

3) Mayookha Johny is from _____ state

(1) Karnataka

(2) Tamil Nadu

(3) Keral

(4) Andhra Pradesh

III. Answer the following in one sentence.

1. How should the triple jump runway be constructed?
2. Which colour is painted on the triple jump take off board?
3. What is the shape of the triple jump take off board?
4. What is the width of the triple jump runway?

IV. Answer the following in three to four sentences.

1. Write any three rules of triple jump.
2. Write any three fouls in triple jump.
3. Draw the triple jump arena and write the measurements.

V. Activity.

1. Construct a triple jump pit using sand on a thermacol.
2. Make a list of the names, year, country, state and national awards of the triple jumpers who have achieved the highest sports awards.

Lesson – 8

JAVELIN THROW

The following aspects are learn in this lesson

- History of Javelin throw
- The rules of Javelin throw sector
- Fouls and weight in javelin
- Famous javelin throwers

Javelin throw competition is an important throwing event in athletics and has got its own importance. History tells us that in ancient times man used to fix a sharp stone to the tip of a long stick and use it as a weapon to hunt animals and thus started the beginning of javelin throw. In ancient Greece, the Greeks used to have a javelin as a weapon during wars, and it was a light pointed stick, which was convenient to throw.

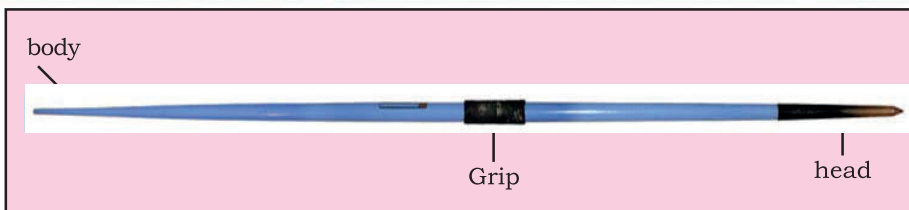
The modern javelin has seen many changes in weight and length. There were many changes to the rules of the event and at the Olympics, Asian games, national level and state level, it has become a very important event among the throwing events in athletics.

Olympic history

Javelin throw was an event in the ancient Olympics, later was added to the modern Olympics for the men in 1908 and for the women in 1932. Javelin throw in Olympics has made itself an interesting event to watch. Earlier javelin was used to hunt for food and now javelin is thrown to hunt medals.

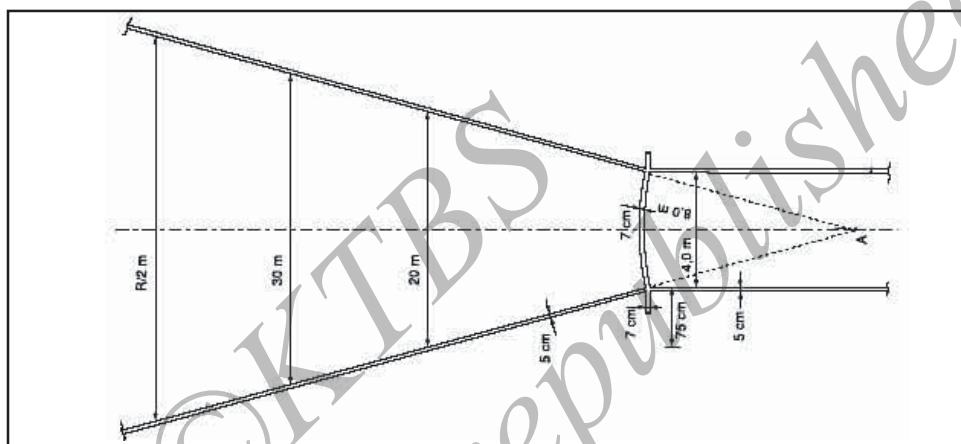
Construction of a javelin

A javelin has three parts namely the head, body and the grip. The head of the javelin is pointed and is covered with a metal cover. The grip of the javelin will be located on its center of gravity.



Javelin

Construction of the sector



Javelin throw sector

Measurements :

- 1) The runway of the javelin throw should be from a minimum of 30 mts. To 36.5 mts. Long.
- 2) The width of the runway should be 4 mts.
- 3) The lines of the runway should be 7 cms. wide and white in colour.
- 4) At one end of the runway, a line perpendicular to it and on either side 75 cms. long and 7 cms. wide called the scratch line should be marked. This should be in white.

Basic rules of the competition

- 1) The javelin should be thrown from within the runway.
- 2) The javelin should be compulsorily held at the grip so that the palm is facing upward.
- 3) The javelin should be held above the shoulder and thrown. The elbow should be extended forward.

- 4) When the javelin is thrown the metal tip should contact the ground first, then the body of the javelin can touch the ground.
- 5) The javelin thrower should not turn his back to the direction of the throw till the javelin has landed.
- 6) The mark of the javelin point should be within the lines of the sector.
- 7) Until the javelin lands the thrower may not leave the runway.
- 8) After the javelin is thrown the thrower should leave the runway without touching the white scratch line and should step out from behind it.
- 9) In the javelin competition the throwers are given three attempts in the first round out of which the best eight will be selected. These eight throwers will be given three more throws.

Warning : When learning or teaching to throw the javelin, the students should stand behind the sector or far away from it. This is because, the javelin might accidentally slip out of the thrower's hand and there are chances of it injuring the students standing outside the sector.

Fouls :

1. The thrower cannot start running from outside the runway.
2. If the javelin is thrown without the appropriate technique.
3. If the javelin point makes a mark of the sector line or outside it.
4. If the thrower touches the boundary of the runway after he has started running.
5. If the thrower leaves the runway after the javelin is thrown and before it touches the ground.



Length of Javelin

Various weights of Javelin

Javelin	Women/ Girls/ Junior boys	Youths/ Boys	Men
Minimum weight to create a record	600 grams	700 grams	800 grams
Length of the javelin Minimum	2.20 mts.	2.30 mts.	2.60 mts.
Maximum	2.30 mts.	2.40 mts.	2.70 mts.

State Athletes

Kashinath Naik : Kashinath Naik hails from Sirsi. He secured the gold medal in the senior international athletic championship after throwing the javelin to a distance of 73.77 mts. He bagged the bronze medal in the 19th commonwealth games held at Delohi in 2012. He is training at the Army Sports institute and is a subedar in the Armoury 69 regiment.



Kashinath Naik

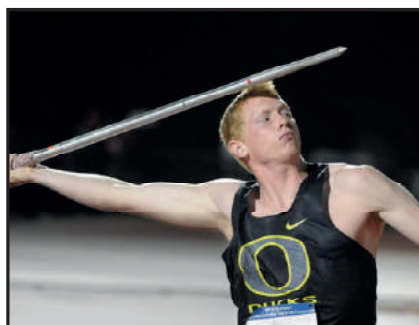
National athletes :

Sabir Ali : He is the former javelin thrower of India. He secured the silver medal in the South Asian Federation games held at Kathmandu in 1984. He participated at different levels of competition and gave excellent performances. For his excellent achievements the government of India honoured him with the Arjuna award in 1981. He is from Maharastra.

Neeraj Chopra: Has created world record in 2016 at IAAF (Junior) meet at poland. He has represented India in the international meet worth distance of 86.48 meters. He is from Haryana.

International athletes

Hostetler : Hostetler was born on 08-08-1986. He threw the javelin to a distance of 83.16 mts at the PAC-10 championships and secured the gold



Hostetler

medal. This is his personal best. He received his training from Christina Sterwin. He created a record in the Oregon university. He has won medals in USA championship, NCAA championship and the 2011 Toronto international track and field championship. He has participated in the 2012 London Olympics. He stood 17th in the qualifying rounds of the 2008 London Olympics.

He is a graduate in science and is a professional in website and graphics designing. He worked in the project management of the 2012 IS Olympic track and field trials.



Leslie Copeland

Leslie Copeland : He is a citizen of Fiji. He is the second javelin thrower from Fiji to participate in Olympics. He participated in the 2012 London Olympics. He was living on an island in which there was only one stadium. This stadium was used for playing rugby and soccer. Because of this it was very difficult for him to practice javelin. This place was technically and infrastructure wise less developed which made it difficult for him to compete with athletes coming from well developed countries.

At present he is being coached by James and the Red bull company is sponsoring his participation in competitions and for providing facilities. He has received the international 'Olympic council scholarship'. His best throw is 80 mts. He has left his job and has dedicated full time in practising javelin throw.



Andreas Thorkildsen

Andreas Thorkildsen : He is from Norway and secured his second Olympic gold medal in the 2008 olympics. He threw to a distance of 84.74 in his first throw, 87.93 in his second throw to secure the gold medal. But his throw of 90.57 mts. in his fifth throw bettered the Olympic record for the event. His personal best is 91.59 mts. In 2009 he was ranked 9th among the 10 best javelin throwers of the world. The worlds best throw is 91.28 mts.

He was born on 01-04-1982. His father a former javelin thrower was his first coach. Tom's best throw was 71.64 mts. Thorkildsen's mother Bente Amundsen was a national medallist in the 100 mts. hurdles in 1972. Upto 1999 he was coached by his father and was

seventh in the European junior championship. In 2000 he was placed second in the Norwegian championship and world junior championship. He started coaching under Asmund Martinsen. In the 1994 Norwegian championship he secured the bronze medal.

EXERCISES

I. Fill in the blanks with suitable words.

1. In the ancient times a sharp _____ was attached to the end of a light pole and used.
2. The javelin competition for men in the Olympics was introduced in _____.
3. Javelin has got _____ parts.
4. The width of the Javelin runway is _____.

II. Choose the correct answer from the following four choices.

- 1) In the ancient times the javelin was used for
(1) Food (2) Hunting (3) Protection (4) to dig
- 2) Distance thrown by state athlete Kashinath Naik in the 19th Commonwealth games is
(1) 76.29 mts. (2) 73.28 mts. (3) 74.29 mts. (4) 73.77 mts.
- 3) The personal best of international athlete Andreas Thorkildsen is
(1) 91.59 mts. (2) 90.57 mts. (3) 91.28 mts. (4) 84.74 mts.
- 4) The year in which national athlete Sabir Ali received the Arjuna award is
(1) 1980 mts. (2) 1981 mts. (3) 1984 mts. (4) 1985 mts.

III. Match the following.

A

1. Ancient Greeks
2. Modern Olympics
3. Weight of women javelin
4. Weight of men javelin

B

1. Hunting medals
2. From Sirsi
3. 800 grams
4. War
5. 600 grams

IV. Answer the following questions.

1. Write the year in which the javelin event was introduced for women in the Olympics.
2. Write the rules of the javelin competition.
3. Write the minimum length of the javelin for men.
4. In whose name does the record for javelin throw for women in Karnataka stand?
5. Write the fouls of javelin competition.

YOGA

Lesson – 9

ASHTANGA YOGA

The following points are learn in this lesson

- Meaning of Ashtanga yoga and its importance
- Benefits of yoga practice
- Types of Pranayama
- Kapalabhati

We will learn the importance of yoga, types of pranayama and kapalabhati activities.

Yoga consists of simple and activity oriented asanas. Yoga finds a place of pride in our daily life. Yoga is important in improving ones health. In recent times yoga has become popular as a means of improving the health of a person.

Meaning of ashtanga yoga and its importance :

Calming the mind, integrating the mind and body is the aim of yoga. There are many ways of achieving this aim. The Propounder of yoga science sage Patanjali in his book 'Yoga sutra' has referred to four important ways. They are called 'yoga patha'. They are (1) Jnana yoga (2) Bhakthi yoga (3) Karma yoga (4) Raja yoga.

In order to involve fully and develop mind control, one has to travel these paths step by step. For this purpose one has to achieve control over mind and breathing which is the basic controlling factor of man's behaviour and habits. This will result in man reaching his goal, which is taught by 'Raja Yoga'.

Sage Patanjali has indicated eight steps in Rajayoga and called them 'Ashtanga Yoga' or 'Path of Ashtanga'. These eight steps are referred to as yama, niyama, asana, pranayama, prathyahaara, dharana, dhyana, Samadhi.

1. **Yama :** In order to become a socially acceptable person we have to cultivate good habits. They are called 'yama panchaka'. They are

- (1) **Ahimsa (non violence)** : One should not cause harm to anyone in whatever way possible.
 - (2) **Satye (truth)** : Telling common occurrences and subject in a direct manner is called satye.
 - (3) **Astheya** : To abstain from stealing is astheya. It means not to desire things or objects which do not belong to us.
 - (4) **Brahmacharya** : Taking control of physical, mental and senses is called brahmacharya.
 - (5) **Aparigraha** : Not accumulating or receiving more than necessary is called aparigraha.
- 2. Niyama** : Niyama refers to the rules and regulations which determine the personal behaviour of an individual. It consists of five principles which are also called the “five senses of niyama”.
- 1) **Shaucha (Cleanliness)** : Keeping the body and environment clean is called shaucha. In addition to it we should also keep our mind pure.
 - 2) **Santhosha (Happiness)** : Santhosha means happiness, joy and contentment. If the yoga practitioner does not desire anything naturally he will be self satisfied and happy.
 - 3) **Thapassu (Meditation)** : Continuous attempt towards devotion is meditation. It is important to see that the mind does not go astray.
 - 4) **Swadhyaha (self study)** : Being aware of oneself is swadhyaya. One can call this self study or introspection. We should introspect ourself quite often.
 - 5) **Ishwara pranidaana (offering one's life to god)** : Offering oneself to god is ishwara pranidaana. It means having faith in any one principle, subject, individual or power.
- 3. Asana** : The third step of Rajayoga is asana. Body postures are called asanas. It is important to practise asanas in order to keep the body in one position still, without pain and for a long period. We will learn more about asanas separately.
- 4. Pranayama** : “Prana” means life, breath, vital energy and “ayama” means control. It is the phase where breath which is the link

between the mind and body is regulated. In this step various breathing exercises can be practiced.

5. **Pratyahara** : It means the withdrawal of senses. The mind observes the external happenings with the help of the sense organs. To focus this mind within ourselves is pratyahara.
6. **Dharana** : Dharana means to concentrate. It means an individual focuses his mind on one subject or object without being distracted. This activity helps in unwavering focus of the mind.
7. **Dhyana** : Uninterrupted meditation without any particular object is dhyana. The procedure of controlling the mind and the senses concentrating on the almighty is dhyana.
8. **Samadhi** : The eighth step of ashtanga yoga is Samadhi. It is a continuation of dhyana. In this stage the individual becomes immersed in the object or he himself becomes the object. He enjoys absolute bliss.

Sage Vyasa has said Yoga=Samadhi. It means yoga is Samadhi or Samadhi is yoga.

As sage Patanjali has explained in his “Yoga Sutras” continuous dhyana becomes one with an indefinite object and loses his existence is the real Samadhi. In this state, body, mind, intelligence all become one, and thoughts such as I, mine are eliminated. At this moment the practitioner is relaxed in a sleeping state, and his mind and intelligence are activated. “The joy of the soul that we see in all the corners of our life is Samadhi”.

Necessity of yoga

Body is the basic cause of performance of religion. For man to reach his life's goal it is important for him to have a healthy body. Just as the saying 'health is wealth' goes it is better to live a short but healthy life rather than live a long but a life of sickness. Therefore we should possess good health throughout our lives.

In recent years due to increased comforts caused by industrialisation and automatisations, participation in physical activities has decreased. Mental stress, sleeplessness, worries, luxurious life, intake of processed food has increased leading to a decrease in immunity, leading to an increase in diseases. Questions like Is there a solution for this? How do you get relief from these

ailments? arise in ones mind. The solution to this is yoga or regular practice of yoga.

Since yoga has got enough beneficial effects to cause all round development in man, yoga has become important for man. Yoga affects the mind and body with more beneficial effects than any other form of exercise or sports activities.

Beneficial effects of yoga

- Leads to total health of the body.
- Calms the mind.
- Improves mental strength and perception.
- Increases concentration.
- Several asanas increase the strength of many muscles and improve the efficiency of all the organs and brain.
- The blood vessels get cleansed through pranyama, mental stability increases. It plays an important role in keeping the respiratory system healthy.
- Relaxing kriyas relax the body and mind and help to keep them calm.
- Helps in making good thoughts and taking good decisions.
- Practice of meditation helps us to reach the peak of spirituality and also has a positive influence on intelligence.
- Betters the immunity system and keeps the body healthy.
- Helps in the allround development by leaving its stamp of influence on the physical, mental, emotional spiritual and spiritual aspects of man.

This way practice of yoga creates a fountain of knowledge in us. It makes the development of personality an interesting aspect. If a child has to grow into a man only education is not sufficient. Here intelligence is required twice as much as education.

Like the saying “Knowledge is food”, knowledge is the food for mind. Practice of yoga makes us knowledgeable persons and thereby makes us intelligent human beings.

To gain intelligence, increase immunity, avoid diseases, to have presence of mind and to live as good citizens in the society, it is important to make yoga a part of our life.

Types of pranayama

Pranayama :

To get the benefits of deep breathing, practice of breathing in a systematic manner is called Pranayama. There are many types of pranayama. They are

1. Anuloma – viloma pranayama
2. Chandranuloma – viloma pranayama
3. Suryanuloma – viloma pranayama
4. Chandrabhedana pranayama
5. Suryabedhana pranayama
6. Nadi shodhana or nadi cleansing pranayama
7. Sheetal, sheetkari and sadantha
8. Brahmari 9. Ujjayi 10. Bhastrika
11. Plavini 12. Murcha

Our body has got five pranas.

- Prana
- Aapaana
- Udaana
- Samaana
- Vyana

Gaining control over these five pranas through breathing is called pranayama.

Pranayama

- Control of breathing
- Cleansing of blood vessels
- Control over five pranas
- Control of mind.

Pictures of mudras used in pranayama:



1. Nasika mudra



2. Chinmudra



3. Chinmaya mudra



4. Brahma mudra



5. Mrigi mudra

Anuloma viloma pranayama : Practice of breathing through both nostrils. Sit in any of the meditation asanas, Being in the chinmudra breathe in soundlessly through both nostrils for 4 counts and breathe out for the same counts.

Chandranuloma – viloma pranayama : Breathe in and out through the left nostril only. Sit in a meditational asana, make the nasika mudra with the right hand, close the right nostril gently with the thumb, breathe in and out uniformly through the left nostril only.

Suryanuloma – viloma pranayama : Breathe in and out through the right nostril only. Sit in a meditational asana, make the nasika mudra with the left hand, close the left nostril gently with the thumb, breathe in and out uniformly through the right nostril only.

Chandrabhedana pranayama : Breathe in through the left nostril and breathe out through the right nostril. Sit in a meditational posture, with the nasika mudra close the right nostril, breathe in

slowly through the left nostril. Closing the Chandra nadi (left nostril) breathe out through the surya nadi (right nostril).

Suryabhedana pranayama : Breathe in through the right nostril and breathe out through the left nostril. Sit in a meditational posture, with the nasika mudra close the left nostril, breathe in slowly through the right nostril. Closing the Surya nadi (right nostril) breathe out through the Chandra nadi (left nostril).

Nadi Shodhana or cleansing the nadis pranayama : This is the combination of chandrabhedana and suryabhedana pranayamas. This is the practice of cleansing the nadis. Breathe in through the left nostril and breathe out through the right nostril, next breathe in through the right nostril and breathe out through the left nostril. Here the puraka and rechaka is done and on its completion kumbaka is begun. It is suited to practice the antherkumbaka and bahyakumbaka. This is the basis of pranayama. This is practised to bring about a balance between Ida (mental force) and pingalanadi (vital force) and to correct the heating and cooling mechanism of the body. Explanation of puraka, rechaka and kumbaka is given in the previous class.

Ujjayi : As you breathe in s s s... sound should come from the throat.

Sheethali : Roll the tongue and breathe in.

Sheethkari : Fold the tip of the tongue backwards, making a s s s .. sound breathe in through the openings formed at the side of the tongue.

Brahmari : Brahmara means bee. While breathing out make a sound like a female bee and loudly make a 'hmm...' humming noise.

Bhastrika : The combination of bhastrika kriya and suryabhedana pranayama is called bhastrika pranayama.

Murcha : Make the shanmukhi mudra with both hands, hold the breath as long as possible.

Plavini : Inhale and rub the stomach vigorously sideways, upwards and downwards. Next slowly breathe out.

Sadanta : Pranayama made with the help of the teeth.

Kapalabhathi

This is done as a preparation for the practice of pranayama.

Meaning : Kapala means forehead. Bhati means shining.

Definition : “Kapalam bhati ithi kapalabhathi” means adding shine to the forehead. This procedure stimulates the brain and the blood vessels and improves their functioning.

In a quick and active breathing activity, the exhalation is forcefully done while the Inhalation takes place normally. The cells of the brain are activated from this activity, the forehead becomes bright. Therefore this activity is called kapalabhathi.

Procedure : Keep the back and neck erect and sit in vajrasana position. Voluntarily pull the abdomen muscles inside, while breathe out forcefully and explosively. Once inhalation is done, breathe out forcefully as many times as possible. Afterwards come back to normal breathing and relax. Later continue the practice. Practice 2 to 3 times.

In kapalabhathi since the breathing out is done explosively, the breathing in takes place by itself. You do not require to strive to breathe in.

Note : Persons with weak heart, neck pain, discharge from the ears, extreme weakness, fever should not do this practice.

Exercises

I. Fill in the blanks with suitable words.

1. The great propounder of yoga _____.
2. There are _____ steps in Ashtanga yoga.
3. By doing _____ the blood vessels get purified and improves mental stability.
4. Pulling the breath in is called _____.

II. Choose the correct answer from the following four choices.

- 1) Ashtanga yoga comes in
(1) Bhakti yoga (2) Jnana yoga (3) Karma yoga (4) Raja yoga

- 2) In yama panchaka _____ is one.
(1) Niyama (2) Asana (3) Pranayama (4) Truth
- 3) The benefit gained due to yoga practice is _____
(1) Body weight decreases (2) Concentration improves
(3) body weight increases (4) creates unity
- 4) The pranayama performed with the help of teeth is called ____
1) Sadanta (2) Sheethali (3) Sheethkari (4) Brahmari

III. Answer the following questions.

1. What is the main aim of yoga?
2. What is 'Niyama'?
3. Write the literal meaning of the word 'kapalabhati'.
4. Write any two types of pranayama.

IV. Answer the following questions in two –three sentences.

1. Write the eight steps of ashtanga yoga
2. How many yama panchakas are there? Which are they?
3. What is pranayama

V. Activity.

Except the sitting, standing and lying down asanas of the 9th standard, collect information about one sitting asana, standing asana and lying down asana and write their uses.

HEALTH EDUCATION

Lesson – 10

SOCIAL HEALTH

The following points are learn in this lesson

- Meaning of social health and its importance

Health Education being academically important, social health deals with creating a healthy environment and protecting social values in public places, about which we will learn in this lesson.

Meaning :

To create a healthy society, it is necessary for every citizen to have adequate knowledge about health. To learn about social health it is essential to have knowledge about health. Health education and social health are like the two faces of the same coin.

To protect social health the cooperation of every member of the society is very important. To achieve this they should have appropriate knowledge, habits and attitudes. Health education is the medium through which these can be gained.

According to Dr. Vin Slo “The well organised efforts of the society to prevent diseases by creating a good healthy and clean environment, making arrangements for their appropriate medical treatment, giving guidance to individuals about their personal health through a scientific approach is social health.”

In the opinion of Dr. Brokingine “a collection of knowledge and the method of its execution is social health.”

Social health can be said to be the collective efforts to protect the society from common diseases and to improve its health and creating a healthy environment for citizens to enjoy by preventing adulteration of food, pollution of water and air.

It is the duty of every citizen to protect social health.

To possess good social health it is important to adopt the following measures:

1. Spitting, sneezing and dirtying in public places should be avoided.
2. The waste organic products should be disposed of only in places meant for their disposal.
3. To create a clean environment by destroying agents of diseases such as mosquitoes, bed bugs etc.
4. To maintain cleanliness in public toilets.
5. To urinate and defecate only in public toilets.
6. It is important to avoid water, sound and air pollution from industries and vehicles.
7. To report the outbreak of social diseases to the related authorities.

Activity

Make a list of social health activities which you have conducted in your class and school.

Necessity of social health

1. To improve and maintain the health of every member of the society.
2. To create a society free of diseases.
3. To develop peace, love, confidence and cooperation in the society.
4. To help lead a happy and healthy life.

EXERCISES

I. Fill in the blanks with suitable words.

1. It is necessary for every citizen to have a knowledge of _____ to create a healthy society.
2. To maintain social health the _____ of every member of society is very important.
3. Collection of knowledge and the _____ of its execution is called social health.

II. Answer the following questions in a sentence.

1. What is social health according to Dr. Brokingine.
2. Write any two measures to develop good social health.
3. Write any two necessities of social health.

III. Match the following.

A

1. Disease free
2. Peace, love and faith
3. Urination
4. About health

B

1. Everyone should know
2. Use of public toilets
3. Should be developed.
4. Aim of creation of society

IV. Activity.

In view of maintaining cleanliness of social places

1. Skits or street plays
2. Debates
3. Writing slogans about maintaining cleanliness
4. Preparing placards to create awareness among public.

Lesson – 11

USES OF HEALTHY ENVIRONMENT

The following points are learnt in this lesson

- Health is wealth – How?
- Exercise in open environment
- Gymnasiums and aerobic centers.
- Swimming pool and sports training centres

Health education being an important academic issue, in relation to it, it is important to know about the places and environment which contributes to healthy living and how they can be made more useful to the society.

Health is Wealth

The home, school and the surrounding environment plays an important role in influencing the health status of a child. Therefore it is every individual's duty to create and maintain a healthful environment.

The following are the uses of a healthy environment

1. Improves the health status of every individual.
2. It makes it possible for every person to perform his daily work in an effective manner.
3. It contributes to the growth of social harmony.
4. It contributes to the creation of a self sufficient society and nation.
5. It can prevent several serious diseases.

1. Open air activity

Walking and spending time in the arms of nature especially during sunrise and sunset is called open air activities.

Selecting spots where the human or vehicle population is less and going for walks or running results in the following uses.

1. The body receives adequate oxygen.
2. Provides peace of mind. The stress caused by continuous work is relieved.

3. Supply of adequate quantities of vitamin D for the skin.
4. Improves blood circulation
5. Relieves the stiffness in joints.
6. Overall it improves the health of the person who indulges in open air walks and exercises.

2. Gymnasiums :

Normally gymnasiums mean places where systematic and special training is given to various parts of the body either with or without the use of specialised equipment.

‘Adequately equipped places or schools where various exercises with or without equipment are implemented in a scientific manner in order to achieve good health are called gymnasiums.’

Uses of gymnasiums

1. Physical abilities such as speed, strength, endurance, agility, coordination can be improved.
2. Since exercise can be controlled in gymnasiums physical fitness can be improved.
3. Exercise can be given in a scientific and systematic manner to all the parts of the body.
4. Helps in achieving good posture.
5. In addition to improving immunity, helps in achieving good health.
6. Helps in preventing unwanted behaviour and habits.
7. Overall helps in the all-round development of children.
8. Helps in improvement of physical, mental and social behaviour.

3. Aerobic centres

Aerobic activities are those activities done continuously for at least 15-20 minutes. They include cycling, swimming, walking, running, aerobic dance etc. “Places where aerobic type of exercises is done are called aerobic centres”. Normally in aerobic centres the aerobic activities include aerobic dance or such other exercises to music. Aerobic dance or exercise to music are exercises done in a rhythmic manner to counts or beats of music. In these activities in addition to exercising one also gets entertainment. These activities are called aerobic activities because they are done while consuming sufficient oxygen.

Uses

- 1) It improves flexibility, endurance and agility.
- 2) Develops the cardio vascular system.
- 3) Improves neuro muscular coordination
- 4) May improve the dancing ability of the children.
- 5) It provides entertainment along with exercise.

4. Swimming pool

The ability to float and move in the swimming pool is called swimming. Swimming pool is a facility where a artificial enclosure as per predetermined specifications is constructed in the ground and clean water is stored in it for the purpose of swimming.

Uses

- 1) Provides exercise to all parts of the body.
- 2) Improves the neuro muscular coordination.
- 3) Develops the motor abilities like endurance, strength, flexibility, speed, agility.
- 4) Improves the cardio vascular system.
- 5) Helps in achieving good posture.
- 6) Swimming provides opportunities for competitive swimming and successful swimmers are provided opportunities to get respect and honor in the society.
- 7) Suitable for all age groups

Along with individual achievements, various competitions can be organised in the swimming pool.

5. Sports training centres :

Sports training centres are centres created for the purpose of helping the state and national athletes train and achieve good performances at the state, national and international levels.

For example the Sports Authority of Karnataka and Sports Authority of India has opened several well equipped sports hostels and training centres in many districts. Similarly many private trusts and institutions also are running many sports training centres. These training centres being residential ones, offer all the facilities necessary

for improving sports performances. The main purpose of these centres is to create the atmosphere and provide facilities for achieving notable performances in different games and sports at the national and international levels.

Uses

- 1) High level of training is provided in various games.
- 2) It is possible to achieve excellent performances at the national and international levels.
- 3) Helps in developing qualities of self confidence, courage and social qualities in children.
- 4) Makes it possible for children to adopt sports as a career.
- 5) Helps a person to achieve a place of respect and pride in the society.

Exercises

I. Fill in the blanks with suitable words.

1. By having good healthy environment the level of _____ of every individual improves.
2. Indulging in open air activity provides _____ which is essential for the human body.
3. Optimum participation in aerobic activities develops _____ ability.
4. Swimming regularly contributes to the development of good _____.

II. Answer the following questions.

1. Which are the two main benefits of participating in limited open air activity.
2. Write any two benefits derive from using the gymnasiums.
3. What are aerobic centres?
4. What is swimming?

III. Activity.

Open air activity, gymnasiums, aerobic centres, swimming pool, sports training centres – write an essay on their uses and maintenance.

Lesson – 12

USES AND BENEFITS OF RAW VEGETABLES

The following points are learn in this lesson

- Uses and benefits of raw vegetables

As the saying goes ‘Health is Wealth’, health is very important. Each one’s health has to be properly protected. Good food is important to maintain good health. The food stuffs that are used in the diet are important, and including raw vegetables in the diet provides us with good nutrition.

Diseases occur because of absence of nutrition in food. Fresh food stuffs such as raw vegetables, fruits, roots and sprouted grains contain various nutritients. As such they are also called live foods. All the nutrition required for development, maintenance and purification of the body is contained in these live foods in adequate quantities.

Green leafy vegetables, lime (calcium), contain iron content and have more vitamin A than any other food stuffs. Leafy vegetables have vitamin B and C in large quantities and therefore promote health. Therefore leafy vegetables can be used effectively as medicines.

Uses :

- 1) Use of coriander, curry leaves, sacred basil, bilva, neem, muruga and ajwain leaves can relieve many ailments and improve health.
- 2) Use if bitter gourd can control allergies, chest pain, diabetes, blood pressure etc.
- 3) Saffron, red, green coloured fruits and raw vegetables, tubers, raw vegetables contain vitamin A. Consumption of these can improve immunity, health of the eyes, health of the skin, growth in children and health of aged people.
- 4) All leafy vegetables have the power to cleanse the body and cure diseases and help in improving digestion.

Vegetables which can be eaten raw :

Sweet potato, carrot, radish, yam, beetroot, cucumber, ladies finger, lentils, gurkins, tender ridge gourd, fenugreek leaves.

Exercises

I. Fill in the blanks with suitable words.

1. Leafy vegetables are _____ for the health.
2. Sacred Basil and _____ are _____ plants.
3. Bitter gourd is good for _____ disease.
4. Beetroot is called _____

II. Choose the correct form the four options given below.

- 1) Vegetables which are available in the neighbourhood.
(1) Peanuts (2) Jackfruit (3) Fenugreek leaves
- 2) Vegetable which can be eaten raw _____
(1) Drumstick (2) custard apple (3) Radish
- 3) _____ is found in lime.
(1) Sodium. (2) Calcium (3) Potassium (4) Magnesium
- 4) Vitamins are found more in _____
(1) Raw vegetables (2) Dried vegetables
(3) Rotten vegetables (4) Preserved vegetables

III. Answer the following questions in one sentence.

1. What kind of vegetables provide good nutrition.
2. What are the nutrients present in green leafy vegetables?

IV. Activity.

- 1) Exhibition of green vegetables
- 2) Give information about the names and uses of raw vegetables.
- 3) Cut the raw vegetables in various shapes and exhibit them.

Lesson – 13

FIRST AID

We learn about health education and first aid in this lesson

First aid is an essential part of health education and is very important. In this lesson we will learn about the procedures of giving first aid in different situations.

First aid :

- 1) Snake Bite
- 2) Drowning
- 3) Animal bite

Applying bandages in different situations

When an accident occurs, administering treatment on the spot before the arrival of a doctor is First Aid. It is the treatment given to prevent the injury from worsening and to save life.

I. First Aid :

We have learnt the meaning and importance of first aid in the previous class. In this lesson let us learn the nature of accidents and the first aid to be given for those situations. We will learn about the method of administering different first aid procedures.

1) Snake Bite :

Awareness about snake bite :

Snake is a reptile. There are many varieties of snakes. Only a few snakes have poison in them which might lead to death on being bitten by them. The method of preventing death – first calm the person being bitten by snake, the nature of the bite and the teeth, which part is bitten, the blood vessels in the region of the bite should be understood.

Symptoms :

- The teeth marks of the snake can be seen.
- If there are more than two teeth marks then such a snake is not poisonous.

- There is pain in the area of the bite.
- The person being bitten will have tremor in his arms and legs and will not be able to stand.
- There will be spit and foam coming from the mouth.
- The tongue will be stretched out and there will be stammering.
- There will be the possibility of nausea or vomiting.
- There will be drooping of eyelids and difficulty in breathing.
- The body will be stiff, cold and there will be profuse sweating.

Treatment :

- Call the doctor immediately.
- Prevent the casualty from becoming unconscious.
- Tie a tourniquet above the bite. (Tourniquet is a strap tied tightly so that the flow in the veins is restricted and thereby bleeding is stopped).
- Make an attempt to bring out the poison with the blood by making a cut in the skin with a knife or blade.
- Calm the casualty and see that he/she is not anxious.
- Bring him to consciousness if he becomes unconscious.
- In a conscious state, give him hot milk, tea or coffee to drink.

2) First Aid for drowning :

When a person is drowning, a person who knows swimming should get into the water and try to pull the drowning person out of the water. Since a drowning person will be desperate to get out and might grab at you and pull you in along with him, the rescuer should be careful to grab him by the hair or clothes from behind. If there is no swimmer around, then other objects lying around like, rope, pole etc. can be used to help the casualty to grab and pull him out.

The casualty must be made to lie on his side and the water to drain out of his mouth. The stomach should not be pressed to bring out the water as he may choke on his own vomit.

The pulse should be checked, and if absent artificial respiration should be started. The casualty should be calmed down and rested.

3) First aid for animal bite :

'Man is basically a social animal' – he leads a higher level of life than other animals. There are circumstances when he might be attacked by other pet animals or wild animals. For example –

Dog bite :

First one has to find out if the dog which has bitten you is a stray dog, a pet dog or a rabid dog. Any animal bite should be cleaned with antiseptic lotion such as dettol, betadine or hydrogen peroxide and properly dressed to prevent bleeding and infection. Later the casualty should be immediately shifted to a doctor for further treatment as is necessary.

II. Bandages used for different situations :

A common first aid procedure is to apply bandages to any wound or laceration or in cases of sprains. Some of the bandages are:

Bandage for finger tips : This is applied to an wound to the fingers

Bandage for small joints : This is used for injuries to fingers, hands and legs.

Gauze : This is used to prevent infections and to heal the wound.

Pressure bandage : This is a thin bandage made of cotton, helps in keeping the injured part stable and without movement.

Sterilised pad rolls : This can be used for different wounds. It comes in the sizes of 2" x 2", 8" x 3", and 9" x 5" or still larger.

Triangular bandage : The triangular bandage, made from a piece of muslin cloth, has several uses. It can

Activity :

Visit the nearest primary health centre, observe the various bandages and dressings applied by the doctor and collect information about them.

be used as an arm sling for avoiding unnecessary movement of the injured arm. Besides, by folding the triangular bandage at least twice, it makes an ideal bandage for immobilizing the joint in case of a sprained ankle.

Joint stabilising bandage : This bandage has the qualities of firmness and elasticity, keeps the joint stable as well as allow restricted movement. It has got clips to hold the bandage in place and it restricts bleeding by applying uniform pressure on the joint.

Exercises

I. Answer the following questions in a sentence.

1. How would you identify a poisonous snake?
2. Which are the circumstances in which the triangular bandage should be used?
3. Why should first aid be done?
4. When is the gauze used?

II. Answer the following questions in the Two-Three sentences.

1. How would you treat a casualty saved from drowning?
2. How would you treat a person bitten by an animal?
3. Name the bandages used in different situations.

III. Match the following.

A

1. First aid
2. Snake
3. Artificial breathing
4. Use of dettol

B

1. Drowning
2. To prevent infection
3. To save from danger to life.
4. To clean a wound
5. Reptile

IV. Activity.

1. Stage street plays or skits showing the various first aid procedures for different situations.

NATIONAL INTEGRATION

Lesson – 14

CODE OF CONDUCT FOR NATIONAL FLAG AND COMMUNAL HARMONY

We learn about national integration, our national flag and communal harmony in this lesson.

National integration is academically important and therefore has a special place of interest to us. In this lesson let us learn various aspects of national integration.

National flag and code of conduct

Every country has got its own special national flag. National flag is one of the national symbols. It has got a place of honour. It is the duty of every citizen to honour and protect it. Our country's national flag has got three colours and is known as 'Tricolour' or 'Tiranga'. Our national flag was approved on July 22, 1947 at the 'Rajyanga' assembly which was constituted for the purpose of creation of the national flag.

Our national flag has got three colours namely saffron, white and green respectively from top. On the white strip in the middle there is a sky blue coloured 'Ashoka Chakra'. There are 24 spokes on this chakra which indicates the 24 hours of the day.

Saffron colours denotes courage, devotion and sacrifice, white denotes truth and peace and green denotes prosperity. Ashoka chakra represents the icon of 'progress' which fulfils the aspirations of the common people. This chakra is a symbol of Dharma and travels ever onwards without stopping. For this reason this chakra has been included in the national flag of independent India. This chakra has been chosen from the Ashoka pillar in Saranath.

The national flag has to be stitched from Khadi which is prepared from raw cotton. The length and width of the national flag should be in the ratio of 3:2 (3 length x 2 width). As soon as the national flag is hoisted, national anthem has to be sung to honour the flag.

The proper procedure of hoisting the flag

- The flag has to be flown in a place visible to everyone and should occupy a place of honour.
- When the flag is hoisted it has to be done in a quick manner and when lowered it has to be done slowly with respect.
- It has to be flown in such a way that the saffron colour is always on the top and green colour is on the bottom.
- When the flag is displayed near the seat of the president of India, it has to be hoisted to his right. When the president stands the flag should be exhibited in such a way that it is in line with his head.

Points to be noted while displaying the national flag

- Flag which is torn, dirty and whose colours have faded should not be displayed.
- No decorative flags should be displayed near or above the national flag.
- The national flag should not be used for bunting or decorations.
- The flag should not be displayed upside down.
- The national flag should not form a part of any dress or uniform.
- The flag should not be touched to the ground.
- There should not be any writings on the flag.
- The flag should not be used for advertisements.

Occasions of flag display

- On national festivals.
- Prescribed dates published by the government of India.

Half mast display

On the day when personalities of national importance expire or

when the regional government declares a day of mourning, the flag shall be lowered to half of the flag pole.

Note : When the flag is hoisted half mast, first it has to be hoisted fully, before lowering it to half mast. Before it is lowered from half mast also, the flag has to be hoisted fully before lowering it with respect.

Communal Harmony

The culture of India reflects unity in diversity. To make this possible our ancestors showed the way by strengthening the belief that in every living thing there is the almighty. If we believe in this there will be many changes in our life. We will ignore the differences in caste, creed, language, religion etc. and start respecting people. This will result in there being a real meaning to life. It will create a desire in everyone to be more cultured and tolerant.

Our country is India, The feeling that we all are 'Indians' indicates our respect for our nation. Here, family, society, city, state and finally nation, these are all the steps leading to development. As we climb these steps systematically, it enables us to see the real picture of a unified nation. From this point of view every citizen should respect his country and also have pride in being called its citizens.

In today's society we can see a variety of religions, culture, language, dressing and so on. To combine all these differences in a nation is called integration. To view all these in a secular manner is called national integration.

With regards to integration, to bring together people of different communities can be called 'National integration'. In the national educational sector various circumstances, experiences and activities should help us in developing a feeling of brotherhood.

Programmes to develop national integration

- National festivals and celebrations
- Special programmes to inculcate national pride. (Air shows, Presentation of historical and ancient famous events etc.)

- Fairs which reflect different cultures.
- Encouraging shows, dialogues and skits reflecting songs of bravery etc.
- Processions decorated with banners of bravery, exhibitions of costumes and still pictures.
- Folk songs of a particular region or community – identifying group action songs, musicals, dance shows etc. as well as organising such programmes.
- Singing in groups as well as enacting regional songs, patriotic songs, folk songs etc.
- Singing the national song together with respect, pride in a clear and loud voice.

EXERCISES

I. Fill in the blanks with suitable words.

1. Our national flag is famously known as _____.
2. Ashoka chakra represents the icon of _____ which fulfils the aspirations of the common people
3. The national flag was approved in the _____ assembly.
4. The proportion of the national flag is _____.

II. Choose the correct answer form the given choices.

- 1) Number of colours in the national flag _____
(1) 4 (2) 6 (3) 3 (4) 2
- 2) The date and year of approval of the national flag _____
(1) 1947, August 15 (2) 1947, July 22
(3) 1947, October 2 (4) 1947, January 26.

- 3) Number of spokes in Ashoka Chakra is _____
- (1) 34 (2) 24
- (3) 54 (4) 14

III. Answer the following questions in a sentence.

1. What does the saffron colour indicate?
2. What does the circle in the national flag indicate?
3. Write two proper methods of displaying the national flag.
4. What is national integration?

IV. Answer the following questions in two or three sentences.

1. Explain the importance of communal harmony.
2. Write the occasions on which the national flag can be displayed.
3. Name two programmes to inculcate the spirit of national integration.

VI. Activity.

1. Observe the national flag hoisting in our school during National festivals and prepare a report.