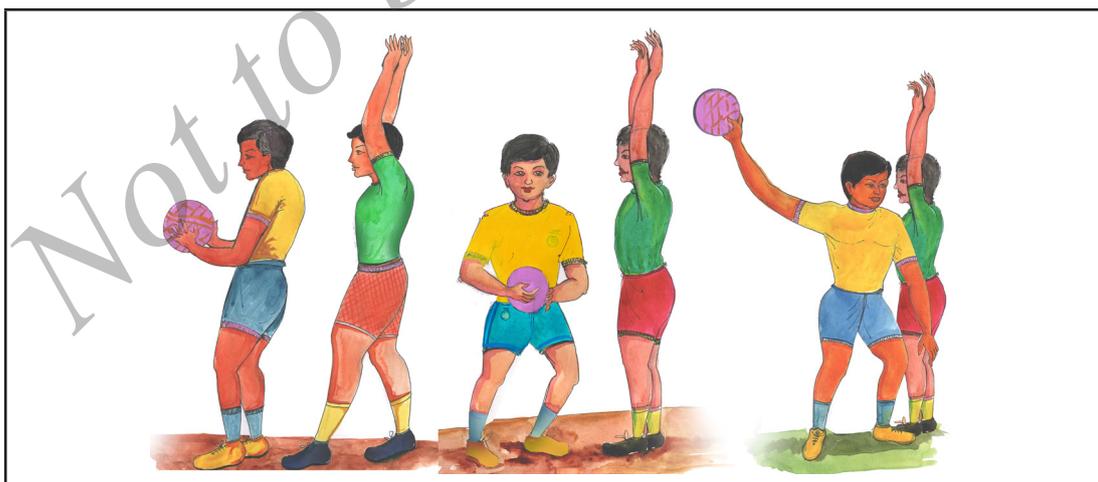


Fig -3.3- Pivot dodge

- a) **Stance** : When the player is about 2 feet away from the opponent, receive the ball from the teammate and stand on both feet.
- b) **Execution** : Using the right leg as the pivot foot turn 180 degrees to the left and face the goalpost. Placing the left leg to the left of the defending player, jump in the air and throw the ball towards the goal.
- c) **Follow through** :

4. Defending the goal in the corners:

- a) **Stance** : Hold the goal post on the side where the ball is anticipated to be thrown. Keep both legs straight, lift the hand closest to the goal post high in the air, and extend the other to the side.
- b) **Execution** : Stop the ball with both hands.
- c) **Follow Through** : After defending the ball land on both legs while maintaining body balance.

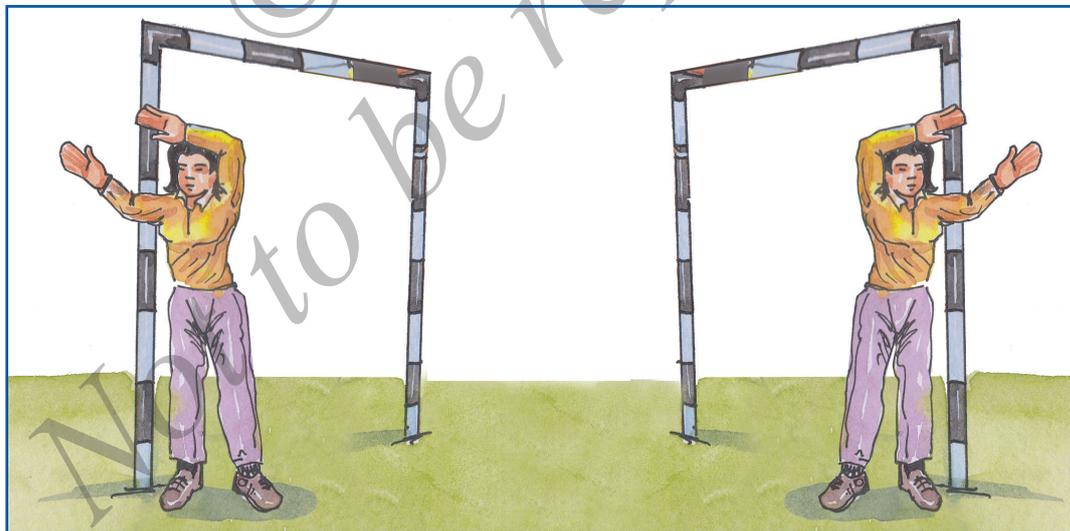


Fig -3.4-Blocking the ball shot to the corners of the goal post

Project :

Design lead up activities to practise the skills in this chapter with the help of the teacher.

CHAPTER - 4

BASKETBALL

You will learn the following skills in this game

- Bounce pass • Jump stop • jump shot
- attack and defensive tactics

You have already learnt the basic and advanced skills along with game in the eighth and ninth standard. This year you will learn a few more advanced skills as well as some tactics.

Bounce pass

This pass is performed like the chest pass. In this skill, the ball after bouncing will travel to the waist level of the teammate. For this purpose the ball should be bounced with enough force at about the two thirds the distance of the teammate. (as shown in the picture).

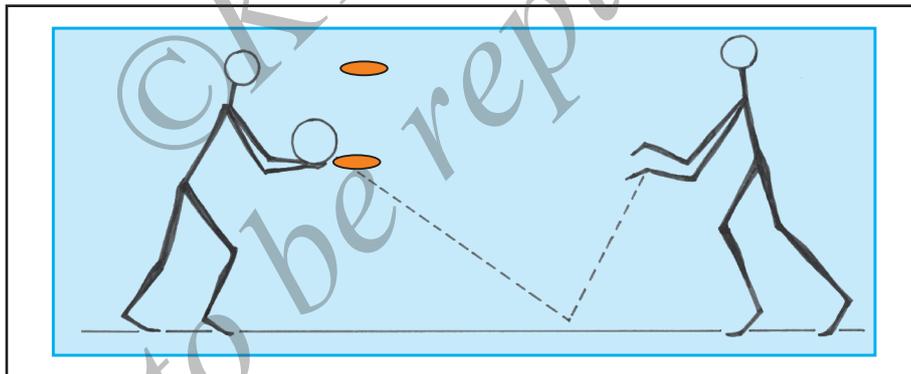


Fig -4.1- Bounce pass

Jump Shot

The jump shot shooting action is performed in the same manner as the set shot. But in this skill the shooter jumps high into the air and at the peak of his jump he releases the ball from above his head. While shooting the shooting hand is above and in front of his forehead.

In which situations should the jump shot be performed?

This shooting skill is commonly used in the opponents court. Importantly this skill is performed when there is no option to pass the ball or dribble and the opponent is closely marking you.

Jump shot technique

Both the feet should be planted firmly on the floor and the knees should be bent. The body should be facing the basket and ready to take off.

Holding the ball, straightening suddenly, jump into the air, the ball should be simultaneously brought to the front of the forehead and at the peak of flight, it should be released with a flick of the wrist and fingers towards the basket.

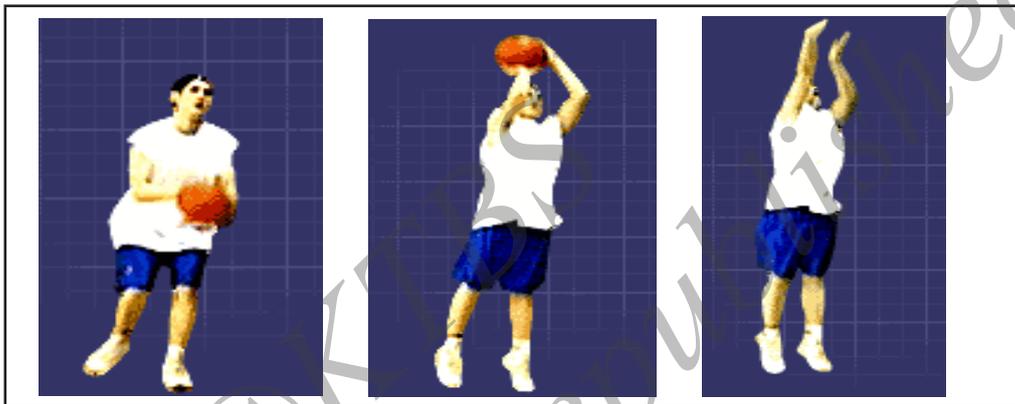


Fig -4.3- Jump shot

Attack and Defensive tactics

Attacking tactics during the game

1. Pass quickly.
2. Rush forward ahead of the ball.
3. Deceive the opponent while passing and sneak in between the gaps.
4. Rolling the ball and giving long passes.

Defensive tactics

1. Prepare two players to defend 2-3 zones.
2. Man to man defense and zonal defense.
3. Protect the less skillful players from the opponents.
4. Be careful in the three second area.

You should know: The basketball is available in three sizes which are used for men, women and boys and girls below twelve years.

Project : Design lead up activities to practise the skills in this chapter with the help of the teacher.

CHAPTER - 5

BADMINTON

You will learn the following skills in this game

- Forehand smash • Backhand smash • Rally • Tactics

In the ninth standard you have learnt the skill of Placing, Backhand service, Backhand receive/return and overhead forehand return skills. The forehand overhead return is not only used to return the shuttle defensively, but also to deceive the opponent or to gain points by swiftly returning the shuttle. (is this sentence necessary). In this lesson let us learn forehand smashing, backhand smash, Rally and the tactics associated with it.

1. FOREHAND SMASHING

Hitting the shuttle which is approaching above the head, with a normal grip, hard into the opponent's court to make it difficult for him to return it is called overhead smash. Like all other skills, this skill also has three stages - (a) Preparation (initial stance) (b) Execution (c) Follow through.

(a) Preparation:

- Distribute the weight equally on both feet, with the left leg placed slightly ahead towards the net.
- Hold the racket in such a way so as to bring it over and behind the head. The left hand should be raised towards the direction of the approaching shuttle.
- Turn the left shoulder towards the net (right handed players).

(b) Execution:

- Shift the body weight onto the back foot (right leg).
- Stretch the left hand forward to maintain body balance.
- As the racket is swung backwards, the right wrist is extended backwards.
- Transfer the body weight forward onto the left leg, and as the racket is swung powerfully upward and forward, the shuttle is contacted above and slightly in front of the body.

- Swinging the left hand forward and downward, helps in rotating the body forwards.
- The racket head travels forward in the direction of the shuttle.

(c) Follow Through

- Swing the racket forward and downwards in front of the body.
- Bring the right foot forward and the right shoulder should turn toward the direction of the shuttle.
- After swinging the racket, the player should once again get ready to receive the shuttle.

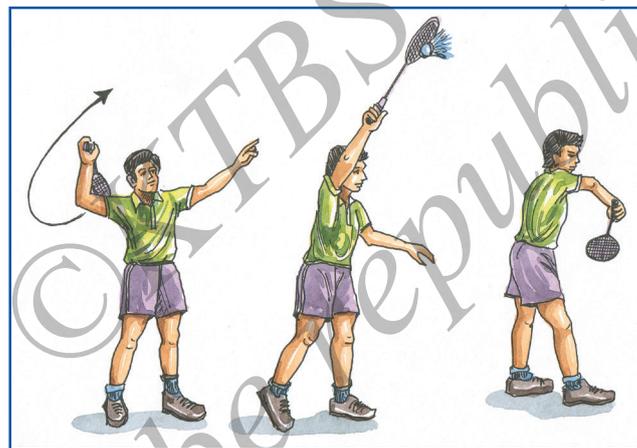


Fig -5.1- Fore Hand Smash

2. BACKHAND SMASH

(a) Preparation:

- Distribute the weight equally on both feet, with the right leg placed slightly ahead towards the net.
- Turn the shoulders in such a way so that the back is turned towards the net.
- Raise the hands so that they are parallel to the floor.
- The head of the racket should be pointed downwards.

(b) Execution:

- Initially, shift the body weight onto the back foot (left leg).

- Stretch the left hand to the left side to maintain body balance.
- As the racket is swung backwards, the right wrist is flexed forward.
- Transfer the body weight forward onto the right leg, and as the racket is flicked powerfully with the wrist. The hitting action is more of a wrist flick as it is difficult to swing the arms with the back towards the net. swung powerfully upward and forward, the shuttle is contacted above and slightly in front of the body.
- Swinging the left hand forward and downward, helps in rotating the body forwards. (not required)
- The racket head travels forward in the direction of the shuttle. (not required)

(c) Follow Through

- Once the shuttle is hit over the net, the right leg travels back to the original parallel or diagonal position to get ready to receive the shuttle.
- Swing the racket forward and downwards in front of the body.
- Bring the right foot forward and the right shoulder should turn toward the direction of the shuttle.
- After swinging the racket, the player should once again get ready to receive the shuttle.

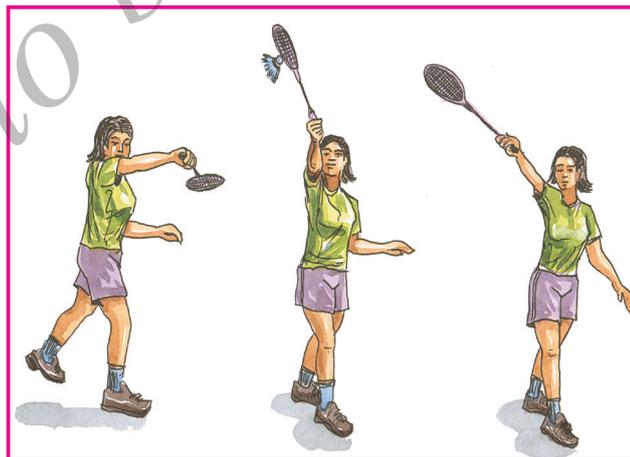


Fig -5.2- Back Hand Smash

3. RALLY

The act of using the appropriate skills of badminton to send the shuttle to and fro continuously over the net is called a rally.

4. TACTICS

- When the shuttle is smashed, the player should observe the opponent's position and movement.
- While smashing, by turning the shoulders and the trunk swiftly forward the body weight can be optimally used to perform the skill effectively.

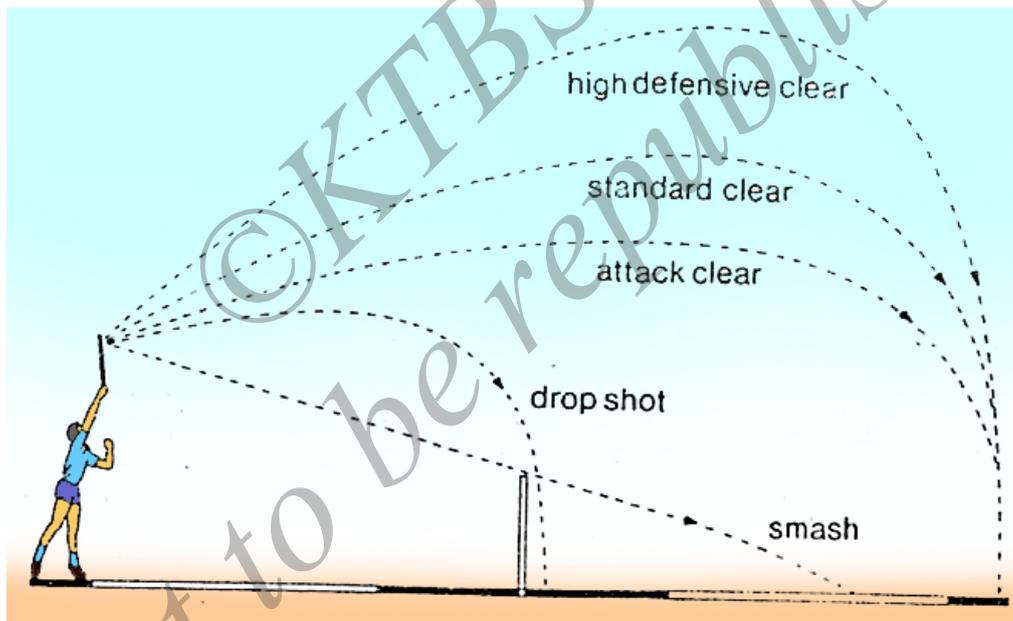


Fig -5.3- Different types of Smash

You should know: : Mr. Prakash Padukone is the only badminton player from Karnataka to have won the All England Badminton Championship.

Project :

Design lead up activities for the skills learnt in this chapter under the guidance of the teacher.

ATHLETICS

CHAPTER - 6

HURDLES RACE

You will learn the following skills in this event

- The start technique
- approaching the first hurdle
- take off.
- hurdle clearance
- movement of the trailing leg and landing
- running between the hurdles.

In the eighth and ninth standard you have learnt the skills of middle and long distance races, high jump, triple jump and javelin throw. In this class you will learn the skills of hurdles race, race walking and discus throw.

The hurdles race is considered a variation of sprint races. In this race, the runner sprints at maximum speed while clearing the hurdles placed in his own lane and crosses the finish line.

1. The starting technique of the hurdles race.

As in the sprints, in the hurdles competition also the start is taken in a crouch position using the starting blocks. The runner should start quickly from the starting block and run swiftly towards the first hurdle.

2. Running to the first hurdle from the start

- The runners normally take eight strides from the start to the first hurdle.
- The number of strides and the stride length from the start to the first hurdle should always be uniform.



Fig -6.1- Running to the first hurdle from the start

3. Take off

- Normally hurdlers take off from about 1.5 mts. to 2 mts. behind the hurdles.
- As he starts the race his take off leg should reach the take off spot.
- The spot where the take off leg is planted behind the hurdles should be marked.
- If there is variation in placing the take off leg on the mark, such difference should be adjusted by altering the placement of legs behind the starting mark.
- If the runner takes off very close to the hurdles, he will be forced to jump high over the hurdles while clearing it.
- While taking off, one should not forget to lift the leading leg by bending the knees and pointing it in the direction of running.

4. Hurdles clearance:

- As the hurdler runs swiftly towards the hurdles and bends the upper body forwards, he should not jump unnecessarily too high over the hurdles, rather should jump at just enough height to clear the hurdles.
- While clearing the hurdles the leading leg should travel in the direction of running, the knee should be bent and lifted upwards and should be cleared swiftly.
- As the leading leg crosses the hurdles, the opposite hand (right hand for the left leg and vice versa) should be stretched forward in the manner of touching the toes. This will help the runner to maintain his balance.

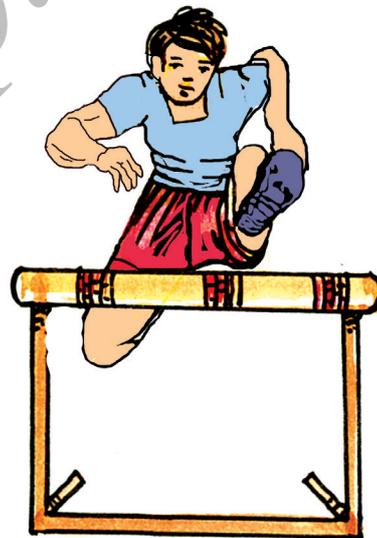


Fig -6.2-
Hurdles clearance

5. The movement of the trailing leg and landing

As the hurdle is cleared, attempt should be made to plant the leading leg on the ground as soon as possible. The leading leg should contact the ground on the balls of the feet (not on the heels or flatfoot). As the leading leg contacts the ground the knee of the trailing leg should be bent and brought forward as if it is lifted in front of the athlete's body. As the trailing leg is brought over the hurdle it should be bent perpendicular to the upper body. In this manner, the trailing leg is brought forward as if it is rubbed over the top of the hurdle.

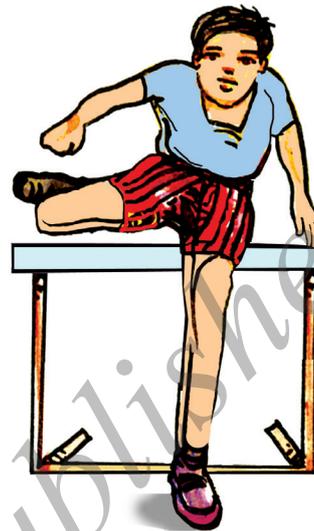


Fig -6.3- The movement of the trailing leg and landing

6. Running between the hurdles

- The runner should run at maximum speed between the hurdles.
- The athlete should take three strides between the hurdles.
- The first step should be taken as an optimum stride length, otherwise it might be difficult to reach the next hurdle.
- The first stride should be made in the direction of running.

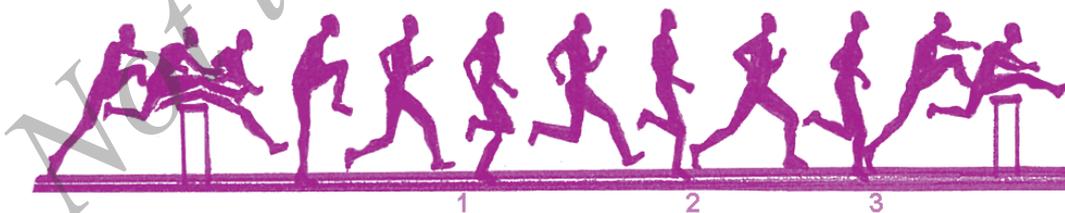


Fig -6.4- Running between the hurdles

Project

Under the guidance of the teacher design lead up activities to practise the skills learnt in this lesson.

CHAPTER 7

WALKING

You will learn the following skills in this event:

- Movement of hands
- legs and feet.
- Technique of walk

In walking, the movement of the hands, legs and feet is important. Therefore let us analyse their movements.

THE TACTICS OF WALKING

Movement of arms

- The elbows should be bent to 90 degrees.
- The legs and feet should not be held rigid and should be bent in a relaxed manner.
- With every step the opposite hand should move forward.
- The elbows should be close to the body.
- The hands should not hang across the body.
- As the hands come forward they should not be raised above the shoulders.



Fig -7.1- Movement of arms

The movement of legs and feet

- As the rear leg is brought forward, the front leg should not leave contact with the ground. (Both the legs should be in contact with the ground at any given time).

- As the rear leg is placed forward the weight should be on the heel, followed by transfer of weight to the front of the feet.
- After the front leg is planted on the ground, the rear leg should be lifted off the ground.



Fig -7.2- Movement of legs and feet

- As the ground contact is maintained while taking steps, the rear knee should be kept straight. (knee should not be bent).
- As the walking commences, the movement of the legs should start slowly and gradually speed should be increased.
- The weight should be transferred between the front and rear legs equally (there should be no limping).

Project:

The students under the guidance of the teacher should design lead up activities to practise the skills learnt in this lesson.

Activity : Discuss with walkers in the morning or evening and know advantages of walking.

CHAPTER 8

DISCUS THROW

You will learn the following skills in this event:

Holding the discus and standing throw

1. Holding the discus and standing throw:

Place the discus on the left palm and cover it completely with the right palm. Then, grasp the discus with the tip (final one third) of the fingers of the right hand as shown in the picture and hold the discus independently with the right hand.



Fig -8.1- Discus

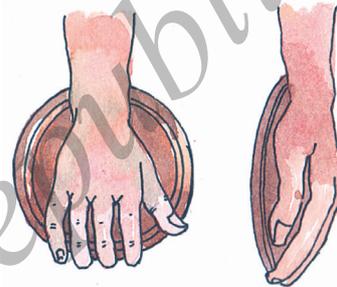


Fig -8.2- Discus placed on the palm

The thrower should stand with feet shoulder distance apart. The left shoulder should point towards the landing sector. Initially, after swinging the extended arms freely once or twice, release the discus in a clockwise rotation at the proper height. (When the arms are swung initially, as the right hand comes in front of the body the palm should be facing upwards and when the right hand is swung behind the body the palm is facing downwards.)



Fig -8.3- Turning the Discus

2. Holding the discus and turning:

Hold the discus as described above and toss upward, the discus so tossed should spin in clockwise direction (top-spin).

3. Initial swinging and turning without the discus:

The thrower stands with his back to the throwing sector, feet are shoulder width apart. From this position he will swing his extended arms once or twice, freely in both directions, then he will pivot on his toes of the left feet and turn 180 degrees in the anti clockwise direction to assume the position where his left shoulder will point toward the throwing sector (as in standing throw).

4. Initial swinging and turning with the discus:

Make the same movements with the discus as in 3. The palm is facing upwards when the right hand is swung in front of the body and is facing downwards when it moves behind the body.

5. Release and maintaining balance:

In the final stages of the throw, the thrower releases the discus at an angle of about 40 to 45 degrees to the ground. In order to maintain balance after the throw, the thrower switches his left leg with right leg. (right leg is brought forward and the left leg is taken back).



Fig -8.4- Release and maintaining balance

Project:

Under the guidance of the teacher design a lead up activity to practice the skill learnt in this lesson.

YOGASANA

CHAPTER 9

ASANAS

You will learn the following asanas in this chapter

- Asanas in the standing position
- Asanas in the sitting position
- Asanas in the lying down position
- Meditation

Note : In 8th and 9th standard text books, the asanas figures are shown in four stages. The four stage of are shown here. However, the asanas are to be taught in four stages.

A. ASANAS IN THE STANDING POSITION

1. Ardha Chakrasana (Half wheel posture):

Starting position : Stand in Jada Tadasana picture

1. Raise both the arms to the side upto the shoulder level.
2. Support the back by placing both the palms on the trunk and breathe out.
3. Breathing in bend the trunk backwards, extend the neck back and downwards along with the head.
4. As you bend backwards all the while breathing in, in the final position keep breathing normally.

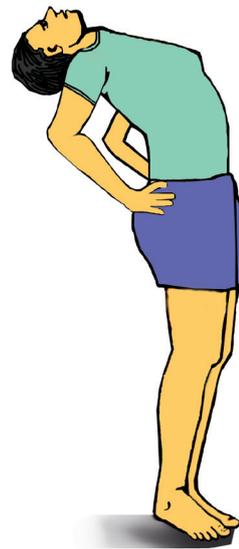


Fig -9.1-
Ardha chakrasana

Points to be noted

- Since there is excessive blood flow to the head, eyes and face regions persons with headache and eye pain should avoid performing this asana.
- Persons with high blood pressure should perform this asana slowly.

Uses

- This asana will strengthen the neck and chest muscles.
- The lower back will get toned up and stronger.

2. Garudasana (vulture posture).

True to its name, the final position in this asana resembles the bird Garuda (Eagle).

Starting Position: Stand erect in the Tadasana posture.

1. Bend both the hands and place the palms on the waist.
2. Bend both the knees like sitting on a chair.
3. Balancing the body on the left leg, wrap the right leg around the left leg as shown in the picture.
4. Bend both the elbows in front of the chest, wrap one around the other, join the palms and perform namaskara. In this manner, breathing gently maintain balance in this posture for some time and then come back to the starting position.

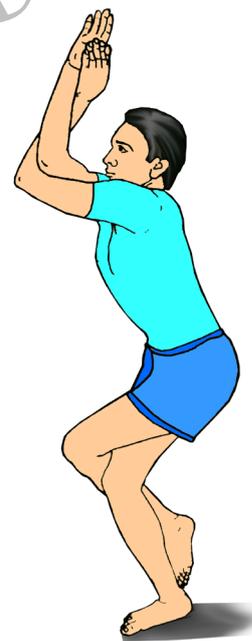


Fig -9.2- Garudasana

Precautionary measures:

- Before assuming the final posture, practise balancing on one leg.
- Pregnant women should not perform this asana.

Uses

- This asana will strengthen the muscles of the leg and arms.
- Loosen the joints.

3. Prasaritha Padotthanasana

Starting position: Stand in Tadasana posture.

1. Place the right leg to the right side at a comfortable distance depending on the height. Raise the arms from the sides and place them on the floor perpendicular to the shoulders parallel to each other.
2. Maintaining the same position with the legs and body, the hands should be brought forward.
3. Exhaling, bending forward, keep both the palms pressed to the ground, raise the head and look forwards.
4. Next bending slowly forwards touch the forehead to the floor..



Fig -9.3. Prasaritha Padotthanasana

Precautionary measures

While sliding the legs in this asana, one should be careful.

Uses

Chest and legs become strong and broader. Increases the flex bility of hip joint.

4. Angushthasana

Starting position: Stand in the Tadasana.

1. Breathing in, raise the arms on the sides and bring them parallel to the shoulders. Join both the legs.
2. Raise the arms from the sides and join both the palms.
3. In the above position, bend both the knees forward.
4. Slowly bending the knees, raise both the heels, the whole of the bodyweight is now placed on the big toes of the feet.



Fig -9.4- Angushthasana

B. ASANAS IN THE SITTING POSITION

1. Vajrasana

Starting Position - Sit in the long sitting position (sit with legs extended forward).

1. Slowly bend the right knee and bring the right heel below the right buttock.
2. Likewise do the same with the left leg (left heel under the left buttock).
3. Place both the palms on the thighs.
4. Both the feet should be placed together under the hips and both the knees should be joined together.

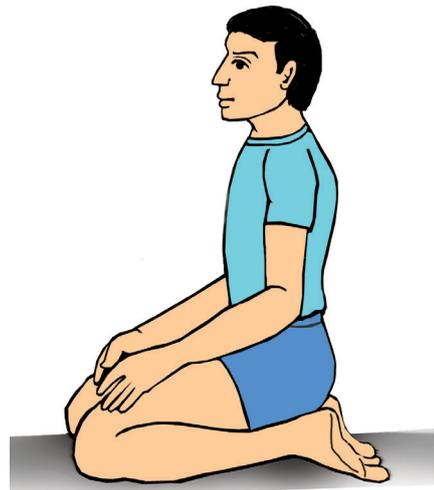


Fig -9.5- Vajrasana

Keep the body erect, close the eyes and assume the meditation position.

Uses - Since the vertebral column is kept erect for a long time the legs get stronger and digestion improves.

2. Bakasana - 'Baka' means 'Crane'.

Starting Position - Stand in Tadasana posture.

1. Breathe in and raise both the hands in front of the shoulders.
2. Breathing out squat down, open both the knees, bend the chest between them and place both the palms on the floor in front of the feet.
3. Transfer the body weight forward onto the hands leaning the body in front of the knees, raise the heels.
4. Delicately place the body weight on the arms, raise the legs from the floor and balance the body on the arms.

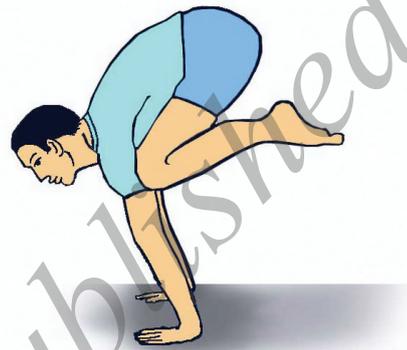


Fig -9.6-Bakasana

Points to be noted

Since this asana requires a lot of balance, it should be performed with care.

This asana should not be performed if there is wrist or shoulder pain.

Uses

The wrists and shoulders get strengthened.

Increases blood circulation.

3. Supta Virasana

1. Bend the right leg slowly and get it under the right buttock with the heels outside.
2. Similarly bring the left leg under the left buttock.
3. Slowly bend backward placing the body on the floor and keeping the hands to the side.

4. Slowly extend the arms straight behind and next to the head and maintain this position for some time.

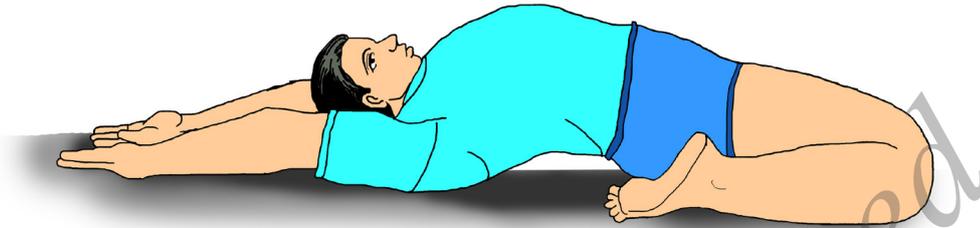


Fig -9.7- Supta Virasana

4. Paryankasana

Position: Sit straight.

1. Bend the right knee on the outside, straighten the foot and place it next to the right buttock.
2. Do likewise with the left knee on the left side.
3. Bending backwards, placing both the elbows on the floor, touch the top of the head to the floor.
4. With easy breathing, bring both the hand backward and place them near the head.



Fig -9.8- Paryankasana

Benefits

- Reduces the pain at the knees and thighs.
- This is an excellent asana for the neck and the head region.

ASANAS IN THE LYING DOWN POSTURE

1. Bhujangasana: bhujanga means hood of the snake.

Position: Lie in the Makarasana position with the arms straight by your side.

1. Bring both the hands near the ribs, elbows should be bent, forehead touching the floor.
2. After placing both the palms on the floor, touch the chin to the floor.
3. Slowly transfer the weight to the wrists and raise the head.
4. Raising the chest off the floor bending the back backwards as far as possible, maintain this position for some time.

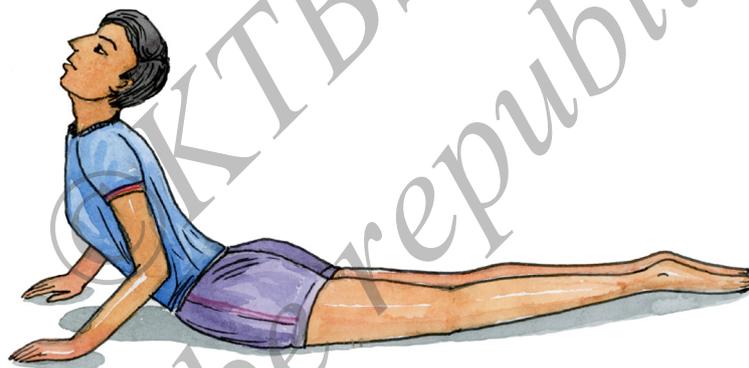


Fig -9.9-Bhujangasana

Uses:

The back muscles will be strengthened. Helps in burning abdominal fat. Helps to cure respiratory diseases such as bronchitis, asthma etc.

2. Paripoorna Navasana (Complete boat posture)

Position: Extend the legs forward, place the hands to the side.

1. From this position lift the arms forward parallel to the shoulders.
2. Bend the body a little backwards, looking forward.
3. Slowly lift the right leg and grasp it with your right hand.
4. Slowly lift the left leg and grasp it with your left hand. Both the legs should be raised to about 45 degrees to the floor and this position should be maintained for about some time.



Fig -9.10- Paripurna navasana

Uses: To keep control of the body and to burn abdominal fat this asana is useful.

3. Simhasana (Sitting lion posture)

Position: Sit with legs extended forward.

1. Bend the right knee from the outside with the feet facing backwards.
2. Similarly bend the left knee on the outside so that the feet are facing backwards.
3. Bend forward and place both the palms pressing to the floor at shoulder width distance.
4. Breathing in deeply, open the mouth as widely as possible, put the tongue out completely and maintain that position.

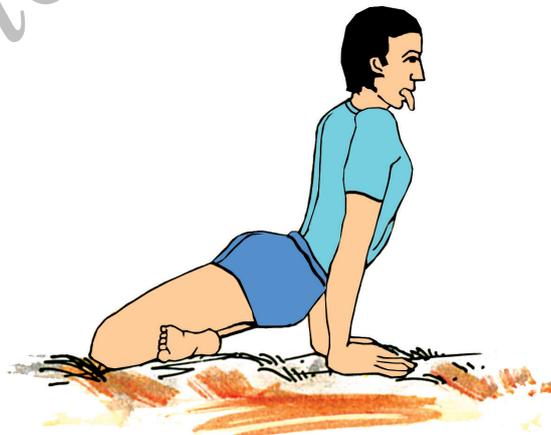


Fig -9.11- Simhasana

Precautionary measures: Do not tighten the facial muscles while doing this asana. If there is knee or ankle pain do not sit in this position for long.

4. Mayurasana (peacock posture)

Position: Long sitting position (sitting with legs extended forward) with heels touching.

1. Bend the knees backwards and assume the Vajrasana position.
2. Bend the elbows and tuck the elbows into the navel and bend forward so that the centre of gravity of the body is in the navel region, the palms are firmly placed on the floor. Touch the forehead to the floor.
3. Extend the legs backward and plant the toes on the floor.
4. Concentrating the body weight on the elbow joint and fixing the navel region on it, move the body forward so that the whole body is parallel to the floor. Balance the body in this position for as long as possible and then slowly come back to the original position.

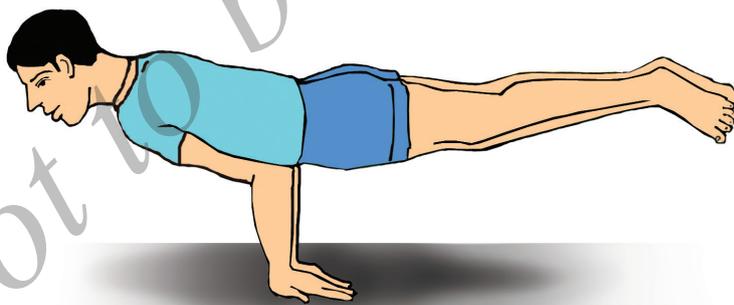


Fig -9.12- Mayurasana

RHYTHMIC ACTIVITIES

CHAPTER - 10

N. D. S. LEZIUM

You will learn the following Activities in this lesson

- Aage ki mor chal
- Chaumukhi mor chal

In the ninth standard you have learnt five activities from NDS lezium. In this class we will learn the remaining two activities aage ki mor chal and chaumukhi mor chal.

AAGE KI MOR CHAL

This is a eight count activity done after Harkat Bharath Matha ki.

Starting position: After the fourth count of harkat bharath matha ki, stand on the right foot, bend the left knee and bring it in front of the right foot. The left foot should not be placed on the ground. Bend forward, join both the handles of the lezium and should be held perpendicular to the ground. The right leg should be bent slightly and should be held parallel to the ground. (Fig. 10).



Fig -10.1

Count 1: Plant the left leg on the ground and stand on toes. Relax the right leg, swing slightly to the back (this movement should take place from the hip joint) . The lezium should be held parallel to the ground and diagonal to the shoulders, both the handles should be opened. (Fig.10a). Bringing the right leg to the basic position, lift the left leg upwards and front, joining the handles of the lezium come to the starting position. While doing this move half step forward.(Fig -10.2b)



Fig -10.2a



Fig -10.2b

Count 2: Repeat count 1.

Count 3: As you repeat count 1 at count 2, hop on the left leg and start straightening your upper body.(Fig 10-3)



Fig- 10.3



Fig-10.4

Count 4: As you hop on count 3, stand up straight. Plant the right leg forward, bringing the leziium above the head (arms should be fully extended) open both the handles. At this the stand on the right leg with the weight on it.(Fig 10-4)

Then immediately replace the right leg with the left leg (the left leg should be slightly bent) join both the handles of the leziium and the left leg and arms should be slightly bent (Fig. 10-5).



Fig- 10.5



Fig -10.6

Count 5: Keeping the right leg on the ground and extending the hands completely upward, open the leziium. At the same

time swing the left leg slightly backwards (Fig 10-6).

This left leg Once again replace the right leg with the left leg, join the leziium handles and bend the left leg and arms slightly (Fig-10-7)



Fig - 10.7

Count 6: Repeat count 5.



Fig - 10.8

Count 7: As the count 5 and 6 are repeated, hop on the right leg, bring the left leg forward start bending forward (Fig 10-8)

Count 8: As you hop on the right leg for count 7, bring the left leg forward and bend forward. Just as in count 1. The leziium should be parallel to the ground and diagonal to the shoulder line. (Fig 10-9) Both the handles joined and should be held just as in the starting position.



Fig - 10.9

CHAUMUKHI MOR CHAL

This activity also is done after harkat bharat matha, but is a 16 (8+8) count activity.

Starting position: As in Aage ki mor chal.

Count 1 to 4: Do as in aage ki mor chal. But on count 4, the right leg should be placed in front of the left leg like a scissor (Fig 10-10)

Count 5 and 6:

Do as in aage ki mor chal. But instead of going forward, place the right leg in front of the left like a scissor towards the left and move to the left.(Fig 10-10b)



Fig- 10.10a



Fig - 10.10b



Fig - 10.11a



Fig - 10.11b

Count 7: As you repeat counts 5 and 6, hop on the right leg, keep the left leg forward and start bending down. (Fig. 10-11a&b).



Fig - 10.12a



Fig- 10.12b

Count 8: As you hop on the right leg for count 7, bring the left leg in front of right leg like a scissors bend forward. Just as in count 1, bring the lezium parallel to the ground and diagonal to the shoulder line, both the handles should be joined (Fig 10-12 a&b).



Fig - 10.13a



10.13b



10.13c

Count 1 and 2 (9 and 10): Do as in aage ki mor chal. But cross the left leg in front of right leg and move to the right (instead of moving forward).

Count 3 (11): As directed above, as you repeat counts 1 and 2 (9 and 10), hop on the left leg, turn around from the right and start getting up (Fig 10.13 a,b&c).

Count 4 (12): Keep the right leg forward (opposite to the original direction) open the handles of the lezium above the head (both the arms should be extended).

Count 5 and 6 (13 and 14): Do as in counts 5 and 6 of aage ki mor chal. (But this time the person is moving in the opposite direction)

Count 7 (15): As in aage ki mor chal, hop on the right leg and open the lezium above the head, turn around from the left (towards the original direction) and start bending down (Fig 10-14a).



Fig - 10.14a



Fig - 10.14b

Count 8 (16): Keep the left leg forward, bend forward, join the lezium handles and hold them perpendicular to the ground. The right leg should be slightly bent and the upper body should be parallel to the floor (Fig.146)

Project:

With the help of the teacher, coregraph these activities to music.

CHAPTER - 11

AEROBICS

The following skills will be learnt in this chapter

- On the spot low impact marching
- marching forward and backwards
- steps to the side
- double steps
- 'I' shape steps
- V steps
- step touch in the front and back
- Grape vine with pivot
- mambo
- mambo with pivot on left foot
- cha cha cha
- knee raise and hand raise.

In the last two classes the rhythmic exercises were limited to leziiums. In this class in addition to leziium we will learn aerobic dance also. Aerobics increases endurance by increasing the cardio vascular capacity. This exercise should be done in a relaxed manner and in accordance with the beats of the music.

1. Low Impact march on the spot

Steps are put on the spot rhythmically to the music like in marching. The knee should be raised enough to add intensity to the exercise.

2. March forward and backward

This is a four count movement.

Step 1 - Step forward with the left leg

Step 2 - Join the right leg to the left.

Step 3 - Step back with the left leg.

Step 4 - Join the right leg to the left.

Likewise after predetermined number of counts start first with the right leg.

3. Steps to the side (Step Touch)

This is a four count movement.

Step 1 - Step left with the left leg

Step 2 - Join the right leg to the left.

Step 3 - Step right with the right leg.

Step 4 - Join the left leg to the right.

Likewise after predetermined number of counts start first with the right leg. Not necessary.

4. Double step touch

This is a eight count movement.

Step 1 - Step left with the left leg

Step 2 - Join the right leg to the left while bending the knees a little.

Step 3 - Once again step left with left leg.

Step 4 - Join right leg to left leg.

Step 5 to step 8 - Repeat the movements to the right side, starting with the right leg and joining

5. L Shapes

This is a sixteen count exercises

Count 1 : Step left leg to left

Count 2 : Join right leg to the left and bend both knees rhythmically

Count 3 : Turn clockwise and place left leg 90° forward. Now the body turn to the right of initial position.

Count 4 : Join right leg to the left and bend both knees rhythmically. In order to return to the initial position the same exercise has to be performed in 4 counts. Starting with right leg and turning anticlockwise . For this, replace right leg for left leg and left leg for right leg. (perform this exercise for four counts, four times and return to initial position at the end of 16 counts)

6. V - step

This is a four count movement. Start with left leg as the leading leg.

Step 1 - Step forward diagonal with the left leg.

Step 2 - Step forward diagonal with right leg so that it is placed parallel to left attaining a wide stance (the width is more than the original position.)

Step 3 - Step back with left to the original place.

Step 4 - Join right leg to left leg.

Likewise after predetermined number of counts start first with the right leg as the leading leg.

7. Step touch forward

This is a four count movement starts with left leg as the leading leg.

Step 1 - Step forward diagonal with the left leg.

Step 2 - Join the right leg to left.

Step 3 - Step forward diagonal with the right leg.

Step 4 - Join left leg to the right leg.

You can continue forward for another four counts.

8. Step Touch backward

This is a four count movement. This is a continuation of step touch forward, to come back to original position.

Step 1 - Step backward diagonal with the right leg.

Step 2 - Join the left leg to the right.

Step 3 - Step backward diagonal with the left leg.

Step 4 - Join right leg to the left leg.

The same number of counts that have been done for forward step touch should be followed for backward step touch in order to come to the starting position.

9. Grape vine

This is a four count step.

Count 1- step left with left leg.

Count 2 – cross the right behind the left with both the knees slightly bent.

Count 3 – step left with left leg.

Count 4 – join right leg to left.

Likewise do it on the right side substituting the right leg for the left and the left leg for the right.

10. Grape vine with pivot

This is a four count step.

Count 1- step left with the left leg.

Count 2 – turn anti clockwise 180° crossing the right across the left and facing behind.

Count 3 – without lifting the feet, pivot on them to turn anticlockwise quarter turn and facing to your left.

Count 4 – join right leg to left coming back to the starting position

Likewise do it on the right side substituting the right leg for the left and the left leg for the right.

11. Mambo

On the left leg.

Count 1 – step the left leg forward in front of right leg

Count 2 – step right leg on the spot

Count 3 – step left back to original position

Count 4 – step right on the spot.

On the right side – inter change the legs.

Note: The knees should be slightly bent and the body kept relaxed. Step on toes.

After finishing eight count or multiples of 8 on the Right leg, by taking the first count on the Right leg, the changeover from left to right can be done.

12. Mambo with pivot on left foot

On the left side.

Count 1 – step left leg forward in front of right leg

Count 2 – turn clockwise turning back without lifting the legs but pivoting on them.

Count 3 – step left step forward facing same direction

Count 4 – turn clockwise facing forward without lifting the legs but pivoting on them.

On the right side – inter change the legs.

Note: The knees should be slightly bent and the body kept relaxed. Step on toes.

The changeover from left to right can be done by taking the first count by the right leg after finishing on the right leg for a count of 8 or multiples of 8.

13. Cha - Cha - Cha

This is a four count move. Though on the third beat there are two steps taken as two half counts.

Example : 1 2 3& (one count) 4

With the left leg as the lead leg

1 – left step forward

2 – right on the spot

3 – left step back to original position but on the left

4 – join right to left

5 – step the left leg to the left

Likewise do it with the right as the lead leg.

14. Knee Raise

Count 1 - step the left leg to left.

Count 2 – lift the right knee across to the left side above waist height.

Count 3 – step the right leg to right.

Count 4 – join the left leg to the Right leg.

Similarly step and knee lift on the right side.

Variation: 3 knee lifts with either leg and join the other leg to the lifted leg on count 4.

15. Hand Raise

During the course of various steps, arms can be moved as biceps curls, shoulder presses, rowing, triceps curls etc.

CHAPTER - 12

DRILL AND MARCHING

You learn the following movements in this chapter.

- Open order march • Close order march • Right turn • Left turn
- Give the letter to the officer and receive prize • Salute to the guest.

1. Open order march: The students are standing in a line ready for the march past, before the guest comes for inspection this command is given.

Command - class open order.... march....

As soon as this order is given, the students in the front line come forward one and a half steps - taking a normal step on the left and a half step on the right, joining the left to the right leg. Likewise the students in the rear lines also take a normal step backwards with the left, a half step backward with the right and joint their left leg to the right.

2. Closed order march: When the students who are in open order position are given the command closed order march, the students in the front go one and a half steps backward and the students in the back come one and a half steps forward to assume the original position.

3. Right turn: When the students are marching forward in three files and are required to go towards the right this command is given.

Order- Class...Right...turn.... As soon as this order is given, the students in the right file march in the march time (kadam taal) and turn to the right, the students in the middle file take normal steps and march to the right, and the students in the file on the left, will take longer steps and march to the right till they align themselves and assume original positions.

4. Left turn: When the students are marching forward in three files and are required to go towards the left this command is given.

Order- Class...Left...turn.... As soon as this order is given, the students in the left file march in the march time (kadam taal) and turn to the left, the students in the middle file take normal steps and march to the left, and the students in the file on the right, will take longer steps and march to the right till they align themselves and assume original positions.

5. Give the letter to the officer and receive the prize: While marching this order is given when a letter is to be given to the officer or a prize is to be received from him, this order is given -

The salute to the officer command is given on the left leg -

Class.... Salute... this order is started on the left leg and completed on the right step. Immediately after the left leg is stepped for count one, and on count two right leg is joined to the left leg stopping the march. (tham). After saluting the officer, the leader goes one step forward and delivers the message or receives the prize from him, comes one step backwards, salutes the officer, turns back and continues the march past, to reach his place.

6. Salute to the guest

Arrange all the students in three files. As shown in the picture in front of every class group the class leader will stand and in front and middle of all the groups the school leader will stand. After the guest occupies the place of honour on the podium, the school leader will give the command to all the groups Attention and general salute for the guestsalute. All the students will salute the guest and honour him. Then he will give the command, turn to the right in threes...right...turn. The chief leader (school leader) will turn left and the class leaders and all the students will turn right. The school leader and all the class leaders will march and stand in front of their respective classes. The school leader after signalling to the band will command Quick....march. As the students come marching in front of the dais, and when they cross the first red flag which is a signal, the school leader will command the first team Eyes...right. Immediately the main leader will turn his head to the right and give the salute. The first member (in the first row and to the extreme right) of that group will see straight ahead and continue marching. The rest of the students will see to the right and continue marching swinging their hands. After the whole group passes the second indicator red flag the leader gives the command Eyes...right. This way each class leader will give the commands eyes right and eyes front to each of their teams when they cross the indicator flags. This way when all the teams have given the salute and have come to their respective original places the main leader will give the command tham.. Later the school leader gives the command left...turn all the class leaders and the school leader stand in their original places. After the guest leaves, the school leader gives the command to disperse.

Note: If a band is available, the band group will take part in the march past behind the last group.

CHAPTER - 13

SELF DEFENCE TECHNIQUES

Introduction:

Self defence is using universally accepted techniques against possible harm occurring to oneself according to circumstances.

Meaning :

Every measure taken to protect the health of oneself and others is called self defence. Persons under attack usually perform these techniques. Sometimes it is necessary to apply force during self defence in order to escape from harm or prevent harm.

Physical self defence :

Physical self defence is applying physical force to escape from the fear of violence. The force applied may be either with weapon or without. The success of physical self defence on many factor mainly the intensity of harm and physical as well as mental readiness of defender play an important role here.

i) Weapon less self defence : A number of styles are used for self defence. Most of these self defence styles teach to escape from the attack. Further they teach to counter attack as per circumstance. Important among them are karate, judo, taekwondo, wrestling etc.

ii) Self defence with weapon: Many types of weapons are used in self defence. The weapons have to be selected according to the situation and the defender's experience. Legal restrictions influence the use of such weapons for self defence.

Mental self defence :

Mental self defence is possessing mental status for appropriately using physical self defence techniques. Knowledge of physical self defence is useless until one possesses mental stability to use such techniques. Mental readiness is utmost essential to escape from fatal attacks. Usage of physical self defence technique in natural situation gives intended results.

Other self defence techniques :

There are three types in this : 1) Preventing 2) Verbal self defence 3) Using personal alarm.

Preventing : Preventing the danger situation completely is the main technique of self defence. Attackers opt for people with smaller stature, lesser numbers and weaker sections. Sometimes it will be difficult to predict attacking situation. Understanding this will help in defeating the attacker. Whenever it is not possible to prevent it is safe to escape. Therefore understanding the mental state of the attacker helps in preventing the attack or escaping from the attack.

Verbal self defence : Preventing the probable attack by talk, diverting it or ending the attack by talk is verbal self defence. Here words are used as weapons or protective devices.

Self defence techniques

Hands may be used as important weapons for self defence.

1. Punch : Punching is an important part of self defence.

Punch should be effectively used to escape from strong hold of opponent.



a) Upward Punch : Feet shoulder width apart, both fists kept stable near trunk. Now extend right fist straight towards opponent face and turn wrist. Then while withdrawing right fist extend left fist.

b) Middle Punch :

Method : Similar punches are made towards Center of opponent's chest.

c) Lower punch : In this type, the punches are directed towards lower abdomen.





2. Self defence with open palm

a) Hacking with palm: Feet shoulder width apart. Both fists stable near trunk. Right palm is brought near ear in the manner of saluting. Now pushing the palm as in hacking. Next, repeat with left hand.



b) Open palm Push : Feet shoulder width apart. Both fists stable near trunk. Extend right hand forcefully



forwards and give a push. Fingers should be extended. Bring back the right hand and simultaneously pushing left.

Push with palm should be directed towards the chest, jaws, forehead and nose of opponents. Gradually increase the force of push.

c) Pricking from fingers : Feet shoulder width apart. Both fists stable near trunk. Extend right hand forcefully forward fingers should be firmly

extended and ready for pricking. This method may be used to effectively attack the throat of opponents and chest region.



4. Elbow hit :

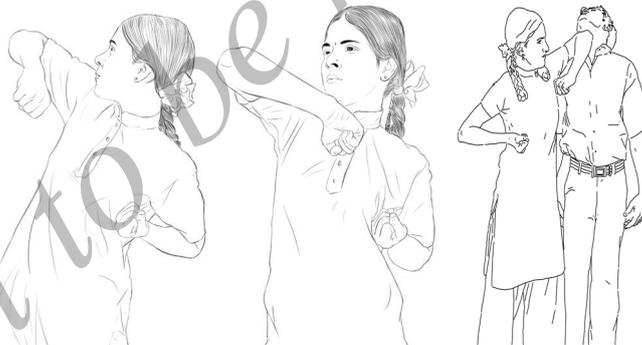
Procedure : 1) Feet shoulder width apart, stand straight. Place fists firmly near trunk. Place right leg slightly backward. Swing right elbow forcefully upward. Similarly swing right elbow.



Procedure : 2) Stand as in procedure 1. Swing right elbow upward in front of your chest towards jaw of the opponent. Perform same movement with left hand.



Procedure : 3) Feet shoulder width apart stands right. Bring right elbow across your chest and look back from left side. Now, bring back your right elbow and repeat the same movement from left side.



These hits have lasting effect because of the rigidity of bones in elbow joint. Elbow hit may be directed towards neck, Jaw, ribs, chest and stomach of the opponent.

II. Method of using legs as a weapon for self defence

1) Snap kick : stand in defensive stance with right leg backward. Bend right knee and swing forward. Now extend the knee forcefully and

kick with flat surface of upper side of feet. Perform the same movement with left leg.

Kick to the suitable area of the opponent.

2) Front kick : stand in defensive stance with right leg backward. Lift right leg up and forcefully kick forward. Extend hip according to necessity. Now bring back the right leg and repeat with left leg.

This kick may be used to target knee, thigh and abdomen region.

3) Side kick : Stand diagonally with right leg backward. Look at the attacker on the right side and kick him with side lower part of feet by lifting the leg.

This kick may be used to target hip, ribs, chest and abdomen region.

4) Back Kick : Stand in defensive stand with right leg forward. Lift right leg backward and kick the attacker with heel by looking at him. Now bring back the right leg to original position. Perform same movement with left leg also.

Knee, thigh, lower abdomen and chest regions can be kicked through this technique.

5) Knee kick : Keep left leg front and lift right knee upward forcefully so that it impacts opponent. Bring right knee to original position and repeat with left leg.

Such kicks may be made towards abdomen, chest, face and other regions of the opponent.

III. Blocks

The hits from the opponent have to be effectively blocked. Hands move defensively to create block for protecting the lateral sides, middle region, head region and lower regions.

Method of blocking the opponents hit and protecting.

1) Situation : Attacker attempts to slap with right hand

Defence : Defensively place left hand against the slap. Attack the jaw or nose of the attacker with base of right palm.

2) Situation : Attacker attempts to hit on the head.

Defence : Lift both hands upward to form 'x', Grasp the attacker's hand with both your hands by twisting. Retain right hand grip and press the elbow of the attacker downwards.



3) Situation : The attacker tries to ditch with head.



Defence : Push the jaw of the attacker from both palms forcefully backward. Grab the head of attacker and pull it downward to ditch with your lifted knee. at last

hit him on the chest and face.

Defence from attacker's grip

Situation 1: Attacker squeezes your neck with both hands.

Defence : Insert both your hands between already grabbed hands of the attacker. Push his hands with outward will all your effort. Slap on his ears with both of your hands. Hit him on his lower abdomen with your knee.



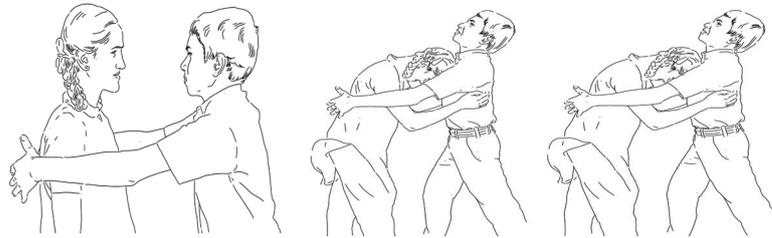
Situation 2 : Opponent holds your left wrist.



Defence : Turn your hand towards his thumb and lift up. Now hit on his out side of the wrist with your right palm. Immediately hit him on his neck with hacking method.

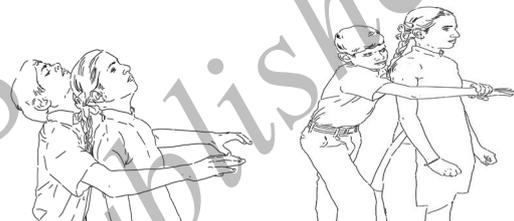
Situation 3 : Opponent hugs from front

Defence : Hit forcefully with your forehead on his face. Now press his eyes with your thumbs and lift his face up. At last hit him on his neck.



Situaton 4 : Opponent hugs you from behind.

Defence : Hit forcefull with your back side of the head on his face or neck. This wil loosen his grip. Now, repidly kick him on his knee and then hit him on his Jaw with your elbow.



Situation 5: Attacker grabs your neck from left side

Defence : Forcefully tap his pelvic region with your left hand. Immediately bend your left elbow and hit him on his face. Then move backward with your left leg and make him fall.

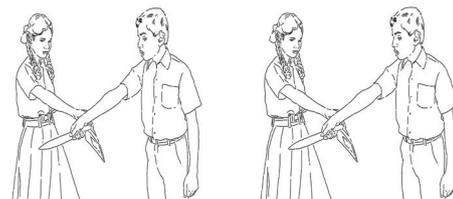
Using available materials as weapons

In threathful situations available materials can be made use as weapons for counter attack and escaping. Making use of available materials is a matter of wisdom.

Kitches utensils are weapons for a housewife. Pen, Pencils, files are weapons for working women. Similarly, female students in schools and colleges can make use of school bag, pen, notebooks as weapons.

1) Using note book for self defence :

A book can be usefull in situations where there is an attack with knife. The book should be held firmly as a hook. A strong blow on the wrist of attacker will make the knife fall.



2) Bag : Swing the bag forcefully and attack on the offender at his face, neck, handset.

EXERCISES

I. Answer the following

1. What is meant by self defence ?
2. Mention the types of self defence.
3. Which are the self defence techniques ?

II. Write short notes

1. Weapon less self defence
2. Mental self defence

III. Write whether true or false

1. Use of physical force in order to escape from the fear of violence is called self defence.
2. Karate, judo are weapon less self defence techniques.
3. Sometimes self defence can be made with appropriate talks.

Know this : Women wrestler of India Sakshi Mallik won bronze medal in 2016 Rio-Olympics. She was born in 1992 at Mokhra of Rohtak District of Haryana. She is a post graduate in Physical Education and works in Indian Railways. In 2016 she was honoured with Rajeev Gandhi Khel Ratna from Government of India.



CHAPTER -14

RECREATIONAL GAMES

You will learn the following games in this chapter

- Unhook the anklets • Tiger-run- Man • Flag war • Newsmen
- Naughty horse • Hand ball • Whose throne is this? • 10 bear • Whose seat? • Capital tour • Challenge. Punjabi Kabaddi

1. Unhook the anklets:

Make two teams and decide the pair who will play against each other from either team. Tie a piece of cloth on the ankles of all the players. The players who are paired against each other try to remove the cloth tied to the ankle of the other player. The team whose most number of players succeed in untying the cloth of the opponent players is the winning team.

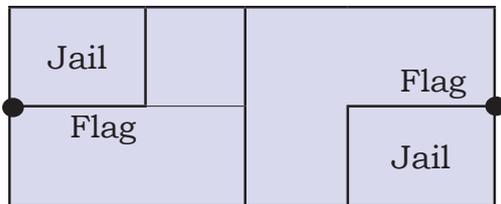
2. Tiger, gun, man:

The players are divided into two teams, the teacher explains the following signs to the players: Tiger is shown by holding both the ears, gun is signalled by making a shooting sign in one hand, and man is symbolised by standing in the attention position. The teams discuss the signal which they are going to show without indicating it to the other team. The teams are made to stand in a line one meter apart. On the signal both the teams simultaneously show the signal. If 'A' team shows tiger and 'B' team shows gun, then the team showing the gun scores one point. Similarly if one team shows man and the other shows tiger, the team showing the man sign wins a point. If a team shows the man and the other shows the gun, the team showing the man wins a point. This way the team scoring the most number of points wins the game.

3. Flag war:

Mark a court in accordance with the number of students as shown in the picture. Station both teams on both sides as seen in the picture.

On the opposite corners of each court fix a flag of each team.



The team which grabs the flag of the opposite team first is the winner. No player is allowed to go outside the court while the game is on. In both the courts, a part of the court should be identified as a prison. While

struggling for the flag the players from either side can be put into the prison. The players who go into the prison are out of the game. If neither team is able to take the opponents flag, then the team which has the least of its members out is the winner.

4. Newsmen:

Arrange the players in two or more lines keeping adequate gap between each of the players. Call the first person from each line and give a message so that no one can hear it. That person should whisper it to the person next in the line, who will do so with the third person and so on. At the end all the last persons of the group will tell the teacher the news that they receive from their teammate. The team which conveys the most accurate message to the one that was given to them in the beginning is the winner.

5. Naughty horse:

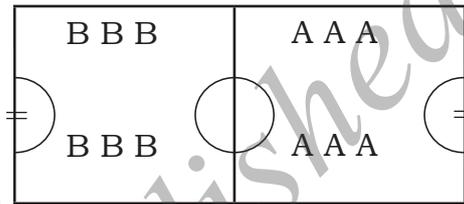
Divide the players into two teams A and B. Each player of team B will stand behind each player of team A. On the whistle the team B players will hop on the back of the team A player (horse) standing in front. The horse will try to shake and put down the B player on the back. After a prescribed time the players still remaining on the horse are counted. Now the roles are reversed and team B players become the horses. After the same amount of time the players on the horses are counted. The team with more number of players stayed on the horses is the winner.

6. Hand ball:

Two teams assemble within a marked area. On both ends of the area two goals are marked about 8 feet wide. A semi circle of about 10

feet radius is marked around each goal. The stands in the centre of the area and tosses a ball in the area. The players catch the ball, pass among their teammates and try to enter the opponents' goal. Each time a player enters the opponents' goal with the ball, he scores a point for his team. At the end of the specified period the team scoring more number of goals is the winner.

Rules: As soon as the ball comes into the hands of the players, it should be passed to the teammates. If the ball is thrown outside the playing area the opponent team will get a throw from the spot where the infringement was made and the game is continued.



7. Gaddi kiski hai (Whose throne is this):

All the players form a circle. Inside the circle a smaller circle will be drawn in which one player will be standing. This small circle is the seat. He should announce 'gaddi kiski hai' (whose throne is this). The other players will shout 'hamari hai' (it is ours) and come one step forward. After three such announcements the person standing in the centre circle should vacate the circle. All the players try to come into the small circle. One can push the other in order to get a place in the circle. After a specified time whoever remains in the circle are the winners. The winners should stand inside the circle and continue the game. Another way to play the game is to make two teams and the team whose player gets into the circle scores one point. The game is played for a specified period and whichever team scores more points at the end of the period is the winner.

8. Our bear:

The players of two teams will form a circle each, about 10 feet away. The players in each circle will face inwards and interlock their elbows and hold the hands in front of the chest thereby forming a fort. One player of each team will enter the fortress of the other team. They are

the bears. When the teacher blows the whistle the bears try to break out of the opponent's fortress and enter their team fort. The bear which reaches his fort first is the winner. While attempting to come out of the fort, the players should not touch the bear with their hands, but must resist the bear from breaking out of their fort.

9. Whose seat?

The players shall stand in a circle. Each one will draw a circle around where he is standing with his feet. The players will tell their names loudly so that everyone can hear them and then run out of the circle. The circles should not be disturbed. The players after meeting the teacher will stay in a different circle allotted to them. The teacher will go to each one of them and ask them the question "Who is the owner of the circle in which you are standing?" The person should tell the name of the player who was originally in that circle. If he is wrong then he is eliminated from the game. The person who remains till the last is the winner.

10. Capital tour:

There should be paper slips the same number as that of the players. On half of the chits the state name is written and on the other half the capital names are written. The chits should be folded and kept at one place. The players will be running in a circle. As soon as the whistle is blown each player picks chits one by one, reads them and asks each other about the state or capital on their respective chits. The one who pairs the state and capital first is the winner.

11. Challenge:

Two teams will stand facing each other about twenty feet apart. A member of one team will come forward, tap the hands of a member of the other team and try to run back to his place. The player who is challenged (whose hand is tapped) tries to tag the challenger before he reaches his team. If the challenger is tagged, he is out and he has to stand behind the tagger. In case the challenged player fails to touch

the challenger, then he is out and he would have to stand behind the challenger. In the same manner every member of the each team will get a chance to challenge the opponents. Which team tags the most number of the opposite team is the winner.

12. Punjabi Kabaddi:

The players of both teams shall stand facing each other about 30 steps away. One team is 'A' and the other is 'B'. A player of team A sits in a small circle near the line formed by team B. As shown where is the picture? the players of team A should stand in their line firmly. Team B players can run around the whole court.

After the game starts, the team A players one by one will chant the word kabaddi and try to touch the team B players. The team B players cannot touch the team A player chanting 'kabaddi'. But they can escape from being touched. If touched by the team A player, such player should sit on the same spot. If the A team player loses the cant, the sitting players of team B shall touch that player from their sitting position. This will result in the whole team A players getting out. If the team A player without losing his breath and saying kabaddi reaches his line safely, another member of the same team will start the game.

Team A player touches team B players one by one and makes them sit. When only one player of team B is remaining, the A player touches his teammate sitting in the circle and if he brings him back to his line without getting touched by any of the team B players, his team wins the game.

Then the game is restarted.

NATIONAL INTEGRATION

CHAPTER 15

VANDE MATARAM



Bankim Chandra

Vande mataram, vande mataram
sujalam, sufalam, malayaja sheethalam
sasyashyaamalam maataram

shubhra jyothsna, pulakithayaamini
pullakusumitha dhrumadala shobhini
suhaasini sumadhura bhaashini
sukhadam varadam maataram

koti koti kanta kalakalaninaada karaale
koti koti bhujaidhrithakharakaravaale
abalaa keno maa etho bale
bahubaladhaarineem namaami taarineem
ripudalavaarineem maataram

tumi vidyaa tumi dharma | tumi hrudi tumi marma
thvamhi praanaaha shareere | baahuthe thumi maa shakthi
hradaye thumi maa bhakthi | thomara prathimaa gadi
mandire mandire

thvam hi durgaa dashapraharanadhaarinee
kamalaa kamaladala vihaarinee
vaanee vidyadaayinee namaami thvaam
namaami kamalaam amalaam athulaam |
sujalaam sufalaam maataram

shyaamalaam saralaam sushmitjaam bhushithaam |
dharaneem bharaneem maataram
vande maataram, vande maataram

-Bankim Chandra Chatarjee

Meaning

Mother I pay my obeisance. You are water laden, you are fruit laden, you blow the perfumed breeze from the malaya mountains, you who dazzle in your green costume I pay my obeisance.

You shine with pure moonlight, You are adorned with flowers and budding fruits, You give peace through your smiling face and sweet words, You who fulfil our wishes mother I bow before you.

You sing melodiously with crores of voices, you wield weapons with your crores of arms, who can call you an orphan? You are powerful in many ways, fearless, destroyer of enemies O mother I bow before you.

You are wisdom, you are right, you are heart, you are soul, you are the life flowing within us, you are the strength born within our arms, you are the devotion pulsating within our hearts, You are the deity which is worshipped in the temples of our country. You are the Durga who wields weapons with your ten arms, Lakshmi play on the army of lotuses, goddess of education I bow before you.

You are holy, auspicious, unique, water and fruit borne O mother I salute you.

You are the likeness of Krishna, ever-smiling and wearing ornaments, mother earth, you who are the cause of everlasting prosperity O mother I pay my obeisance to you.

THEORY

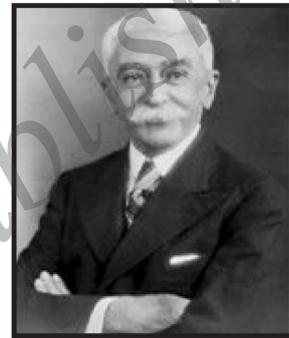
CHAPTER 1

MODERN OLYMPICS AND ASIAN GAMES

You will learn the following points in this chapter

- Origin of modern olympics and its objectives
- The Olympic Flag • The Olympic Torch • Asian Games

The Olympic games are the competitions where the world's best sportspersons are crowned. The Olympics were first started in Greece in 776 BC and continued till 394 AD when the Roman emperor Theodosius put an end to these games. In later years, Baron Pierre De Coubertin of France with his incessant efforts and determination made the modern Olympic games a reality. Baron Pierre



Baron Pierre De Coubertin

de Coubertin was inspired to found the International Olympic Committee (IOC). Coubertin presented the idea of conducting the Olympic games during the first Olympic Congress of the newly created International Olympic Committee in 1894, at the University of Paris, which would internationally rotate between different countries. On the last day of the Congress, it was decided that the first Olympic Games, to be held under the auspices of the IOC, would take place in Athens in 1896. The IOC elected the Greek writer Demetrius Vikelas as its first president and Baron Coubertin the secretary.

The headquarters of the International Olympic Committee which was constituted in 1894, is in Switzerland. It is an independent body and bears the responsibility of controlling and directing the Olympic games.

The Olympics is one of the largest public programmes in the world where competitions are conducted without discrimination of caste, colour and creed. Coubertin proposed the Olympic motto coined by his

friend Henri Didon 'Citius, Fortius, Altius' meaning faster, stronger and higher. It denotes that the main aim of Olympics is to test the skill and physical capabilities of the participating athletes

Olympic Flag

The Olympics games flag was created under the guidance of Baron Coubertin in 1913 and was released in 1914. But it was first hoisted in 1920 in Belgium at the Antwerp Olympic games in the main stadium. The Olympics games flag consists of five interlinked rings of five different colours on a white background.



Pic -1.1- Olympic flag

Olympic Torch

The tradition of lighting 'Olympic Torch' was initiated during the Berlin Olympics (Germany) in 1936 to bring about international integration. The torch is lit at Olympia (of Greece) (using 'sun's' ray and is then relayed on foot in aeroplane or ship when necessary.) The flame in the main stadium of the games is lit with the help of the torch to mark the beginning of the games. The flame in the stadium burns during the games.

Greek poet by name kotis Palamas wrote the lyrics of Olympic hymn Spyridon Samaras composed music for the hymn. As the speedster liked the hymn and its music it was accepted as official anthem.

Know:

- 1) *The Olympics is organised as Summer Olympics and Winter Olympics.*
- 2) *The paraolympic games is conducted soon after the summer olympic games in the same venue.*

ASIAN GAMES

After the second world war many of the Asian countries became independent. Thus all the countries which newly gained freedom, with an intention to show their sporting strength and prowess at the international level, came together and decided to organise a unique games. As a preliminary exercise, Mr. Gurudutt Sondhi who represented the Indian Olympic Council at the London Olympics on August 14, 1948 discussed with all the representatives of the Asian countries the possibilities of conducting the Asian games which would also help to foster mutual understanding and cooperation among them. The Asian Athletic Federation gave their acceptance to this suggestion. Later in 1949 the Asian Athletic Federation changed its name to Asian Games Federation. This federation being an independent body, carries all the responsibilities of organising the Asian Games. In its meeting this Federation decided to conduct the first Asian Games at the Indian capital New Delhi in 1951. These games were conducted successfully, and from there on the Asian games are being conducted one every four years in various countries.

EXERCISES

I. Answer the following questions in one sentence each.

1. Where did the ancient Olympic games start?
2. Who was the founder of Modern Olympic games?
3. In which country was the first modern Olympic games organised?

4. Where is the headquarters of the International Olympic Committee situated?
5. What is the motto of the Olympics?
6. What are the various colours of circles in the Olympic emblem?
7. In which games was the Olympic torch used for the first time?
8. In which country was the Asian Games organised for the first time?
9. Which is the organisation responsible for conducting the Asian Games?

II. Answer the following questions in three or four sentences.

1. What is the Olympics motto? What is its meaning?
2. Explain the meaning of the Olympic flag.
3. Explain the origin of the Olympics torch.
4. Describe the origin of Olympics.
5. Explain the manner in which the Asian games came into existence.

Activities:

- 1) Collect the biodata of Baron Pierre de Coubertin.
- 2) Make a list of cities where the modern summer Olympic games have been organised till date.
- 3) With the help of internet prepare a list of players and athletes who represented India in the recent Olympic Games.

GAMES

CHAPTER 2

VOLLEYBALL

In this chapter you will be introduced to important volleyball players like Shyamsunder Rao, Ramana Rao, Jimmy George, Shridharan, Charles Kiraly and Yamilka Ruiz.

IMPORTANT NATIONAL AND INTERNATIONAL PLAYERS

1. M. SHYAM SUNDER RAO

Hailing from Andhra Pradesh, Shyam Sunder Rao represented India in the 1970s. The Indian government in recognition of his achievements honoured him with the Arjuna award in 1974 and the Dronacharya award for his coaching achievements in 1995.

2. A RAMANA RAO

A Ramana Rao also was from Andhra Pradesh. He represented India in the 1970s. The Indian government in recognition of his achievements honoured him with the Arjuna award in 1978 and the Dronacharya award for his coaching achievements in 1990.

3. JIMMY GEORGE



Jimmy George is from Kerala and was one of the best players that India has produced. He met with a tragic end in a car accident in Italy, where he was playing for a private club.

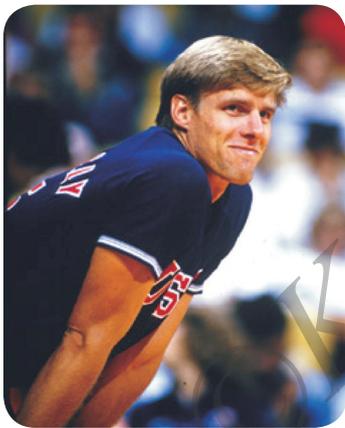
4. J E SHRIDHARAN

Hailing from Tamilnadu, he was one of the best setters in India. Currently he has the responsibility of coaching Indian volleyball teams of different age groups.

INTERNATIONAL PLAYERS

CHARLES KIRALY (USA)

Charles Kiraly born in Michigan (USA) on 3rd November, 1960 has achieved fame in volleyball. He is famously known as 'Karch' in the volleyball world. Honoured as the greatest volleyball player of the 20th century Charles Kiraly represented the American team. His achievements are:



Gold medal in the 1984 Los Angeles Olympics

World cup title in 1985 at Japan

World Championship title in 1986 at Paris

Olympic gold at Seoul Olympics in 1988

Olympic gold at the first beach volleyball olympics competition in 1996 at Atlanta.

With all these titles to his credit he is acclaimed as the world's best volleyball player.

YUMILKA RUIZ



Honoured as the best female volleyball player of the 20th century, Yumilka Ruiz was born in Cuba on May 8, 1979. She has elevated her country to one of the top places at the world level.

Her achievements from 1992 to 2000 are:

Gold medal at the Barcelona Olympics in 1992.

World cup title at the World championships in Brazil in 1994

World cup titles in 1995, 1998 and 1999.

Gold medal at the Atlanta Olympics in 1996.

Gold medal at the Sydney Olympics in 2000.

With all these achievements she has risen to one of the top most positions of volleyball stardom in the world.

You should know: Beach Volleyball has gained popularity in recent times and has been included in the Olympics.

EXERCISES

I Fill in the blanks.

1. M Shyam Sundar Rao is from _____ state.
2. A Ramana Rao was honoured with the Arjuna award by the Indian government in _____ year.
3. In 1990 A Ramana Rao received the _____ award.
4. _____ from Kerala has played for a private club in Italy.
5. Name of the international female volley ball player of Cuba is _____.

II Answer the following questions

1. What are the awards conferred Shri.M.Shyamasandra Rao?
2. List the medals won by Charles Kiraly .
3. What were the medals secured by Yamilka Ruiz?

Activity: 1) Make a list of the names of volleyball players of Karnataka who have represented India at international competitions.

2) Using internet collect photographs of international volleyball players and their achievements .

CHAPTER - 3

HOCKEY

You will learn the following points in this chapter

- Introduction of State, National and International Hockey players
- Tournaments conducted at different levels

Already in the previous classes we have studied the history of hockey, field measurements, equipment and common rules, the achievements of the state and country and sports awards. This year we will learn about the state, national and international hockey players and the hockey tournaments conducted at different levels.

FAMOUS INDIAN HOCKEY PLAYERS

Indian Hockey has witnessed not only the renounced mentors of Hockey but also the wizards of Hockey. People were mesmerized by their attractive game. Brief introduction of such players is given below.

Dhyan Chand Mejor General Dhyan chand singh is a great Indian Hockey player, who was considered as the greatest hockey player, the world has ever witnessed. He represented India three times in Hockey, and was instrumental in scouring 'Gold' medal during 1928 - Amsterdam ; 1932 los-Angoles and 1936 Berlin games. Government of India decorated Maj Dhyan Chand with the highest civilian award "Padmabhushan". His first Hockey coach, having identified his talent gave the title "chand"(moon) and predicted that he would shine like the moon.



Dhyan Chand was first selected to represent India in summer Olympic games of Amesterdam in 1928. India managed to defeat the Netherlands 3-0 with Dhyan Chand's two goals. Then in 1932 Losangeles Games India defeated USA with 23-1 goals to secure Gold medal. In this Mach Dhyan Chand had scored eight goals. During the Hockey tournament of Los Angles games Dhyan Chand had Scored 12 goals in all during 1932 Dhyan Chand had scored 133 goals for India out of 338 goals in various tournaments.

In 1935 during the tour of new Zealand and Austratia out of the total 584 goal in 43 matches, Dhyan Chand had scored 133 goals.

Having impressed by Dhyan Chand, even Adoph Hitler of Grmany had offered him field Marshals Position in his army, which he declined In Germany during the pre-Olypic matches Dhyan Chand had scored 59 goals out of a total of 175 goals of Indian team. During Olypic Games 11 Goals out of the total of 38 goals of Indian team.

Dhyan Chand played Hockey Continuously till the age of 42 years. During the tour of eastern Africa he has scored 61 goals in 22 matches Dhyanchand retired from the sport in 1984 and then went on to earn his diploma in coaching from NIS Patiala.

His birth date 29th August is observed as “Natinal sports Day” in India,

2. Ajit Pal Singh Ajit Pal Singh was an outstanding centre-half of Indian hockey team. He captained the Indian team that played the 1976 Olympics in Montreal. Ajit Pal represented India at the 1970 Bangkok Asian Games and captained the team to the 1974 Teheran Asian Games, whare India won the silver each time. Ajit’s skilful play earned him a place in the Asian All-Star team in 1974. In 1971, at Barcelona ‘World cup’ he won bronze, at the 1973 Amsterdam ‘World Cup’ he won a silver and in 1975 at Kuala Lumpur in what is known as the year of Indian hockey, he captained the team to the World Cup gold defeating Pakistan.



3. Leslie Claudius : Starting his sports career with Hockey Leslie Claudius was one of the finest right-halves of his time. He was a key player in the world-beating Indian team that won three consecutive Olympic gold medals from 1934 to 1956. His name is entered in the Guinness Book of world Records for having won the maximum number of Olypic medals in hockey - three gold and a silver. Claudius was awarded the Padma Shri in 1971 for his contribution to Indian hockey.



4. Dhanraj Pillay : In a glorious career spanning 15 years, Dhanraj has represented India in four Summer Olympics (1992, 1996, 2000 and 2004), four World Hockey Cups, four Champions Trophies, four Asian Games, and four Asia Cups. Dhanraj was the highest goal scorer in the Bangkok Asian Games and was the only Indian player to figure in the World Eleven side during the 1994 World Cup at Sydney. He has also received the Rajiv Gandhi Khel Ratna Award (1999) and been conferred the coveted Padma Shri in 2000.



5. M.P. Ganesh : Hailing from Kodagu, Karnataka, M.P. Ganesh was in the Indian team that won Bronze at the first World Cup at Barcelona in 1971 and captained the team that won Silver at the next World Cup in Amsterdam. He represented India at the 1972 Olympic in Munich, finishing third and settling for a Bronze, He played for World XI in 1972 and Asian XI from 1970 to 1974 and was awarded the Arjuna Award in 1973. He was the coach of the Hockey coaching committee for the 1992 Commonwealth games and Asian games.



6. Mamta Kharab : Hailing from Haryana, She is an attacking player of the Indian Hockey team. She played for India for the first time in 1999 and in the 2000 junior Asia cup she scored the highest number of goals and was awarded the best player of the tournament. She represented the Indian team which secured the fourth place at the 2002 Busan Asian games and won the bronze at the 2006 Doha Asian Games. She won gold at the Asia cup in 2004 and in the commonwealth games of 2002.



7. Suraj Latha Devi : She is from Manipur. She made her international debut in 1994 Indira Gandhi Hockey Gold cup. Championship she represented India in the 1998 Utrecht world cup. she represented India three times at the Asian games, winning silver in the 1998 Bangkok Asian games. She played twice in the Asia Cup winning silver in 1999 and the gold in 2004. In 2002 Commonwealth games she won the gold and in 2003 Afro-Asian games she won the gold for India. She captained the team for many years.



8. Helen Mary Innocent : A goalkeeper, of high caliber, hails from Karnataka. She made her international debut against Germany in 1992. She represented India in the Utrecht World cup in 1998 and twice in the Asian games. She won the silver medal for India in the 1998 Bangkok Asian Games. She won gold and silver in two Asia cups and in 2004 Asia cup she secured the best goalkeeper award. She won silver and gold in two commonwealth games and was instrumental in winning gold at the Afro-Asian games for India. In 2005 Indira Gandhi Gold cup, she captained the team for silver medal



International players :

Dr. Richard Charlesworth : Dr. Richard Charlesworth is a former Australian hockey player and a doctor by profession. He captained the Australian team and was regarded as the world's best hockey player of the decade. He was selected to represent Australia in five Olympics 1972, 1976, 1980 (Captain) (Moscow Olympics were boycotted), 1984 (captain), and 1988. He was a member of the national team which won the 'World Hockey cup' in London in 1986. He played 227 international matches for Australia and was the coach of the victorious Australian women's hockey team for a long time.



2. Shahbaz Ahamad

Shahbaz Ahamad is a former field hockey player from Pakistan. He is considered to be among the best forwards in the history of field hockey. Nicknamed The Man with the Electric Heels he has represented Pakistan in the Champions Trophy tournaments held in 1986, 1987, 1988, 1989; Seoul olympics, 1988; 3rd Asia Cup, New Delhi 1989; 7th World Cup Hockey cup 1990, Lahore, BMW Trophy Amsterdam, 1990, 11th Asian Games Beijing, 1990, 12th Champions Trophy, Melbourne and world Cup Hockey, Sydney, 1994. He is the only player in the history of Field Hockey to win two consecutive player of the tournament awards in world cup (1990, Lahore, and 1994 Sydney.)



3. Floris Jan Bovleander :

Floris Jan Bovleander is a former field hockey player from the Netherlands, who was a member of the Dutch national squad that won the gold medal at the 1996 Summer Olympics in Atlanta. Earlier in 1990, at the Hockey World Cup in Lahore he had scored nine goals. He was famous for his devastating penalty corners, and was nicknamed 'Boom Boom Bovleander'. He played 241 international matches for Holland and scored 216 goals.



4. Jacques Brinkman :

Jacques Brinkman is a former Dutch field hockey player, who twice won the gold medal at the 1996 Summer Olympics in Atlanta and four years later, at the 2000 Summer Olympics in Sydney. In a career spanning more than thirteen years, he played a record number of 337 international matches for Holland as a midfielder. He won the Hockey World Cup in 1990 and 1998, and also the annual Champions Trophy in 1996, 1998 and 2000.



5. Hassan Sardar :

Hassan Sardar is a former field hockey player and captain from Pakistan. One of the best centre forwards that Pakistan has ever produced, he played his first world Hockey Cup in 1982. Sardar scored a record 11 goals in the tournament and Pakistan took the gold. In the 1982 Asian Games he was instrumental in defeating India and winning the gold medal. He played an important role in leading Pakistan to a gold medal at the 1984 Olympics in Los Angeles. He later managed Pakistan to a gold medal at the 1984 Olympics in Los Angeles. He later managed the Pakistani Hockey Team.



World Cup

Bashir Mujid of Pakestan conceived idea of the World Hockey trophy, Which was sponsored by Pakistan milatry. Mr. M. masood, who was the ambassador of Pakistan Belgium handed over the trophy to the president of World Hockey federation Mr Rene frank on March 27, 1971 at Brussds.



This trophy is made of silver and has floral designs. The trophy also has world map engraved on it in gold. It has the base decorated with ivory. On the top of it is a hockey stick and a ball. Excluding the base the height of trophy is 120.85 mm, and including the base the height is 650mm. The trophy weighs 11,560 gram, It is made of 895grams of gold , 68/5 grams of silver, 350 grams of ivory and 3500 grams of teak.

EXERCISES

I Fill in the blanks.

1. India has won the world cup hockey _____ times.
2. National sports Day is observed in the name of _____ .
3. Mamata Kharab is from the state of _____ .
4. World Hockey cup tournament is held once in _____ years between _____ games.

II Answer the following in one sentence each

1. Who is addressed as Wizard of Hockey?
2. When did India win World Hockey Cup?
3. Who has the distinction of maximum Olympic Hockey gold medals ?
4. Who is the sole Hockey player decorated with Rajiv Gandhi Khel Ratna?
5. Who was addressed as man with electric heels and why?
6. Name the Karnataka Hockey Players who have represented India?

III. Write short notes on the following hockey players?

1. Dhyan Chand
2. M.P Ganesh
3. Suraj lata Devi
4. Dhanraj Pillai

Activity: Make a list of countries which have won the world Hockey cup and the year .

CHAPTER - 4

HANDBALL

You will learn the following points in this chapter

- Introduction to handball players
- Torunaments conducted at various levels.

Already in the previous classes we have studied the history of handball, field measurements, equipment and common rule, the achievements of the state and country and sports awards. In this lesson we will learn about the international handball players and the handball tournaments conducted at different levels.

Introduction to International players:

Talant Duyshebaev

Talant Duyshebaev was born in Russia on June 2, 1968. He was a member of the Olympics gold winning team in 1992 and was the highest goal scorer with 47 goals. A year later he won the world championship gold in 1993. Later he secured the citizenship of Spain and played for the Spanish national team for about 10 years. As a member of the Spanish national team he won two olympic bronze medals and one silver and one bronze in the European championships. He was awarded the 'player of the tournament' in the 1997 world championship.



Jackson Richardson

Jackson was born in France on June 4, 1969. He captained the France handball team and was the flag bearer for the 2004 Athens Olympics. He was a member of the winning team in the French League in 1994 and 1996 and also the French cup in 1993 and 1995.



Being a member of the French national team he was instrumental in winning the world championships in 1995 and 2001 for his team. In 1992 Barcelona Olympics he won the bronze. He was awarded the player of the year by the International Handball Federation in 1995. As a fruit of his hard work and intelligence he has been awarded the world's best player for more than 15 years.

Daniel Stephan

Daniel Stephan is from Germany. He was born on August 3, 1973. He was a member of the German national team from 1995. He was a member of the winning team in the European Handball Championship in 2004. Stephan was nominated as the World's player of the year in 1998 and also the German player of the year from 1997 to 1999.



Henning Fritz

Henning is also from Germany and was born on September 21, 1974. He is the famous Handball goalkeeper of Germany. He is the first goalkeeper to have been awarded the Worlds best player in 2004. He has been representing the German national team since 2002. In the same year Germany won the runners up in the European championships held at Sweden. The first match of the world championships in Portugal in 2003 was his 200th match as a national player. He was one of the most important players of Germany.



You should know: During the summer olympics of 1928, eleven countries came together to form the International Amateur Handball Federation.

Handball tournaments conducted at different levels:

State level tournaments

- Under 12 championship for boys and girls.
- Under 15 championship for boys and girls.

- Under 19 championship for boys and girls.
- Association cup for men.

National level tournaments

- Senior national championships
- Federation cup
- Inter zonal championships.

International tournaments

- Championship for SAARC Nations.
- Commonwealth championships for senior and junior sections.
- Asian championships
- Asian Games
- World cup for seniors and juniors in men and women section.

EXERCISES

I Fill in the blanks

1. Daniel Stephan was awarded the worlds best player in _____ year.
2. Talant Duyshebaev is a famous handball player of _____ country.
3. The famous handball player from France, Jackson Richardson was born on _____.

II Answer the following questions

1. Write achievements of Talant Deyshebuv
2. Write about Jackson Richardson
3. Write about Denial stephan
4. Which are the handball tournaments conducted at the state level?
5. Which are the tournaments conducted at the national level?
6. Name any four international handball tournaments.

Activity: Make a list of the countries and the year in which they have won the gold medal in the Olympics. (Handball)

CHAPTER - 5

BASKETBALL

You will learn the following points in this chapter

- State, national and international players
- Tournaments conducted at different levels.

INTRODUCTION OF STATE, NATIONAL AND INTERNATIONAL PLAYERS

Achievements of Indian players

S.V Appayya : He was the first Basketball player Karnataka state (then mysore state) to represent India. He played 1951 Asian Games at Delhi and three test matches at Pakistan.

G. Dileep : He was the first Karnataka state Basketball player to have played in the Olympic games of Moscow 1980. He also represented India in Asian Basketball Championship held in Nagoya of Japan.

R. Rajan : He represented India in Asian Basketball championship between 1983 and 1995. He also represented India in other Asian championship. He captained Indian Basketball team for four years.

B S Goutam : He captained India's junior and senior Basketball teams between 1985 and 1989. He represented he represented India in the following international Championships : 10th Asian Basketball Confederation championship at Manila, 1989, 18th and 19th Asian Basketball Confederation championship held at Seoul (Korea) and Riyadh (Saudi Arabia) and represented the senior Indian team in the Europe cup international tournament, held at Dhaka, Bangladesh in June 2003, where he was adjudged as most-valuable player of the tournament and scored gold medal.

Awards :- 1992-93 Karnataka State Award, 1994-Kreeda Ratna, 1995-Ekalavya Award, 2008-09 Hoysala Award.

Achievements of Indian players

Geethu Anna Jose

Geethu Anna Jose was born in the Kottayam district of Kerala. She was interested in sports from a young age. She started playing basketball from the age of 11 years. She was the ward of the then Indian basketball captain I V Cherian. She played for different teams at the state youth games and was selected for the Indian railways team. She was the first Indian to play in the professional basketball and played in the WNBL (Womens National Basketball League) in Australia and was appreciated for her game in 2008. Later she led the Indian team at an international tournament at Thailand. In 2006 she participated in the Commonwealth and the Asian games and got India the honour of participating in international basketball for the first time. She played for the railways and was the winner for seven consecutive times.

India's famous Basketball players

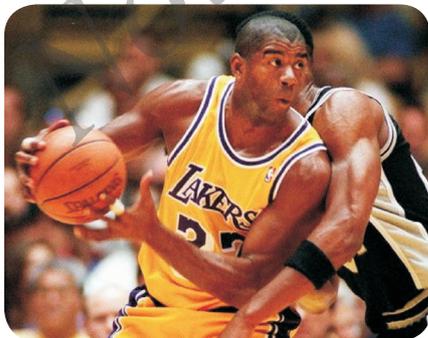


Gurudayal Singh



Vishesh Bhargava

MAGIC JHONSON

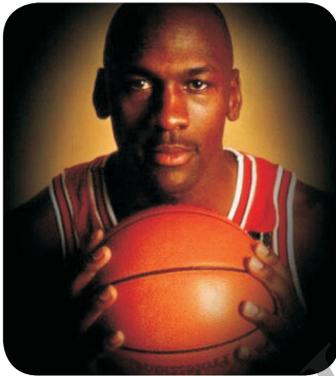


Earvin "Magic" Johnson Jr. was born in Lansing, Michigan, USA on August 14, 1959. He started his high school career with Everett High School and played for different teams at the college level, for Los Angeles Lakers and for the US National team. His achievements include winning the NBA title for nine consecutive years from 1983 to 1991. He received the All Time Star award

for 12 times. He won the gold for the US team in the 1992 Olympics. He is included in the top 50 players of NBA and earned the name “Magic Johnson”. He retired from the game on May 14, 1996.

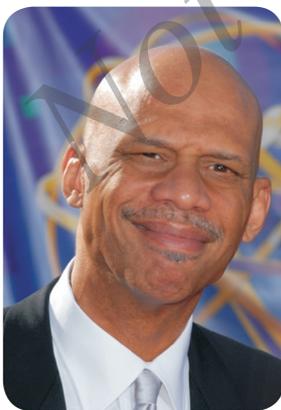
You should know: NBA - National Basket Association

MICHAEL JORDAN



Michael Jeffery Jordan was born on February 17, 1963. He is basically from Brooklyn (New York). He started his high school education at Emsley A Laney High School in 1984 and played for the Chicago Bulls in NBA. His specialty was that he was expert in performing the fade away jump shot. From then on his team climbed the steps of success and made a name for itself in the basketball world. He was known as “Air Jordan Mike”. His achievements are 6 times NBA titles (1991-93 and 1990-98), two times olympics gold medal 1984, 1992, 12 times NBA Star Player and has a record 41694 points. He is recognised as one of the 50 All Time Greats in NBA history. The most important qualities which he had were speed, power and the ability to utilise it. He played his final game on April 16, 2003 in Philadelphia before announcing his retirement from basketball.

KAREEM ABDUL JABBAR



Kareem Abdul Jabbar was born in New York on August 16, 1947. His name was Ferdinand Lewis Alcindor Jr. He attended the Power Memorial Academy, played for the Jersey team and then the NBA. He was 7 ft 2 inches tall and weighed 118.4 kgs. and is known for his excellent ability to score points and awards. He was specialised in the Sky Hook technique to score points. He retired from Basketball on May 15, 1995 at the age of 42.

You Should know : At present wheel chair basketball is introduced for handicapped players.

EXERCISES

I Fill in the blanks

1. Geethu Anna Jose was born in _____ district.
2. The nickname of Michael Jordan is _____.
3. Karim Abdul jabbar is a famous _____ player.

II Answer the following questions

1. Write about the achievements of Geethu Anna Jose.
2. How many times has Magic Johnson won the NBA title?
3. Write achievements of Michel Jorden .
4. Write about the ability of Kareem Abdul Jabbar.

Activity: Make a list of countries which have won the Olympic gold and the year in which they won it.

CHAPTER - 6

BADMINTON

You will learn the following points in this chapter

- Introduction of Badminton players.
- Introduction to Badminton tournament at various stages .

In the eighth standard you have learnt about the history of the game, court measurements and the purpose of various zones, equipment required for this game and the common rules of the game. Last year in addition to learning about the tactics of the game, we also learned about the various achievements of the state and country and the awards and trophies related to this game.

This year let us learn about the achievements of famous players of our state, country and some international players. There are many Karnataka state players who have achieved laurels at the national and international level. Let us know more about them.

Famous players from the state

PRAKASH PADUKONE

Born on June 10, 1955 in Bangalore, he is known as the 'gentle tiger', in the game of Badminton. He is the first Indian to have won the All England Badminton Championship, which is equated with the 'Wimbledon' in Tennis. He was introduced to the game of Badminton in his younger days by his father Ramesh Padukone, who was the secretary of the then Mysore Badminton Association.



His success at the national championships was followed by his inclusion into the Indian team for international competitions. He won the bronze at the Teheran Asian games in 1974. Later in the same year he lost in the quarterfinals of the Commonwealth games held at

Christchurch. But at the commonwealth games held at Edmonton in 1978, he beat Derek Telbot to win the gold. In 1979 he won the English Masters championships at the Royal Elbert hall in London. He continued this success at the Danish Open and Swedish Open championships in 1980.

His win at the All England Badminton championships in 1980 secured him the top ranking in the world. In 1980 at the Swedish open he defeated his idol Rudy Hartono 09-15, 15-12 and 15-01 in the earlier round. This was a memorable moment for him. The Indian government honored him with the Arjuna award in 1972 followed by the Padmashri in 1982. You should know: Prakash Padukone of Karnataka has the honour of being the first Indian Badminton player to have won the All England Badminton Championships.

Know this: Shri Prakash Padukone of Karnataka is the first Indian to have won the “All England championship.”

ANUP SHRIDHAR

Hailing from Bangalore, Anup Shridhar is considered one of the rising stars of Badminton. He won the national badminton championships for three consecutive years in 2004, 2005 and 2006. He is known for his powerful smashes. He qualified for international participation in 2002 and since then has been participating at the international level. In 2005 for the first time he won the 30th Hungarian international competition. In the 2006 Melbourne Olympics he won the bronze medal. On March 2008, when the world rankings were released he stood at the 24th place. He is credited to have beaten the world champion Taufik Hidayat in his career. The Karnataka government honoured him with the Ekalavya award in 2004 and the Government of India bestowed on him the Arjuna award in 2007.



ARVIND BHAT



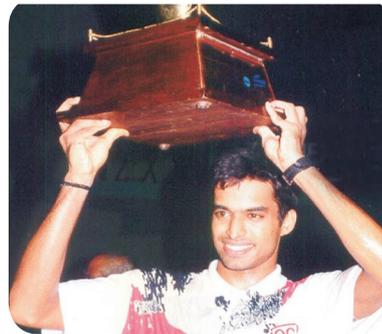
Having honed his skills in the Prakash Padukone Academy, Arvind Bhat at present is ranked 46th in the world and is the national champion. In November 2004 at the Scottish Open Badminton Tournament he beat the third seed Marc Zwiebler of Germany and became the champion. In 2007 at the Caledonia Open Badminton tournament he beat the world 48th ranked player Abian of Spain and emerged the winner. Continuing his success, he won the Czech international open tournament also. In 2007 Arvind Bhat won the

Syrian satellite series tournament and the Jordan open tournament at Amman also. In 2008 he for the first time he emerged the winner in the Tata Open senior ranking tournament. Later in February 2009 he won the national championships for the first time beat P Kashyap. In January 2011, he once again beat P Kashyap to win the national championships for the second time.

Famous National Players

Pullela Gopichand

Gopichand is the second Indian win the all England Championship In 1991 for the first time he was selected to represent Indian at an international competition. He has represented India at the Thomas Cup three times. 1997 proved to be a productive year for Gopichand. At the Indian Grand Prix he defeated many seeded players and attracted attention. In 1999 he won the Toulouse Open championship in France and the Scottish Open in Scotland. 2001 was a golden year for Gopichand. He won the All England Badminton title. He beat the olympic gold medallist Anders Boesen in the quarterfinals, world number 1 Peter Gade in the semifinals and in the finals he beat Chen Hong 15-2, 15-06 in the finals.



For his meritorious achievements in badminton he was awarded the Arjuna award in 1999, 'Rajiv Gandhi Khel Ratna' award in 2001 and the 'Padmashri' award in 2005.

P.V. SINDHU



Pusarla Venkata Sindhu is basically from Andhra Pradesh and was born on 05.07.1995. Securing Silver medal in 2016 Olympics held at Brazil is her highest achievement. She has also won several other international level competitions. She has obtained Arjuna award in 2013, Padmashree in 2015 and Rajiv Gandhi Khel Ratna in 2016. She has won Indonesia open, Macau open, Malaysia masters, China open competitions. She has won one bronze and one gold medal in commonwealth games.

SAINA NEHWAL

Saina Nehwal was born on March 17, 1990 in Hissar, Haryana. Currently (April 26, 2011)

Saina was a national champion of under 19 years of age she created history by twice winning the Asian satellite Badminton championship. She began Philipens open championship as 86th ranked player and won the championship defeating several top ranking players later in the world Federation Cup championship of 2006, settled for second place being defeated by Wong Hian of china in the finals. In the same tournament of 2008 she managed to defeat Sakoya Sato of Japan by 21-09;21-18 and secured the trophy. In 2008 she was identified as the most promising player. Saina Nehwal is recognized on par with Prakash Padukone and Pallela Gopichand she became the first Indian woman to have won the world Badminton Federation super series championship. She was decorated with Arjuna Award in 2009 and with Padmashree in 2010. Then in 2010 she was decorated with the highest sports award of the country 'Rajiv Gandhi Khel Ratna'. She won the commonwealth games 'gold medal' by defeating Wong Nu Chu of Malaysia by 19-21, 23-21, 21-13 and created a history.



JWALA GUTTA

Born in Wardha, Maharashtra on September 7, 1983 and brought up in Hyderabad, Jwala Gutta started playing Badminton from an early age.



She entered the international arena when she participated in the Uber cup in 2002. In 2004-06 she reached the semifinals in the Indian Asian satellite tournament. In 2004 she entered the finals of the Scottish international tournament and the 40th Portuguese Badminton championship. In 2007 she won the Cypress Badminton international championship. In the same year she won the Pakistan International Challenge and Indian International Challenge tournaments. Later in 2008 she won the doubles title in the Nepal International Series tournament and the Yonex Dutch Open Gran Prix tournament. She teamed up with Ashwini Ponnappa and won a gold medal in the women's doubles at the Commonwealth Games 2010 making history of winning the first gold medal for India in the women's doubles. In 2011 they made again history by being the first Indian women's doubles pair to win a bronze medal in a badminton world championship. She has been awarded the Arjuna award for her achievement.

Aparna Popat

Aparna Popat was born on 18 January, 1978 in Mumbai, Maharashtra into a Gujarati family. She won the national championships for girls below 12 in 1989. She captured her first Senior National title at Hyderabad in 1997. Aparna went on to win the Senior National title from 1997 - 2005 for nine consecutive years to create a record in the women section.



She surpassed all her Indian predecessors at the international level. She won the silver medal in the junior world championships held at Denmark. Later she again won the silver medal at the Commonwealth games in 1998. She is the first Indian woman badminton player to have won the French open tournament. In the 2002 Manchester Commonwealth games she won the bronze medal.

She was conferred the Arjuna Award in 2005, one of the highest sporting honours in India awarded by the Government of India. The Karnataka and the Maharashtra Governments have also honoured her for her achievements at the Commonwealth games.

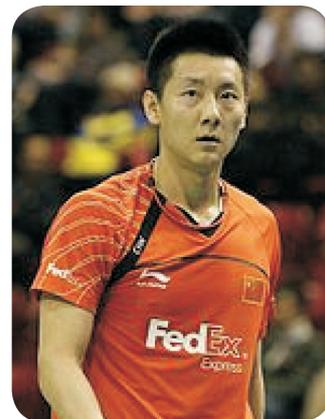
Achievements of International players

Chen Jin

Born in Handan, Hebei in China Chen became the world's sixth ranked player in 2010.

He won the Asian Junior Badminton Championships in 2004, and thus developed into one world's elite men's singles players. His titles include the Polish (2004), French (2004), German (2006), Swiss (2007), and the All England Championships (2008).

In 2008 he won his biggest title to date, the prestigious All-England Championships over his teammate and world number one Lin Dan. At the 2008 Beijing Olympics, however, he was beaten in the semifinal by Lin Dan and had to settle for a bronze medal. Chen was also a bronze medallist at the 2007 World Championships and a silver medallist at the 2008 Badminton Asia Championships. He is a member of China's world champion Thomas Cup (men's international) team which has lifted the highly coveted cup for three consecutive campaigns (2004, 2006, 2008).



In 2010 Chen won the Wilson Swiss Open. Later, Chen represented his country China to play the Thomas Cup Finals. In the final match, he

beat Indonesia's Simon Santoso and helped all his men's team members win the Thomas Cup's gold medals again. Later in the year Chen won the individual gold in the World Badminton Championships in Paris. In the 2010 Asian Games men's team tournament which were held in Guangzhou, China , he beat South Korean Shon Wan-ho and helped secure the men's team gold medal for China.

Maria Kristin Yulianti

Maria is an Indonesian player and was born on June 2 1985. Currently she is ranked 30th in the world. In the 2008 Uber cup she was responsible for bringing her team to the finals. In the same year she surprised everyone by defeating second seeded Zhang Ning in the semi finals of the Indonesia Super Series. But in the finals she was defeated by another Chinese Zhu Lin. The match lasted for one hour and 15 minutes. In this match Zhu Lin had to face penalty for taking extra rest. In the 2008 Beijing Olympics, Mari defeated Lu Lan of China to win the bronze medal.



Badminton Tournaments conducted at different levels

International Tournaments

THOMAS CUP

This is commonly called the world men team championships. The member countries of World Badminton Federation participate in this tournament. When this tournament started in 1948-49 this competition was conducted once in three years. In 1982 the rules were changed and since then the tournament is conducted every alternate year. In the final round of this tournament only twelve countries participate and at the same venue the womens Uber cup is conducted. From 1984 both these competitions are conducted at the same time.



In the twenty six Tomas cup competitions conducted till now only three countries have won the cup. Indonesia is the most successful nation having won the tournament thirteen times. China started participating in the tournament from 1982 and has won it eight times and Malaysia has won it five times.

The Thomas cup and Uber cup are gaining popularity more than the All England Badminton and the World championships and are on the way to becoming the most prestigious tournaments.

UBER CUP

This is commonly called the womens team world championship. The member nations of World Badminton Federation participate in this tournament. When this tournament started in 1956-57 it was conducted once in every three years. From 1984 it is being conducted every alternate year. Betty Uber a British badminton player mooted the idea of introducing a championship for women similar to that of men and hence the cup is named after her.



This tournament is similar to the Thomas cup. In the twenty two tournaments conducted so far China has won eleven times and is the most successful. Japan is second with five wins and Indonesia and United States are joint third with three wins each.

The 2010 Uber cup was conducted in Kaula Lumpur in Malaysia and the 2012 cup was conducted in Wuhan in China.

ALL ENGLAND OPEN CHAMPIONSHIP

This is the oldest and most prestigious tournament. This tournament was first conducted successfully in 1898 and since then it is being conducted every year. At first this tournament was conducted for the men, women and mixed doubles. Later the men and women individual event was



included. The first three tournaments were called 'The Open English Championships'. After the Thomas cup was introduced in 1949 this tournament was officially considered as the world championship. Since 1984 the Yonex company is sponsoring this tournament. This tournament was not conducted in 1915 and 1919 due to world war.

BWF World Championship

Initially it was called IBF world championship. The World Badminton Federation organises this tournament to honour the worlds best players. This competition was started in 1977. Till 1983 these competitions were conducted for every three years. Between 1985 and 2005 these competitions were conducted once in two years. After 2006 this championship is being conducted every year except in the year of the Olympics.

National Tournaments

Major National Badminton Tournament

All India Senior Major Ranking Badminton Tournament

All India Junior Major Ranking Badminton Tournament

All India Junior Ranking Badminton Tournament

Ubi All India Sub-Junior Major Ranking Badminton Tournament

EXERCISES

I Fill in the blanks

1. In the final stage of Thomas Cup _____ number of teams participate.
2. Till present _____ number of tournaments have been conducted in Thomas cup.
3. The All England Open championships are known as _____
4. BWF World championship are called _____

II Answer the following questions in one sentence each.

1. What is Prakash Padukone identified as?
2. What is Anup Shridar well known for?
3. What is the ranking of Anup Shridhar?
4. Write the birthdate and birth place of Pullela Gopichand.
5. Which is the award won by Saina Nehwal?
6. In which champions did Aparna Popat set women's record.
7. What is Thomas Cup commonly called?
8. What is Uber cup commonly called?

Activity: Make a model of the badminton court with the material available to you.

Know this: Cricket is the most popular game in India. Stalwarts of our nation have performed excellently at National and International levels. Karnataka State has given top players to National team. IES Prasanna, B.S. Chandrashekar, G.R. Vishwanath, Javagal Srinath, Anil Kumble, Rahul Dravid, Venkatesh Prasad have immensely contributed. Players from Karnataka have played a major role in India's supremacy at Test, one day and T-20 formats of cricket. Anil Kumble and Rahul Dravid have led the National teams several times.

ATHLETICS

Hurdles

CHAPTER - 7

You will learn the following points in this chapter

- Construction of the hurdle • Details of various races and Rules
- Introduction to international athletes and Records.

This event is one of the track events and usually athletes who are tall with long legs participate in this event.

Construction of the hurdle

1. The hurdles shall be made of metal or some other suitable material with the top bar of wood or other suitable material. They shall consist of two feet and two uprights supporting a rectangular frame, reinforced by one or more cross bars, the uprights to be fixed at the extreme end of each base. The hurdle may be adjustable in height for each event.

2. Width of the hurdle - 1.18 to 1.20 meters.

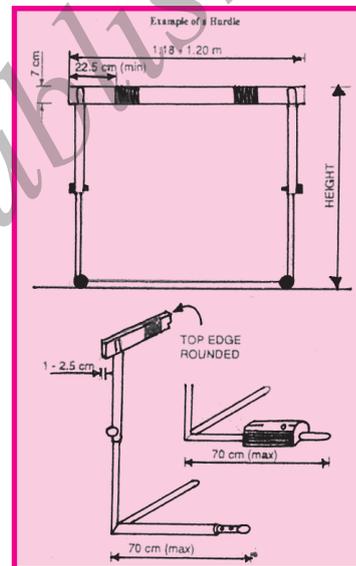
The maximum length of the base - 70 centimetres

The gross weight of the hurdle should not be less than 10 kilograms.

The width of the top bar shall be 7 centimetres. The width of the top bar should be between 1 to 2.5 centimetres. The top bar should be fixed firmly to the hurdles at the extremities.

3. The top bar should be painted with white and black stripes, or with other strong distinctive contrasting colours (and also in contrast with the surrounding environment), such that the lighter stripes, which should be at least 0.225m wide are on the outside.

4. When placing the hurdles in the lanes the legs of the hurdles should be on either side of the lane.



Details about various hurdles races

Age Group	Race	Height of the hurdle	Number of hurdles	Distance from the starting line to first hurdle	Distance between hurdles	Distance from the last hurdle to the finish line
Men	110 mts.	1.067 mts.	10	13.72 mts.	9.14 mts.	14.02 mts.
Boys below 17 years	110 mts.	0.914 mts.	10	13.72 mts.	9.14 mts.	14.02 mts.
Men	400 mts.	0.914 mts.	10	45 mts.	35 mts.	40 mts.
Women	100 mts.	0.84 mts.	10	13 mts.	8.50 mts.	10.50 mts.
Girls below 17 years	100 mts.	0.762 mts.	10	13 mts.	8.50 mts.	10.50 mts.
Women and girls of all age categories	400 mts.	0.762 mts.	10	45 mts.	35 mts.	40 mts.
Boys and girls below 14 years	80 mts.	0.762 mts.	8	12 mts.	8 mts.	12 mts.

You Should know: The following events are conducted for the hurdles races - 80mts., 100mts., 110mts., 400mts.

Rules:

- All the runners should jump over the hurdles in their own lanes from the start of the race till the end.

2. Any runner who infringes any one of the rules given below will be disqualified from the race.

(a) If the runner does not jump over the hurdles.

(b) While clearing the hurdle if the runner touches the leg below the top of the cross bar, or if he/she clears from the side (side hurdling), touches the hurdle with the hand or intentionally topples the hurdle with the leg he/she will be disqualified.

P.T. USHA

P T Usha's full name is Pilavullakandi Thekkaperambil Usha. She is also called the "Payyoli Express". Usha was born on 27th June, 1964 in Payyoli, in Kozhikode district of Kerala. She is one of the most famous sportspersons of India and is called the 'queen of Indian track and field'. She joined the sports school started by the government of Kerala in 1976. She started competing in competitions from 1979. At present she is employed by Indian railways and is running 'the Usha school of Athletics' in Kerala.



SPORTS ACHIEVEMENTS

Usha's talent was identified by O M Nambiar at the National School Games in 1979. She participated in the Moscow Olympics in 1980. She won the silver medals in 100 mts. and 200 mts. at the New Delhi Asiad in 1982. In the Asian track and field championships at Jakarta she created a new record in 400 mts and won the gold medal. Between 1983 and 1989 Usha won 13 gold medals in the Asian Track and Field Meets. At the 1984 Los Angeles Olympics Usha won the semifinals in the 400 mts. Hurdles but failed by a hair's breadth (photo finish) in the finals and lost the third place. She lost the bronze medal by 1/100th of a second. She was the first Indian woman and fifth Indian to have qualified for the olympics semifinals. In the 1986 Asian games at Seoul, P T Usha won 4

gold medals and one silver medal. She won 5 gold medals in the Asian games and created new records in all the events that she participated.

In 1985 at the 6th Asian Track and Field championships she won the gold in 100 mts., 200 mts., 400 mts., 400 mts. hurdles and 4x400 mts. Relay and also the bronze medal in the 4x100 mts. relay. This record of 6 medals in one international meet and the most gold medals by a woman still stands. P T Usha has won 101 international medals.



Awards and Honours

1984 - Padmashri and Arjuna awards

1985 - Best woman athlete at Jakarta athletic meet

1984 to 1987 - Best athlete in Asia

Marshal Tito trophy given to excellent athletes by the Railways.

Adidas Golden Shoe award for the best athlete at the Seoul Asian Games.

30 international awards.

Kerala Sports Journalists Award

Best athlete World Trophy

John Akii Bua

24 year old John Akii Bua, won the 400mts. Hurdles gold with an olympic record in Manich olympics.

In the 1972 olympics, Akii Bua finished the 400 mts. Hurdles race in 47.82 seconds leaving behind some of the best athletes like Ralphman and David Hemery. It was possible only because of his unusual training. Uganda is a place with heavy rainfall. When it was not possible to run in the water



logged areas, he would run in the forests. When he was in shortage of training partners he would race with the zebras on the hills.

Edwin Moses

Edwin Moses is an Olympic champion, an administrator, a tactician, a businessman and a famous sportsman. He is the person who has fought for a drug free Olympic sport and athletes rights. He has created many records at the international level.



In 1979 he took leave from his engineering profession and dedicated full-time to sports. In 1978 he was instrumental in bringing to force the Amateur Sports Congress Law by the American Congress government. Through this law he provided the necessary training and economic facilities to the American sportspersons. He was responsible for the funding of the amateur sports congress through various sources. The International Olympic Committee accepted many of his useful suggestions. In addition to this Moses won the first world title at the track and field world championships in Helsinki, Finland in 1983. His most memorable moment was at the Los Angeles Olympics where he was selected to read the athletes oath. A few days later he won the second olympic gold medal. Moses was an excellent administrator, tactician and a guide who fought against drugs in sports in 1983. He was a member of the athlete's congress from 1983 to 1989. He supervised the drug testing programme. In 1986 he worked in the national and international sports committee and won the bronze medal in the Seoul Olympics in 1988.

Records in the Mens hurdles

110 mts.

Level	Name	Country	Year	Time (seconds)
World	Eris Merit	U	2012	12.80
Olympic	Liu Xiang	S.A.	2004	12.91
National	Siddhanth Tongalai	China	2012	13.65

State	P T Vasudas	India	1999	14.1
Boys below 20 years	Sumant M.K	Karnataka	2011	14.1
Boys below 18 years	Manjunath P.M.	Karnataka	2012	14.3

400 mts. Hurdles

Level	Name	Country	Year	Time (seconds)
World	Kevin Young	United States	1992	46.78
Olympic	Kevin Young	United States	1992	46.78
National	Joseph Abraham	India	2007	49.51
State	K B Thimmaiah	Karnataka	1980	53.0
Boys below 20 years	Jagadeesh Chandra	Karnataka	2013	54.1
Boys below 18 years	Mohan G K	Karnataka	2004	55.4

Records in Women's Hurdles

100 mts.

Level	Name	Country	Year	Time (seconds)
World	Kendra Harrison	U.S.A.	2016	12.20
Olympic	Sally Pierson	Australia	2012	12.35
National	Anuradha Bistal	India	2002	13.38
State	G.G. Pramila	Karnataka	2000	13.65
Girls below 20 years	B. Poonam	Karnataka	1998	14.1

Girls below 18 years	Meghana Shetty	Karnataka	2012	14.0
Girls below 16 years	Pallavi Sukumar	Karnataka	2005	14.6

400 mts.

Level	Name	Country	Year	Time (seconds)
World	Yuliya Pechonkina	Russia	2003	52.34
Olympic	Malainevakar	Jamaika	2008	52.64
National	P.T. Usha	India	1984	55.42
State	A.K. Asha	Karnataka	1996	58.9
Girls below 20 years	Arpitha M.	Karnataka	2012	1.03.3
Girls below 18 years	Shilpa Maglada	Karnataka	2005	1.04.3

EXERCISES**I Fill in the blanks.**

1. P.T. Usha is known as _____
2. John Ari-bua set Olympic records in _____ mitr hurdles.
3. Edwin mosess set maximum records at the _____ level.

II Answer the following questions in one sentence each.

1. What is the width of the hurdles?
2. What is the weight of the hurdles?
3. What is the distance of the hurdles race for boys and girls below 14 years?
4. What is the distances for the hurdles races for men and women?
5. Write the complete name of P T Usha.

III Explain in detail

1. Explain the construction of a hurdle.
2. Write any two violations of rules in hurdles.
3. Give an account the achievements of P T Usha in sports.

IV Match the following.

- | | | |
|--|---|-------------|
| 1. Maximum length of the base of Hurdle | - | 0.762 mts |
| 2. Width of top bar of the hurdle | - | 1 to 2.5 cm |
| 3. Thickness of top part of the hurdle | - | 70 cm |
| 4. Height of hurdles for women's 400m Hurdle | - | 7.0 cm |

CHAPTER - 8

RACE WALKING

You learn the following points in this lesson

- Various races
- The fundamental rules and tactics of the race.
- Records, Indian and International athletes.

History

The walking competition started in England about 400 years ago. In the 1904 Olympics race walking was introduced in the Decathlon event for a distance of 880 yards. Later in 1906 the 3000 mts walk was unofficially conducted. In the 1908 Olympics officially the 1500 meters. And the 3000 metres walk races were added. Britain's George Larmer won both the races. In the following years the walk racing distance was finalised in 1932 as a 50 kilometres and 20 kilometres for men. In 1992 women walk event for 10 kilometres was introduced. In 2000 it was changed to 20 kilometres.

1. Fundamental rules of the competition

1. The toe of the rear leg should not leave the ground before the heel of the front foot has made contact with the ground.
2. The supporting leg (front leg) should be straight from the point of contact with the ground and should remain straightened till the body directly passes over it. The body should be erect.
3. The walking style or technique should not change.

2. Disqualifying fouls

1. A change in the walking style or technique.
2. The competitor will float/run/or lose contact with the ground or not maintaining a straight supporting leg. The judges will detect the foul visually and after confirming they will give a warning. When a competitor receives three warnings from three different judges such competitor will be disqualified.

- If a competitor blocks another competitor or elbows him and prevents him from overtaking him, such competitor will be eliminated from the competition.

You should know: International walking race was conducted in the garden city of Bangalore.

3. Details of various races

		Racing Distance	
Sl. No.	Age group	Men/Boys	Women/Girls
1	Below 18 years	5 kms.	3 kms.
2	Below 16 years	5 kms.	3 kms.

These races are conducted on the track and on the road.

4. Start of the Race

- The race will be started by assembling the athletes behind the at the starting and line in a bunch start and firing the gun. The gun is fired after the command 'on your marks' is given.

5. Safety and Medical arrangements

- The required medical facilities must be provided to the participants.
- Adequate water and light food should be available at the start and finish.

Definition of Race Walking

Walking means progression of steps so that the walker maintains continuous contact with the ground, without visible loss of contact. The advancing leg must be straightened (not bent at the knee) from the moment of first contact with ground until the vertical upright position. The rear leg should leave the ground after the heel of the front leg has touched the ground. This way the walker has to move forward without visible (to the naked eye) loss of contact with the ground.

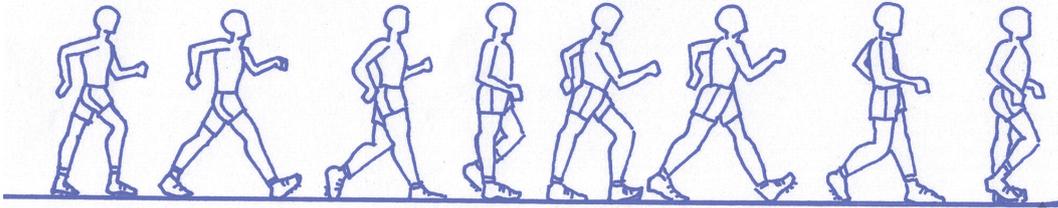


Fig-8.1

National Walking athlete Siri Chand Ram

Chand Ram was born on January 26, 1958. He is an accomplished walker for India. He won the gold for India in the 20 kilometre walk event at the 1982 New Delhi Asian Games.

He performed creditably at the 1984 Los Angeles Olympics. He has been awarded the Arjuna award and the Padmashri award by the government of India.

National Walking athlete - Gurmeet Singh

He was placed sixth at the 18th Dublin International Grand Prix, in Ireland in 2011 with a time of 1:22:07 sec. thereby passing the 'A' qualifying mark (qualifying mark was 1:22:30) for the 2012 London Olympics. Though walking event is not very popular Gurmeet Singh has achieved the 'A' qualifying mark for the London Olympics. He is the national record holder for the event and includes Yogasana in his training schedule.



International Race Walking Athlete

Jared Tallent

Jared was born on October 17, 1984 at Ballarat in Australia. He secured his first Olympic medal at the 2008 Beijing Olympics when he won the bronze medal in the 20 kilometre walk. A week later in the 50 km walk he secured the silver medal. He is the first Australian after 1972 to have won 2 medals in athletics in the same Olympics. He was

placed sixth and seventh in the 20 km and the 50 km walk at the world championships in 2009. In 2010 at the 24th World Race Walking cup at Chihuahua, Mexico he won the bronze medal. He won the gold medal at the 2010 Delhi Commonwealth Games. He started the year 2011 with a gold in the 20 km walk at the Australian National championships.



Jane Saville

Jane Saville is the bronze medal winner at the Athens Olympics in 2004 and is the world's number one marathon walker.

She kept her national flag high by winning Olympic bronze medal at Athens after 30 years. She showed excellent technique from the start to finish. She was ranked first in the marathon Walkers list in the ranking list published by IAAF in 2004. At the 2000 Sydney Olympics while leading in front of the home crowd of about 80000 and with 150 metres to finish she was disqualified for lifting. But she was among the ten best athletes published by a sports magazine.



She won the 20 km race in Manchester Commonwealth games in 2002. This was her first major event for her after she got disqualified in 2000 Sydney Olympics. She clocked her best timings in the three years when she was placed eleventh at the 2003 world championships. Jane broke her Australian record in the 2004 World walking cup. In her twelve years career she secured a gold in the commonwealth games and represented her country at the Olympics. She broke the Australian record of Kerry Junna-Saxby in 2000. She created a new record in an athletic meet held in Germany.

EXERCISES

I. Answer the following questions.

1. Explain the walking style in a walking race.
2. Write the rules of race walking.
3. Write any one rule violation in race walking.
4. How do you start a walking race?
5. Write the date of birth and birth place of Jared Tallent.
6. After how many years did Jared Tallent achieve the feat of winning two medals in the an Olympic athletic event?

II. Match following.

1. Siri Chand Ram - Selection to London Olympics
2. Gurumit Singh - 20km Walking Race
3. Jane Seville - Arjun Award

Activities: The students along with their parents should involve in walking activities everyday for at least 20 minutes.

Note : Students should collect present State, National and International level records in walk race.

CHAPTER - 9

DISCUS THROW

You will learn the following points in this lesson

- Measurement of the circle
- Rules
- Achievements of national and international athletes
- Records

In ancient Greece during the times of the poet Homer (9th century BC) discus throw was an important entertaining event. Homer has described discus throw in his poems.

Construction of the discus: The discus is made from wood or any other suitable material. It is spherical in shape and its edge is lined with metal rim. The width of this metal is about 6 millimeters. In the centre part of the discus there is a metal core, though the discus can be prepared without the metal also. But the centre part of the discus (the width of the metal insert) should be flat and the specifications should be uniform.

The discus should possess the following specifications

Discus	Men	Women and all juniors	Youth (men)	Junior (men)
The minimum weight for ratification of record.	2.000 kilograms	1.000 kilograms	1.750 kilograms	1.500 kilograms

The throwing circle:

The diameter of the inner part of the circle is 2.50 meters. The rim of the circle should be at least 6 millimeters thick and painted white. On either side of the circle and perpendicular to the throwing sector a white line at least 75 centimetres long and 5 centimeters wide is drawn or painted on either side of the circle.

Throwing sector:

The area within the sector should be made of cinder, mud, grass or other suitable material so that the landing discus will make a mark on the surface.

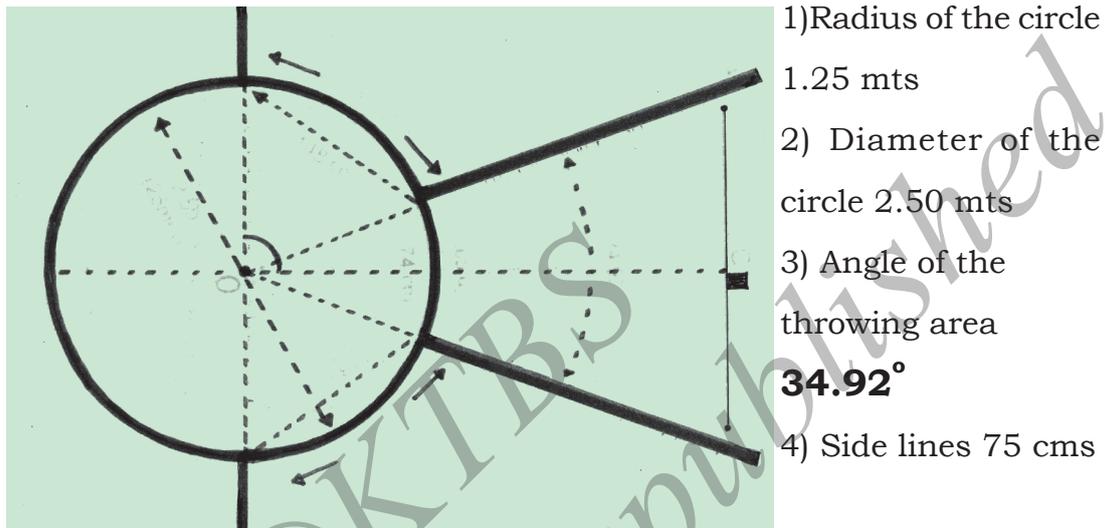


Fig -9.1- Throwing sector

Rules of Competition

The discus should be thrown from inside the circle and the thrower should start his throw from a stationary position. The thrower is allowed to touch the inner part of the rim of the metal insert on edge of the circle.

In the following situations the throw of a participant will be called a foul.

1. Once the thrower starts his throw from a stationary position, touching the ground outside the circle, or the top of the metal rim of the circle with any part of his body is a foul.

2. On landing, the discus should make an initial mark inside the sector lines. If the first mark is made by the discus on or outside the sector lines, the throw is a foul.

3. After the throw, the thrower should not leave the circle until the discus has landed. While leaving the circle, the thrower should come out of the circle behind the foul lines which are extended on either side at the centre of the circle.

State athletes

Vikas Gowda

Vikas Gowda hails from Mysore. With his excellent performance he qualified himself for the 2012 London Olympics.



He has settled in United States and from several years is receiving training from the former champion John Goodina at the world throw centre. His father Shive Gowda was his first teacher. Initially Vikas started his athletic career with the long jump.

He got the 11th place in the 2004 olympics, 2012 olympics he got the 22nd place, bronze medal in the 2010 Asian games, silver medal in the 2010 Commonwealth games, and 7th place in the 2011 world championships.

His best throw is 66.28 mts. which he achieved in April 2012 at the Oklahama in the discus throw challenge and thereby erased his previous best of 64.96 mts.. With this achievement he is in the forefront of discus throwers this season.

Vikas Gowda is 6 feet 9 inches tall and weighs 110 kgs. He is a graduate in Mathematics.

You should know: In the 2012 London Olympics Vikas Gowda from Karnataka secured the eighth place.

National Discus Thrower Krishna Poonia

Krishna Poonia is the national discus thrower of a proud India. She created a new national record by throwing the discus to a distance of 61.51 mts. At the Delhi Commonwealth games on October 11, 2010 and clinched the gold medal. She qualified to participate in the London Olympic games.

Krishna Poonia is the first Indian female athlete to have won a gold in the commonwealth games in the track and field events which is did on 11-10-2010. In 1958 at the Cardiff Commonwealth games Milkha

Singh had won the gold medal in the 440 yards race. Fifty two years after Milkha Singh did so, Krishna Poonia won the gold medal for India.



At the Doha Asian games she threw the discus to a distance of 61.53 mts. thereby achieving a personal best and winning the bronze medal. She won the gold medal at the 46h Open National Athletic championships. Krishna Poonia was born to a Jat family in Agroha, Hissar district of Haryana in 1982. She married Virendra Singh in 2000. The couple are employed in the Railways. Virendra Singh himself was an athlete. The Rajasthan government has rewarded her with 10 lakh cash prize for her exceptional performance.

Awards

Arjuna award in 2010. Maharana Mewar award from the Mewar Association. Bhayani Singh award from the Jaipur Royal family. Bheem award from the Haryana government.

International athletes

Jurgen Schult

Jurgen Schult was born on 11-05-1960 in Amt Neuhaus in Germany. He was a track and field athlete from Germany. His world record throw in Discus established in 1986 still stands to this day. This record is in itself a record for being unbeaten for the longest time ever in track and field. Jurgen Schult represented East Germany in 1988 Seoul Olympics and won the gold medal. Later he continued his sports career for unified Germany. He won the silver medal in the 1992 Olympics and the 1999 world championships. At the age of 40 years in 2000, he participated in his last Olympics and secured the eighth place. He did not participate in the 1984 summer Olympics since his country boycotted the games. In the East German Meet in 1986 he created the world record with a throw of 74.08 mts. His throw obliterated the old record created by the Soviet athlete Yuri Damchev by 2.22 mts. Schult has a degree in Sport and in 2002 he joined the German Track and Field Association Discus team as the coach.

Discus Throw records (Men)**Men Discus Throw Records**

Level	Name	Country	Year	Distance (mts.)
World	Shult Jurjen Schult	Jarmani	1986	74.08
Olympics	Virgilijus Alekna	Lithuania	2004	69.89
National	Vikas Gowda	India	2012	66.28
State	Vikas Gowda	India	2012	66.28
Boys below 20 years	Sheethal Kumar	Karnataka	2008	46.72
Boys below 18 years	Gautham G.	Karnataka	2013	48.20
Boys below 16 years	Thippanna L	Karnataka	2006	39.91

Women Discus Throw Records

Level	Name	Country	Year	Distance (mts.)
World	Gabriele Reinsch	East Germany	1988	76.80
Olympics	Martina Hellmann	East Germany	1988	72.30
National	Krishna Poonia	India	2012	64.76
State	S Chitra	Karnataka	1995	48.80
Girls below 20 years	Priyanka G.S.	Karnataka	2014	41.93
Girls below 18 years	Niveditha Sawanth	Karnataka	2015	39.96
Girls below 16 years	Niveditha Sawanth	Karnataka	2013	35.84

EXERCISES

I. Fill in the blanks

1. The weight of the discus for women is
2. The edge of the discus is made up of
3. The length of the extension line is centimeters.

II. Answer the following questions in one sentence each.

1. Write the diameter of the discus throw circle.
2. What is the meaning of sector in discus throw?
3. What is the weight of the discus for the discus throw competition for men?
4. Where was Jurgen Schult born?
5. Where was Krishna Poowa Born?

III. Answer the following questions in 3 to 4 sentences each.

1. Write any two violation of rules which will result in foul in discus throw.
2. What is the meaning of landing sector in Discus throw?
3. Draw the discus throw arena and name the parts.
4. In Whose name does the discus throw record for men stand and what is the record.

Activity: Collect the pictures of national and international discus throwers.

YOGA

CHAPTER - 10

MEDITATION

In this chapter we learn Meditation : Its meaning- Achieving concentration through dhyana and benefits of dhyana.

Introduction :

Man is suffering from several diseases in the present scenario due to stress and mental instability. Inappropriate life style and lack of mental stability are the main reasons for this. Dhyana (Meditation) referred in Ashtanga Yoga of Patanjali Saga is a major dimension and practice of meditation helps in solving the problems of man. Meditation helps in achieving mental concentration in students.

Meaning of Meditation:

Releasing the mind from distractions and concentrating on a particular object or subject is called meditation. Involving mind in creative activities, thinking only about such activities, ending all sorts of confusions needs immense practice. Such a practice will give relief to the mind and develops immense mental strength. This leads to development of qualities like concentration, affection, patience, brotherhood, forgiveness.

Effortlessly concentrating on one aspect and deriving pleasure is meditation. It is the happiness obtained by attaching good thoughts with the mind and thereby having control over it.

Method of Meditating

The meditator follows the methods of meditation - posturer and mudras as per his own mental decisions.

Padmasana, Vajrasana, Swasthikarana, siddhasana, Bhadrasana, sukhasana and Standing posturer may be selected for meditation.

1. Trunk , back, neck should be aligned during meditation.
2. The distractors should be avoided and one useful aspect should be selected in the mind. The mind should fully concentrate on the aspect.
3. Every matter should be cautiously thought.
4. Meditation should be pleasureable and performed in appropriate position.

5. Strong will is required for practice.
6. The mind with inner strength when focused on an aspect or object leads to deep meditation.

Benefits of Meditation

1. Develops mental concentration.
2. Mind gets free of all distractions.
3. Body and mind gets filled with joy.
4. Control over breathing process can be achieved.
5. Creativity increases. Mental stability is derived in the areas of work.
6. Lightness, stability and clarity is obtained to meditator. Anger enmity can be kept away and love, brotherhood as well as sustenance gets increased.
7. Meditation inculcates the quality of sitting in one place, thinking of one aspect and understanding of one aspect.
8. Meditation helps in improving the mental status of patients. Meditation sessions are conducted in some of the National and International Health Centers.

EXERCISES

I Answer the following

1. Mention the meaning of meditation.
2. What are the benefits of Meditation?
3. Which is the method of meditation ?

II. Fill in the blanks

1. _____ is aligned in meditation.
2. _____ can be achieved through meditation.
3. _____ increases due to practice of meditation.

III. Match the following

- | | |
|-----------------------------|--------------------------|
| 1. Way of deriving pleasure | - Required for practice. |
| 2. Body and mind | - Creativity increases |
| 3. Strong will | - Practice meditation |
| 4. Due to meditation | - To obtain joy. |

Activities: Perform meditation for 10 to 15 minutes every morning and evening systematically. Understand the effects.

HEALTH EDUCATION

CHAPTER - 11

COMMUNITY HEALTH

You learn the following points in this chapter

- Waste disposal
- Cleanliness of wells and lakes
- Sewage
- Supply of potable water

WASTE DISPOSAL

In every community, people living in every house or apartments create different types of waste. This waste can be classified into two groups.

Wet waste products

Eg: Faeces, Urine etc.

This kind of waste if disposed of around the house, streets, sewers, borewells, wells, the stagnant water around them creates an opportunity for mosquitoes and flies to breed. Therefore arrangements must be made to prevent the stagnation of water. Spraying kerosene and other insecticides on the stagnant water will prevent the breeding of mosquitoes.

Arrangements must be made to see that the wet waste is disposed off in the proper sewers.

Solid waste products

“Any material produced by the residential houses, commercial, industrial, mining and agricultural activities or any other unnecessary materials which cause problems to the environment can be classified as solid waste.”

Disposal of garbage depends on the local situation. The house and surroundings should be kept neat. The garbage should be collected in a dust bin or box. It can also be kept in a big box or plastic bins. The dust bins should be emptied everyday.

The solid waste that can be found in our society

Sl. No.	Waste	Method of disposal	Reason
1	Glass bottles	Burying	These cannot be burnt or used for manure. If they are broken they cause injuries.
2	Waste from vegetable source	Composting	It decays and increases the fertility of the soil.
3	Boxes	Burying	Cannot be burnt or used for storing purposes. They should be smashed before burying.
4	Paper, rags or other inflammable material	Burning	These take long to decay, so it is better to burn them. Burning plastic results in toxic gases, so plastics should be buried.

Solid waste should be collected in one place, which should be disposed by burning.

In rural areas of India, the system of collecting and disposed of waste and swage system does not exist.

Dispose solid waste by a proper and scientific method, Sort the waste before disposing them. Solids that cannot be burnt such as metals may be use in landfills. Burn the solids that can be burnt. in specially designed incinerators. This way many communicable diseases can be Controlled.

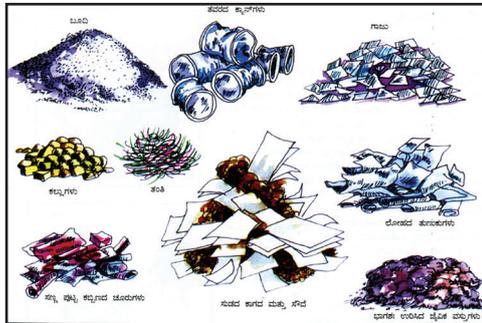


Fig -10-1- Solid waste

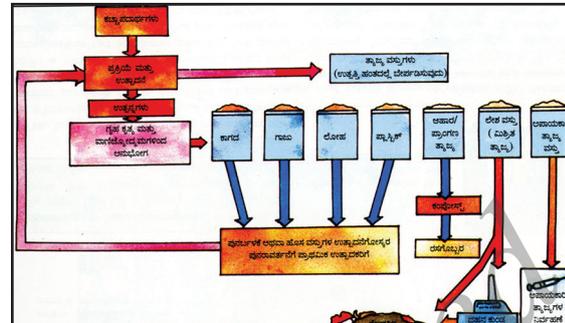


Fig -10-2- Manage of solid waste

2. Disposal of wet waste products (sewage):

Flowing dirty water, detergents, commercial and domestic waste and many living and non living pollutants are present in the sewage.

In the rural areas of India there is no facility for storing and disposing of domestic waste and the drain water. The water is disposed off through the gutters.

The sewage and wet garbage can be processed in the sewage processing plants and this water can be used for agricultural and industrial purposes. A picture of the model of the processing methods of wet waste products is given below.

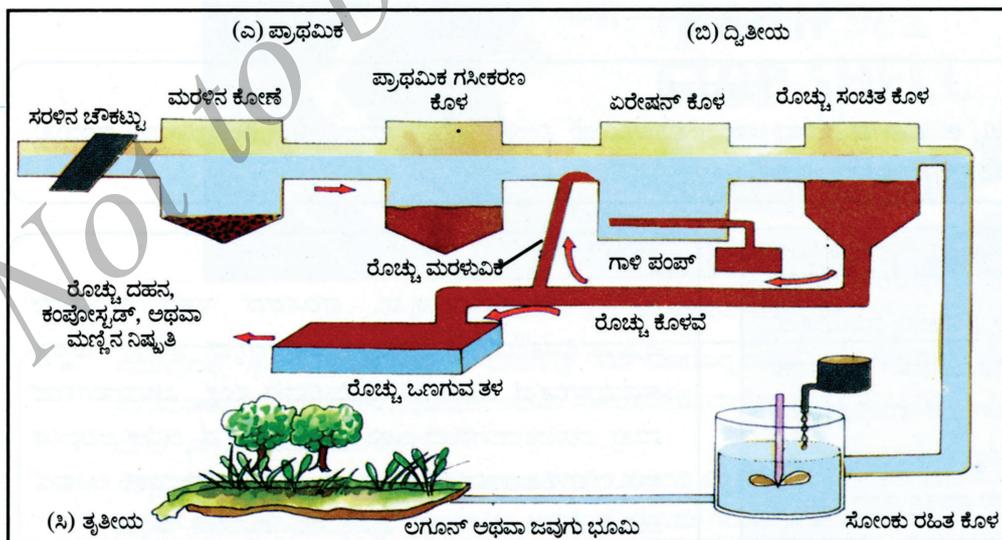
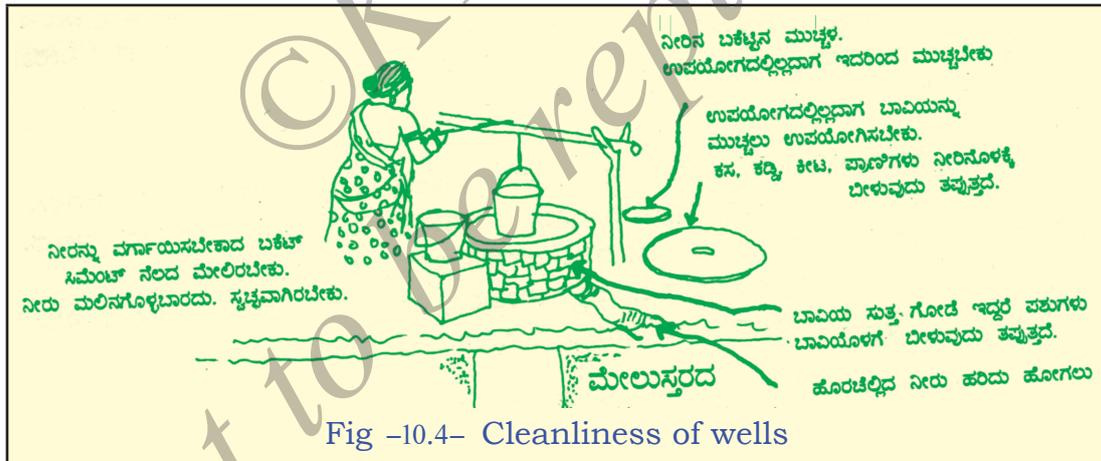


Fig -10.3- Purification of sewage

3. Cleanliness of wells and lakes.

Cleanliness of wells

1. There are two types of wells. Open wells and tube wells.
2. It is better if there are no industries around wells.
3. When the wells are not used, closing the opening with wooden or metal sheets prevents dust, insects or other vegetation from fallen into them.
4. A raised wall should be built around the open wells.
5. A concrete platform built for the purpose of keeping buckets will prevent the water from getting polluted.
6. One should ensure that water overflowing from the wells is dried up which would prevent growth of mosquitoes.



Cleanliness of lakes

1. A lake filled with silt reduces its capacity for retaining water. Therefore it is important to desilt lakes.
2. Most of the lakes depend on the rains for water. In summer they dry up.
3. Cattle should not be bathed in the lakes.
4. Clothes and utensils should not be washed in the lakes.

5. One should ensure that the surroundings of lakes is clean.
6. Waste should not be disposed in the lakes.
7. By building an embankment or wall around the lakes, one can ensure that the lake is not polluted.
8. Water flowing in open drains and unchecked water should be prevented from flowing into lakes.

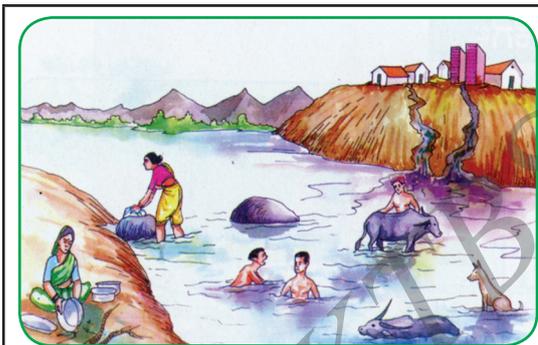


Fig -10.5- Contaminated lake

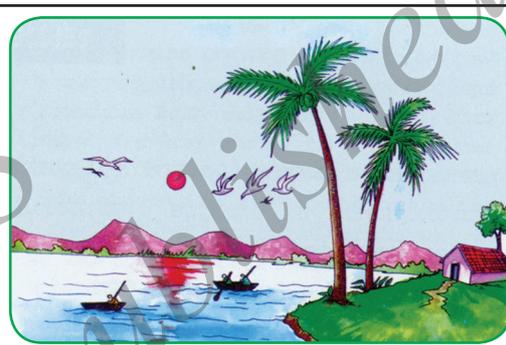


Fig -10.6 Clean environment

4. Supply of clean drinking water

“Water , water everywhere but not a drop to drink anywhere”, the English poet Coleridge has said this suitably by observing the drinking water situation in many countries. There is enough water everywhere. But most of it is polluted making it unfit to drink. Drinking water helps man to live. It also helps other organisms. But polluted water spoils the health of a person.

Water is more important than food for man. It is the basic service of the community health services to provide clean drinking water to the people. Clean water refers to water that is not contaminated by dirt, bacteria, parasitic organisms etc. Clean water is very essential to the community.

Purified water is important for a healthy life. Many of the health problems arising in India and other developing nations is because of the scarcity of clean water. Experts predict that the diseases and other illnesses in India can be reduced by fifty percent if clean and potable drinking water is provided to people. Clean water is essential for drinking, cooking and other domestic purposes. Clean drinking water is also a gift

to good health. It is possible to provide clean drinking water through personal and community efforts. Safe and potable water should be free of dangerous infectious agents and industrial chemical agents. It should be suitable for cooking. Provision of clean water which is free of pollutants can be said to be 'potable water'.

EXERCISES

1. Fill in the blanks

1. By spraying on stagnant water, one can prevent the growth of mosquitoes.
2. There and types of wells.
3. Large lakes depend upon
4. Clean water is important for

II 1. Answer the following questions.

1. Who produces waste products?
2. Write the different groups of waste products?
3. How do you dispose of wet waste products?
4. Which are the wet waste products?
5. Which are the solid waste products?
6. How do you dispose of solid waste products?
7. What does the drainage water consist of?
8. Write about cleanliness of wells.
9. Write about cleanliness of lakes.

Activity: Learn to classify the wet, solid and dry waste products in your house and the surrounding areas.

CHAPTER - 12

FIRST AID FOR DROWNING

You learn the following points in this chapter

- First aid for a drowning casualty
- Bandages used in various situations.

If a person who is drowning is rescued immediately and if breathing is restored, his life can be saved. Sometimes a person who was drowning and is rescued, might have lost consciousness and his breathing might have stopped. In such a case it is necessary to activate his breathing through artificial means.



Loosen the clothing of such a person, lie him face down on the ground with the head turned to one side. Kneel astride him over his back as shown in the picture. Hold him firmly by the ribs with both hands. Relax your arms and stand up. By doing this your body weight will fall on the person's chest. This will put pressure on his diaphragm. Maintain this position for two seconds and come back to the kneeling position and stay in this position for 3 seconds. Now the pressure on the diaphragm is decreased. This way do the maneuver 12 times per minute till the water in the lungs is emptied and the victim starts breathing again. The casualty will start breathing with a cough. Contact a doctor or transport the casualty to the doctor as soon as possible.

You should know: The person giving first aid should not assume the role of a doctor.

Bandages used in various situations

Medicated plaster: Band aids



Various types Band-aids

These can be used for any small open wounds. These bandages are commonly carried in the first aid kit.

Elastic Crepe bandage:



These hold the joints stable. These bandages are elastic in nature and are used to add compression to the injured area. These bandages are fixed firmly with the help of metal or similar clips.

Sterilised gauze rolls



These bandages are used to cover open wounds to reduce bleeding and prevent infection. They are available in different sizes and can be used to dress wounds of different sizes. These are available in 2" x 2", 3" x 5", 5" x 9" or in still bigger sizes.

EXERCISES

I Fill in the blanks

1. If a nearly drowned person is rescued and immediate arrangements are made for artificial respiration his can be saved.
2. The condition where a person who is unconscious and his breathing is stopped is
3. can be used for small wounds.
4. Elastic crepe bandage is used to add stability to
5. Sterilized gauze pads are used on open wounds to prevent and

II Answer the following

1. What is suffocation?
2. Write first aid to a person who has drowned
3. What is the use of elastic crepe Bandage?
4. What are the uses of sterilized gauze rolls?

Activities: Organise mock first aid presentation.

CHAPTER 13

COMMUNICABLE DISEASES

You learn the following points in this chapter

- Malaria, Cholera, Tuberculosis, Typhoid, Influenza – The causes, symptoms, methods of spread, prevention and control of these diseases.

Communicable diseases are those diseases that spread from one person to another. These diseases can spread from man to man or animal to man. Communicable diseases spread from contact with the infected material or person.

I Malaria: Malaria is a communicable disease which has been plaguing our country from many years. This disease is mostly seen during the months of May to September.

Causes:

- Stagnant water, septic tank, drainage, gutters, feed the mosquitoes. They lay eggs and produce young ones. The mosquitoes bite the persons living in these areas.

Symptoms:

- The fever increases day by day or fever and chill on alternate days.
- Presence of fever, chill, and shivering. If the fever persists for many days one can suspect malaria.

Methods of spread:

- This disease is spread through female anopheles mosquitoes. This mosquito bites the person and sucks blood. The plasmodium bacteria present in the blood multiplies in the body of the mosquito. Later when the same mosquito bites a healthy person the bacteria is passed on to his blood and results in the spread of the disease.

Control and precautionary measures:

- Spray pesticides in areas where water is stored and the mosquitoes multiply such as stagnant water, septic tanks, gutters, fields etc.
- Spray pesticides such as DDT, BHC, malathion etc around the house.
- Use mosquito nets when sleeping.
- Install meshes on the windows to prevent the mosquitoes from entering the house.

II. Cholera: This disease is seen mostly in the months of May to October.

Causes:

- Cholera is caused by the bacteria vibrio cholera. It is spread by the intake of contaminated food and water. Flies are the vectors which cause this disease.

Symptoms:

- Intermittent vomiting and diarrhoea. The vomit and stools take the form of clear fluid called 'rice water' about 30 to 40 times a day.
- Due to extreme dehydration the patient becomes weak and the body becomes cold.
- The blood pressure drops and there is severe stomach pain.

Methods of spread:

- Insects like house flies, mosquitoes, cockroaches come into contact with the faeces of the infected person and they sit on the food and water thereby spreading the bacteria. The uninfected person upon injecting this infected food is infected by this bacteria.

Control and precautionary measures:

- Sterilization: Proper disposal and treatment of infected a fecal waste water produced by cholera victims and all contaminated materials (e.g. clothing, bedding, etc.) are essential.

- Sewage: antibacterial treatment of general sewage by chlorine, ozone, ultraviolet light or other effective treatment before it enters the waterways or underground water supplies helps prevent undiagnosed patients from inadvertently spreading the disease.
- Sources: Warnings about possible cholera contamination should be posted around contaminated water sources with directions on how to decontaminate the water (boiling, chlorination etc.) for possible use.
- Water purification: All water used for drinking, washing, or cooking should be sterilized by either boiling, chlorination, ozone water treatment, ultraviolet light sterilization, or antimicrobial filtration in any area where cholera may be present.
- The patient should be kept hydrated by giving water, electrol, lime juice etc,

III. Tuberculosis: Tuberculosis is a communicable disease and it affects the organs of the respiratory system. Sometimes it also affects other organs.

Causes:

- It is spread through contaminated atmosphere.
- It is spread through human beings and animals.
- It is spread through the bacteria called 'mycobacterium tuberculosis.
- The bacteria is transmitted mostly through the cough and sneezing of the infected person.

Symptoms:

- The sputum filled cough does not reduce even after 15 days.
- Blood can be detected in the sputum.
- There is frequent fever.
- Pain in the chest.
- Digestion capacity decreases.
- Weakness continues to increase.

Methods of spread:

- This disease is spread mostly due to the patient spitting wherever he wants.
- It can also spread when the patient coughs or sneezes without covering his nose or mouth.
- It is also spread when the hukkah or cigarette is shared by many persons.

Control and precautionary measures:

- The patient should not spit in all places. He/she should cover the mouth or nose when coughing or sneezing.
- Tuberculosis is diagnosed through the tuberculin DPD Purified Protein Derivative test.
- All person within 30 years should be given BCG vaccine.
- As soon as the symptoms are seen the person should be taken to a doctor.

IV Typhoid:

Causes:

- This disease is spread through contaminated food, milk and water transmitted by flies.

Symptoms:

- The fever continues and does not reduce even after 3-4 weeks.
- The body becomes hot and headache is present.
- Stomach ache and loose stools increases.

Methods of spread:

- Typhoid fever — also known simply as typhoid — is a common worldwide bacterial disease transmitted by the ingestion of food or water contaminated with the faeces of an infected person, which contain the bacterium *Salmonella enterica*, serovar Typhi. The bacteria is spread through the feces of the infected person. Flies are the vectors for this disease. The disease is spread through contaminated water, milk, and food.

Control and precautionary measures:

- The stools of the patient should be kept faraway from the sources of water. The contaminated material should be burnt. After the cleaning of the patient the hands should be washed with soap and water.
- Drinking water should be boiled and cooled.
- Milk should be adequately heated before being consumed.
- The environment should be kept clean.
- Inoculation should be done against Typhoid.
- Food should be kept closed and eaten when it is hot.

You should know: It is possible to prevent many diseases by following good personal hygiene.

V Influenza:

Causes:

- Contaminated environment.

Symptoms:

- The patient has shivering and chills and suffers from fever.
- There is throat pain and headache.
- Stomach ache and loose stools increases.

Methods of spread:

- The patient himself spreads the disease through air and also by direct contact.
- The disease is spread through Influenza virus.

Control and precautionary measures:

- One should prevent contact with the patient and also from the articles used by him.
- Nose and mouth should be covered while sneezing and coughing.
- The clothes of the patient should be sterilized in boiling water and dried.
- Separate utensils should be used by the patient for eating and

drinking.

- The patient should take nutritious food and do adequate exercise.
- The patient should take rest and live in well ventilated surroundings.

EXERCISES

I Fill in the blanks

1. As a precautionary measure for Malaria we should put meshes on the doors and windows to prevent the entry of _____
2. _____ chemical should be sprayed to prevent the spread of Cholera.
3. Tuberculosis is caused by _____
4. The full name of flu is _____

II Answer the following questions in one sentence

1. Which is the mosquito that causes malaria?
2. Cholera is caused by which bacteria?
3. The clothes of the cholera patient should be washed in which solution?
4. Tuberculosis is connected to which organ?
5. What is the cause of Typhoid?
6. Write the preventive measures for influenza.
7. Write the symptoms of cholera?

III Answer the following 2-3 sentences

1. How does communicable diseases spread?
2. Mention the control and preventive measures of malaria.
3. Write the causes of tuberculosis.
4. Write the methods of spread of influenza.
5. What are the symptoms of tuberculosis?

Activity: Cultivate the habit of washing hands before and after eating food.

CHAPTER 14

LIFESTYLE DISEASES

You learn the following points in this lesson

- Cardiovascular diseases arising out of lifestyle, causes of diabetes and the preventive measures.

Lifestyle diseases, also known as ‘non-communicable diseases’, are conditions associated with the way people live and behave (as opposed to infectious diseases – which have less to do with human behaviour).

Lifestyle diseases are those conditions usually due to dramatic shifts in the way humans live their lives, often due to advancements in a society or its scientific progress.

Some of the common disorders and diseases among the people due to wrong lifestyle are:-

- | | |
|------------------------|--------------------------|
| 1) Alzheimer’s disease | 2) Asthma |
| 3) Cancer | 4) Type 2 diabetes |
| 5) Heart disease | 6) Chronic renal failure |
| 7) Depression | 8) Obesity |

Causes

The primary cause is poor diet, lack of exercise, smoking, consumption of excess alcohol, and even poor sleep. Lifestyle habits such as excess tension, no social life, lot of traveling, no specific eating habits and changes in eating hours, etc. also contribute to these diseases.

Lifestyle diseases are known as silent killers. Due to industrialization there is advancement in the life of the people according to which lifestyles changed, resulting in increased consumption of junk food and practice of very little physical activity.

Prevention of Lifestyle diseases

Lifestyle diseases can be prevented by changing our lifestyle. Following are the some important steps which can counter-attack the ill-effects of our wrong lifestyle:

- 1) Performing regular exercises.
- 2) Balanced diet.
- 3) Reduction in unnecessary food consumption.
- 4) Avoiding junk food.
- 5) Proper eating times and habits.
- 6) Regularly doing yoga to refresh your mind and body.
- 7) Meditation.
- 8) Sharing your thoughts with your friends

Obesity

Obesity is a medical condition in which there is excess accumulation of fat. This creates undesirable effects on health. Health related problems increase due to obesity and reduces the quality of life. This is a universal problem affecting people of all age groups.

Obesity leads to several diseases. Cardiac diseases, diabetes, cancer, osteoporosis are prominent. Although there are several reasons for obesity, excess of food intake and lack of physical activity are the major one. The remedy to obesity is controlled diet and appropriate physical activities. Instead of suffering from physical and mental distress due to obesity it is appropriate to prevent it.

BLOOD PRESSURE

Meaning

Blood pressure is a measure of how hard the blood pushes against the walls of the arteries as it moves through the body. Blood pressure goes up and down throughout the day, but if it stays up, then one has high blood pressure. Another name for high blood pressure is hypertension.

Blood pressure consists of two numbers: systolic and diastolic. A person with a systolic pressure of 120 and a diastolic pressure of 80 has a blood pressure of 120/80, or “120 over 80.”

- The systolic number shows how hard the blood pushes when the heart is pumping.
- The diastolic number shows how hard the blood pushes between heartbeats, when the heart is relaxed and filling with blood.

Adults should have a blood pressure of less than 120/80. High blood pressure is 140/90 or higher. Blood pressure between these values is called pre-hypertension condition. It is necessary for people with pre-hypertension to change their lifestyles to avoid or delay the onset of hypertension.

Causes of High Blood Pressure

Some of the causes of blood pressure, include being overweight, drinking too much alcohol, having a family history of high blood pressure, eating too much salt, and getting older.

Blood pressure may also rise if one is not very active, one does not eat enough potassium and calcium, or when there is a condition called insulin resistance.

When blood pressure is high, it starts to damage the blood vessels, heart, and kidneys. This can lead to heart attack, stroke, and other problems. High blood pressure is called a “silent killer,” because it doesn’t usually cause symptoms while it is causing this damage.

Symptoms

High blood pressure does not usually cause symptoms. Very high blood pressure can cause headaches, vision problems, nausea, and vomiting.

Diagnosis

Most people find out they have high blood pressure during a routine doctor visit. A person is considered to be in hypertension when the blood pressure is 140/90 on three or more occasions.

Treatment

Blood pressure can be lowered by making healthy changes in your lifestyle. If those lifestyle changes do not work then medication can be done.

Prevention of high blood pressure

Making lifestyle changes can help to prevent high blood pressure. One can:

- Stay at a healthy weight or lose extra weight.
- Eat less salt and salty foods.
- Exercise regularly.
- Follow the DASH eating plan (Dietary Approaches to Stop Hypertension). This diet is rich in fruits, vegetables, and low-fat dairy products.

CARDIOVASCULAR DISEASES

Cardiovascular disease (CVD) is a group of diseases affecting the heart and blood vessels. Diseases of the cardiovascular system affect the pumping ability of the heart, cause failure of the valves, or result in narrowing or hardening of the arteries. In addition, toxins and infectious agents may damage the heart and blood vessels. CVD is a family of diseases that includes hypertension, atherosclerosis, coronary heart disease, and stroke.

Arteriosclerosis

Arteriosclerosis is hardening of the arteries. When the coronary arteries (arteries of the heart) are involved, it results in coronary artery disease (CAD). The hardening of the arteries is due to the build up of fatty deposits called plaque, and mineral deposits. As a result, the supply of blood to the heart muscle is reduced and can lead to deficiency of blood (ischemia) to the heart. This will cause chest pain or a heart attack (myocardial infarction). The hardening of the arteries causes an increase in resistance to blood flow, and therefore an increase in blood pressure. Any vessel in the body may be affected by atherosclerosis.

Coronary Artery Disease

Coronary artery disease (CAD) refers to the conditions that affect the coronary arteries and reduces blood flow and nutrients to the heart. It is the leading cause of death worldwide in both men and women. Atherosclerosis is the primary cause of CAD. The risk factors associated with CAD include hypertension, cigarette smoking, elevated blood lipids (e.g., cholesterol, triglyceride), a high-fat diet (especially saturated fats and trans-fatty acids), physical inactivity, obesity, diabetes, and stress. Lifestyle changes can assist in prevention of CAD.

Stroke

Stroke, or a cerebrovascular accident (CVA), occurs when the brain does not receive sufficient oxygen-rich blood through blood vessels or when a blood vessel bursts. A stroke may result from blockage of the blood vessels due to a blood clot (ischemic) or from ruptures of the blood vessels (hemorrhagic bursts). Uncontrolled hypertension is a major risk factor for strokes.

Preventing Cardiovascular diseases

Heart attacks between the ages of forty and sixty are primarily due to lifestyle factors. Smoking, high blood cholesterol, high blood pressure, and lack of physical activity are the most serious risk factors for CVD and heart attack. Controlling one of these risk factors can help control others. For example, regular exercise can help control cholesterol, blood

pressure, weight, and stress levels. Smoking is the most preventable risk factor.

For optimal health, the following measures are recommended:

- Maintaining a healthy weight.
- Limiting dietary fat.
- Reducing salt intake.
- Following a diet which includes adequate whole grains, fiber, fruits and vegetables.
- At least thirty minutes of moderate physical activity, five times a week.
- You should know: With a disciplined and controlled diet we can prevent many lifestyle diseases.

DIABETES

Glucose is the main source of energy, just like car needs petrol to run. Glucose is derived from carbohydrates such as starch and sugars; for example bread, cereals, fruits, milk, pastries etc. When the glucose which is supplied to the body is in excess of its need, the excess glucose is stored in the liver. When the body is unable to regulate blood glucose levels, it results in too much glucose in the blood resulting in a condition called Diabetes.

The blood glucose level is regulated with the help of insulin, a hormone (or chemical messenger) produced in the pancreas. The normal blood glucose level ranges between 80-120 mg/dl of blood.

Effects of diabetes

High blood glucose levels may damage blood vessels and nerves.

These complications of diabetes can cause damage to eyes, nerves and kidneys and increase the risk of heart attack, stroke, impotence and foot problems.

Symptoms of diabetes

- Thirst
- Frequent urination
- Tiredness or lack of energy

- Blurred vision
- Weight loss (in Type 1 diabetes)

TYPE 1 DIABETES

Type 1 diabetes occurs in about 10-15% of all cases of diabetes. It usually occurs in people under the age of 30, but can happen at any age.

The pancreas stops producing insulin and therefore glucose cannot enter the muscle and other body cells. This results in a rapid build up of glucose and ketones in the blood stream.

Treatment

Replacement of insulin by injections (usually several times a day), balanced with healthy eating and guided by regular monitoring of blood glucose levels.

TYPE 2 DIABETES

The majority of people with diabetes have type 2 diabetes. This type of diabetes usually occurs in people over 30 years of age but may also occur with overweight teenagers and children with a family history of diabetes. Type 2 diabetes can be triggered by lifestyle changes such as overweight and inactivity.

Treatment

Healthy eating and physical activity are the first steps to getting blood glucose levels and blood pressure under control. Antidiabetic pills and insulin injections can be used at some stage to manage diabetes.

EXERCISES

I Fill in the blanks

1. The values for normal blood pressure is _____
2. High blood pressure is also called _____.

3. One of the ways to prevent lifestyle diseases is _____
4. Stroke refers to the disorder of the _____
5. _____ and _____ are major reasons for obesity.

II Answer the following questions in a sentence

1. What is the meaning of Lifestyle Diseases?
2. When do you say a person has high blood pressure?
3. Write the meaning of cardiovascular diseases.
4. What is diabetes?
5. What are the different types of diabetes?

III Answer the following questions in about two to three sentences.

1. What are the different type of lifestyle diseases?
2. Write the meaning of blood pressure.
3. What is atherosclerosis?
4. What is stroke?
5. What is Coronary Artery Disease?
6. What is systole and diastole?
7. What are the different cardiovascular diseases?

IV Answer the following questions in a paragraph each

1. What are the causes for lifestyle diseases?
2. What are the preventive measures for lifestyle diseases.?
3. How can you treat or prevent hypertension?
4. How would you prevent cardiovascular diseases?
5. Write the effects and causes of diabetes.
6. What are the causes and symptoms of hypertension.
7. Explain type I Diabetes.
8. Explain type II diabetes

Activity: Engage in sports activities of your interest every morning and evening. at least for one hour a day.

CHAPTER 15

NATIONAL INTEGRATION

You will learn the following points in this chapter

- Meaning, importance and necessity
- Factors influencing national integration
- Physical Education and national integration

Meaning

Unity means that the various parts of a single system is united into one whole unit. Unity is achieved when all the parts of a system function with mutual understanding and are united to achieve a common cause. This results in the effective functioning of the whole unit. When this type of unity is to be achieved, the individual parts have to identify themselves with the whole, make changes within themselves and possess the characteristics of the whole system. But even then, the individual units should retain their individuality in the process of performing its duties and developing themselves. In other words Unity can be said to be the combination of individual units into a whole in such a manner that it retains its individual characteristics and at the same time is an integral part of the whole.

Integration means that all the individuals of the society feel that they are an important part of the society. Every member of the society identifies himself with the society, state and nation in which he resides and inculcates the societal values, rules and regulations and behaviour of that society. Even though every individual has his own aims and ambitions, behaving in a way that his own welfare depends on the welfare of the society is called integration. A society and such a state comprises individuals and communities, associations, institutions, groups, families etc. built on the basis of race, colour, religion, caste etc. Every community, society and institution should develop its aims and objectives to improve the welfare and uplift the whole society. Developing such common feelings and sentiments in the subjects of that society can be called integration.

A nation comprising varied societies can achieve progress only through divergent and lateral thinking. Suppressing of diverse beliefs and varied interests in the name of unity is detrimental to the progress of that society/country. Therefore in a society with diverse cultures and interests should be encouraged and tolerated. This kind of nature and attitude is the foundation of a democracy. Tolerance is the keyword of integration. The citizens of the country should go beyond the narrow minded boundaries of religious beliefs, castes, language and so on. Developing such a broad minded spirit which shows that we are the citizens of one nation is called national integration.

1. Importance and need for National Integration In a democracy integration is as important as diverse ideas and behaviour. Tolerating and respecting the culture, traditions, behaviour, likes and dislikes, beliefs is the essence of national integration. This attitude is an important aspect of democracy. Only through tolerance and mutual respect can the importance of individual freedom and human rights be safeguarded.

2. Another important characteristic of national integration is mutual faith and belief which eliminates the feelings of fear, hatred and suspicion in others.

3. If the associations and institutions related to different languages and religions could develop their aims and objectives on the lines of national objectives, it could develop the efficiency and will power of the nation.

4. Diverse ideas and interests lead to convergent thinking. Convergent thinking encourages creativity in the society and thereby leads to the progress of the society. This is possible only through an integrated society. Therefore national integration will result in a prosperous nation.

Factors which influence national integration

1. Cultural factors: The different communities of a country have their own system of expression. Language, way of dressing, traditions, food habits, architectural system, rules and regulations, religion, beliefs differ from community to community and from place to place. In every community there are people with varied beliefs and attitudes. The narrow minded attitude of such communities, societies and regions that their own culture, religion, language, policies is better, false prestige, egoistic attitude bear a negative influence on social and national integration.

Developing a broad minded attitude of identifying the good qualities in and the similarities among different cultures and a bringing about a positive attitude among the citizens of a nation should be done through education.

2. Mental development factors: Depending on the opportunity that he gets, every individual in the society, institution, association, group acquires different mental characteristics. His intelligence level, level of perception and understanding, problem solving ability will vary. These differences can be seen among the people of cities and rural areas. This should not cause differences among the people of a nation. Therefore providing equal opportunities to all the citizens is everyone's duty and responsibility.

3. Physical factors: Though a human being is similar in all aspects, people belonging to different races and regions develop different physical characteristics. These characteristics are inherited genetically. These physical differences also can prove to be a hurdle to national integration. But all the physical processes in a human being are the same among all the people. The water, air and food required for sustenance is the same for everyone. The innate tendencies of everyone is the same. If there is the feeling that no one is superior or inferior in any race or caste then, national integration is developed.

4. Economic factors: Intellectual development and acquisition of life skills influence the economic differences among different people and different communities. These economic differences among different people and communities affect not only national integration but also influence education, mental development and potential opportunities of future generations. Therefore it is the responsibility of the society to reduce the economic differences between the rich and the poor.

5. Geographical factors: Throughout the world human beings live in different geographical areas. They consider that the region in which they live is their personal property and the natural resources available in those areas are meant only for them. They resist transgression from outsiders. Every nation divides its regions into different states for administrative conveniences. The people of different states of one nation do not encroach upon each other. The borders of a state are merely imaginary. The natural resources of a nation are public property.

Everyone has got equal right over them. Misuse of such resources denies the others the right to use them. It is everyone's duty to protect the rights of our fellow citizens. National integration is possible only through such an attitude.

Physical Education and National Integration

Physical Education and sports has the ability to bring about integration at different levels, in different ways and among different communities. The means for this is the activities that are involved in physical education and sports. The people who manage physical education and sports activities knowingly or unknowingly contribute to such integration. The methods in which physical education and sports develops and integration among people is discussed here.

Physical education develops unity among children through culture. Every school has children of different religions and cultural backgrounds. Though they speak in the same language, their behavioural habits, beliefs are different. But in a physical education class the physical education teacher has to make classifications, make houses for intra mural competitions or select a student for the school team based on certain established norms and in an impartial manner. For example the height, weight or other physical characteristics may be the norms. By following this procedure the beliefs, habits and behavioural patterns are avoided. It means that their beliefs and religious habits are not considered. Therefore when participating and competing in physical and sports activities the children keep aside their caste, religion, habits and depend solely on their physical abilities.

In this manner when the children represent their school teams and participate in inter school competitions, they realise that even in different schools and regions there are sports persons with the same physical skills and abilities. The children become aware that just as in their school, in other schools also there are students of different castes and religions, they realise that these students are selected on the merit of their abilities. This develops the attitude that language, caste, colour, religion should be limited to their respective homes and when you come out all are one.

When the children, youth and adults, represent their respective school, community, district, zone and state teams, they interact with people of different religious and cultural backgrounds. This gives them the opportunity to informally discuss and understand the differences and similarities among themselves.

When the children represent their states and participate in national competitions, they cross over the borders of their respective states. While crossing their state borders they do not experience the feeling of fearlessness and freedom from anxiety. This makes them realise that the state borders are “merely there for convenience purposes” and they feel that “in reality we are all one.”

Sports provide equal opportunities for personality growth and development of abilities. Training in physical education and sports is physical in nature. In these circumstances it is not possible to train on the basis of religion, language and habits. Sports and physical activities are not the property of a single community. Though Dronacharya rejected Ekalavya for archery training merely for the reason that he was not a kshatriya, present times it is not possible to reject a student on the basis of religion and colour. Is it not true that a winner will have to occupy the winners place on the victory stand irrespective of whoever he is?

When the children and youth compete with sportspersons of neighbouring or far away states they realise that “though the physical appearance and colour is different are the physical abilities are the same. Strength is strength, speed is speed and agility is agility. But the possession of such abilities is different and the difference in winning and losing is in proportion to the difference in these abilities. Such differences in physical abilities are based on the dedication, effort and devotion to training shown by that sportsperson.” When such an attitude is developed in the children they appreciate and respect their rivals. The competitors may belong to any religion, region, may speak any language, may practise any tradition, but none of these factors affect the appreciation and respect that they earn.

Therefore sports and physical education is a means or a medium to cultural integration. This is an excellent platform for not only national but also international integration. In this aspect sports act as a catalyst for integration. For example in IPL cricket tournament which is being conducted for the last three to four years, all the cricket players worldwide participate for different teams without any discrimination. Under the leadership of Chris Gayle all the national players of the Bangalore Royal Challengers team show extreme dedication and respect.

You should know: National integration can be developed by participating in national festivals and sports activities.

EXERCISES

I Fill in the blanks.

1. _____ part of a whole is integration.
2. _____ is the key word integration.
3. Physical education develops _____ integration.
4. Sports and Physical Education is a means or a medium to _____ integration.
5. _____ progress is possible through National integration.

II Answer in one sentence each.

1. What is unity?
2. What is integration?
3. What are the cultural factors of 'National integration' ?
4. What are the economic factors of 'National integration' ?

III Answer the following in two to three sentences each.

1. What is meant by 'achieving unity'?
2. What is national integration?
3. Write the importance of 'National integration' ?
4. What are the factors that bring about 'National integration' ?
5. How is 'National integration' brought about by physical education and sports.

Activity: Celebrate the national festivals in your own homes just like your religious festivals.