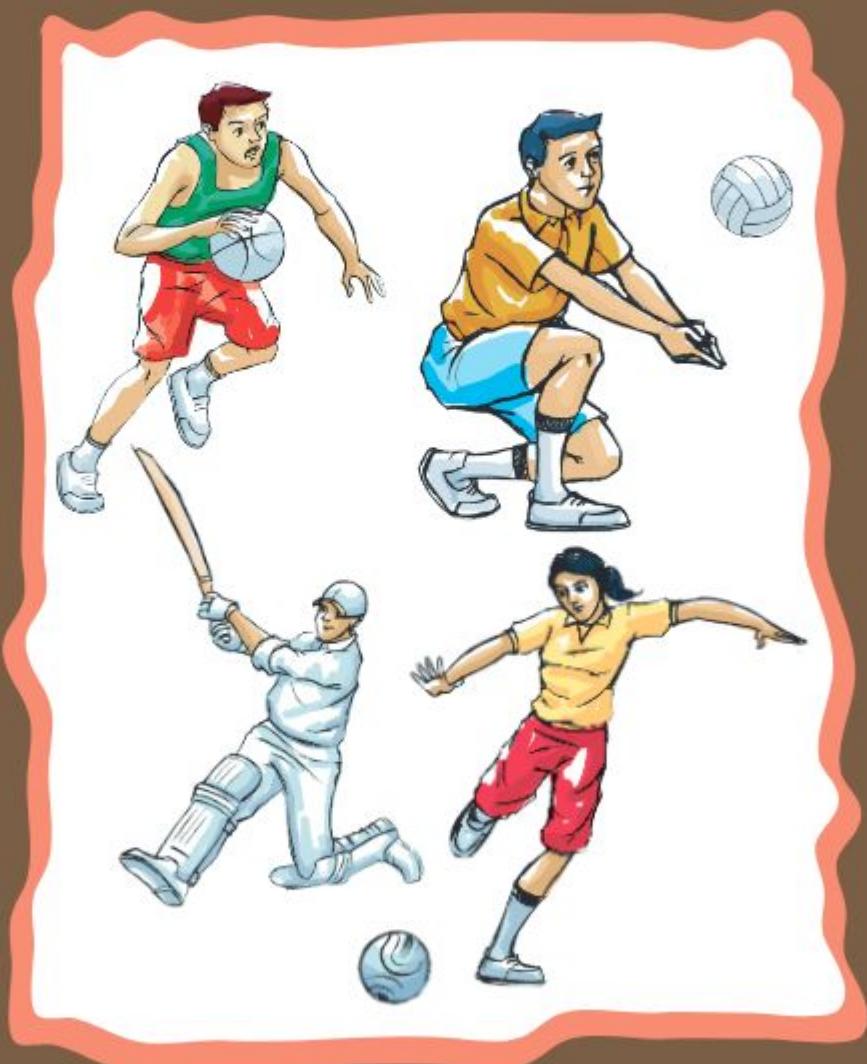


# Physical Education and Health

## Class Eight



National Curriculum and Textbook Board, Bangladesh

---

**Prescribed by the National Curriculum and Textbook Board  
as a textbook for classes eight from the academic year 2013**

---

# **Physical Education and Health**

## **Class Eight**

**Revised for the year 2025**

**Published by**  
**National Curriculum and Textbook Board**  
69-70, Motijheel Commercial Area, Dhaka

---

[All rights reserved by the publisher]

**First edition written, edited and translated by**

Prof. A B M Faroque  
Abu Muhammad  
Md. Abdul Haque  
Md. Tajmal Hoque  
Jashim Uddin Ahmad  
Md. Abdul Haque  
Md. Amjad Hossain

First Edition	:	November, 2012
Revised Edition	:	September, 2015
Reprint	:	August, 2018
Revised Edition	:	October, 2024

---

For free distribution by the Government of the People's Republic of Bangladesh  
Printed by :

## Preface

---

The importance of formal education is diversified. The prime goal of modern education is not to impart knowledge only but to build a prosperous nation by developing skilled human resources. At the same time, education is the best means of developing a society free from superstitions and adheres to science and facts. To stand as a developed nation in the science and technology-driven world of the 21st century, we need to ensure quality education. A well-planned education is essential for enabling our new generation to face the challenges of the age and to motivate them with the strength of patriotism, values, and ethics. In this context, the government is determined to ensure education as per the demand of the age.

Education is the backbone of a nation and a curriculum provides the essence of formal education. Again, the most important tool for implementing a curriculum is the textbook. The National Curriculum 2012 has been adopted to achieve the goals of the National Education Policy 2010. In light of this, the National Curriculum and Textbook Board (NCTB) has been persistently working on developing, printing, and distributing quality textbooks. This organization also reviews and revises the curriculum, textbook, and assessment methods according to needs and realities.

Secondary education is a vital stage in our education system. This textbook is catered to the age, aptitude, and endless inquisitiveness of the students at this level, as well as to achieve the aims and objectives of the curriculum. It is believed that the book written and meticulously edited by experienced and skilled teachers and experts will be conducive to a joyful experience for the students. It is hoped that the book will play a significant role in promoting creative and aesthetic spirits among students along with subject knowledge and skills.

The subject "Physical Education and Health" has been developed based on the philosophy of sound health and a fresh mind. It is, basically, a practical-oriented subject. So it has been tried to co-orient between both the theoretical part and the practical part for learning practically and also for life-oriented and realistic education. The student will achieve a clear idea about their health care, knowledge of nutrition, personal security, and reproductive health. Learners will be conscious of the dreadfulness of drug addiction, and AIDS and thereby they will be free from all these. Besides, they will be able to develop themselves to be a healthy and active citizen by learning the rules and regulations of different kinds of physical exercises and games.

It may be mentioned here that due to the changing situation in 2024 and as per the needs the textbook has been reviewed and revised for the academic year 2025. It is mentionable here that the last version of the textbook developed according to the curriculum 2012 has been taken as the basis. Meticulous attention has been paid to the textbook to make it more learner-friendly and error-free. However, any suggestions for further improvement of this book will be appreciated.

Finally, I would like to thank all of those who have contributed to the book as writers, editors, reviewers, illustrators and graphic designers.

October, 2024

**Prof. Dr. A K M Reazul Hassan**

Chairman

National Curriculum and Textbook Board, Bangladesh

## **Contents**

<b>Chapter</b>	<b>Title</b>	<b>Page</b>
<b>One</b>	Physical Exercise and Healthy Life	<b>1</b>
<b>Two</b>	Scouting, Girl Guiding and Bangladesh Red Crescent Society	<b>14</b>
<b>Three</b>	Reproductive Health in our Life	<b>30</b>
<b>Four</b>	Sports for Life	<b>38</b>

# **Chapter One**

## **Physical Exercise and Healthy Life**

Everybody expects a sound life. Good health is essential for a sound and happy life. We take different types of exercise to attain physical ability. This exercise develops both mind and body together. Daily proper exercise determines body structure and strengthens it. Physical exercise can be done alone or in a group. But living cells do not get enough time to reduce its decay due to a stretch exercise. Then we become tired. To recover this decay and also to rejuvenate the inspiration for work it is necessary to take full rest. After taking rest, the damaged living cells return to its previous condition. Besides, the tiredness of body and mind is also removed. Sleep gives rest to our body and mind. In fact, sleep gives rest to our brain. Sound sleep keeps our body and mind fresh. For good health we take various types of exercise which may be with instruments and without instruments. Sometimes we take physical exercise with folk songs of different regions. "Bratachari Dance" is one of the best examples of physical exercise. These types of physical exercise helps the students to enjoy both pleasure and mental recreation along with physical fitness.



**Group Exercise**

**At the end of this chapter we will be able to -**

- analyze the influence of exercise on building sound body;
- take right decision on which exercise to be effective as per proper rules and schedule;
- develop co-operative attitude in everyday life;
- explain the necessity of rest, sleep and recreation for physical fitness;

- explain the importance of rest and sleep as per age;
- exhibit physical exercise through "Bratachari Dance";
- practice the suitable exercise in proper method.

## **Lesson- 1: Impact of exercise on sound health:**

Exercise is the main means of good health. A man cannot expect good health without exercise. Exercise and sports not only help to develop physical growth but also cause mental development. Each of the organs of the body can be developed through physical exercise. A healthy mind leads to a healthy body. Because without mind, body cannot move alone. Body is the nest of mind. So, 'a sound mind, in a sound body' is accepted in the society as an established proverb. Psychology is a science. It deals with mind. But we have to know how a mind develops. The mind works through the nervous system. Within the body there are many important organs like: heart, brain, lung, liver, kidney, stomach, pancreas, spinal cord etc. Among these brain is vital.

Various organs of the body work in their respective area. But if there is no co-ordination among these organs, body becomes inactive. All these organs of the body work with the help of central nervous system. Exercise causes harmonious development of these organs. But the activities of this type of exercise are done according to age and gender difference in right method and standard. With the growth of the physical organs of the children, the types of physical exercise should be changed. With the increase of age, the schedule of exercise gradually gets harder and developed.

**Task-1 :** Make a list of the benefits of exercise in groups and present it in the class.

## **Lesson -2 : Exercise without equipments :**

Exercise which is done without equipment is called exercise without equipment. In the term of gymnastics it is called "free hand exercise". To attain particular object exercise is done without equipments.

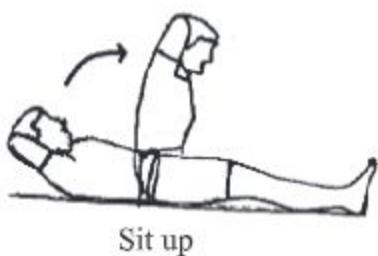
### **1. Speed Exercise.**

The exercise which is done to accelerate the speed of body is called speed exercise. In the beginning body needs to be warm up by running slowly.

Later, when the organs of the body become fit for exercise by doing various types of exercises, to accelerate the motion it is needed to run fast in the small range again and again. For example a line should be given 25 meters away. From the starting point of that line, it is needed to run in full swing. After coming back from jogging a person has to run fast. In this way when we do not stop during the whole time of exercise, it is called speed exercise. That means, we have to continue exercise so long as we are involved in taking exercise.

## 2. Abdominal Exercise:

The exercise for lower part of belly is called abdominal exercise. When some exercises are done to reduce the fat of the lower part of the belly only, it is called abdominal exercise such as sit up, sit up bending knees, two legs keeping high in the air etc.



Sit up

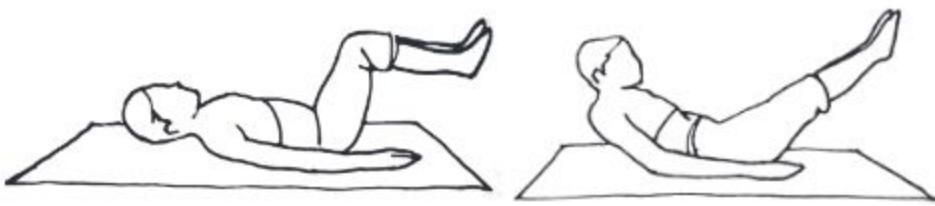
**A. Sit up:** Lying on the back two hands are to keep under the head and two legs are to keep straight together. Then keeping the head high we should bend the body forward as much as possible. In this way body should be made go up and down one by one. To do this exercise knee cannot be bent.

**B. Sit up bending knees:** The position of the body will be like sit up and only bending knees the upper part of the body is to be kept high and down. The more sit up is done in this way, the more it will be effective.



Sit up bending knees

**C. Two legs keeping high in the air:** Lying on back two legs should be kept 8" high in the air together. Try to keep it for a minute. It is to be done time and again in this way. These exercises reduce the fat of lower abdomen. Besides combined exercise, chin-up, push-up, jumping over the back, medlay-relay all these are included in exercise without instrument.



Two legs keeping high in the air

**Activity-1 :** Explain the necessity of exercise without instrument in everyday life .

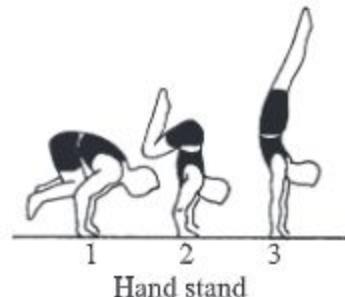
**Activity-2 :** Demonstrate speed exercise in the field.

**Activity-3 :** Show abdominal exercise in practice.

### Lesson- 3: Hand stand and Head stand:

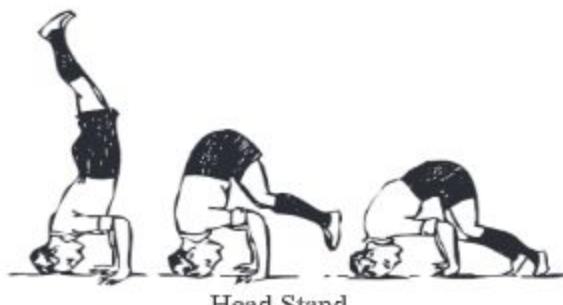
These two exercises belong to free hand exercise. No instrument is necessary to do these exercises. These exercises can be performed on the ground.

**A. Hand stand (To stand supporting on hands):** Keeping the hands straight the palms of two hands along with shoulder should be put on the ground. Two legs are to be kept forward and backward a little. At first the leg in the backward is to be raised high and another leg is to be kept high to make the two together. Try to keep your knee and flat of the legs straight above the head along with waist. Do not bend elbow by any means. This exercise has to be practiced with the help of an assistant or wall in the beginning. Then, without the help of assistant, try to keep practising this exercise gradually.



Hand stand

**B. Head stand (To stand supporting on head):** Keeping your forehead forward a little, touch the floor with the palms of the hands along with shoulder. Make the palms of the two hands and forehead like a triangle. Now keep two legs high drawing your waist forward. Keeping two legs straight, the front part of the legs has to be made pointed. Equal pressure will be kept on both hands and forehead. While standing, your head has to be kept inside and dive forward.



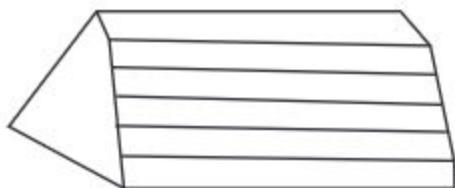
Head Stand

**Activity-1 :** Explain the technique of hand stand.

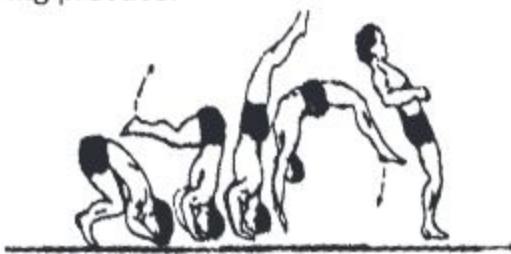
**Activity-2 :** Demonstrate hand stand in the field.

## Lesson- 4: Educational Gymnastics:

Doing exercise of different organs of the body freely keeping hands on mat is called educational gymnastics. According to the age and gender of the learners the activities of exercise should be determined. Before doing this sort of exercise body needs to be warmed up sufficiently. It is necessary to inspect the field and examine the equipments for exercise minutely before starting exercise so that there may have no possibility of any accident. An assistant should be kept so that no accident can happen during practice.



Vaulting box



Head spring

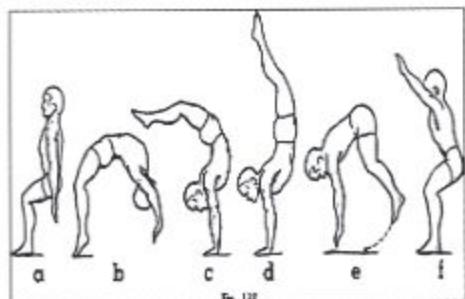
- Head spring :** According to the height of the learners the height of the vaulting box should be fixed. A mat will be kept behind the vaulting so that none can get hurt during falling down. There will be an assistant. He will help the learner sitting at the end of the box. A learner has to come running from 15-20 feet away. Keeping two hands on the box and also touching head to the box it is to create pressure in the two hands and joining the legs together it is to land. As touching head this exercise is done, it is called head spring. When any one pushes with hands, the assistant will help him if it is necessary. Because if hands slip, head can fall down to the ground and it may cause serious accident. In this way the learner, one by one, will have to practice this exercise running in rows.



Neck spring

- Neck spring:** Neck spring is also to be done on the vaulting box. Everything is like head spring. This time neck is to be touched to the vaulting box instead of head. Running slowly from short distance keeping neck on the box it is to land creating pressure on two hands.

**3. Hand spring:** Instead of doing hand spring on the box, it is to be done on the ground. During hand spring form 4-5 feet away taking two or three steps the learner will touch two hands on the ground and stand straight turning back after pushing on the ground. As it is to rise up pushing on the hands, it is called hand spring.



Hand spring

**Activity- 1:** Show the techniques of head spring .

**Activity-2 :** Show the neck spring by practice.

**Activity-3 :** demonstrate the hand spring tecniques.

## Lesson -5 : Exercise with equipments :

Doing exercise with equipments for any purpose is called exercise with instrument such as -climbing rope, roman ring, frisby, ball-passing, ball controlling, cycling etc. Roman ring and frisby were discussed earlier in class seven.

**1. Climbing rope:** Climbing up with rope is called climbing rope. The rope that is used during this excrcise can not be either too thick or too thin. If it is too much thick, it is difficult to catch, if it is too much thin you may get pain in your hands. Sticking rope to the branch of any tree and to hang with it and to climb up with it, is called climbing. If it is difficult to climb up in the beginning, it is to give knot in the middle of the rope so that you can climb up holding the knots. This kind of exercise increases the strength of hands.

**2. Ball Passing:** Players will stand up in some rows based on the number of players. Equal number of players will be there in each of the row. Every player will stand up with astride position. The front row player will have the ball. He/She will pass the ball in between their legs backwards as soon as the signal is given. In this way ball will go to the last player of the row. With the end of ball passing, ball will come to the front over the head. The row which completes passing the ball first, will be the winner.

**Activity -1 :** Show the techniques of climbing rope.

**Activity-2:** Exhibit the techniques of ball passing being divided in group.

## **Lesson -6: The necessity of Rest, Sleep and Recreation**

Our mind does not keep well if our body is unwell. As a result, no work is done perfectly. To perform job perfectly and to lead life comfortably, it is necessary to keep sound health. We cannot keep our body sound only by doing exercise. As we have the necessity of food and water in our body, we also have the necessity of rest and sleep as well. There is the necessity of rest of body and mind and also sleep after exercise for keeping good health. Our body gets exhausted after movements, works and exercise and life cells of our body also start decreasing. Then we become tired. To keep decreased life cells return in the previous state rest is a must. By taking rest we can wipe out tiredness and exhaustiveness of our body. If the environment for rest and sleep is quiet and isolated, it is good to improve mental development. During sleep all the organs of the body remain static in full rest and the breathing and digestive activities keep going in a disciplined way. Recreation is also a means to keep the body sound along with rest and sleep.

Events providing spontaneous joy to a man are called recreation. Sports is a source of recreation. There are many other arrangements for recreation except the recreation in sports in the society. They are- recreation by travelling, enjoying cinema, Tv programmes and drama, entertainment through picnic, reading books and gossiping etc. The eagerness and thoughts of the people of the society being different, the tradition of recreation is also different. The recreation through which we can learn something is called educative recreation .For example:

- 1. Reading educative books:** By reading different types of book the learners can acquire knowledge. What sort of books a learner will read depends on the learners' own personal interest. Some read books of story, some books on religion, some like to read novels or sports magazine and earn knowledge.
- 2. Through the programmes of TV and Computer:** Various kinds of educational programmes are telecast in computer and television. At present, watching these programmes the learners earn knowledge and enjoy recreation. The learners also can get pleasure by watching sports, enjoying magazines, debate programmes in TV and playing various types of game in computer.

3. **Recitation and Music:** It is noticed that many families have the tendency to spend their leisure time by reciting poems and practising music. Besides, in educational institutes many learners take the opportunity to manifest their talent and enjoy recreation by participating in cultural programmes and music.
4. **Travelling:** During the vacation or after the examination many prefer to visit their relatives and the worth seeing places. Some also go to various historical places both home and abroad for travelling. Sometimes all the members in a family together or classmates and teachers can go for picnic in the spots famous for natural beauty, sea-beaches and historical attractive spots. Visiting these places the learners acquire knowledge with recreation.

**Activity-1:** Describe the necessity of sleep and rest.

## **Lesson-7: Requirement of rest and sleep according to age and physical formation:**

The requirement for rest and sleep differs on the basis of age and physical formation. Those who are children they have different requirement for rest and sleep. The requirement for rest and sleep for the teenaged is different. Thus, there are differences in the requirement of rest and sleep of the children, youth and the adult. The childhood is the period to grow up. At this stage a child grows physically and his mental development is also done and this makes him/her interested for sports and studies. It is necessary to provide the children with sports opportunities. After games and sports, taking rest for a while removes physical tiredness. The children who get over physical development become tired after a little physical exhaustion. They need sleep much. Generally, the tiredness of a child is removed after taking sleep for 9-10 hours. A chart of sleep as per age is given below :

1. Age between 5-7 years requires sleep for 10-11 hours.
2. Age between 8-11 years requires sleep for 9-10 hours.
3. Age between 12-14 years requires sleep for 8-9 hours
4. Age above 15 years requires sleep for 6-8 hours.

Advice should be given to sleep and to get up on time as per the chart mentioned above.

**Activity-1 :** Discuss the requirement of sleeping of learners of different age.

**Activity-2 :** Make a chart of sleep according to age and hang it in the classroom.

## Lesson- 8 : Brotochari Nritya (Folk dance):

Everyone likes to express his/her mind with the rhythm of songs through dance. Physical exertion and gesture can be done easily with pleasure through our traditional popular folk dance. Stick dance is one of the most popular folk dances in Bangladesh. Under the supervision of the teachers the students can practise these dances easily. Various types of physical exertion and mental pleasure are done by it.

### Lori dance:

Place - Play ground, Instruments: a bamboo stick and a drum.

Musical measure: jha, jha, jha, jha ta ta.

Lori dance has several stages. They are-

- a. Hoshiar Position, b. Act of pacing, c. Nouka baich, d. Shokha, e. Manush Pota, f. Bijoy.
1. **Hoshiar Position (Caution position) :** The players will stand straight taking sticks in their left hands. They have to catch hold the end of the stick leaving 7"- 8" of it. The ending side of the stick will be pointed to the ground i.e. to be ready to perform further activities.
2. **Act of pacing:** The players in even numbers will stand in two files or lines. With the musical rhythm the files will come back to the starting point doing double march.
3. **Nouka Baich (Boat Racing) :** Start beating the drum with the first signal. With the second signal catching the end of the stick the players will turn it to back at a stretch. Create pressure on back catching hold of the lower end of the stick. With the third signal jump a little bit keeping left leg forward and keep right leg back. The body will bend a little forward, bending the knee a little too. With the 4th signal, it is to move forward and backward with two legs, like a boat swaying. With the 5th signal, after reaching the fixed line it, is to come back to the previous place. With the 6th signal coming to the

starting line, it is to keep dancing. With the 7th signal stop dancing. With the 8th signal keep the stick in the previous caution position drawing the stick from the back.

- 4. Shokha (Intimate Dance) :** With the 1st signal the players, with right hand, will hold the edge of the stick of left hand and will draw out it at a stretch and stand keeping it on knee. With the 2nd signal, raise left hand high with the stick and look at it. Keep right leg across left leg with the 3rd signal and all groups in this way will move forward. After reaching the fixed place, all groups will turn back and come back dancing to the previous place. With the 4th signal, they will stop dancing. With the 5th signal, they take caution position.
- 5. Manush Pota (To bury a man) :** With the 1st signal, the students, will hold the edge of the stick and drawing its head they will keep it like a pen on the back. With the 2nd signal, they will turn the right leg to left and then keep bending body forward. The beat of the hands and legs will be done together. In this way, make a circle by dancing. The number of circle will be as per the number of groups. With the 3rd signal, they will stop dancing. With the 4th signal, turn the stick and keep it on the back of their body i.e. it is to keep on the back. They will keep their right hand up with the stick all along the ear.
- 6. Bijoy (Victory dance) :** Bend head forward a little to the underneath with the 1st signal and keep dancing in this way. On the 2nd signal, turning to the left keep dancing. Stop dancing with the 3rd signal. With the 4th signal, every one will take a jump and stand turning to the right. With the 5th signal, keep the stick to the caution position.

#### Songs of the stick dance :

Chal	Kodal chalai
Bhule	Moner balai
Zhere	Olosh mejaj
Hobe	Sorir jhalai
Joto	Bedhir balai
Bolbe	Palai palai
Pete	Khider jalai
Khabo	Khir ar malai

Besides, there are many folk songs by which we can enjoy pleasure through

physical exertion. Such as- Jari, Sari, Folk etc. Example of some folk songs has been given below:

### 1. Jari Song :

Are-e bhalo bhalo bhalo-re bhai  
Are-e O—O aha besh bhai  
Amra Allar namti loaia-re bhai  
Amra naicha naicha sobai jai  
Ar-e shone kan shone kan Momin bhai  
Amra bea-dopir mapti chai

### 2. Sari Song

O—Kaie dhan khailo- re  
Khedanor manush nai  
Khawar belai asche manush  
Kamer belay nai  
Kamer belay nai  
Kaie dhan khailo- re  
Or-e hath pawo thakite tora  
Olosh hoe-a roi-le  
Kaie na khedai-e tora  
Khai-ber bosile  
Kaie dhan khailo- re  
Ore - O- parate pata nai puta nai  
Morich bat-e gal-e  
Tara khailo taratari  
Amra mori jhal-e  
Kaie dhan khailo- re

**Group Activity-1 :** Some learners will exhibit lori dance in the field.

## Exercise

### Multiple Choice Questions

- 1. Which exercise does require equipment ?**
  - a. head stand              c. head spring
  - b. hand stand              d. hand spring
  
- 2. Which exercise does require an assistant ?**
  - a. head spring              c. hand stand
  - b. hand spring              d. head stand
  
- 3. Who require the highest amount of sleep ?**
  - a. children              c. youth
  - b. teenagers              d. aged people
  
- 4. Which part of body lose fat due to abdominal exercise ?**
  - a. arms              c. rump
  - b. thigh              d. lower abdominal
  
- 5. Which one of the following plays the main role to function the daily exercise effective?**
  - a. rest and sleep              c. games and sports
  - b. recreation              d. fresh environment
  
- 6. Which is the main source of physical fitness ?**
  - a. regular exercise              c. financial solvency
  - b. balanced food              d. regular medical treatment

**Read the following stem and answer question 7 and 8**

Medha is a student of class eight. Her mother takes drowsy Medha to school at 7.00 O'clock in the morning. She has to do singing, drawing, reading arabic and home work after returning from school. It becomes 11.00 P.M. to go for sleeping. Thus after some days, Medha falls sick. Due to lack of opportunity of interaction with others, studies become boring to her.

- 7. The reason of education being boring to Medha is -**
  - i. unawareness of parents
  - ii. doing more physical work in regards of age
  - iii. Textbook content being difficult

**Which one of the following is correct?**

- a. i and ii              c. i and iii
- b. ii and iii              d. i, ii and iii

**8. Which can increase physical ability of Medha?**

- a. nutritious food
- c. regular physical exercise
- b. necessary rest and sleep
- d. games and sports with classmates

**Read the following stem and answer question 9 and 10.**

Due to the increase of fat Head Teacher Mr Jamal performs a kind of physical exercise taking consultation from physical education teacher. As a result, his fat decreases well. Now staying more time in school, he feels spontaneity in all activities including classroom monitoring.

**9. What type of physical exercise did Mr Jamal perform ?**

- a. speed exercise
- c. educational gymnastics
- b. abdominal exercise
- d. exercise with equipment

**10 How did that exercise become useful to Mr Jamal?**

- a. increases hand strength
- c. physical work ability increases
- b. increases leg strength
- d. strength of abdominal muscle increases

**Short answer questions**

1. Proper rest and sleep helps to remain fit. - Explain.
2. "Sound mind in a sound body" - Explain the speech
3. Abdominal exercise mainly helps to increase the speed of the body-give opinion.
4. Chaotic environment hampers the flourishmeant of soundness of body and mind-explain.
5. Joto bedhir balai  
Bolbe palai palai - how? Explain

## Chapter Two

# Scouting, Girl Guiding and Bangladesh Red Crescent Society

Scouting and girl guiding are international, world wide, non-political social service oriented youth movement. Almost all over the world, the scouting and girl guiding activities are introduced. One of the British army officers Lieutenant General Robert Stephenson Smith Lord Baden Powel introduced Scouting in 1907 and girl guiding in 1910. After the liberation in 1972 Bangladesh Boys scouting was formed. At present both girls and boys take part in scout. This is why it has been renamed as Bangladesh Scout Samity. It achieved the approval of international Scout Samity in 1974. Red Crescent movement is one of the international humanity movements, through which Red Crescent is working for human life and good health irrespective of cast, creed, race and religion. What is girls guiding and scouting, its history, main principles, oath, aims and objectives and its activities have been discussed in the book of previous class.



Membership Badge



Tenderfoot Badge

Youth movements for human service

**At the end of this chapter we will be able to -**

- describe the rules of project and hiking;
- explain the importance of scouting, girl-guiding and Bangladesh Red Crescent Society in leadership and human services;
- acquire knowledge, showing respect to others during scouting, girl guide activities and Bangladesh Red Crescent Society;
- explain the first aid and its influence;
- provide primary treatment for small injury in daily life.

## **Lesson-1: Preparing project and hiking:**

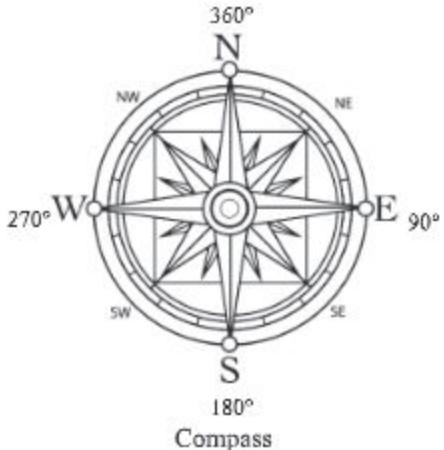
The meaning of hiking is travelling with some purposes. The scout and girl guide will set on foot to travel fixed destination by following present directions. During travel they will observe the environment and study nature. Generally one or two persons or even a sub group can take part in a hiking programme. They can pass a day or night or more than one day and night in hiking. Making barrier or station at intervals, hiking girl guide training can be practised during hiking. Through hiking particularly study of nature, drawing maps, study the track sign, setting of compass and its reading, preparation of the field book, code and cipher, social survey, cooking and other things all there can be taught and practised. After reaching hiking spot series of activities have to be performed- placing the tent, cooking, eating, social survey, campfire, sleeping and at the time of leaving the camp site, farewell call to the owner of the land and report to the camp after returning from hiking.

Hiking is a laborious and difficult task yet very enjoyable and essential for good physique. It is an exciting and recreational activity and very much educative. Through this activity the scout and girl guide enjoy the natural beauty and it makes a mind broad.

## **Lesson-2:Compass:**

Compass is direction- determining device. Compass has a hand. Whatever direction does the compass face, the hand always faces the direction 'north'. In the unknown places or in the darkness of night, some one who loses direction, the compass shows the correct direction.

**Mapping:** While reaching the certain spot of hiking, mentioning everything that some one sees and passes behind of either side is mapping of hiking. It does not require to draw map while on the road. Precise detail description of number and distance like school, mosque, market, forests, pond, pucca-roads, high-places etc will be written in the field book of scout and guide. Later they will write detail description and draw map coming back to the camp.



### Petrol system and Programme preparation:

#### Petrol system:

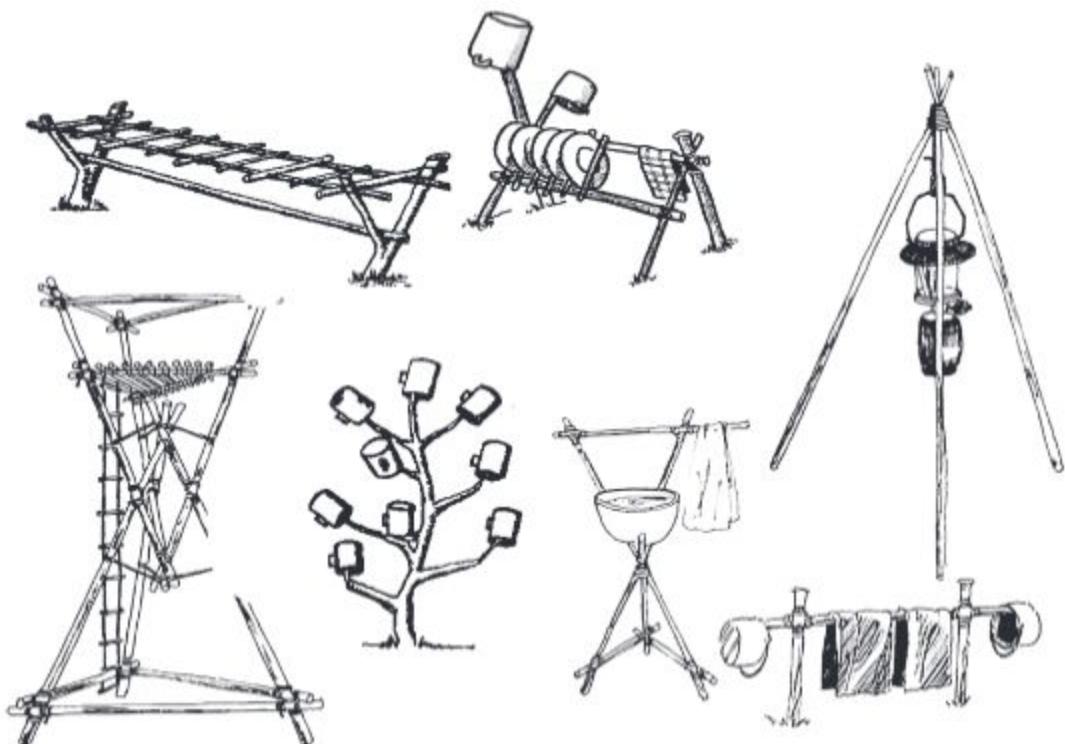
Lord Baden powel first introduced petrol system in India. Firstly he taught scouting to the young soldiers in petrol system. Then this system was introduced among all scouts and guides all over the world. Petrol system includes activities in small groups. The main objective of petrol system is to make the girls conscious about their own responsibilities. Each guide or scout can put forward its opinion to company level in this system and they can implement planning, and supervise company activities according to the benefit of their own petrol.

**Preparation of Programme:** The standard of hiking completely depends on planning. The programme should be prepared following the decision of petrol meeting taking in view the experience of hiking. The petrol leader has to prepare the hiking programme with the recommendations of group council (scout or guide) according to the decision of Parisad. At this stage, the permission of Thana or Scout or Guide Commissioner is essential.

1. Before the final preparation of the programme, all work schedules should be reviewed or examined and necessary addition and alteration should be made accordingly.
2. At the time of site selection, the unit leader has to be considerate about distance, communication, arrangement of water, closeness of market, medical facilities, suitable natural environment and alternate arrangement during inclement weather.
3. The unit leader will make the training schedule beforehand and procure the training equipments.
4. Permission of the owner of the selected site or head of the institution and consent of the guardians of the scouts/guides should be obtained.
5. Through health check the weak members are to be dropped.
6. A date is to be fixed as to when it will start, how many days it will continue and when it will come to an end.
7. For implementation of the work schedule, a budget is to be prepared. In the budget, a policy of thrift should be followed.
8. Required numbers of trainer, quartermaster, first aider, and sanitary observer etc are to be engaged.

9. Dry fire wood and balanced food items are to be procured as per budget.
10. Sanitation system should be prepared before at hand.
11. Ideas of street signaling, compass reading, map drawing and reading, techniques of tent pitching, cooking, swimming, pioneering, first aid, rescue works, guidance of road walking shall be given.
12. It is to walk at straight position in scout steps (20 steps walking and 20 steps running). In every two miles a rest for five minutes is to be taken.

At the time of staying in tent gadget has to be built to keep useful materials properly. The gadget is made of bamboo, branches of trees, ropes etc. Different types of knot and its correct demonstration with the help of ropes is called pioneering. Present age is a high technological age. So to teach the students we will use projector for hiking and pioneering. In this system the students will get clear idea about hiking and pioneering.



Various types of Gadget

**Activity-1:** Prepare the programme of hiking and project.

**Activity-2:** A scout/guide will make a gadget in the class room with bamboo, piece of wood and with the right use of rope knot.

### **Lesson-3: Leadership, human service in scouting and girl guiding:**

Human being, wherever they live, try to live together. Society is built up in this way. Living in the society is the characteristics of human being. He tries to do good to the society in which he lives. Society can be locality based or village based. Wherever he lives, every one has the responsibility to beautify the environment of the society. For example, one pond is clean and another pond is full of water hyacinth. For not cleaning the water hyacinth of the dirty pond, there grows mosquitoes and mosquitoes are harmful to all. If with the help of all people water hyacinth is cleaned from the pond, water of that pond will be clean, fish will be cultivated properly and the growth of mosquitoes will be stopped too. Similarly, if the road to the market is broken due to rain water or any other reason, with the help of the people the broken roads have to be repaired and made it usable. In this way, by means of small scale development works in society one can make himself prepared for wider service. There are many types of task for developing the society. This type of task is called welfare work. Rendering service is the main motto of scouting and girl guiding. This serving may be self serving, welfare of society and human serving. Self serving means to build one self as a self dependent man. The main aim of self serving is to build himself properly and well-established by labour intelligence and own effort. For serving others or great enterprise one has to be self dependent. So one has to make himself up in the way. So that scout and girl guide can sacrifice his/her life for the welfare of the general people. Every scout and girl guide thinks about family and society as a member of the society. So, he/she always tries to perform responsibilities to his/her mother, brother, father and sister. Besides, they engage themselves to serve the old, disabled, autistic children, sick and helpless people of the society. There are some welfare organizations serving in the society, among them scout and girl guide are ideal organizations. They are always ready to show loyalty and respect to the creator, honesty and truthfulness, kindness to animals, thought, awareness and dutifulness. Main motto of scout and girl guide is always 'Be prepared'. Each scout and girl guide will remain prepared always for good works and to help others. "Soda prostate" its English meaning is 'Be Prepeared.' It means for any purpose, to perform courageously being determined, with tolerance like friends and sacrifice for others. Every day to help one or other is the slogan of scout and girl guide.

In English, 'Do a good turn daily.' It is also a characteristic of a scout and girl guide. This slogan is a part of scout and girl guide promise. So its importance is all the more. Every day, in several ways, this slogan may be fulfilled.

- To market for Scout/Guide.
- To search for lost things of some body.
- To help a blind man to cross the road.
- To pick up bricks, stone, thorn etc from the road.
- To fill up the dig on the road.
- To help kids to cross the road.
- To bring water of ablution for devotees.
- To wash the floor of mosque.
- To show path to a passersby.
- To help some one searching a quater.
- To stop quarling.
- To carry a wounded person to hospital.
- To help buring the dead body.
- To give first aid to any body.
- To help some body to ride on a car.
- To participate in relief activities at the time of flood.
- To participate in relief works for flood affected and firing area.

The main slogan of scout and girl guide is to serve the people. In this way by doing works either small or large, leadership quality can be achieved.

**Activity-1:** Write down two service oriented jobs.

**Activity-2:** Make a poster of what good works are to be done every day and keep it hang on the wall.

## **Lesson-4: History and origin of Red Crescent and Red Cross:**

A terrible war took place between Austria and France in Salferino of North Italy, 24 june in 1859. Only in this sixteen hours war, about forty thousand soldiers were wounded. Wounded soldiers were suffering from pains in deadly condition, in the open battle field for lack of treatment. At that time a young man of Switzerland, Jin Henry Dunant-for business purpose was going to meet Nepolean the 3rd in France. He was shocked at the terrible sight in the battle field and called the village people to serve the affected people with the immediate primary treatment and played a vital role saving their lives. These people were the first volunteers of Red Cross. Most of them were women. Dunant, wrote a book named 'A memory of Salferino' about frightful and horrible sight of this war in 1862. The main message of this book was we can form such type of serving organization in every country, who impartially will serve the wounded people irrespective to friends or foes.

Jin Henry Dunant formed a committee with four Geneva people on 9th February, 1863, which is familiar as 'committee of five' changing this name it becomes familiar in the name of International Red Cross Committee. In the same year this committee called on an international conference held in Geneva with the representatives of sixteen countries. In this conference the best proposal of Dunant was accepted and for this results Red Cross was established. Jin Henry Dunant was born in may 8, 1828 at the town of Geneva in Switzerland and died in october 30,1910 at the age of eighty two. To show the honour to Dunant his birth day on 8th May is observed as world Red Cross and Red Crescent day.

**Basic Principles of International Red Crescent and Red Cross movements:** In 1965 at Viena 20th International Red Cross and Red Crescent conference the following seven fundamental basic principles were accepted :

- 1. Humanity:** Helping the wounded in the battle field without any discrimination.
- 2. Depersonalisation:** This movement helps wounded people irrespective to nation, race, religious belief and classes.
- 3. Impartiality:** To achieve the confidence and faith of all, this movement does not support any team at the time of war.
- 4. Independence:** This movement is impartial. In human servicing work this organization helps the Government according to the rules and resolution of the country.

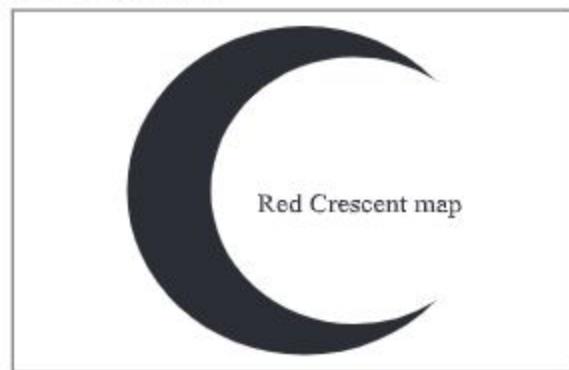
- 5. Volunteer Service:** As a relief base volunteer organization, this movement does not work for any interest.
- 6. Unity:** Every country will have only one Red Cross or Red Crescent society. It's human serving activities will spread out country wide.
- 7. Universality:** Red Cross and Red Crescent is a world wide universal movement which consists of the people of same status and responsibilities for helping people equally.

**Bangladesh Red Crescent Society:** After the independence of Bangladesh in December 16, 1971, Bangladesh Red Cross Society was established as an associate organization of govt. relief organization.

Under the ordinance of honorable president on 31st March 1973, Red Cross Society was approved since 16th December, 1971. International Red Cross Committee approved the Bangladesh Red Cross Society on 20th September, 1973. At the same time this society acquired the membership of contemporary league of Red Cross. Later on, on April 4, 1988 an amendment order was passed by the president and the name of Bangladesh Red Cross Society was changed to Bangladesh Red Crescent.

**The symbol of the Red Cross and Red Crescent:** To get engaged in relief works in the battle field, with medical service of army and their equipments and security as an impartial and differential sign, Internationally Red Cross symbol was accepted. For establishing Red Cross and Red Crescent movements and remarkable contribution to the wounded in the war from the Swiss citizen Jin Henry Dunant and his colleague, to show honour to the state of Switzerland the opposite side of national flag on white ground Red Cross symbol was selected.

#### Measurement of Red crescent flag:



In central position of white ground a C letter shaped red colour half moon drawn crescent flag measurement is given below-

1. Length of white ground is 10 unit, width 6 unit, proportion of length-width is 10:6 (as same as our national flag)
2. The symbol of Red Crescent is one unit which is to be drawn as one portion equal of twenty four parts of white ground.
3. The symbol of Red Crescent is to be placed in the centre of the white ground.
4. Open side of half shape moon (Red Crescent) will remain at the opposite side of the flag pole.

**Importance of Bangladesh Red Crescent Society in human service:** Red cross is an international organization engaged in serving helpless people of the world. Now this organization is divided into two names. In muslim world it is called Red Crescent and in other countries it is familiar as Red Cross. Its symbol in muslim world is half shape moon. It's main aim and purpose is to rescue and co-operate any type of natural disaster affected people, war prisoner, wounded people of war, shelterless and sick people. Besides, its function includes preservation of blood bank, pure water and arrangement of training about primary medical aid. This organization was awarded Nobel prize in peace in 1963.

**Activity-1:** Present the importance of Red Crescent in human service.

**Activity-2:** Draw the flag of Red Crescent society at home and bring it to school.

## Lesson-5: First Aid:

The organs of the body means hands, legs, nose, ear, head, throat etc. The knowledge of the first aid of those organs is essential for the students. Every person in any time may face an accident in practical life. To prevent this accident everybody should know the idea of first aid. It is to learn knowledge about first aid to protect injury becoming worse before doctor comes. English meaning of prathomik chikitsha is first aid. First means prothom and aid

means help. Treatment given to an wounded person at first is called first aid. First aid is that type of scientific education which helps nursing the patient to save his life in any accident. Dr. Fredrik Ezamrk is the creator of first aid. He was a prominent surgeon of Germany. He thinks after any accident necessary steps should be taken first to patient before sending him to the doctor so that his condition does not deteriorate. So first aid is the nursing given at once to the suddenly injured person before doctor comes. Three main functions of first aid are-

1. Identification of disease, 2. Treatment 3. Transfer

**1. Identification of disease :** Identification of the reason of illness.

**2. Treatment :** Primery treatment for the patient so that his condition may not deteriorate before doctors' arrival.

**3. Transfer:** Steps to transfer the patient as soon as possible to hospital or doctor or any secured place according to the condition of the accident.

**Care of wounded place:** When an injury occurs by knife, scissors, blade, cutter, etc. and starts bleeding is called wound. Hitting by the hammer, brick, stone when bleeding occurs it is also called wound. The animals biting also causes wound. Besides, boiling oil or water may cause wound on skin or muscles when the body gets burnt.

#### **First Aid:**

1. Firstly it is to wash hand with antiseptic.
2. Try to stop bleeding with ice or any other ways.
3. To keep the patient stationary in lying position, to reduce bleeding.
4. To remove any loose foreign matters from wounded place.
5. If any large thing enters into the wound, send him to doctor as soon as possible .
6. Wounded place is to be washed by the germ free medicine and to be dressed properly.

**Dressing:** Keeping the wounded place free from germs or clean is called dressing. Piece of clean cloth, gauze, bandage, cotton, antiseptic etc. are used for dressing.

**Method of dressing:** At the time of dressing some points have to be followed:

1. The patient on lying the wounded place will be at up ward position.
2. A clean cloth to be placed under the wounded place.
3. First aider will take wash of his own hands.
4. Injury place will be washed by the refine cotton.
5. Surrounding area of the injury will be washed by detol or sprit.
6. At the time of washing, firstly it is to wash from centre. So that dirty things may not enter the injury place.
7. Never touch the wounded place by hand.
8. To press the wounded place by the gauze with ointment, refine cotton, anticeptic powder etc.
9. Tincher iodin, spirit, potash paramanganet etc should not be used in the wounded area.
10. First aider will keep some essential medicine, scissor, bandage, gauze, sterile cotton and first aid box in his/her bag.

**Activity-1:** Act out giving first aid to the victims of any accident.

## **Lesson-6: Bandage :**

The bandage is used to keep the dressing properly and injured limb firmly. At the time of making bandage always keep in mind.

1. Bandage can cover whole dressing.
2. Binding of bandage should be neither tight nor loose.
3. The measurements of bandage is not more wide or thin than injured limb. Bandages are of different sizes. There should be specific size of bandages according to injured limb.
4. Generally strong cloth bandage is good.
5. In special case, elastic crep bandage is to be used.

### Three types of bandage

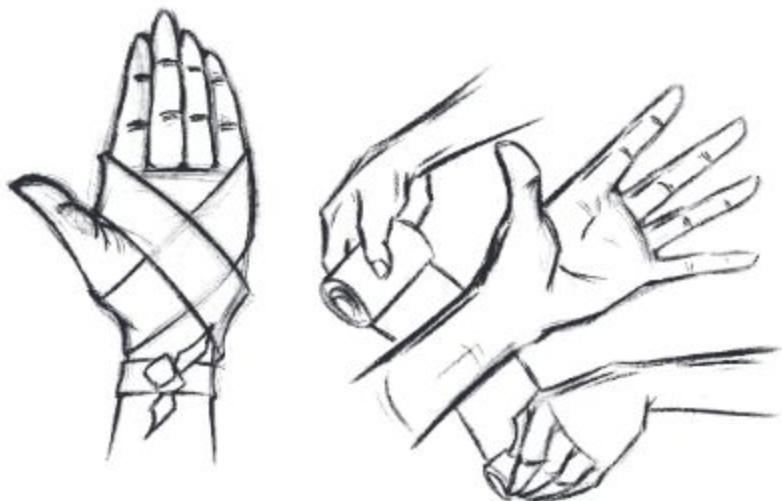
1. Triangular bandage
2. Roller bandage
3. Special bandage i.e. multi tail bandage

**Triangular bandage :** This bandage is very often used in the first aid. A piece of rectangular cloth can be cut diagonally. It will be made triangular bandage, Its base will be measured 42 inches. It will be wise to take one meter cloth.

**Roller bandage :** Generally the roller bandage is used in hospital by experienced first aider. Roller bandage is of various sizes. It's width is one inch to six inches. Roller crap bandage is to be used when a player gets injury on the body.

**Multi tail bandage :** Multi tail or many base bandage consists of many tails. It looks like T size.

**Hand bandage :** Roller bandage is used in hand over dressing with movement of hand. After the end of dressing, the bandage is to be tightened by safety pin. How to make bandage over dressing by movement of hand is shown-



Hand bandage

**Head bandage :** If the hit is on the skull, dressing of wounded place is to be covered with triangular bandage moving round the head with bind on forehead.



Head bandage

1. The width bandage is to be used on head.
2. The bandage starts first from forehead.
3. The dressing will be covered by bandage with rolling slowly.
4. Making forehead bandage by means of rolling.

**Jaw bandage :** 'T' bandage is a special kind of bandage which has three bases instead of two bases. It is used specially on jaw. How to start and how to end bandage in jaw has also been demonstrated with picture.



Jaw bandage

**Activity-1 :** Write down what are the things to be kept in mind during bandage.

**Activity-2 :** Practise and show how to do jaw and skull bandage in the class room.

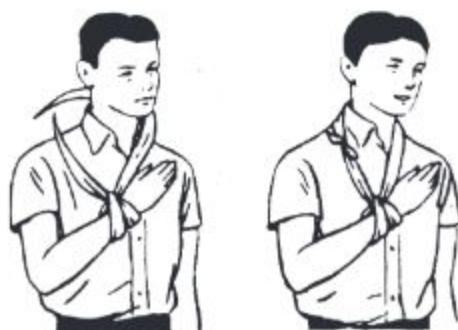
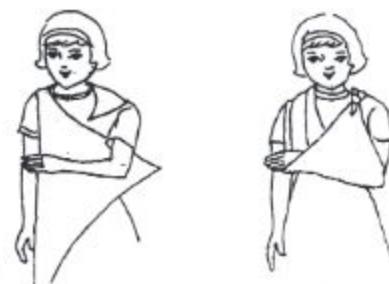
### Lesson-7 : Arm Sling and Collar and Cuff Sling:

If any hard blow or any fracture involves any bone of the hand, the sling is used to keep that injured limb firm. The bandage which is used to hang the injured limb with the body is called sling.

**Arm sling :** The tied up bandage which is used to hang the whole arm is called small arm sling. Arm sling is required for hanging the front part of arm at easy position.

Now spread out one part of triangular bandage on the shoulder. Then it will be passed round the neck and brought toward the shoulder of injured limb and other end will hang in front of the chest. Then lay the injured arm on the centre of the bandage. The top or vertex of the bandage will remain behind the elbow. Then the second end will be tied up with the first end of the bandage. The top side of the bandage will be folded up to the elbow. Then front part of the bandage will be attached with two safety pins.

**Collar and Cuff Sling :** This sling is used for hanging the wrist. Now, bend the elbow in such way that the fingers can touch the other shoulder. Hand will be kept on the chest. Then lie it up with a clove hitch. The last end of the bandage is tied with this, it will be hanged in the neck. Clove hitch will be made with a narrow bandage. Make two loops, place second loop on the first. Then bring the loop from behind the first one and make a clove hitch. Now fasten it with the neck tightly passing round within the wrist.



Collar and Cuff Sling

**Activity-1 :** Practise arm sling and collar and cuff sling and show it.

**Activity-2 :** Show one another the process of making arm sling and collar cuff sling.

## Exercises

### Multiple choice question

1. **What type of activity is hiking ?**
  - a. political
  - b. educational
  - c. social
  - d. development based
  
2. **Who first mentioned of first aids ?**
  - a. Dr. Fredrik Ezmark
  - b. Jin Henry Dunant
  - c. Dr James Neismith
  - d. Lord Baden Powel

- 3. Which bandage is used to hang the wrist ?**
  - a. collar and arm sling c. arm sling
  - b. multetail d. triangular
- 4. What does the success of hiking depend on ?**
  - a. planning c. campfire
  - b. compass d. map
- 5. Which one is good to use in the wounded place ?**
  - a. spirit c. potassium permanganate
  - b. tincture iodine d. antiseptic powder
- 6. Multitail bandage –**
  - i. used usually in jaw wound
  - ii. used in forehead
  - iii. multitail or T shaped

**Which one of the following is correct?**

- a. i c. i and iii
- b. ii d. ii and iii

**Read the following stem and answer question no 7 and 8**

Ranu is benevolent from childhood. She does not like suffering of people. She asks her parents questions to know how better she can help endangered people. Father said, "There are many serving organisations in your school. Take advice from your teachers and become member of any of these serving organizations."

- 7. Which serving organization is suitable for Ranu?**
  - a. scout c. Red Cross
  - b. girl guide d. Red Crescent
- 8. After becoming member of a serving organisation, Ranu may-**
  - i. help kids and aged people to go across the road.
  - ii. help the children to get ways to home.
  - iii. shift the wounded to hospital or health complex.

**Read the following stem and answer question no 9 and 10**

Arita went to field for playing in the afternoon, after he had come home from school. During the time of playing, he fell on a piece of brick and bleeding started. Arita's friends ran to him to render their co-operation and they stopped bleeding with what they had with them. Then carried Ischa to hospital.

**9. What is this work done by friends of Arita?**

- a. quick treatment      c. observation
- b. first aid                d. medical treatment

**10. Arita's friends can do –**

- i. stopping bleeding from the injured place
- ii. taking out anything that remains in the injured place
- iii. massaging the injured place

**Which one of the following is correct?**

- a. i and ii                c. i and iii
- b. ii and iii              d. i, ii and iii

**Read the following stem and answer question 11 and 12**

Ariq is involved in an organization of his school. The main characteristic of this organization is to remain always prepared for work. This organization runs on seven principles. Due to the activities of the organization, admission rate of students in the school has increased ever before.

**11. Which organization is Ariq involved with ?**

- a. girl guide              c. Red Crescent
- b. scout                    d. Red Cross

**12. Successful implementation of Ariq's organization will raise among the learners –**

- i. human values
- ii. conscious attitude will be developed
- iii. group attitude will grow up

**Which one of the following is correct ?**

- a. i and ii                c. ii and iii
- b. i and iii                d. i, ii and iii

**Short answer questions**

1. Though laborious, hiking is entertaining - explain.
2. Hiking becomes entertaining through flawless planning - explain.
3. It is possible to contribute in the society through scout movement - explain
4. One can get the opportunity of serving human beings by being a member of Red Crescent - give your opinion.
5. First aid can save too many lives - explain.

## **Chapter Three**

### **Reproductive Health in our Life**

The organs of the body which are related to procreate child and to know about the health of these organs is called reproduction health. Many think that only the girls should know about the health for procreation. This is a wrong idea. A child, whether boy or girl, at every stage of life there should have a clear idea about reproductive health in addition to knowledge of general physical health. So, it is necessary to know what is reproductive health and how to protect it. During adolescent period the children having no knowledge about reproduction health, suffer from many difficulties related to health. So, boys and girls of this age have to know about the necessity of protecting the reproduction health.

From the previous chapters and lessons, it has been learnt that because of hormone during the time of adolescence some physical and mental changes occur to the boys and girls. During this important transitional period in the adolescent time everyone should be careful about health for procreation particularly. Because, in this stage there starts a process of changing a boy into a man and a girl into a woman. Again, to protect the physical and mental health of the boys and girls procreation is very important. Besides, to ensure the health for the generation to come every one should follow the rules for reproduction health.



**At the end of this chapter we will be able to -**

- explain the necessity for protecting health for reproduction;

- explain the rules of reproductive health;
- analyse the consequences of conceiving child at immature age and taking preventive measures;
- keep one self sound and protective, flowing the necessary rules for reproduction health.

## **Lesson-1: The idea about the health for reproduction:**

When a child is born in a family, since then he grows up gradually. He grows up passing different stages of life. He has to pass the stages like early hood, childhood, youth and old age. During the transition from early hood to childhood there happens different changes-physically and mentally. This period is called adolescence. In adolescence period a boy or girl comes to youth stage. At this time there occurs a balance in physical development. At this stage, the organs which are related to breeding child form, develop and flourish. The health for procreation is the process of breeding of a child. For the physical, mental and social welfare reproductive system is very important. This is why every one should have basic knowledge about reproductive health to lead a safe and healthy life.

**The way of protecting reproductive health and its necessity:** The first condition about the health for procreation is that in the adolescence period what physical changes occur, the teenaged boys and girls should know well. What they have to do and carryout the rules accordingly. In this time they have to take nutritious food, sufficient water and maintain cleanliness. If any physical complexity occurs, one should take suggestions from health worker or doctor.

Many mothers meet death while giving birth to child every year in our country. The reason of this is the marriage at immature age and conceiving child. As a result they are attacked with many diseases and their health breaks down. For this reason, there arises financial crisis and absence of tranquility in the family. When a girl marries in matured age, she remains aware of physical fitness and also remain prepared mentally. If girls conceive at mature age i.e. after 20, the risk of infant mortality will come down in that case. Besides if any mother gives birth to child frequently, the mother and the child face the risk of life. To reduce this risk, there should have gap in the case of giving birth to child. Flowing the above rules, sustaining the soundness of health for

procreation we can keep the new born baby healthy and disease free. So, tranquility will prevail in the family and society.

**Rules of health for reproduction:** In the previous lesson we have come to know about reproduction health. For leading safe and improved life everyone should have fundamental knowledge about the reproduction health because it is a major part of the total health of human life. So, various types of problems are caused because of the lack of necessary knowledge about reproduction health. Without understanding anything the teenage boys and girls conceal their diseases caused by illness and suffer from many problems which are harmful for health. In the time of childhood there occurs physical and mental change fast to the girls and boys. As a result fear, curiosity and emotion are seen among them. Out of emotion they can take wrong decision and harm themselves. If they have clear idea about the health of procreation, they can avert such type of problems. Some important elements about the health for procreation are given below :

- 1. Conceiving child at proper age:** A girl should not conceive a child before the age of 20 to protect her health. Both mother and child keep well if it is conceived at proper age.
- 2. Safe motherhood :** The conceived mother should be cautious in her movement in order to ensure the safety of her life and her child. She should not carry anything which is heavy. Besides, she should consult the doctor if there is any physical problem.
- 3. Caution at the time of reproduction :** Nutrition for the child and taking balanced diet by the conceived mother etc. are related to reproductive health. It is possible to give birth to a healthy child only when the mother takes care of these issues.
- 4. Treatment of different diseases of reproductive system and prevention of diseases:** If reproductive organ is attacked with any kind of disease, proper treatment and preventive management should be taken. Infectious disease, sexual disease, cancer in the reproductive organ, HIV and AIDS etc. belong to this class.

**Activity-1:** What necessary measures are to be taken to protect the health for procreation and what problems occur for not taking the necessary means write about this to present in the class.

Sl. No.	What to be done to protect reproductive system	The problems caused by not taking protection
1.		
2.		
3.		
4.		
5.		
6.		

## Lesson-2: Pregnancy:

Before the birth of the human baby, the baby stays in the womb of the mother for a certain period. When a baby comes in the womb of a mother, the mother is known as pregnant. During the time of conceiving, some evident changes come in the body of the mother. After giving birth to a child, the body of the mother goes back to normal condition.

**Conceiving child at mature age :** The mature age for girls is 18 years and 21 years for boys. But if a girl conceives at 20 years age, she does not feel physical and mental problem. The physical problems which are seen at this stage can be cured if she follows the doctors' suggestions and a healthy child is born at proper time.

**Consequences of conceiving child at immature age:** Physical fitness and mental development are absent to become a mother at immature age. The girls who are married off at early age suffer from different mental and physical complexities because at this age the physical and mental stage is not developed. Besides a girl who is at immature age does not have any proper knowledge about conceiving child and reproduction. If she conceives at an immature age, she will not only be affected physically and mentally but also

the new born baby's life may be at stake. Due to this, the family has to admit losses both mentally and financially and there is an impact of this on the society.

#### **The problems created for conceiving at immature age:**

- 1. Health Problem :** Because of conceiving at immature age bleeding, the body having fluid, severe headache, dim vision in the eyes, fever convulsion abortion etc. are common. As a result, risk of death arises for both mother and child. By preventing pregnancy at immature age, we can prevent the untimely death. Besides, there is lack of space for a child to grow up because of being pregnant at this age. As a result an under weight baby is born. In many cases, babies before getting fully developed various complexities are seen since the birth of the baby. These babies have insufficient immunization.
- 2. Education problem:** During study in school if a girl conceives, after marriage she does not go to school because of shyness. She suffers from mental agitation. Because of physical changes she faces problems in her movement and she gives up study at one stage.
- 3. Family problem:** Because of conceiving at immature age the girls can not do household works well. She falls sick very frequently and it causes unhappiness in family.
- 4. Financial crisis:** If girls of immature age conceive, they will suffer from various physical problems. During pregnancy she has to be under the care of a doctor. She has to take nutritive food. For doctor, medicine and nutritious food there needs a lot of money. This leads a family to financial crisis.

**To prevent conceiving at immature age :** The age for marriage of a girl is 18 years and 21 years for the boys according to the existing rules of the government of Bangladesh. If they are married off before attaining the maturity, it will be offensive in the eye of law, and it will be considered immature marriage. So according to law if there is no immature marriage, there will not be any scope for abortion. It is necessary to publicise the complexities what occur due to marriage at immature age. Awareness of the mass people can be developed through radio, television, drama, songs etc. Everyone of the society should be involved in preventing early marriage. Conceiving at immature age should be discouraged through meetings, seminars, workshop etc. and to introduce effective laws the management of government and non government should be strengthened.

**Activity-1:** Write down the difficulties of conceiving at immature age and its ways of solution in the chart below.

Problems	Ways of solution to the problems
1.	1.
2.	2.
3.	3.
4.	4.

### Exercise:

#### Multiple choice question

- Whom should one meet for the complicated physical problems during adolescent period ?
  - parents
  - friends
  - teacher
  - physician
- What is the age bar for conceiving in Bangladesh ?
  - 14
  - 16
  - 18
  - 20
- When do boys and girls have fast physical and mental changes ?
  - in childhood
  - during teenage period
  - in adolescent period
  - in youth
- What is most important during the adolescent period ?
  - sleeping for plenty of time
  - taking protein food
  - remaining busy in sports
  - keeping neat and clean

**5. Remaining aware about the reproductive health during the adolescent period is necessary, because due to this –**

- i. flourishing of human merit occur
- ii. possibility of giving birth to sound and healthy baby increases
- iii. one can remain physically and mentally sound

**Which one of the following is correct ?**

- |             |                  |
|-------------|------------------|
| a. i        | c. ii and iii    |
| b. i and ii | d. i, ii and iii |

**Read the following stem and answer question no 6 and 7**

When Bokul's annual exam of class seven was over, her mother arranged her marriage by changing real age. After a few months of marriage, Bokul was vomiting very often. Apathy to food increased. Often she had bleeding. She went to the physician. After some tests physician became conscious.

**6. Which of the following is responsible for this condition of Bokul ?**

- |                       |                                      |
|-----------------------|--------------------------------------|
| a. financial solvency | c. lack of responsibility of society |
| b. lack of education  | d. conceiving at an immature age     |

**7. Way out of this condition of girls like - Bokul**

- ii. mass circulation of health regulations
- ii. appointing a good number of physician and nurses
- iii. ensuring marriage at proper age

**Which one of the following is correct?**

- |              |                  |
|--------------|------------------|
| a. i and ii  | c. ii and iii    |
| b. i and iii | d. i, ii and iii |

**Read the following stem and answer question 8 and 9**

Ruponti is a student of class eight. She remains unmindful at her bedroom through out the day. In normal works, studies, food at everything she seems to be absent-minded.

**8. Which time is Ruponti passing in regards of age ?**

- |              |                      |
|--------------|----------------------|
| a. childhood | c. youth             |
| b. girlhood  | d. adolescent period |

**9. During this time Ruponti –**

- i. may be directed by emotion
- ii. may lose eagerness for nutrition food
- iii. may become curious to some particular matter

**Which one of the following is correct ?**

- a. i and ii
- c. ii and iii
- b. i and iii
- d. i, ii and iii

**Short answer questions**

1. Acquiring knowledge about reproductive health is essential for a sound beautiful future - discuss.
2. Co-operation of parents can solve the problems of adolescent period of sons or daughters - give opinion.
3. Awareness and implementation of law is necessary to prevent immature conceiving - give opinion.
4. A sound protection of reproductive health is necessary for a safe and better life - explain.
5. Teenagers face both physical and mental problems in their adolescent period - discuss.

## Chapter Four

### Sports for Life

Games and sports keep the body and mind fresh. The happiness and prosperity of future life depend on soundness of body and mind. Games and sports are one of the sources of forming body. Human beings find their ways to flourish their life, find determination to face the struggle of life. In every sports there is victory and defeat. Games and sports prepare mentality of human being to accept victory and defeat. To make life moving, spontaneous and clean, sports is one of the best means. Participating in the sports the students acquire physical, mental and social qualities and build up the characteristics of good citizenship.



Different types of games

**At the end of this chapter we will be able to -**

- describe the institutional and infrastructural disadvantages of games and sports of the country and explain the ways of solving the problems;
- describe the rules of Badminton, Basketball, Handball, Hockey, Athletics and swimming;
- practise obeying the rules of Badminton, Basketball, Handball, Hockey, Athletics and Swimming;
- be skillful to participate at least in one game compulsorily according to our choice.

## **Lesson-1: Necessary institutional and infrastructural facility for games and Sports:**

Educational institutions are social organizations. The responsibility of preparing students as good citizens goes on to educational institutions. At present physical education is considered very important for flourishing the hidden merit and socialization. So the proper implementation of physical education in secondary schools are necessary.

The practical side of physical education is games and sports. Well planned institutional management and infrastructural development is very important for the implementation of games and sports activities. There are arrangements for two sports activities and recreational competitions of winter and summer time to inspire the students of secondary schools of Bangladesh. But most of schools conclude sports activities with one sport competition. Innumerable students are studying in secondary schools. Most of them do not know how to swim. They fall into different accidents due to ignorance of swimming. If there is a pond or swimming pool in each of the schools, students could learn how to swim and participate in different competitions and save themselves from accidents.

Most of our schools neither have sport field, nor plenty of standard sport equipments. The national health will face threats if the students are deprived of sports facilities due to infrastructural disadvantages. Therefore, the condition of infrastructure should be developed.

That's why, we have to build stadium, swimming pool and develop sports field locally. In addition to this supply of sports equipment should be ensured.

**Activity-1:** Write the present condition, regarding institutional and infrastructural condition of your own school.

**Activity-2 :** Write down your suggestions to standardize the condition of games and sports.

In our country a number of games and sports are in practise. Techniques and rules and regulations of some of the games are given below.

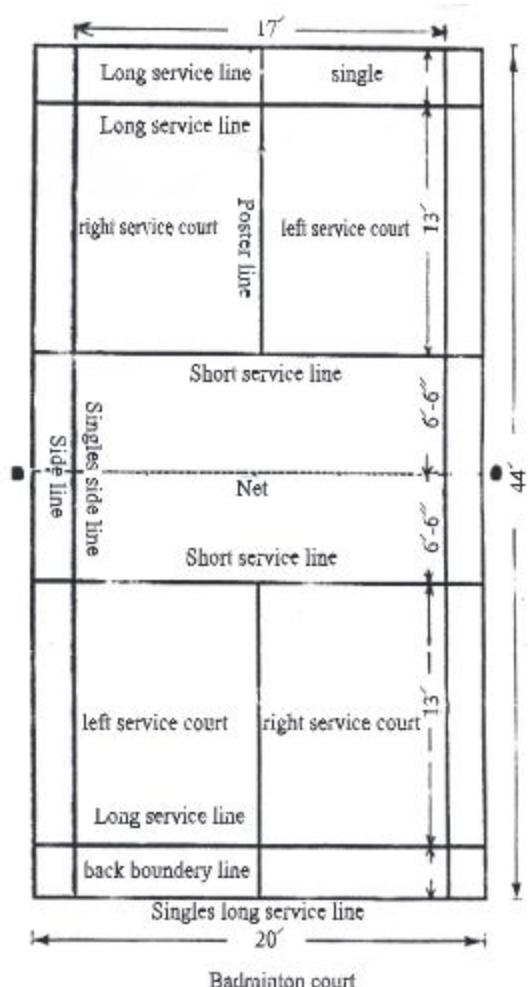
## Lesson-2 : Badminton

The game of Badminton was first introduced at Poona in India in 1870. The game was not popular before it was transferred from India to England by the English soliders. The Duke of Bo-fort was very interested in this game and the name of badminton is originated according to the name of his village. This game was first played in his own house of Duke of Bo-fort in Gloucestershire. In 1934 International Badminton Federation was formed at Shilton in England.

The game of Badminton was included in Asian games in 1966. Bangladesh Badminton Federation was formed in 1971. It is a popular game in Bangladesh. The people of all ages of the villages and towns can play this game.

### Laws of the game:

- Playing court:** The game of badminton is played in two types of court- (a) Single court (b) Double court.
- Single court:** The single court is 44 feet in length and 17 feet in breadth.
- Double court:** The double court is 44 feet in length 20 feet in breadth.
- Marking of the court:** All lines will be yellow and white in colour.
- Post:** The height of the post from floor to top is 5 feet 1 inch. The post will be on the line or little distance from the court.
- Net:** The height of the net from the middle, towards the post will be 5 feet 1 inch. Width of the net is  $2\frac{1}{2}$  feet.



- 7. Shuttle cork:** A shuttle cork is needed for this game.



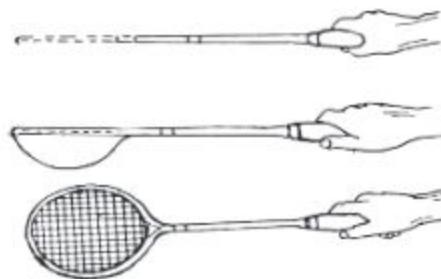
shuttle cork

- 8. Single play:** When one player is participated in each side in a game is called single play.
- 9. Double play:** While in each side two players participate in a game is called double play.
- 10. Toss :** Winner of toss- a. Winner will choose either service or receive. Opponent player will choose the left side.
- 11. Judges :** For conducting the game there are one referee, one umpire, one scorer, two or four line judges.
- 12. Game :** The single and double games are completed by 21 points. In 21 points game if it is drawn by 20-20 all, the game will be completed 20-22, 23-25 points i.e. must have two points difference. When both team's points are equal, it is called deuce. Keep in mind, the game must be completed in maximum 30 points, side changes at point 11 in the final set. When a team will win the two games out of three, he or the team will be winner.
13. At the time of single game the player will serve from right court when the point zero or even number, if the number is an odd the service will be at left court. After scoring a point, the service and receive court players will change the court.
14. At the time of double games the service shall be made from right hand court to diagonally opposite. Who will stand in opposite court only he will receive the service. Without point no player will serve consecutively. The winner of the first game will serve at the beginning of second game.
15. The two legs of server will contact on the court at the time of service.
16. While servicing the shuttle cork touches the net but reaches the right court, the services is considered to be correct.
17. The shuttle cork touching the line will be considered right.
18. No one can shot the shuttle cork crossing the net and during the game no one can touch the net or post with the racket or any part of the body.

**Tactics :** To acquire the skill of badminton one must have flexibility of hand and wrist and good foot work. The basic tactics of badminton are-

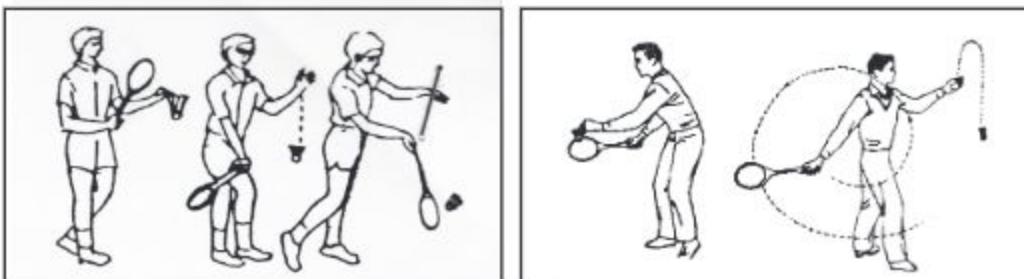
1. Gripping the racket
2. Footwork
3. Service
4. Forehand stroke
5. Backhand stroke
6. Overhead stroke
7. Net stroke

**1. Gripping:** The game of badminton depends mainly on gripping the racket properly. Now turn the palm on the right hand down and spread out the thumb and fore finger at the end of the grip and make it look like English letter "V" then grip the racket. Acquiring the good gripping will help playing good game.



Gripping

2. **Foot work:** Badminton is a very fast game. So foot work should be very fast. Naturally it is necessary to adapt oneself to the need of the situation very quickly. The necessity of foot work is the most important in this case. In a fast game if the foot work is not proper, the shuttle cork can not be sent to the right place or cannot be shot back. Good footwork helps one to reach the shuttle cork very fast and send it back to the opponent court according to choice.
3. **Service:** A player serves the shuttle cork to the opponent court at the start and the beginning of every point according to the rules of the game. This is called service. Through service the cork is to be sent to such a place of the

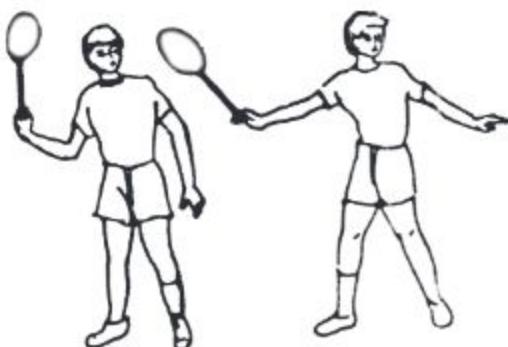


Service

opponent court that the opponent players find it difficult to return. During service keep the two legs with a gap and stand placing left leg before the right a little forward. Keep the body weight on the back foot. Hold the shuttle cork with your left hand and strike the cork on the back to send it

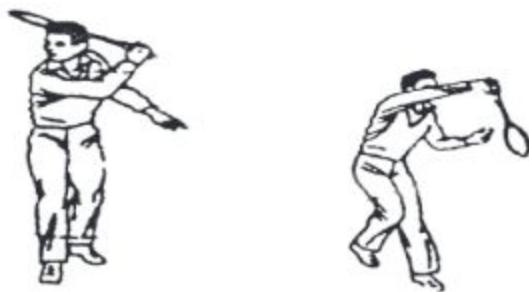
to the opponent court after dropping it. At the moment bring the racket from behind with your right hand. As soon as the contact between the shuttle cork and the racket is made the body weight will be shifted to the left foot. There are two types of service. Short service and long service.

In short service the cork is sent to the opponent court near the net and in long service, the cork is sent to the back side of the court.



Forehand Stroke

4. **Forehand stroke:** Keeping the palm forward, the right hand player sends the shuttle cork to the right and the left hand player to the left. This is called forehand stroke.



Backhand Stroke

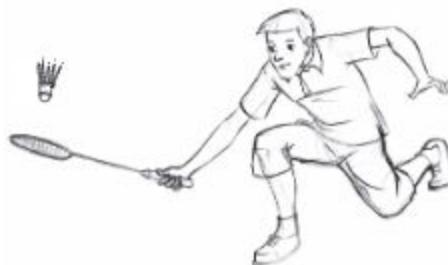
5. **Backhand stroke:** Holding the racket properly, keeping the palm backward right shoulder of right hander and left shoulder of left hander towards the net strike the shuttle cork. This is called back hand stroke.



**6. Overhead stroke:** This stroke is generally made for smashing. Both forehand and backhand may be used to make this stroke. Come below the shuttle cork, jump up and strike the cork from above by raising your racket as much high as possible.

Overhead stroke

**7. Net stroke:** This stroke is used when the cork falls near the net of the opponent court. Net stroke requires very skillful hand, i.e., it requires highest control of the hand to drop the cork near the net. A lot of practice is necessary for mastering this skill.



Net Stroke

**Activity-1 :** Demonstrate the technique of gripping of racket.

**Activity-2 :** Show the technique of service of racket.

### Lesson-3 : Basket ball

#### History :

The game of basket ball was first introduced in America in 1881. Dr. James Neismith was the father of this game. He was the director of physical education in Y.M.C.A. College, Springfield U.S.A .. Basket ball was included first as a competitive game in Berlin Olympics in 1936. It is the national game of America. Now a days, basket ball has become popular in many countries in the world. Dr. John Henry of Y.M.C.A college at Kolkata comes forward to start the basket ball game in this sub continent. The game of basketball was first started in the Christian Missionary schools of Bangladesh. The basket ball federation

of Bangladesh has played important role in Bangladesh to organize national basket ball competition and inter club competition. At present inter school, inter university, inter cadet college are being held in our country.

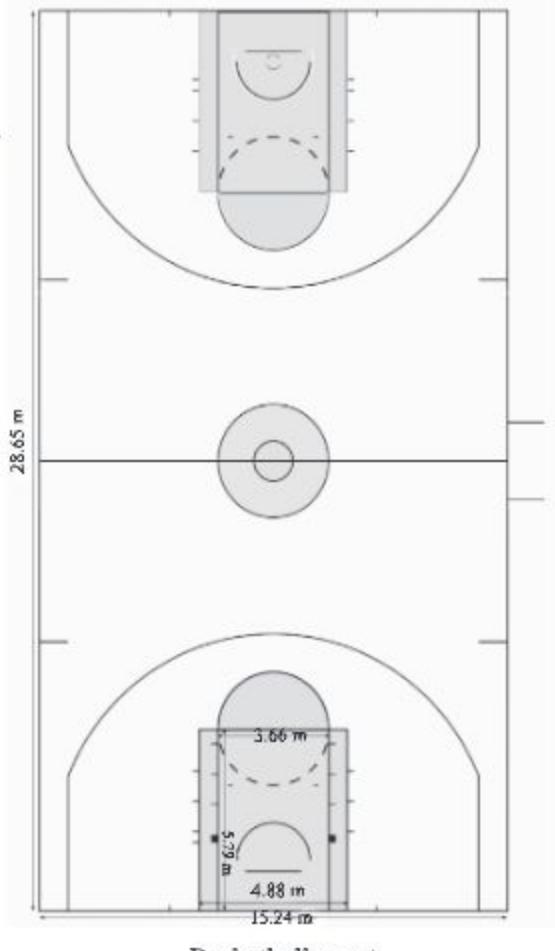
### Laws of the basket ball :

- Court:** The dimension of basketball court is 28.65 m in length and 15.24 m in breadth. For school and college students their court is 25.62 m in length. All lines are of same colour. If the board is of crystalline glass, marking will be white, on the other hand it will be black. Line will 5 cm. in width.

- Centre circle:** The measurement of centre circle and restricted area circle is same. The radius of the circle will be 1.83m . At the time of starting two players of two teams will stand in the middle of the circle and other players will stand out of the circle. The game is started by jump ball from the circle.

- Ring :** The height of the ring from the court is 3.05 m . Drawing an arc of 6.25 m radius from the central point of the ring three points line is drawn.

- Ball :** The size of the ball is round shape . It will be made of synthetic rubber like bladder of rubber. The colour of the ball is orange.
- Foul and violation:** If a player intentionally comes in physical contact with opponent player, is called foul. When a player dishonours the law or break the rules of the game that is called violation.



Basketball court

**Foul:**

- a. Holding the opponent, pushing, resisting the advance of the opponent team with two hands and striking the opponent.
- b. If someone displaces the opponent forcibly while taking the ball with drops.
- c. Touching willingly an opponent who is not holding the ball.
- d. Misbehave with the opponent player or the umpire.

**Violation:**

- a. Walking or running with the ball without drop.
  - b. To move two steps here and there with the ball in hands.
  - c. Dribbling the ball with two hands.
  - d. Staying more than 3 seconds in restricted area of the opponent court while the ball is in the grip of one's team.
  - e. Holding the ball for more than 5 seconds.
  - f. Holding the ball for more than 8 seconds in own half not to go to opponent court.
- 6. Officials:** For conducting the game the officials are referee, umpire, scorer, assistant scorer, time keeper, 24 seconds operator.
- 7. Duration:** The game will be played in four quarter, each quarter will need ten minutes. The rest will be ten minutes, end of the second quarter and before start in the third quarter. Between others quarters rest will be two minutes only.
- 8. Scoring of the point:** During the game a player scoring from outside the arcs will get 3 points, within the arcs will get 2 points and scores from free throw will get 1 point.
- 9. Players:** The game of basket ball is played between two teams. Each team will consist of 12 players, but 5 players participate together. Rest 7 players will remain as extra.

**10. Time out:** In first and second quarter each team will have one time out in third and fourth quarter each team will take 3 time out, extra period each team can take one time out. Duration of time out is 1 minute.

**11. Decision of the game:** If the game is not decided in fixed time, then extra time for 5 minutes will go on continuing until it is settled.

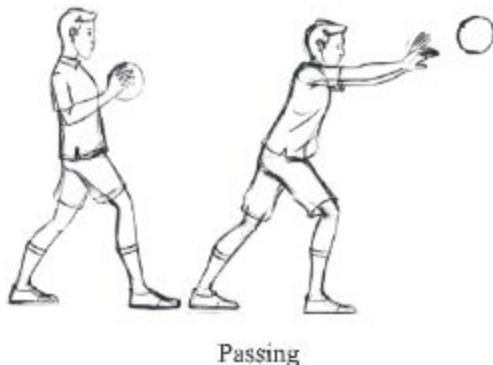
### Tactics :

Playing basketball needs the ability of breathing, power of running, jumping and with them agility of the body.

The main tactics of playing basketball are stance, gripping the ball, right passes and dribbling the ball, shooting and basketing the ball, guarding the opponent etc.

**1. Stance:** Stance bears a special significance during the play. Many a time, one has to take a stance for a moment, for planning a successful attack and defence. For taking the correct stance one has to stand always extending the legs or spreading out the legs and bending the knee.

**2. Catching:** The ball must be caught in such a way that it remains under one's control. While gripping the ball, spread out the fingers and control the ball by the thumb finger. It is not proper to catch the ball with the thumb.



**3. Passing :** While passing the ball always remember that the wrist and elbow will play more active role than other parts of the body. During passing the ball generally one leg is to be kept forward and other leg behind. There are different kinds of passes, i.e.

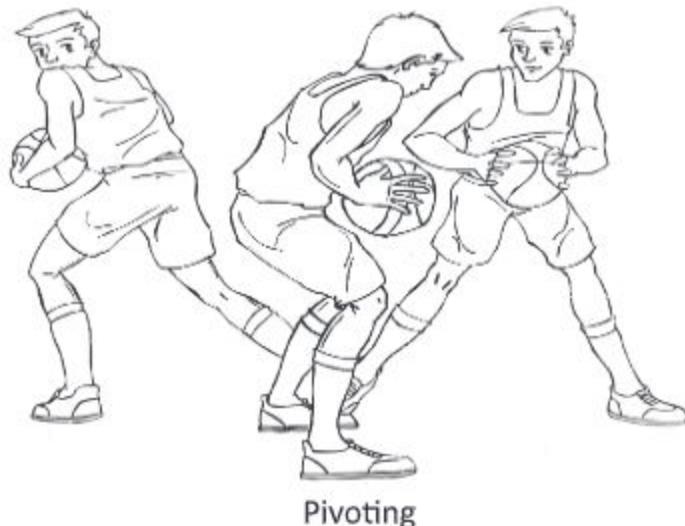
- a) Chest pass (b) Underhand pass (c) Bounce pass (d) Over head pass etc. All kinds of passes learning is essential. But chest pass is the most important.

**4. Dribbling:** During dribbling, the ball is pushed with fingers and the fingers are spread out over the ball to a great extent. This technique helps to take control of the major part of the ball. Use of the wrist and finger infallibly makes possible pushing the ball beautifully so that it jumps upward and then catching the ball and keeping it under control becomes easier.

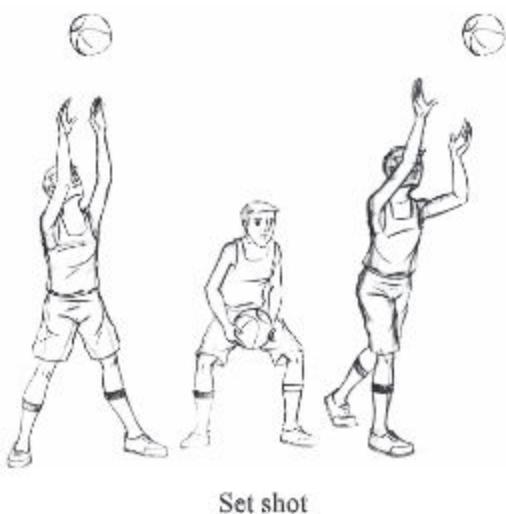


At the time of dribbling keep your body in such way that you can advance to any direction at any time. The head must be kept high and straight. Never keep your eye on the ball rather keep it always in front, so that the players of your own team and opponent team can be clearly observed.

**5. Pivoting:** When a player stands up with the ball, he may turn his one leg round to any direction as many times according to keeping the other leg fixed, this is called pivoting.



**6. Shooting the ball to the basket:** The ball can be directly shot to the basket. Or a score can be made even with the help of the back board. The technique of various types shooting are stated bellow:



**(a) Set shot :** When shot is taken by standing on the spot it is called set shot. This is to be done by one or both hands. The shooting hand will be behind and the other hand will be at the side of the ball during a set shot with one hand. The ball is to be pushed by the shooting hand and at that time, the other hand will be off from the ball. Again both the hands will remain behind the ball during a set shot with both hands and the ball will be pushed by both hands. Generally a set shot is taken from a distance of 4 to 8 meters for scoring a goal.

**(b) Lay up shot:** Normally a lay up shot is taken to score from a short distance. A player moves forward with a fast dribbling and he jumps up with one foot hitting the ground. He tries to take a lay up shot direct to the basket or hitting the board. At this time, the shooting hand will be straight.



**Activity-1 :** Show how to use dribbling in basketball.

**Activity-2 :** Demonstrate the techniques of lay up shot and show practically.

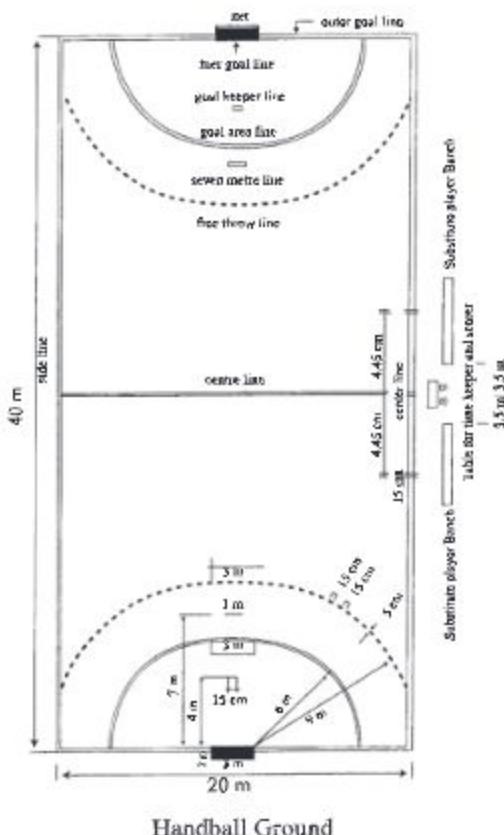
**Activity-3 :** Show the techniques of chest pass.

## Lesson-4: Handball

**History :** In the opinion of the experts the game of handball was originated in Germany in 1890. The International Handball Federation (IHF) was reformed in 1946. The game of handball included men in 1972 in Munich Olympics and women in 1976 in Montreal Olympics. Asian Handball Federation was organized in 1974 and handball was included in Asian games in 1982. In 1985 the name has been changed and Bangladesh Handball Federation has been formed. At present time the game of handball is popular in Bangladesh.

### The laws of the game:

1. The handball field is 40 m in length, and 20 m in width. The long line is called side line and wide line is called goal line.
2. The length of each goal post is 3 meter. The height of the goal post under the crossbar is 2 meter.
3. A 3 meter line will be drawn in front of goal post parallel to the goal line at a distance of 6 meter. Connecting the 2 arcs drawn at 6 meter radius from the corner of the goal post with the goal line prepares the goal area. Total line is called goal area line. All lines in the field is considered part of the ground.
4. The free throw line will be drawn by long dot (—) with the same gaps. The line will be drawn parallel to goal area and 3 meter out side from goal area.
5. A line will be drawn from centre in the goal line 7 meter distance towards the field and parallel to the goal line, length will be 1 meter.
6. A goal keeper line will be drawn from centre in the goal line, apart 4 meter towards the field.



Handball Ground

7. The middle line will be drawn at the centre of both side line intersecting each other. The players will keep standing on the shifting line for the benefit of the match.
8. Duration of the games is 25 + 10 + 25 minutes.
9. If the game is drawn in fixed time, additional 5 minutes will be played ie 5+1+5 minutes. Afterwards if the play is drawn, again 5+1+5 minutes will be additional time.
10. There are 12 players in each team. Seven players will play at a time in the court. The game will not start at least 5 players are not present on the ground.
11. The play starts with throw off "after starting", or scoring of the goal or break.
12. For conducting the game, the officials are 2 referee, 1 scorer, and 1 time keeper.
13. The court players-
  - a) Can catch, stop or strike the ball with hand, head, body, thigh and knee.
  - b) Can never hold the ball for more than 3 seconds or advance more than 3 steps.
  - c) If the ball is touched by the part below the knee, opponent team will get a free throw as penalty.
14. If the ball goes out side of the goal line or touches the hand of goal keeper, the game will be started by corner throw.
15. Opponent team obtains corner throw-
  - a) If goalkeeper broke the rules
  - b) If a player is incorrectly transferred.
  - c) If field player breaks goal area law.
  - d) For illegal behaviour to opponents
  - e) If it is a faulty throw in.
  - f) If any throw in is mistaken.
  - g) If faulty throw off occurs.
  - h) If any player shows foul behaviour.
  - i) If the goal keeper comes out of the goal area after taking the ball in his control
  - j) If the ball is back passed near goal keeper in goal area.
16. The opponents get a penalty throw.
  - a) If an official or a player obstructs the opponent illegally while creating an opportunity of goal scoring anywhere in the field.

- b) If a sure goal is wasted by the illegal blowing of whistle.
  - c) If an opportunity of a sure goal is wasted by the causes of outsiders or any objects.
17. The game will be started by the throw-in, if the ball crosses the side lines.
18. The goal keeper can play the ball with any part of his body inside the goal area.
19. The goal is scored when the ball crosses the inside goal line completely. The team scoring the highest number of goals will be the winner.

**Tactics :** The tactics of handball and basket ball are almost same. But handball has some additional advantages because the ball used for hand ball is lighter and smaller in weight and size in comparison with the basket ball. Beside the rules of hand ball, is easier and simpler than basket-ball.

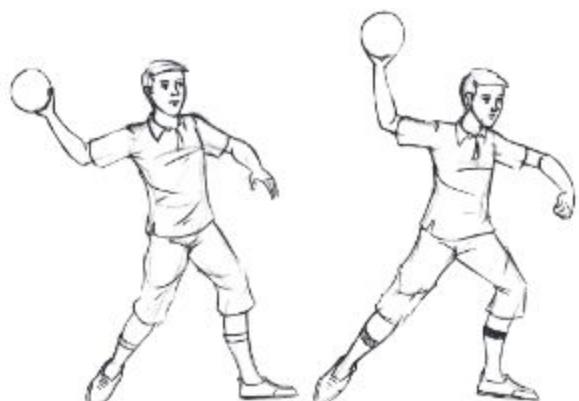
**1. Gripping the ball:** The ball may be gripped in many ways while playing handball-

- a) Holding on the shoulder
- b) Holding by the side
- c) Holding below the waist
- d) Holding above the head
- e) Holding by jumping
- f) Holding the rolling ball.



The ball may be gripped with one or two hands in the above mentioned ways according to situation. While gripping the ball, one should spread out his fingers, keep his eyes on the ball, and bend the elbow, pull the ball towards himself to bring it under control.

**2. Passing the ball:** Passing the ball to the players of one's own team is an important tactics. Since the ball is light and small to a great extent it is much convenient to give passes by throwing the ball in one hand. Of course it may be done with two hands according to situation. While throwing the ball with one hand, one generally grips the ball with his right hand and



Passing

takes the hand behind the shoulder line and keeps the body weight on the left leg at the time of throwing the ball. The balance of the body is maintained by keeping the left hand in front. Ball passing may be of different types as to pass in line with the shoulder turning the wrist, taking the hand below the waist and form above the head etc.

3. **Throwing the ball to the goal :** One must master the skill of throwing the ball to score a goal in handball. Because the ball is thrown from outside particular area and the area of the goal is quite small. One must be expert to play hand ball and he must have speed, attention and flexibility. There are different types of throwing for scoring goals e.g. throwing directly, throwing by giving passes, throwing by jump, to raise the ball by dropping etc.
4. **Advancing the ball :** One can not go more than three steps with the ball in hand. So to keep it under control the ball must be bounced. In this way the ball may be kept as long as one wishes. Again one can advance with ball by bouncing with one hand. One may advance by bouncing the ball and crossing the opponent.
5. **Obstruct:** When an opponent player is advancing with the ball to score a goal, he should be prevented in such a way that he is unable to pass the ball to his mate or throw the ball to the goal. To do that a player alone or two or three players build a wall by raising their hands or with body to obstruct the opponent.

**Activity-1:** Show the techniques of throwing the ball to the goal post.

**Activity-2:** Explain under what consideration penalty throw is given.

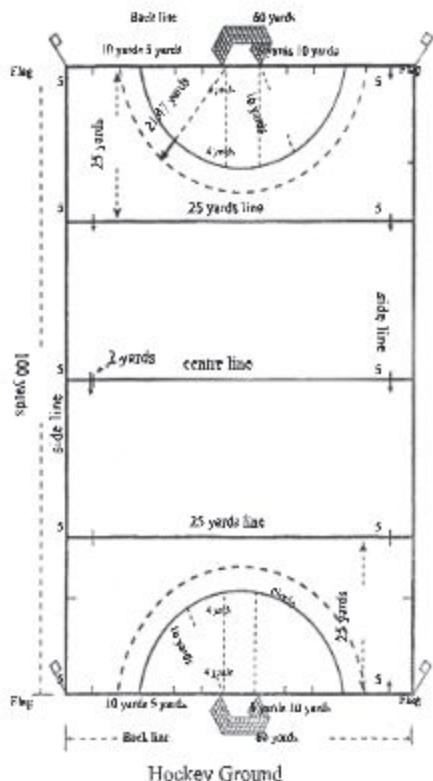
## Lesson-5 : Hockey

**History :** One kind of game was introduced like Hockey in the country of Persia, as far know two thousand years B.C.. The people of France started playing the game named Hocket. Hocket means a stick of shepherd, it is a French word. Later on the people of England learnt this game from France, they started in the name of Hocke. According to the English pronunciation, this game spreads out all over the world in the name of hockey. International Hockey Federation was established in 1924. First olympic hockey for men was included in 1908 and first olympic hockey for woman was included in 1980. First world cup hockey competition was started in 1971. Bangladesh hockey federation was formed in 1972.

### Laws of the Game:

- Length:** The ground of hockey is 100 yards in length and 60 yards in width.
- Width:** All lines of the ground is 3 inches
- Line:** The bigger lines of the ground is called side line and smaller lines is called back line.
- Shooting circle:** A line will be drawn in 4 yards in length parallel to the back line away from the 16 yards in the field will be drawn a half circle and be connected those lines in both sides.
- Flag post :** A flag post will hoist in each corner in the field. The minimum height of the flag post will be 4 feet and maximum 5 feet.
- Goal Post :** The distance between two sticks of the goal post is 4 yards and the height of the goal post from the ground to under the crossbar is 7 feet. The colour of the cross bar and goal post will be white.
- Net :** Net will be connected loosely with crossbar, goal post, side board and backboard.
- Ball:** The weight of the ball is 156 to 163 gram. The colour of the ball is white.
- Stick :** When stick comes out-easily inside 2 inches radius ring, it will be considered standard stick.

A International Hockey Ground



**10. Umpire:** The game will be conducted by two umpires.

**11. Players :** There will be 16 players in each team. Eleven players in each team will play during the game. The remaining players will act as additional players.

**12. Duration of the game :** The games will be played in two halves. Duration of each half is 35 minutes, Interval 5 to 10 minutes.

**13. The start of game :** The game is started with centre pass. At the time of centre pass the ball will be played with either push or hit.

**14. Offside :** There is no offside in the game of hockey.

**15. Goal keeper:** The goal keeper will stop and hold the ball by hand.

**16. A player should not -**

- a. lift the stick intentionally backward during play.
- b. lift any part of the stick above the shoulder during play.
- c. hit the opponent players by stick, hook, charge etc.
- d. hold the cloth or hand of opponent players.

**17. A team will award a free hit-**

- a. If attacking players breaks the rules in opponents area within 25 yards.
- b. If defending player breaks rule unintentionally within 25 yards area in own half.
- c. If any types of infringement occurs within 25 yards area by any players.

**18. Process of taking free hit-**

- a. Ball must be stationary.
- b. The ball must have push or hit by the free hitter.
- c. The ball will not be play upwards intentionally.
- d. Opponent players will stand 5 meter away from the ball.

**19. When a team is awarded a penalty corner :**

Any defending player unintentionally commits any foul within 25 yards (23 m) area or commits intentionally out of 25 yards area, a penalty corner will be awarded to the opponent team.

**20. Process of taking penalty corner:**

Penalty corner is taken keeping the ball on the back line in 10 yards marks. This time other players will take position 5 yards away from the mark. Five defending players will stand on the goal line and backline. Player to take penalty corner keep his one leg within the field and other leg on the line.

**21. Penalty stroke is awarded:**

- When a defending player intentionally commits a foul on attacking player to prevent opportunity for scoring a goal within the circle.
- When a defending player protects a sure goal by unfair means.
- At the time of penalty corner the defending players before shot coming forward again and again.

**22. Process of taking penalty stroke-**

Penalty stroke has to be taken from marking spot 7 yards toward the field from the goal line. All players will take position out side of 25 yards line except goal keeper and penalty striker. The ball will be played from the penalty spot with only push, flick or scoop.

**Tactics:** The following basic techniques are common in the game of hockey.

1. Hitting 2. Stopping 3. Pushing 4. Flick 5. Scoop 6. Dribbling.

**1. Straight hit :** The ball put on left side of the body and hit the ball strongly to send directly towards goal is called straight hit. At the time of hitting will the striker hold the upper part of the stick by left hand. Right hand will be kept below left hand. There will be no gap between both hands. Eyes will be on the ball.



Straight hit



**2. Stopping:** To bring the coming ball under full control is called stopping or trapping. Upper part of the stick is to be held by left hand and middle part of the stick will be held by right hand. The flat part of the stick will be towards the ball. Leg position will be side by side separately. The body weight will be on the toes. Eyes will be on the ball.

- 3. Pushing:** Pushing the ball without sound in contact of the stick with the ball sending forward by touching the ground is called pushing. At time of pushing, the upper part of the stick will be held by left hand and middle of the stick will be held by right hand. Left leg will be front and right leg behind. The left handers will hold in the opposite way.



- 4. Flick:** When a stationary ball or rolling ball is pushed on the knee level height is called flick.
- 5. Scoop:** When a stationary or speed less ball crosses over the head or air by the stick hitting under the ball.
- 6. Dribbling:** Going forward with ball is called dribbling. It is a very effective technique to dodge the player and go forward to the opponent post.

**Activity-1 :** Demonstrate the techniques of hockey.

## Lesson-6: Swimming:

**History:** The modern developed swimming as we see now a days, has been started first by the English. The word swimming has come from English word swimin. The competitive swimming started in London in 1937. In olympic, the swimming competition for men started from 1896 and women from 1912. The International swimming organization FINA (Federation International de Nation Amateur) was formed in 1908. In Bangladesh swimming federation was set up in 1972. The exercise of all the limbs of body is done through swimming. So, swimming is termed as all-round exercise of the body. Everybody should learn swimming in order to get a good health, to save life and for game and enjoyment.

### Helping equipments to learn swimming.

The following supporting equipments are generally used to learn swimming:

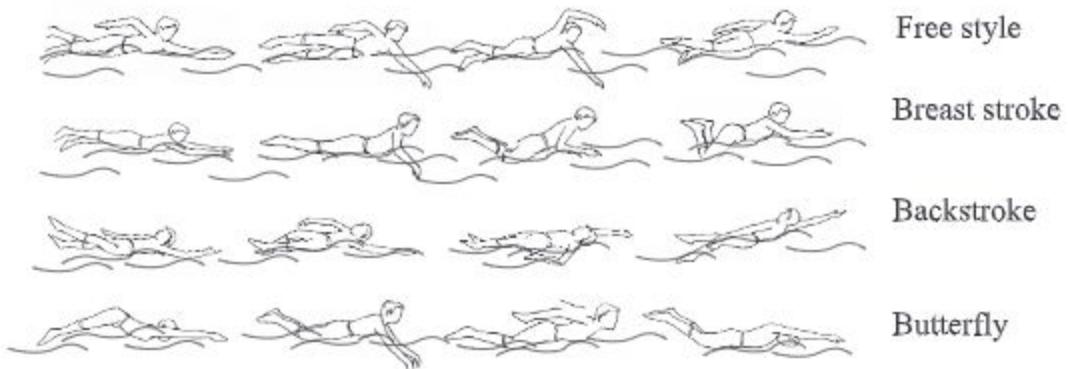
- a. Life buoys for life saving.
- b. Rubber tube of motor cars.
- c. Banana trees.
- d. Dry coconuts
- e. Floating dry wood or bamboos.

### Pre cautiouns during swimming:

- a. Making the swimming place safe by removing waste materials and dangerous things.
- b. Arranging pool with shallow depth.
- c. Keeping an expert swimmer ready beside the pool, so that he can lift anybody by diving.
- d. Keeping the floating material stand by.
- e. Leaving the habit of learning swimming in empty stomach or within one and a half an hour after taking food.
- f. Keeping life board or life jacket ready nearby if possible.
- g. Keeping nearby long, thick and hard rope or bamboo.
- h. Examining whether the dress changing room and bathroom are in proper arrangement.
- i. Arranging spitting outside the pools so that none can spit in the water.

**The competition swimming are four types:**

- |                  |                |
|------------------|----------------|
| 1. Free style    | 2. Back stroke |
| 3. Breast stroke | 4. Butterfly   |



#### **Techniques:**

**Free style:** This style of swimming is also called front crawl or free style. One can swim fast in this style.

**Position of the body:** The body is to be kept in position parallel to water. The position of the head can be changed from time to time, by raising it above the water and bending the neck in it. Generally, the swimmers of short distance raise their head a little high above the water. But the swimmers of long and middle distance keep their head a little bit low.



#### **Action of the hands:**

1. The hand is to be drawn forward vertically.
2. The hand is to be drawn forward by the sides of the body keeping it parallel to the water.
3. The very moment hand touches the water in front of the head at the same time hand will start-functioning inside the water.
4. The hand after entering into the water will draw water and will push it behind. The action of the hand will go on alternatively.

**Action of the legs:**

1. The work of the legs starts from the waist of the body. The movements of the legs will be up and down alternatively and go forward.
2. The legs should be folded slightly near the knee and the feet will remain straight.
3. The heels of the feet will not go above the water. When the flat surface of the feet preses the water, it will go at best 18 inches deep from the water.
4. It should be kept in mind that when the action of two hands will be completed the leg movements will be completed from 6-12 times.

**Breathing:** At the time of swimming, breathing is done by mouth turning the head above the water, when the hand will be above the water, the head, then will be turned in that side for breathing. The air will be taken in by mouth and it will be realized, as soon as the head goes under the water. Look at the picture and try to practice breathing with this process.

**The rules of free style swimming:**

1. Free style swimming starts from block.
2. In free style swimmers swim in prone position.
3. Generally the leg drawn under the water 12-18 inches.
4. Swimmer will not disturb other swimmer entering line.
5. Will not swim under the water.
6. At the time of turning any part of the body can be touched.
7. Swimming may end at any position.
8. Action of the hands will be like 'S'

**Back Stroke**

**Position of body:** The body is to be kept in the lying position on the water. Generally the head is kept a little inside water. This position makes the whole body parallel to water as if the head is laid on a pillow. The position of the eyes will be on the heels of the legs.

**Action of hands:** The hands will go into water straight way near the head when the hands will enter the water immediately. In back stroke position of the hand will be one by one. One hand will fall into water while the other hand will go up and again the later hand will remain prepared for falling on the water.



Back Stroke

**Action of legs:** The action of the legs are like that of the free style swimming usually the action of leg is like kicking a football lying on back.

**Breathing:** Breathing should be kept natural.

#### The rules of back stroke swimming:

1. The back stroke swimming starts holding the handle under the water.
2. Back stroke is made at swimmers' dorasal position.
3. Generally the legs go 18-24 inches under the water.
4. Will not cross the lane during swimming.
5. In back stroke the action of legs will start from the waist.
6. Turning will be finished by any part of the body in backward position.
7. The swimming will be ended by the touches of any part of the body in backward position.

#### Breast Stroke

**Position of body:** At the time of swimming in breast stroke style the body is to be kept almost parallel to water. But the back side stays parallel to water and remains ten degree downward.



Breast Stroke

**Action of hand:** Both the hand will go into water at the same time, the palms of the hand will be kept straight way downward and outward. The elbows are to bend to press water downward with the hand and after the hand coming

towards chest, it should be taken forward quickly. The movement of the hand is some what like the figure of the heart. During turning and finishing the wall is to be touched with both hands.

**Action of legs:** With two legs slightly folded at knees the swimmer is to kick like a frog. The blade of the feet should remain outwardly.

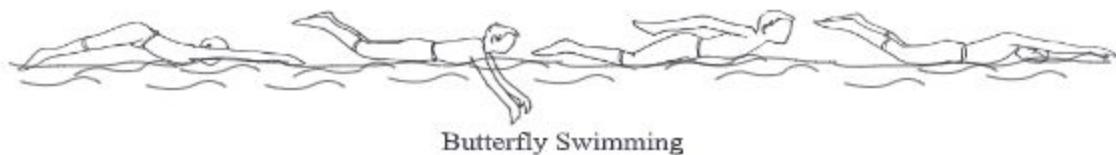
**Breathing:** Breathing is done by mouth while raising the head slightly upward and forward air is inhaled and it will be released under the water.

### **The rules of breast stroke swimming:**

1. The swimming will be started with a dive.
2. With the help of both hands the swimmer will touch the wall at a time while turning and finishing.
3. The swimmer will keep body weight on his chest throughout swimming.
4. The swimmer will not enter the lane of other competitor and he will not create any obstruction there.
5. He will not swim under the water.
6. He will not be allowed to swim raising his leg up and down.
7. He will have to move both his hands and legs at a time and in the some techniques.

### **Butterfly Swimming**

**Position of body:** In this style swimmer's body goes up and down quickly. When the legs are kicked downwards that time the waist comes upward. When the hands ready to pull water, then head and neck goes under water, after pulling the water, neck and hand again float over water. Hands will be spread out at a time and legs must be together taking breathing when head is above the water.



Butterfly Swimming

**Action of hand:** Action of hand in butterfly swimming will be ended

together. Hand movements will not go front and behind either under water or over water. Elbow slightly bends and hands will go forward over water and comes down and outward by pressing water. Hands must be straight parallel to the head. Hands will be rounded both sides of the body and bring under the chest. Hands must be pulled under water at the level of waist.

**Action of legs:** The position of the legs in butterfly swimming will be like dolphin fish, legs must go up and down at a time and always will act together. Two legs will be together straight in lying position of the body. The legs will be forwarded like a wave of bridge on the shoulders at the time of moving forward.

**Breathing:** The movement of the breathing is to be done front and sideways in butterfly swimming but the world famous swimmer's by heading take breath in front. Breathing is done by mouth while raising the head upwards. That is an easy process. At the time of breathing, neck will be flexible.

#### **The rules of Butterfly swimming.**

1. The butterfly swimming starts with a dive on the block.
2. This swimming depends on the chest.
3. Swimmers will not change the lane.
4. The kick will be taken on toes.
5. Don't breath in every stroke.
6. Hands may be behind on the waist
7. At the time of turning, the wall will be touched by both hands at a time.
8. End line must be touched by both hands at a time.

**Medley relay:** The medley relay swimming is of two types- a) Individual medley b) Team medley

In individual medley, one swimmer has to swim the distance in four styles. The name of the styles are given below from first to last.

Butterfly swimming → Back stroke swimming → Breast stroke swimming → Free style swimming

In group medley there are four swimmers swimming in particular distance. The names of the styles are given below serially.

Back stroke swimming → Breast stroke swimming → Butterfly swimming → Free style swimming

To become proficient in different styles of swimming both boys and girls are

to remember the following points.

1. In each style of swimming the movement of hand and feet, breathing and co-ordination of these must be practiced thoroughly.
2. In each style practice of the action of hands or legs should be done in order to increase the strength of the hands and legs and skill is to be acquired accordingly.

**Activity-1:** Mention the technique of free style swimming and show it into the water.

**Activity-2:** Show how breast stroke swimming is performed in water.

**Activity-3:** Explain the technique of butterfly swimming and exhibit it into the water.

**N. B.** If there is no pond in a school, swimming will be demonstrated lying on a low bench.

## Lesson-7: Athletics

**History:** There are many types of games in the world, among these running, jumping and throwing are the most ancient. In the primitive age, the people for saving their life, they had to run, cross the obstruct by jump, wound the opponents or enemies by throwing. Later with the gradual development of civilization people running, jumping and throwing has changed into new form named sports. It has been bounded by rules and regulations. Now running, jumping and throwing is called athletics. In the name of mountains of Olympia and in the honour of God Zeus athletics is now considerd as olympic competition. First Olympic competition was held in Greece in 776 B.C. The modern Olympic competition was organized by the king of Greece in 1896. International Amateur Athletics Federation (I.A.A.F) was formed in 1912. Bangladesh Amateur Athletics Federation was organized in 1972.

### The rules of Athletics

Atheletics can be divided in two parts -

- a. Track event
  - b. Field event
- a. Track event means all kinds of running events and walking events.
  - b. Field event means all kinds of jumping events and throwing events.

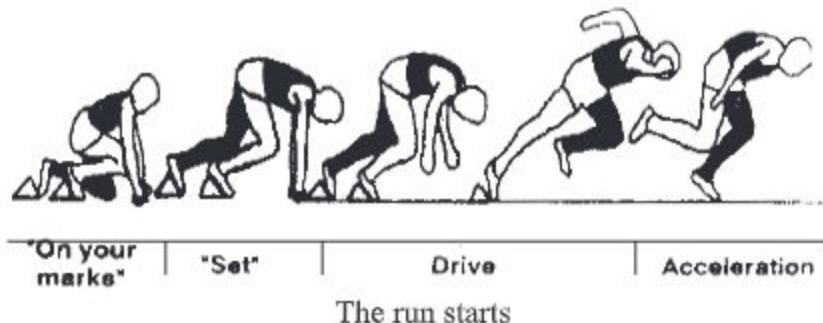
**A. Track event is divided into following parts.**

1. Short distance run it is called sprint.
  2. Middle distance run
  3. Long distance run
1. **Short distance runs are:** 100 meter sprints, 200 meter sprints, 400 meter sprints, 100 meter hurdle (women) 110 meter hurdle (men), 4×100 meter relay, 400 meter hurdles.
  2. **Middle distance runs are:** 800meter run, 1500 meter run, 4×400 meter relay.
  3. **Long distance runs are:** 3000 meter steeple Chase (men), 5000 meter run, 10,000 meter run, marathon run, 20 kilometer walking, 50 kilometer walking (men).

**B. Field events:** The events of jumping and throwing are called field events.

1. Jumping events: Long jump, High jump, Hop step jump, and pole vault.
2. Throwing events are: Throwing the shot, throwing the discus, throwing the javelin and throwing the hammer.

**The run starts:** The person who gives signal for starting the running events is called a starter. At the time of starting sprint event the starter will say, On your marks, set, whistle or fire. In the middle distance and long distance running events, the starter will say "on your marks, fired." No competitor will have false start, if he takes he will be disqualified.

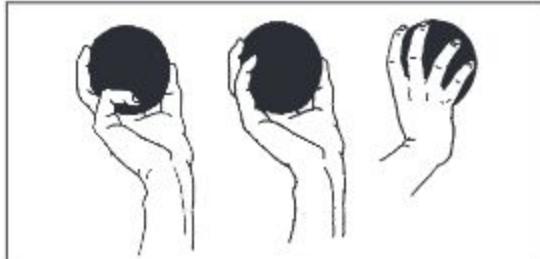


**End of the run:** All runs will be finished on same line. The winner will be decided according to the touching of 'Torso' to the last line. From navel to throat this area is called "Torso".

**Activity-1 :** Exercise some track events in the school field.

## Lesson -8 : Shot put, Discus and Javeline throw.

**Throwing the shot:** If the competitor are 8 or less all competitors will get 6 chances. If the competitor are more than eight, in that case every competitor, will get 3 chances. After 3 chances best of 8 thrower will get 3 more throwing. This rule will be applicable for throwing and jumping events only. Precautionary measures should be maintained to avoid accident in every respect.



Catching the shot put

### Techniques of holding the shot put :

- Shot will be kept on pump in the opposite hand.
- Shot will be held by throwing hand.
- Shot will held on touch by finger's base at the time of holding.
- At the time of throwing support will be on thumb and little finger and strength will remain on other three fingers.



Throwing the shot put

### A thrower will lose a chance, if-

- He takes step from outside of the circle and throws within the circle.
- If the shot falls on the sector line or outside the line.
- At the time of throwing if thrower touches the outside land of the circle.
- If the thrower touches upper part of stop board.
- After throwing, if the thrower comes back front side of the circle.
- If the thrower does not throw within 60 seconds when his name is called.

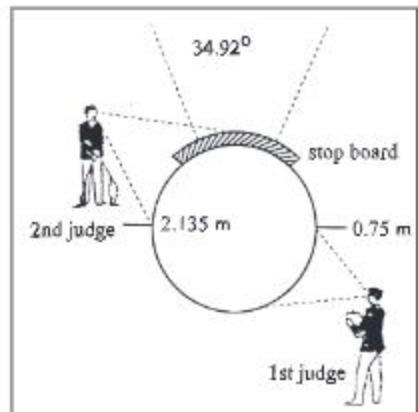
**Circle of shot put:** Diameter of the inner edge of circle is 2.135 m , parallel of the midline will be extended up to 0.75 m in both side. Angle is 34.92 degree. Inside of the circle will be unleveled, so competitor will get advantages at the time of turning.

**Stop board:** There will be a wooden stop board for throwing the shot.

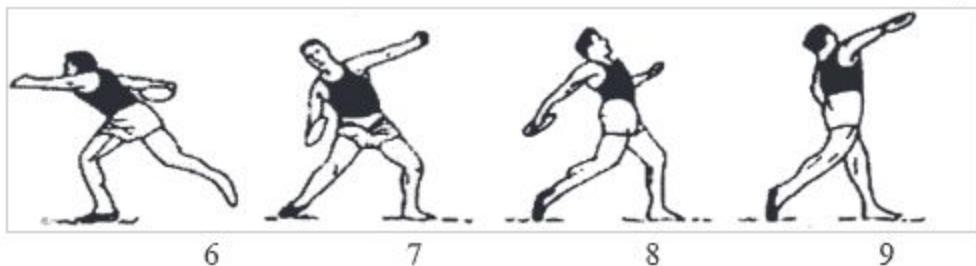
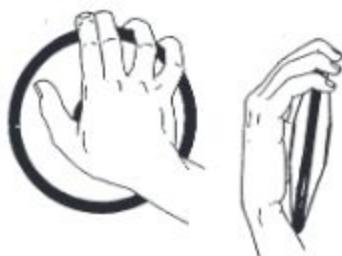
#### Throwing of discus:

##### Method of holding the discus:

- Discus will be held first by opposite hand.
- Upper part of the discus will be plain.
- The discus will be encircled by the first base of three fingers in throwing hand.
- The fingers will be kept spacious.



Circle of shot put



Throwing the discus

##### When a throw is counted as disqualified

- When the discus falls on the line or outside the line.
- Thrower touches outside land of circle.
- After throwing if thrower comes out from the front side of the circle.
- Thrower touches the upper part of the iron ring.
- Thrower does not throw from inside the circle.
- Unless throwing is completed within 60 seconds, when name is called.

**Throwing of Javeline:** The javeline must be thrown over the shoulder by hand. The thrower after realising the javeline will turn his body towards behind within the throwing area, while the javeline does not touch the ground, still the thrower does not leave the runway.

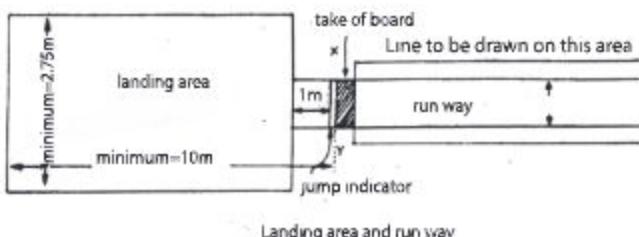


#### **When a throw is counted as unsuccessful.**

- Javeline falls on the line or outside the line.
- The head of the javeline does not touch first.
- At the time of throwing touching the arc line.
- Touching the outside land of demarcated area of run way.
- After throwing crossing the extended area of arc line.
- After calling the name, failing to throw within 60 seconds.

### **Lesson-9: Long jump and High jump**

**Long jump:** When more than eight competitors participate in the competition all players will get 3 jumps. Best eight will be taken for 3 more jumps. If there are eight or less competitors to participate a competition all competitors will get 6 jumps.

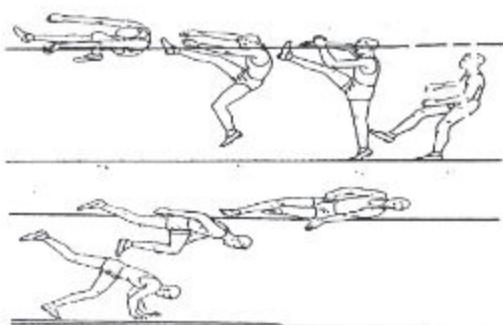


#### **When a competitor losses his chance in long jump.**

- If the competitor touches the land in front of take off board
- When a competitor jumps outside of take off board.
- Touches the ground outside landing area before landing.
- After jumping walks behind.
- At the time of jump competitor takes off in two legs or somersault.
- Failing to jump within 60 seconds, after calling his name.



**High jump:** The height of jump will be known to the competitor before starting the high jump. How much height will be increased it will be declared after the end of the round. The cross bar will be increased 2 centimeters at the end of the round. The competitor must take off in one leg. If a competitor fails consecutively 3 times, he will not take the chance in next height (It will exception about 1st place deciding jump).



High jump

### When a competitor lose his chances in high jump

- Failing to jump within 60 seconds after calling the name.
- The crossbar falling at the time of high jump.
- When a competitor goes under the crossbar without jump.
- If the body of competitor goes out of two stands.

**Tie:** Tie means equal or draw. When competitors pass the same heights & same distance tie occurs, Tie breaks only for 1st place. 2nd and 3rd place will be declared jointly.

### The rules of tie breaking Hight:

- The competitor crossing the height in lowest jump in tie height will be winner.
- If tie does not break by the mentioned rules, whose cross is less from 1st to last jump, he will be the first.
- The tie is not broken, applying this first and second rule the height of the crossbar will be increased or decreased for jump. Who passes the mentioned height will be the winner. Here the competitor will get only one chance of the height.

### The tie breaking rules of distance:

- In total through or jump 2nd highest distance should be under consideration.
- If tie is not broken we will count third highest jump in total jump (gradually will count this way). Draw a graph in the following-

Competitor	Height						Place
	1st Jump	2nd Jump	3rd Jump	4th Jump	5th Jump	6th Jump	
A	7.02	7.15	—	7.10	7.35	7.40	3rd
B	6.10	6.50	6.60	7.05	7.10	7.12	4th
C	7.50	—	—	7.45	7.55	7.60	1st
D	—	7.30	7.40	7.60	—	7.50	2nd

We see, C & D both has crossed the 7.60m distance. According to the rules, we will see the 2nd highest distance. 2nd highest distance C is 7.55m and D is 7.50m distance has crossed. So C will be first, D will be 2nd and A will be 3rd. Tie breaking rules of tie is same as in long jump, hop step and jump, shot put, hammer, discus and throwing the javeline .

**Activity-1:** Demonstrate the technique of holding the shot.

**Activity-2:** Explain for what reason a competitor losses a chance in long jump

### Exercise

#### Multiple choice question

**1. Which game is involved with violation?**

- a. volleyball                    c. handball
- b. basketball                  d. football

**2. Which game has lay up shot ?**

- a. volleyball                    c. handball
- b. basketball                  d. football

**3. Which should be touched at the finishing line in respect of race ?**

- a. hand                        c. torso
- b. leg                         d. forehead

**4. What is the name of the international organization of swimming -**

- a. FIFA                        c. BHF
- b. FINA                      d. IHF

**5. Which swimming's handwork is like English letter 'S' –**

- a. free style                    c. butterfly
- b. back stroke                d. breast stroke

- 6. A competitor will lose his/her opportunity in throwing of shot put if -**
- touches the upper part of stop board
  - if comes out through the front side of the circle
  - does not throw shot put within 60 seconds

**Which one of the following is correct ?**

- a. i and ii    b. ii and iii    c. ii and iii    d. i, ii and iii

**Observe the following picture and answer question no 7 and 8**

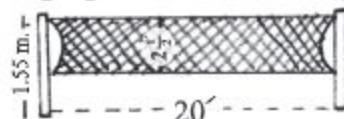


- 7. Which game does the picture above indicate?**
- javeline
  - shotput
  - pole vault
  - triple jump
- 8. The reason of failure of the competitor above game is -**
- touching or going over the sector line
  - touching the arc line
  - touching the land outside the certain line for ran way

**Which one of the following is correct ?**

- a. i and ii    b. i and iii    c. ii and iii    d. i, ii and iii

**Observe the following figure and answer question no 9 and 10**



- 9 . Which game is the figure above involved with?**
- lawn tennis
  - table tennis
  - badminton
  - volleyball
- 10. To be skilled in that game, one needs -**
- flexibility of hand
  - proper gripping
  - good foot work

**Which one of the following is correct?**

- a. i and ii                  c. ii and iii  
b. i and iii                  d. i, ii and iii

**Read the following stem and answer question 11 and 12**

**A, B and C are the shapes of three types of sports field**

A Length-100 yards width -60 yards
--

B length - 44 feet width - 17 feet
--

C length - 44 feet width - 20 feet
--

**11. Which sports does A marked figure indicate ?**

- |               |             |
|---------------|-------------|
| a. badminton  | c. handball |
| b. basketball | d. hockey   |

**12. Which of the following techniques is applicable for both B and C sports field ?**

- |              |                |
|--------------|----------------|
| a. dribbling | c. lay up shot |
| b. smash     | d. service     |

**Read the following stem and answer question 13 and 14**

Type of games	Number of listed player	Number of player participated
A	16	11
B	12	7

**13. Which sports is indicated in figure 'B' ?**

- |              |               |
|--------------|---------------|
| a. badminton | b. basketball |
| c. handball  | d. hockey     |

**14. Which technique is applied in both the games ?**

- |          |                |            |              |
|----------|----------------|------------|--------------|
| a. smash | b. lay up shot | c. service | d. dribbling |
|----------|----------------|------------|--------------|

#### **Short Answer Question:**

1. Necessary infrastructural advantage can grow a student as a good citizen - Explain.
2. Knowing how to swim is essential for the protection of life - Explain.
3. There is no exception of mastering, stopping and dribbling to be a good hockey player – Discuss.
4. Fast moving footwork is the precondition for being a good badminton player - Explain.
5. One has to know about violation to play basketball - give your opinion.
6. False start makes a sport participant unfit - Explain.

# 2025 Academic Year

## Eight-Physical Education and Health

শিক্ষার কোনো বয়স নেই।



For free distribution by the Government of the People's Republic of Bangladesh.