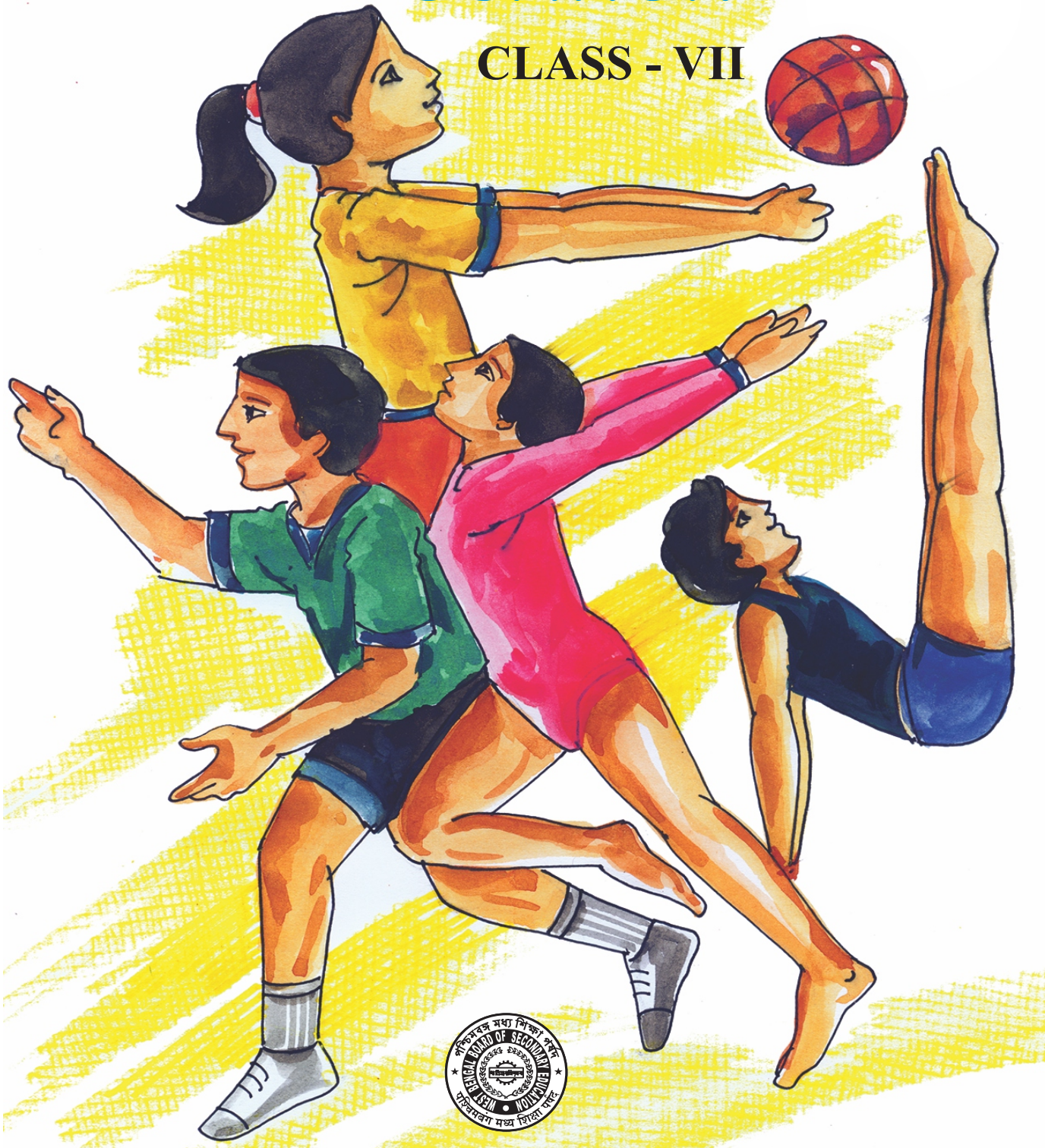
HEALTH & PHYSICAL EDUCATION

CLASS - VII



HEALTH & PHYSICAL EDUCATION

CLASS VII

West Bengal Board of Secondary Education
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सत्यमेव जयते

CONSTITUTION OF INDIA
PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC and to secure to all its citizens : JUSTICE, social, economic and political; LIBERTY of thought, expression, belief, faith and worship; EQUALITY of status and of opportunity and to promote among them all-FRATERNITY assuring the dignity of the individual and the unity and integrity of the Nation ; In OUR CONSTITUENT ASSEMBLY this twenty sixth day of November 1949, do HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.

ভারতের সংবিধান

প্রস্তাবনা

আমরা, ভারতের জনগণ, ভারতকে একটি **সার্বভৌম সমাজতান্ত্রিক ধর্মনিরপেক্ষ গণতান্ত্রিক সাধারণতন্ত্ররূপে** গড়ে তুলতে সত্যনিষ্ঠার সঙ্গে শপথগ্রহণ করছি এবং তার সকল নাগরিক যাতে : সামাজিক, অর্থনৈতিক ও রাজনৈতিক ন্যায়বিচার; চিন্তা, মতপ্রকাশ, বিশ্বাস, ধর্ম এবং উপাসনার **স্বাধীনতা**; সামাজিক প্রতিষ্ঠা অর্জন ও সুযোগের **সমতা** প্রতিষ্ঠা করতে পারে এবং তাদের সকলের মধ্যে ব্যক্তিসম্ভ্রম ও জাতীয় ঐক্য এবং সংহতি সুনিশ্চিত করে **সৌভ্রাতৃত্ব** গড়ে তুলতে; **আমাদের গণপরিষদে**, আজ, ১৯৪৯ সালের ২৬ নভেম্বর, **এতদ্দ্বারা এই সংবিধান গ্রহণ করছি, বিধিবদ্ধ করছি এবং নিজেদের অর্পণ করছি**।

CHILDREN'S BILL OF RIGHTS

A child is every person under the age of 18 years. Parents have the primary responsibility for the upbringing and development of the child. The State shall respect and ensure the rights of the child.

- I have the Right to express my views freely which should be taken seriously, and everyone has the Responsibility to listen to others. (Article 12,13)
- I have the Right to good health care, and everyone has the Responsibility to help others get basic health care and clean safe water. (Article 24)
- I have the Right to a good education, and everyone has the Responsibility to encourage all children to go to school. (Ankle 28,29,23)
- I have the Right to be loved and protected from harm and abuse, and everyone has the Responsibility to love and care for others. (Article 19)
- I have the Right to be included whatever my abilities, and everyone has the responsibility to respect others for their differences. (Article 23)
- I have the Right to be proud of my heritage and beliefs, and everyone has the Responsibility to respect the culture and belief of others. (Article 29,30)
- I have the Right to a safe and comfortable home and everyone has the Responsibility to make sure all children have home. (Article 2 7)
- I have the Right to make mistakes, and everyone has the Responsibility to accept we can learn from our mistakes. (Article 28)
- I have the Right to be well fed, and everyone has the Responsibility to prevent people from starving. (Article 24)
- I have the Right to a clean environment, and every one has the Responsibility not to pollute it. (Article 29)
- I have the Right to live without violence (verbal, physical, emotional), and everyone has the Responsibility not to be violent to others. (Article 28,37)
- I have the Right to be protected from economic and sexual exploitation, and everyone has the Responsibility to ensure that no child is forced to work and is given a free and secure environment. (Article 32,34)
- I have the Right to a good education and education and the Responsibility to encourage all children to go to school (Article 23, 28. 29)
- I have the Right to good health care and everyone has the Responsibility to help others get basic health care and safe water. (Article 24)
- I have the Right to be well fed and everyone has the Responsibility to prevent people from starving. (Article 24)
- I have the Right to a clean environment, and everyone has the Responsibility not to pollute it. (Article 29)
- I have the Right to play and rest. (Article 31)

These rights and responsibilities are enshrined in the United Nations Convention on the Rights of the Child, 1989. It contains all the rights which children and young people have allover the world. The Goverment of India signed this document in 1992.

PREFACE

It has been universally accepted that **Health and Physical Education** plays a very significant part in the all round development of the learners. In fact, play is the other name for life to a child. Student life is the period of life which the child should spend playing, studying and dreaming. The curriculum of **Health and Physical Education** has been framed keeping in mind the age and the demand of the learners. Due importance has been given to the theories as well as to the practical aspects of the subject. Health Education, First Aid, Disaster Management, Road Safety and Value Education have been integrated with Physical Education and the book has been published for class VII this year.

Mobility is life, lack of mobility is death. Due to lack of physical activities and practice now-a-days, modern man has been suffering from an intense crisis of immobility. To keep away from these life-style diseases, the learners must take part in physical education programmes at the school level.

Realising the importance of physical education **Health and Physical Education** has been give equal importance with all the other subjects from the current academic session. **Health and Physical Education** is meant for both Formative Assessment and Summative Assessment. The book has been published as a full-fledged text book this year for the school students; it has been designed following advices from a group of eminent teachers with scientific outlook.

Kalyanmoy Ganguly

Kalyanmoy Ganguly
Administrator
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December, 2016

Forewords

The curriculum of Health and Physical Education has been designed with a new outlook following National Curriculum Framework-2005 and RTE Act. The subject has been given equal importance with the other subjects in the school curriculum, keeping in mind the age old proverb a sound mind lives in a sound body.

Health and Physical Education is to be evaluated through Formative as well as Summative Assessments. In the syllabus of Health and Physical Education, the focus is on health education and physical education. But topics like First Aid Treatment, Disaster Management, Road Safety, Value Education and Patriotism have been given due importance. Health and Physical Education classes must be incorporated in the class routine, so as to enable each and every student to take part in physical activities/ education regularly. Bratachari, exercise with rhymes(Chharar Gaan), Yogasanas, gymnastics, athletics, development of good habits, recreational sports, chess, human resource development projects, assessment of physical skills and health check-ups have been given equal importance. The government is determined to restore the lost glory of Physical Education.

No rigidity has been followed in framing the syllabus of Health and Physical Education. It is but a specimen. Keeping in mind the demands and skills of the learners and regional sports culture, the teachers will innovate and present new things to the students in a student-friendly way, thereby making all these efforts a success.

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PRACTICAL SYLLABUS

CHAPTER - I
Concept of Physical Education

1.1.1 Objectives of Physical Education

The objectives of Physical Education have been contemplated differently by various authors.J.B.Nash has listed four developmental objectives-

1. Systematic development
2. Neuromuscular development
3. Interpretative development and
4. Emotional development.

Bucher and West mentioned four types of objectives:

1. Physical development objectives.
2. Neuromuscular development objectives.
3. Cognitive development objectives.
4. Social, emotional and aesthetic development objectives.

According to J.R.Shermon,objectives of Physical Education are of six types:

1. Physiological development objectives
2. Skill development objectives
3. Social development objectives
4. Health development objectives
5. Emotional development objectives
6. Scope of acquisition of educational experience through participation in physical activities.

After adequate reviews of the opinions about the objectives of Physical Education by different physical educationists, the main objectives are discussed below:

1. Physical development objectives:

a) Growth and development of child

b) Development of internal systems of human body

c) Development of physical fitness through the development of strength and endurance.

d) To build up sound health

e) Conducive practices to maintain hygiene with healthy habits

f) Development of healthy habits regarding health and hygiene

2. **Mental development objectives :** Psychological characteristics are developed through Physical Education, because the mental development of a child is fulfilled through playing and physical movements. The objectives of mental development are:

a) To increase concentration on any aspect

b) To increase mental activities

c) To improve presence of mind and diligence

d) To improve adjustment power in any adverse situation and to take fruitful decision

3. **Social development objectives :** There is ample scope for increasing human relation through interaction among rich-poor, educated-illiterate, caste-creed and religion as physical education brings all of them together and closer. The various aspects of social development that take place are :

a) Development of friendly relations

b) Development of cooperation and sympathy

c) Development of punctuality and discipline

d) Honesty, impartiality, respect towards authority, sincerity, veracity apprehensiveness and self responsibilities.

e) Development of sportsmanship

f) Development of criteria for ideal citizenship

4. **Motor development objectives :** Motor development means the development of appropriate physical activities and its main objectives are:

a) To develop the coordination between neuro-muscular systems

b) To coordinate between brain and nerves

c) To develop reaction time

d) To enhance coordination between various organs of the human body

5. **Development of personality :** Regular exercises help to develop character and personality of an individual. Different characteristics of personality are:

a) Self-control

b) Patience

c) Self-dependence

d) Leadership quality

e) Cordial relationship etc. Besides these, there occurs enhancement of social cooperation and sportsmanship. Behaviour is the manifestation of personality in man and any pleasant experience brings a behavioural change.

f) Physical education is an appropriate medium through which the various skillful characteristics flourish and develop the personality. Thus individuals establish themselves as ideal citizens of the country through such personality development.

6. **Cognitive development :** Cognitive domain develops through:

a) Knowledge of various rules and regulations of sports and games and the skills

b) Consciousness and awareness of different physical problems and their effictive remedies

c) Individuals become conscious about various physical problems and find effecttive remedies for them.

1.1.2 Importance of Physical Education

Physical education is an integral part of general education. Physical education is mainly aimed towards the development of physical, mental and social aspects that help to build up an individual as an ideal citizen. Physical education can help an individual grow up as an ideal human being in today's technology based society. For this reason physical education has gained much importance in the arena of education. The important aspects of physical education are:

1. Development of socio-economic condition :

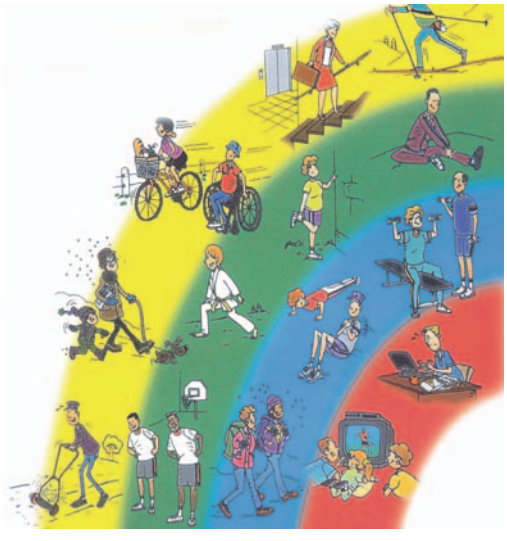
In the poor economic and social condition of the modern society most people tend to lose mental as well as physical balance. As a result there is continuous deterioration of honesty,

justice, consciousness of own responsibility, apprehensiveness in the society. Regular physical exercise enhances an individual's mental and physical qualities along with social establishment and development of financial condition.

2. Sociability:

Physical education develops social consciousness of an individual. As a result, this leads to the enhancement of tolerance for all classes of the society. Besides these, an individual grows positive mentality for all types of religions, caste, creed etc. In the playground he becomes disciplined and develops consciousness towards social responsibilities.

3. Physical fitness :



Regular physical exercise develops strength, endurance, balance, etc which result in physical fitness that helps an individual to lead a healthy life.

4. Development of mental aptitude :

Physical education enhances the mentality of an individual. This improves concentration towards work and increases the ability to take appropriate decisions within time. The enhancement of mental toughness and the ability to adjust in any situation improve and help to resolve adverse situations.Regular physical exercise helps an individual develop positive mentality and increases mental consciousness.

5. Personality development :

Regular exercise improves the aspects of character and enhances the personality. This helps to improve the various qualities of a good personality like discipline, self-control, cordiality, tolerance etc.

6. Neuro-muscular co-ordination :

No work can be performed without neuro-muscular co-ordination. Regular physical exercise and continued physical activities help develop the nervous system and muscular movements. As a result, more work can be performed without expending much energy. The neuro-muscular co-ordinated movements help an individual develop proper and attractive body movements.

7. Physical development :

The regular involvement in sports and games and exercise leads to the development of internal organs and systems of the body that helps an individual to be hard working and to develop a handsome and healthy physique. Health is wealth and good health helps an individual to efficiently perform the daily physical and mental responsibilities and in their proper execution.

8. Cultural development :

The participation in varied sports and games render an individual to exchange culture. During such activities, individuals from different cultural background mingle with each other and exchange their customs, tradition and ways of life. This promotes a rich cultural development.

9. Healthy habits :

There is a tremendous importance to develop healthy and safety habits. Such healthy habits are like intake of nutritious foods in proper time, adequate rest, personal cleanliness and regular physical exercises etc.This healthy and safety habits are easily adopted and implemented through various forms of physical activities.

10. National integration :

Different activities of physical education play a very important role in intermingling of different religions, caste, creed, language etc.As a result, an individual gains the knowledge about the nation, its history, culture and heritage which enhance patriotism. Besides these physical education helps grow up a mentality for unity and national integrity.

11. Democratic values :

Regular participation in sports and games promotes a mentality of respect towards the organization, administration and authority. This imparts faith in the democracy and inculcates democratic ideas and values in an individual.

12. International understanding :

Physical education provides a bridge across the international boundaries. The different activities of physical education help grow up friendly relationship and brotherhood among different countries. International sports events like Olympic Games, Asian Games, Common Wealth Games etc. provide a common platform to exchange cultures and opinions among the participants thereby developing goodwill and friendly relationship. Apart from these, various programmes of physical education play an important role to promote political and diplomatic relationship among various nations.

1.1.3 Misconceptions about Physical Education

Terminological misuse of Physical Education

1. Physical culture: In ancient times, besides other cultures, physical culture and physical exercise was an integral part of the society. Physical culture means the different modes of obtaining gorgeous, handsome and muscular body. Once upon a time people used to think that physical culture is synonymous to physical education but actually it is a part of physical education. Various competitions are arranged internationally like best physique for men and beauty contest for women. The method of developing the external physical outlook of the body is known as physical culture. Since this is the way to develop a physique, it is considered as a part of physical education. The various objectives of physical culture are:

a) To improve physical fitness

b) To develop self-confidence

c) To improve self-control, endurance and societal values

2. Physical Training : The most common misused terminology of physical education is physical training. Physical training actually encompasses various aspects like the way to lead a healthy life, developing endurance, maintaining balance, obtaining flexibility and the development of co-ordination among the different organs of the body. The conditions of physical training are:

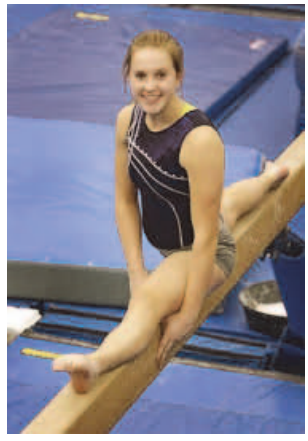
a) To participate in physical exercises regularly in a scientific way.

b) To lead a disciplined life

c) To increase physical and mental toughness

3. Warming up : Prior to rigorous physical exercise a warming up session is taken up to increase body temperature, blood circulation and proper working of muscular enzymes. Warming up should invariably be taken up before the participation in games and sports, as this is directly related to the qualitative parameters of sports and games. It helps to prevent injury.

Characteristics of Warming up : Warming up has some specific characteristics and there are particular procedures to carry out a warming up session. Warming up should have intensity. However, it should not be that intense as the whole energy is exhausted before the actual performance.



4. Gymnastics : Gymnastics is derived from Greek word "Gymnas". Not only in Greece, gymnastics was also prevalent in China. Generally the exercises that are performed inside the gymnasium with and without equipments is known as gymnastics. Gymnastics has a major role to increase the physical fitness and it is an important part of physical education. Recently gymnastics is performed to show superior technical and skillful exercises within the gymnasium.

The objectives of gymnastics are:

a) To develop muscular power, flexibility, balance and co-ordination
b) To grow aesthetic and attractive physique
c) To bring out the hidden skills of children
d) To develop confidence, fearlessness and social qualities

The origin of gymnastics was in Greece, however today the developed countries like Russia, China, Japan, Rumania, etc. are the leaders in gymnastics. The main equipments of gymnastics that need mention are Roman ring, Parallel bar, Vaulting horse, Trampoline etc. The major branches of gymnastics are educational gymnastics, aesthetic gymnastics, rhythmic gymnastics, etc.

5. Athletics : The word Athletics is derived from Greek word 'Athlon' which means competition and the participant is called athlete. In a broader sense athletics is misused for any type of sports and games, for example, football, kabaddi, sprint, jumping, etc. In its true sense athletics means the track and field events. Internationally the first track and field event was held in Olympic Games and World Track and Field Meet. In the year 1946 the organization called Amateur Athletic Federation of India was established. The various track events are the running events like 100 mts, 200 mts, 400 mts, marathon race, etc. The various field events are long jump, high jump, shot put, discus throw, etc. The combination of track and field events are decathlon, pentathlon, etc.

The main objectives of athletics are :

a) To promote physical fitness to its utmost
b) To enhance confidence, discipline and punctuality
c) To pave the way to social establishment

6. Recreation : Recreation means any form of leisure time voluntary participation and activities of an individual in socially accepted programmes for instantaneous self satisfaction.

According to G.D.Butler, "Any form of leisure time experience or activity in which an individual engages from choice because of the enjoyment and satisfaction which it brings directly to him." According to Meyer and Brightbill, "An activity voluntarily engaged in during leisure time and primarily motivated by the satisfaction of pleasure derived from it." Recreation has four conditions-

i) Leisuretime ii) Voluntarily participation
iii) Socially accepted activities iv) Self satisfaction

Characteristics of Recreation :

a) The recreational activity of an individual always takes place during the spare time because recreation is not possible during working hours .
b) The recreational activity is indispensible for all age group of people.
c) Recreation is always aimed towards enjoyment.
d) Recreational activity is also aimed at the enjoyment of an individual as well as others.
e) The participation of an individual in any recreational activity is of his/her own choice and there is no compulsion.
f) The recreational activities must be socially acceptable and individually beneficial.

Classification of Recreation:

Recreations are of four types -

Direct Recreation : The direct involvement of an individual in any kind of recreation which is enjoyable is called direct recreation, e.g., singing, reading, recitation, drama, games and sports, etc.

Indirect Recreation : The indirect involvement of an individual in any kind of recreation which is enjoyable is called indirect recreation, e.g., watching movies and dramas, watching different sports and games, playing video games, etc.

Creative Recreation : The creative thinking of an individual during leisure time in the form of recreational activities is called creative recreation, such as, gardening, writing poems,etc.

Sub-level Recreation : The involvement of an individual in any kind of recreation which is not socially acceptable still enjoyable to him/her is called sub-level recreation, such as, gambling, etc.

Importance of Recreation : Creative recreation is an integral part of physical education. The role of recreation is of utmost importance for the happiness and well-being of all classes of the society.

i. Recreation helps overcome fatigue and monotony of daily life.
ii. It helps refresh the body and mind of an individual.
iii. Participation in recreational activities helps build character and prevents crime and delinquency.
iv. Certain forms of recreation help develop and maintain the muscular system of the body which helps sustain a healthy life.
v. Helps to gain knowledge regarding various types of skills in sports and games, physical proficiency and at the same time helps to get relief from mental depression.
vi. Since all the classes of the society participate in the recreational activities, it brings unity among the people of the society.
vii. Recreation enhances adherence to the rules and regulations of sports and games, mental endurance and self-confidence and thus eliminates selfishness.

1.1.4 East Bengal

Mohan Bagan defeated the English Clubs and Army Clubs one after another in the I.F.A. Shield matches in 1911. Those victories not only inspired nationalism and patriotism among the Bengalis but also developed a football culture that attracted them. It gave birth to football clubs is schools and colleges and in different localities. The teams that came into being as football teams, later became different clubs.

Indian Football Association, the regulatory body of Indian football was formed in 1893. Restrictions were imposed on Bengali teams to ban them from participating in different leagues and shields. They were victims of neglect and non-cooperation. The Indian teams were not allowed in the leagues for a long time. Along movement and war of intellect continued for long. Finially the English people bowed to the pressure of those movements and allowed one or two Bengali teams in the League to make the league popular. They decided not to allow two Indian teams to partioipate in the first division League. When the second division League started, no Indian team was allowed to participate in it. Later on, a few Indian teams were given opportunity to play in the second division League.

Kumartuli was the most successful team in the second division League. They became the Runners-up in two consecutive years - 1917 and 1918. In 1919 they became the second division League champions defeating the English and Army clubs. Being the champions of the second division League, Kumartuli was to get the licence to play in the first division League. As a result three Indian teams should have played in the first division league. But citing the reason, that playing three Indian team in the League would degrade the prestigeous League, Kumartuli was not allowed to play in the first division League. Instead of allowing Kumartuli into the 1st division, they decided to increase the number of Indian teams in the second division League. Kumartuli was forced to play in the second division in 1919. But three more Indian teams were included in the second division League.

Many players of East Bengal (Purba Banga) played in the Maidan. Some of them played for Mohan Bagan, some for Arian, Kumartuli, Jora Bagan, Shova Bazar and some other clubs. Suresh Chowdhury, a landlord of Nagpur village of Tangail sub-division of Mymensingh, was a football enthusiast. He spent a lot of money for football. Following an incident he left Jora Bagan club and decided to form a strong and major club. He planned to reconstitute the Calcutta Union Club at Kumartuli Park. And he did so by transforming minor club into a major one and renamed the club as East Bengal after Purba Banga, the English translation of which is East Bengal.

East Bengal Club was formed in 1920 in a meeting at the residence of Tarit Bhushan Roy. In its first meeting prof. Saradaranjan Roy, a nenowned professor, became the president of the club. Suresh Chandra Roy and Raibahadur Taritbhushan Roy became joint secretaries. East Bengal-A and East Bengal-B took for the part first time in the Hercules Cup at Shyampark in 1920. In the semifinal of that tournament East Bengal-A faced East Bengal-B. East Bengal-B withdrew themselves and East Bengal-A qualified for the final. East Bengal-A became the champion of Hercules Cup in 1920 defeating Vidyasagar College in the final. The captain of East Bengal was then Gostha Pal.

Rajasaheb Gopal Roy decided to withdraw his team Tajhat from the League in 1920. The then East Bengal official Suresh Chowdhury intercepted the withdrawal letter. Then he submitted this withdrawal letter of Tajhat along with the application of East Bengal to play in Legue in the I.F.A. office.

A few days later the two letters were considered in the meeting of I.F.A. It was decided in the Governing Body meeting that East Bengal would be incorporated in the League in place of Tajhat as no other club applied expressing willingness to play in the League. Surprisingly, East Bengal got the licence to play in the second division League for the first time. Nani Gonsai and Dhira Mitra of Tajhat Club switched over to East Bengal club. Mohan Bagan's Suren Chakraborty too joined East Bengal. Moreover East Bengal recruited some players from Dhaka and Kumilla and formed a very strong team in the very first year.

The East Bengal team consisted of

Goal — Moni Talukder and Nagen Kali

Back — Bhola Sen, Bhanu Dutta Roy and Prafulla Chatterjee

Half back — Prafulla Mitra, Nani Gonsai, Suren Chakraborty, Bijoy Sen and Sailen Basu

Forward — Nasa Sen (Captain), Deben Pal, Dhira Mitra, Prasanta Bardhan, Nepal Chakraborty, Jitu Mukherjee and N. Das

After the League they participated in the Shield. East Bengal defeated Mohan Bagan by 2-1 in their first meeting in final of Nagendra Shield. East Bengal lifted seven trophies in all that very year. S. Chakraborty, Nani Gonsai and M. Dutta Roy of East Bengal was selected for the Indian team consituted to play against European teams. In the mean time Sir Monmatha Roy Chowdhury, the Maharaja of Santosh and Nalini Ranjan Sarkar associated themselves with East Bengal. With the cooperation of Suresh Chowdhury and Taritbhusan Roy East Bengal earned the co-ownership of the ground of National A.C. with the police permission.

Mana Dutta and Ashu Dutta joined East Bengal in 1922 and the team retained almost all the old players. East Bengal became the runners-up of the second division League that year. In the Shield, East Bengal faced the second division League champions R.G.A. club in the first meeting and East Bengal defeated them by 3-1.

The next year Suresh Chowdhury and Tarit Bhushan Roy gave up the responsibility of the club management. N.L. Roy and D.K. Roy Chowdhury became the new joint secretaries. Nasa Sen went abroad and Ashu Dutta joined another club. So, East Bengal could not do well in neither the League or the Shield. East Bengal was placed tenth on the League table and they were defeated in the first round of the Shield.

Gradually, East Bengal tent was erected in 1924. Under the leadership of Hemanga Basu East Bengal went on winning one match after another. In the return match of the League East Bengal won against St. Xaviers College team and their chances to play in the first division league brightened.

At last East Bengal became joint-champions with Camerons-B. As Camerons-B was already a first division team, East Bengal had the right to claim a place in the first division league. But the I.F.A. had objections to allow an Indian team to play in the first division. But the East Bengal officials were in no mood to give it up. At last a special meeting of I.F.A was held at the residence of Sir Monmatha Roy Chowdhury, the Maharaja of Santosh, towards the end of October. The meeting was presided over by Stewaty Grveeves, the I.F.A. prersident. It was resolved in that meeting that East Bengal would get the right to play in the first division league as they were the co-champions of the second division league. And the lowest ranked teams of the first division, namely Calcutta, Dalhouse, Rangers etc. would play in the second division.

In that year Nani Gonsai, Mana Dutta and Hemanga Bose were included in the Indian team that was to play against the European team. In 1925 East Bengal played in the first division league under the captaincy of Mana Dutta.

East Bengal defeated Mohan Bagan in their league match played on 20 May, 1925. East Bengal won by 1-0. East Bengal got the opportunity of defeating an English team in 1932 as Mohan Bagan did in 1911. But though they took leads twice, they finally lost the match by 2-3.

In 1932 East Bengal went on tour to Burma. They participated in five matches there. They won two, lost two and drew the rest.

East Bengal was placed fourth on the league table in 1938. In 1951 East Bengal became the runners-up in the league. The lost the first leg match to Mohan Bagan by 3 goals. Butin the return leg they avenged that defeat by beating Mohan Bagan by 2 goals.

The year 1953 is a historical year for East Bengal. They went to Europe and Soviet Russia as the first club of India.

The seventies was a golden decade for East Bengal— it was a decade of success. No other Indian club have had this honour. They won the League and the Shield year after year during the seventies. Not only that they won the Rovers Cup, Durand Cup too. No Indian club teams from Delhi, Bombay or Calcutta could stop the victory march of East Bengal. East Ben-

gal demolished the league record of Mohamedan team in the thirtees. East Bengal were the League champions from 1970 to 1975.

The East Bengal Team of 1970

Goal — K. Sarkar and Thangaraj

Back — Sudhir Karmakar, K. Guha, Naim, Shanta Mitra (Captain), R. Dutta and A. Basu

Half back — Prasanta Singha, Kajal Mukherjee, S. Chowdhury

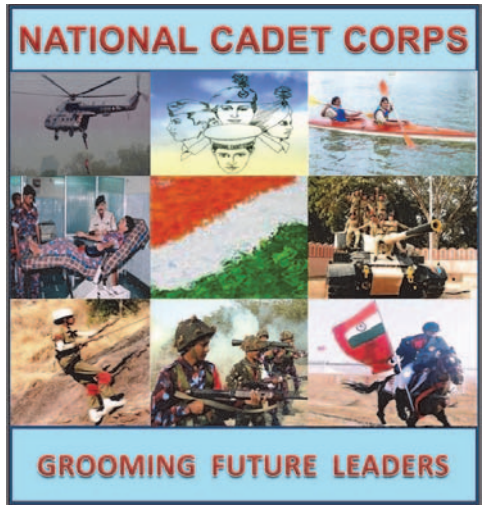
Forward — A. Chatterjee, S. Sengupta, Habib, Parimal Dey, Shyam Thapa, K Sharma, S. Banerjee and S. Da

Though mainly a football club, East Bengal does not lag behind in Hockey, Cricket and Athletics.

1.2.1 National Cadet Corps

The sub-class of army is renamed as National Cadet Corps. The initiation of training in the N.C.C. started during the British rule. Later this training was also started in the major universities of India and previously this training was called University Training Course. The Sergeants and higher officials of the British Army used to impart rigorous training to the students of the universities with an object to make them worthy to be a part of the defense force. The students who successfully completed the course were obviously very skilled physically.

Later on 16th July 1948, the Defence Organization under the recommendation of Defence Kujara Committee the National Cadet Corps was established. The main objectives were to develop patriotism in the young student community, to grow a mentality for national service in a disciplined manner, to impart lessons of national integrity and to transform the student community into ideal citizens. Students joining N.C.C. not only achieve physical, mental, emotional and all round development but also acquire leadership quality, strong character, friendly mentality, sportsmanship and qualities of an ideal social worker. This helps the students to be self disciplined, punctual, well-trained and in future they build up a disciplined society. Such society is always dedicated to serve the Nation in exigency and such training also makes an individual worthy to be an official in National Army.



- In 1948, for the first time, the students of the universities were appended to various activities and training in the army only.
- In 1949, for the first time, the students of schools and colleges were allowed to join N.C.C.
- In 1950, for the first time, N.C.C. training was appended to the Air-force and the N.C.C. department of Air-force was introduced.
- In the year 1952 N.C.C. training was appended to the Naval forces.
- In the year 1964, during Indo-China war N.C.C. obtained a place of importance and for the sake of the country, N.C.C. was made mandatory for all the students.
- In the year 1966 riffle training was initiated among the national cadets.
- In the year 1968 N.C.C. was made optional for the students.
- In February 1986 Trainee Welfare Society was established with a view to help the trainees facing accidents during the training period.
- Unity and discipline are the main motto of N.C.C. Punctuality, skillfulness, strong determination and hard-work are the keys to be a successful trainee.
- The trainees learn to work selflessly which makes them honest, courageous, secular, open minded, skilled in sports and games, good tourist, trekkers and all these qualities convert them to ideal citizens.
- Curriculum of N.C.C. helps the students and the youth lead a disciplined and organized life. N.C.C. represents the majority of the youth of the country.

According to the statistics of 1985, N.C.C. course is ongoing in 17 directorates of the nation, 119 universities, 3734 colleges and 6350 schools. 11.2 lakh students are associated with N.C.C. The co-curriculum of N.C.C.is controlled by 144 units.

The fourth Sunday of November is observed as N.C.C. Day. Till 1951 there was no separate flag for N.C.C. However, in 1954 the N.C.C. flag came into being as a tri-colour containing deep blue, red and sky-blue colours.The fantastic blue symbolizes the Navy; the sky-blue symbolizes the Air force and the red stands for the Army. Special emphasis is given on the aspects of the Army, Navy and Air-force during N.C.C. training, teaching-learning and activities.

Institutional Training :

It is mandatory that two days in every week constituting three periods, A.N.O and P.I. staffs should impart training to the trainees. A certain amount of tiffin charge is given for parade every day. Apart from this Rs.10/month is given for washing cloths and for admission purpose; Rs.19 is charged as admission fee; Rs.10 for each subsequent year. The uniform and shoes are given free of cost to the trainees.

Scope of different activities for the trainees:

i. Regular training in school
ii. Different compulsory training camps of 7-10 days
iii. Participation in Air-force, Navy and Army camps
iv. Participation in advanced leadership camp, National Integration Camp
v. Participation in Republic Day parade camp in Delhi
vi. Participation in Prime Minister's rally

vii. Scope to participate in Ship and Aero-modelling
viii. Trekking, mountaineering, Himalayan expedition, para training, gliding, power flying, basic leadership, cycle expedition etc.
ix. Youth exchange programme
x. Different social and health awareness programmes
xi. Mission for Ideal village formation

Students between 16-19 years of age who have passed higher secondary level are eligible for appearing in the N.D.A. examination conducted by UPSC and SSB twice every year. The successful candidates get admission in the prestigious Indian Military Academy, Dehra Dun.

N.C.C. Examination :

Students between VII-X standard can join the Junior Division of N.C.C. and after one year an examination is held and the successful candidates obtain 'A' certificate which gets special preference in Govt. jobs.

The Senior Division comprises students(both boys & girls) between class XI and university level. After one year of training the students appear for 'B' certificate examination and after another year of training the students appear for 'C' certificate examination. Preferences are given to the certificate holders in different jobs like Boarder Security Force (B.S.F.), Central Reserve Police Force (C.R.P.F.), Military Nursing Service, Indo-Tibet Boarder Police (I.T.B.P.), Army, Revenue Department, Green Police and Fire Brigade etc.

1.3.1 National Integration

Traditionally Indians are religious in nature. We need not disown our own religion or language. It only warns us against hatred for other religions. Secularism does not mean negation of religions, it means tolerance towards all regions. This puts a caution that there should be no hatred for others; secularism does not indicate anything irreligious or against any religion. This indicates tolerance towards all religions.

1. Long ago the Emperor Ashoka preached the doctrine of non-violence. After the tremendous bloodshed of the Kalinga war he said "Instead of conquering an empire through war, it is ideal to conquer the hearts of people". According to the doctrine of Ashoka, it will not be possible for us to respect our religion unless we respect the religion of others.

2. Jainism still stands as the symbol of non-violence.

3. The moral principle of Christian religion is to love thy neighbours.

4. According to Islamic religion, if one really loves 'thy creator', then one should love human beings.

5. According to Sikh Gurus and Granthasahib, every human is His child and He is for everyone and He is omnipresent.

6. According to Swami Vivekananda-

"Oh India …do not forget,
Lower caste, illiterate, poor and ignorant cobbler,
Sweeper is your blood, your brother."

7. According to the poet Kazi Nazrul Islam-

"We are two buds on a single twig called Hindu-Muslim.
Muslim represents the eye and Hindu its life.

The sky is the mother on whose lap
Sway the Sun and the Moon,
Both have the same blood flowing in them."

8. According to the Father of the Nation Mahatma Gandhi-

"Iswar and Allah both are your names.
Oh! God, provide such wisdom to all."

Every religion is for the well-being of the people.There are various opinions and so there are many ways. Religion is like many avenues which ultimately meet at a single point. Secularism is principally our base of unity and communalism, separatism and hatred are against it. We should fight against disbelief and insecurity that comes from communalism.

We should try to eradicate hatred, superstition, orthodoxy from the mind of the people. There should be a mission to unite people at every village, every city and at various festivals. Compaigns against communalism and superstition, orthodoxy should be conducted in all the schools, colleges, universities, working places, markets and malls, clubs and through different medias. We need peace within every caste and community and this is interdependent upon interrelationship. If conferences are held on the issues like the Sermon of the Mount of Jainism, Philosophical empathy of Buddha, Doctrine of non-violence of Hinduism and the principle of Islam along with discussion on the various aspects of Veda, Koran, Tripitaka and other sacred books then it is our firm belief that we shall be able to create strong mentality for the International Peace.

A Nation is not merely a map on a piece of paper but it abodes in the hearts of its people. If the heart gets fragmented then its population will also be diversified and it is our strong resolution that we should not let this happen.

'Oh my dear Indians, let the pledge of our religion be one- at every corner of the world where people are poor and starving and dying out of hunger, make us worthy for their service. Where there is hatred and misunderstanding make us worthy to preach the doctrine of love, where there is prejudice make us worthy to preach the doctrine of forgiveness, where there is conflict make us worthy to spread the doctrine of integrity, where there is depression make us worthy to spread happiness.

I do not want sympathy for my own sorrows but make me capable to console others. If someone misunderstands me, let me not to misunderstand others. I will not get love from others until I love others. I should not be selfish but selfless for others. If a situation arises where there is a question of life and death, even then make me competent to follow the ideal till the last breath.

Every Indian who loves India should care for the cultural heritage of the Nation at each and every work.

All the religious Gurus from different religions were the symbols of love, sympathy and sacrifice. Their personal lives were full of humbleness and they taught their disciples to be tolerant towards other religions.

It is a matter of shame and agony that today many riots and conflicts are taking place in the name of religion. The terrorists pay no need to the doctrine of the Gurus and they do not hesitate to attack, loot and kill innocent people, even do not spare children. Thus it is hard to believe that such heinous acts could be done under the banner of any religion. Hence it is clear that this type of incidents are purely intentional or terroristic or low grade political activities.

Riots and rowdiness specifically affect the poor people and the school students. Many of the followers of various religions for example Hinduism, Islamism, Christianity, Sikhism etc. do not respect the moral values and so, anti-social activities are still in their peak. The anti-social activities are purely personal and they do not have any far reaching target. Communalism and religion should not be considered as synonymous and secularist mentality is aimed at this. Mahatma Gandhi said, 'Indeed, religion should pervade every one of our actions. Here religion does not mean sectarianism. It means a belief in ordered moral government of the universe. It is not less real because it is unseen. This religion transcends Hinduism, Islamism, Christianity, etc. It does not supersede them. It harmonizes them and gives them reality.'

For the renaissance and development of a nation, national integrity is an important issue. If we can sustain our national integrity then there will be peace and harmony throughout the nation and firm developmental steps can be taken up. Sports and games and Physical Education play an important role to sustain such national integrity.

1.3.2 The Role of Physical Education to Sustain National Integration

The various activities of sports and games and Physical Education enlighten the minds of people towards national integration. The various aspects are described below:

i. Religious harmony in team games improve national integration. During the formation of any team, players are chosen by their quality. Thus the team contains players irrespective of their religion. During any match, each and every player aims to achieve the goal irrespective of their

religious afinity. Thus the playground is a meeting point of all religions in harmony which results in reinforcement of national integration.

ii. Team games eradicate the feelings of caste and creed. A team comprises players of various castes and creed however, in the playground such differences play no role at all. Each player plays a team game to achieve the goal. This results to eradicate aparthedism and casteism from society. The only entity of a player in the playground is just a 'human' which further strengthens the national integration.

iii. Builds up co-operation and sympathetic mentality: In a team game the goal can only be achieved through co-operation among all the players. This also helps the players to be co-operative towards the societal activities which again help strengthen national integrity. The players can feel and reciprocate to the problems of each other. The players of the team share the problems and troubles of each other which sustain their unity. This unity serves as the backbone of national integration.

iv. Establishment of integration through various camps: To increase the standard and quality of the players various residential camps are organised. All the players from different religions, caste & creed, are to live under the same roof in the same environment following same routine of activities. Thus all the players reside and work together, resulting in exchange of thoughts and culture which reinforce National Integration .

CHAPTER – II

Health Education

2.1.1. Factors affecting Health

Health is wealth. Health of an individual is guided and affected by various personal, environmental and societal factors.

2.1.2. Personal Factors of Health

i) Heredity : Genes are packaged in bundles called chromosomes which are inheritors and carriers of heredity. In most of the cases the health of the off-springs are decided by the health of their forefathers. Many diseases are hereditary, e.g. cancer, diabetes, mental disorder, Cystic Fibrosis, Haemophilia, Thalassemia etc.

ii) Age and body weight : As the age of a person increases various diseases affect the body and mind. Therefore, according to age appropriate body weight, diet and physical labour should be in balance to maintain a healthy body.

iii) Personal hygiene : Personal hygiene has a special influence on an individual's health. Regular clear bowels and physical exercises keep an individual healthy and hygienic.

iv) Exercise and sports and games : Regular exercise and sports and games build up hale and hearty body. Negligence in exercise and sports and games makes the body prone towards various diseases. Thus regular exercise and sports and games are important aspects through which an individual gains healthy body and becomes labourious.

v) Life style : The life style of an individual has a profound effect on health. Reluctance towards regular exercise,lickerish and overeating,indisciplined life style, excessive consumption of alcohol and cold drinks etc.are malicious for health.

vi) Nutritious food : Intake of nutritious food keeps the physiological and metabolic functions healthy. As a result an individual always remain hale and hearty.

2.1.3. Environmental factors of Health

i) Environmental cleanliness : Environmental cleanliness means supply of clean drinking water, proper disposal of waste products and clean habitation which are indispensible for healthy life.

ii) Socio-economic condition : The socio-economic condition affects the health of an individual and thus socio-economic condition plays an important role in daily life. Individuals, living in poor socio-economic condition are infected by contagious diseases and due to lack of financial support they can not afford proper treatment and remedial measures and thus such diseases spread rapidly among them. On the other hand, these people put tremendous physical labour daily which affects them with non-contagious diseases. On the other hands, people living in well-established socio-economic status are less affected by these diseases. It has also been observed that people with average socio-economic condition generally suffers from non-contagious diseases like diabetes, hypertension, etc.

iii) Health service : Prevalence of health services, its research and development influence an individual's and family's health.

iv) Polluted environment : Polluted environment badly affects the health of an individual and he gets infected with various diseases. This also affects the internal systems of the body.

2.1.4. Social factors

i) Influence of character : Strong character, endurance, co-operative attitude, etc. of an individual provide mental peace and indirectly keeps one away from social nuisance like addiction to alcohol, smoking etc.

ii) Social security : Availability of food, proper education and industrial progress, organic demand of all classes of the society render social security and indirectly influence one's health.

iii) Political system : For achieving the aim of Health for all WHO has demanded 5% of the total budget of a nation to be alloted for health purpose.The stipulated budget of health actually varies according to the political situation of the nation. The budgetary allotment for health in India is 3% of the Gross National Production (GNP).

2.2.1. School Health Programme

Days together children spend most of their time at school away from their home and many people are associated with the academic curriculum, management and administration of the

school. Therefore, it is essential for the administration to create a healthy environment in the school for the students, teachers and all others associated with school curriculum. School Health Programme is an indispensable part of education and this health programme ensures the healthy life of the teachers, students and all others associated with school. The children get their first lesson of health and hygiene at home but the different lessons of Health Education are taught only at school.

The School Health Education, imparted to the students, is indispensable for all round development and it helps to build up a healthy society. The salient features of the School Health Programme is to impart education for maintaining and sustaining health, and to generate a healthy environment at school. Health Education helps to develop healthy habits that assists an individual to lead a healthy life.The School Health Programme plays an important role to resist the communicable diseases, pollution, mal-nutrition and unhygienic habits that are rapidly spreading today.

2.2.2. Objectives of School Health Programme

1. To encourage pupils to lead a healthy and joyful life and to become health con scious.
2. To develop the physical, mental, social, emotional and cognitive aspects of the child there by leading to an all round development of the child.
3. To enable students learn about health, become conscious about health and to take decisive steps about health.
4. To develop health consciousness in the school, at home and in the community; to improve personal, family and social health.
5. To make students conscious so that no contagious disease is spread from school to society or vice versa; to help students take necessary remedial steps immediately.
6. To identify problems related to ear, nose and throat through health check-up camps at school and to arrange for proper treatment. Physical deformities and retardations are to be identified and taken care of.
7. To impart proper knowledge about adolescence problems.

2.2.3 : Concepts of Health Education

Health education is any combination of learning experiences designed to help individuals and communities improve their **health**, by increasing their knowledge or influencing their attitudes. (WHO)

The Joint Committee on Health Education and Promotion Terminology of 2001 defined Health Education as "any combination of planned learning experiences based on sound theories that provide individuals, groups, and communities the opportunity to acquire information and the skills needed to make quality health decisions."

An educational programme directed to the general public that attempts to improve, maintain, and safeguard the health care of the community.

School Education Programme has three divisions—

a) Health Instruction

b) Health Supervision

c) Health Service

2.2.4 : Health Instructions

In educational institutions students are imparted lessons on how to spread scientific health education, how to keep themselves healthy, how to give up bad habits, how to diagnose, resist and control contagious diseases; instructions about balance diet are also given.

Things to be noted are—

(a) Instructions about healthy personal life

(b) Instructions about the necessity for balanced diet

(c) Instructions about developing a healthy society

(d) Instructions about physical and mental health.

(e) Instructions against harmful drugs-addiction.

(f) Instructions about the necessity for god habits to attain sound health.

(g) Instructions about the causes of contagious diseases and their remedy.

(h) Instructions about physical deformity and their remedy.

(i) Instructions about CWSNS (children with special needs).

(j) Instructions about Health-Card and Fitness Card.

(k) Instructions about hygienic environment and health services at school.

(l) Instructions about the benefits of regular exercises and games and sports.

m) Instructions about the functions of the external and internal systems of human body.

Nature of Health Instructions:

There are five means to impart instructions in school.

(a) Conventional/Traditional health instructions

(b) Unconventional instructions

(c) Co-related health instructions

(d) Health instructions through camps

(e) Health instructions through notice board

(a) **Traditional health instructions**: Teachers may give certain traditional instructions to students during lessons, such as, to brush teeth regularly, to bathe, to comb hair, to do regular exercises and physical activities, to wash hands before eating, to take care of eye-ear-skin, to learn about hygiene, to learn about safety measures, etc.

(b) **Unconventional health instructions**: When the teachers interact with the students personally, scopes for unconventional health instructions occur. The teachers can impart instructions on life-style, development of good habits or can warn them against harmful effects of addictions to drugs, etc.

(c) **Co-related health instructions:** While imparting lessons on other subjects, the teachers may give health instructions related to those lessons. Such instructions may be termed as co-related health instructions. For example, while imparting lessons on nutrition in a class of environment studies, the teacher may discuss about the effects of nutrition on health. He/ She may give such instructions on nutrition whiling imparting lessons on writing paragraphs on nutrition.

d) **Instructions through camps:** Instructions on health may be given by organizing different health awareness camps in school. The same may be done through NCC camp, Bratachari camp, 'Sab Peyechhir Asar', Scouts and Guides camps, Sports camp, etc.

2.2.5 Health Supervision

'Health supervision' means daily, weekly, fortnightly and monthly health check-ups of the students and staff or members of a school or an institute and keeping records thereof. The main objectives of health supervision are— (i) to develop a beautiful and healthy environment in school and (ii) to make the teaching-learning days of the school healthy for the students.

Health supervision of a school may be done in five ways:—

(a) To create a healthy physical atmosphere in school

(b) To supervise personal hygiene of the students

(c) Administrative supervision

(d) Daily supervision by the teachers

(e) Supervision by doctors/physicians

(a) To create a healthy physical atmosphere in school:

(i) The school environment should be made clean, attractive, healthy and joyful. The natural surroundings of the school need to be beautiful. It should be free from damp, dust, garbage or noise.

(ii) The classrooms, laboratory, library, stairs, corridors, playground and toilets must be clean, beautiful and spacious.

(iii) The school rooms should be airy and well-lighted.

(iv) The seating arrangements should be comfortable and scientific, so that the back bone, neck and eye-sight remain free from stress.

(v) The school should have constant source of clean and pure drinking water. Regular water testing should be done.

(vi) The school should provide the students with sufficient number of clean and hygienic toilets and bathrooms.

(vii) Dustbins or waste-bins should be kept at particular places in the school campus.

(viii) Dust-free chalks should be used.

b) To supervise personal hygiene of the students:

i) Physical or bodily cleanliness of the students
ii) Cleanliness of their uniforms
iii) Bad habits like spitting and urinating anywhere and everywhere should be checked.
iv) To make them aware about using health and hygienic systems of the school.
v) To assist students in developing proper limb formation (body movements/ structures.)
vi) To make students participate in games and exercises.

c) Administrative supervision:

i) Mid-Day-Meal programme, milk project and other nutritional programmes should be arranged properly.
ii) Daily routine should be followed, any discrepancies thereof should be overcome.
iii) Medical investigation and their follow-up programme should be maintained carefully and regularly.

d) Daily supervision by the teachers:

The areas to be surveyed by the teachers are as follow:

i) Behaviour of the students
ii) Dresses and uniforms
iii) Reading and writing materials
iv) Eyes, nose, ears, teeth, skin, and nails of hands and feet
v) Whether a student is having skin disease or any infectious disease

e) Suprervision by doctors/physicians:

A doctor cannot check or surpervise a student daily. So the teachers will detect any serious health problem and send him/her to the doctor. Weekly or monthly health check-up programmes should be taken up.

The areas to be covered by a doctor are—

i) Whether the school building, drinking water, sanitation facilities, etc. are hygienic or not.
ii) Whether the time table, daily routine and teaching-learning programmes are healthy or not.
iii) To treat students having diseases and to discuss the matter with the school authority.

iv) To prepare a balanced diet.
v) Heath check-up of the students and to record their height, weight and other body measurement.
vi) To give proper guidance about school health programme.

2.2.6 Health Service

Health service is such a service project that takes up and materializes programmes of the students' health check-up, health regain, health protection and development and deals with the scope for scientific health application and its best usage. The main objective of health service is to develop the health of the students by the concerted efforts of the teachers, guardians and health specialists.

The different programmes of health services are—

1) Organizing health check-up camps at regular intervals
2) To arrange first-aid treatment
3) Taking up different programmes to prevent infectious diseases
4) To spread health education
5) To make students habituated to disciplined life
6) To arrange for Mid-Day-Meal

Weekly or monthly health check-up for the students :

1. To know about the health condition of the students
2. To separate students infected with infectious diseases
3. To arrange for their treatment by the school authority, if possible
4. To give proper guidance and advice to the concerned guardians

Follow-up programmes:

The health check-up of the students is to be done by a competent doctor and the physical education teacher as well as other teachers connected with school health programme may enquire about the health of the students.

Taking up necessary steps following the advice of the doctors as per the results of medical tests are called follow-up programmes. The necessary steps for this are—

1. To separate students having infectious diseases and to give advice to their guardians
2. To arrange for preventives, vitamins, iodine, etc. for the infected students
3. To arrange for nutritious food for the students

To prevent infectious diseases by timely vaccination:

The school is not beyond the boundary of the society. So communicable diseases often spread among the school children. It has to be stopped by timely vaccination of the students.

First-aid treatment and emergency cares:

To arrange for the first-aid treatment and emergency treatment at school is an inseparable part of school health programme.

Facilities of a health centre at school: The students should not only be provided with regular health check-up facilities but also with the facilities of a health centre at school.

Special care for CWSNS: Special assistance, treatment and recreation facilities should be provided to the children with special needs.

2.2.7 Healthy School Atmosphere

The atmosphere/environment that helps the children develop their physical, mental, emotional and cognitive qualities and in which they can lead a healthy, pure and actively creative life is called a healthy atmosphere or environment. Health protection programme has two significant aspects—1) Direct aspect: detection of students' diseases and the remedy thereof, and 2) Indirect aspect: To create and preserve a healthy atmosphere. Healthy atmosphere helps in health protection, health improvement, physical, mental and emotional development of the children. In a word, it helps in the all round development of the children. Only proper treatment and balanced diet cannot ensure proper development of the children. For that, a healthy environment is a necessity; it ensures health development and makes up deficiencies.

Constituents/tools of a healthy atmosphere:

(1) Pure air
(2) Sufficient sunlight
(3) Germ-free surroundings
(4) Pure drinking water
(5) Natural habitation
(6) Proper sanitary facilities
(7) Availability of health centre facilities at school
(8) Control of sound pollution
(9) Control of water and air pollutions
(10) Political soundness and economic affluence

(11) Availability of playground and gymnasium (proper space for physical practice)
(12) Arrangement for recreational activities
(13) Population density, and the education of the people of the neighbouring societies.

Healthy atmosphere of the school: Health protection programme in school has its direct aspects in arranging health check-up camps, treatment facilities, balanced diet and in helping students overcome their problems. The indirect aspects include creation of healthy atmosphere and thereby helping students in the improvement of their health and in eradicating the causes of diseases. Therefore, to create a healthy atmosphere in school is a significant part of the indirect aspect of health protection programme. It depends on the following matters—

1) Location of the institution : An educational institution should be located in a quiet place by the road away from the din and bustle of the crowd. It should be convenient for the students and the teachers to attend school in time and to do their activities with whole-hearted attention. The teaching-learning activities can be carried out best in a calm and quiet atmosphere.
2) The area and the space of the school : The area and the space should be proportionate to the number of the students, teachers and other staff of the school, so that each and every one may feel comfortable enough. It should be airy and well lighted.
3) The buildings and the classrooms : The school building should be South-facing, so that sun light may enter the classrooms directly. The doors and windows should be big enough and the rooms must be well-ventilated. The classrooms must have modern and scientific teaching aids and appliances. There should be book corner, activity corner and tools for creative development in each and every room.
4) Availability of emergency arrangements : There are many students, valuable documents and goods in every school. To save them from any disaster / emergency situation, especially fire mishaps there must be fire fighting equipments and arrangements in schools.
5) Cleanliness : Classrooms, furniture, playground, corridors, school yards, etc. should be cleaned regularly. This maintains the healthy atmosphere in school and keeps every one cheerful and inspires everyone to be active.
6) Exchange of good wishes : To keep up the work culture exchange of good wishes, respect for each other and commitment to duties are necessary. Such qualities help

create a healthy atmosphere and improve mental health of all concerned. They share one another's joys and sorrows, become popular among people; otherwise they may be victims of public ire and an atmosphere of unrest prevails in life.

Outlines/Framework of healthy atmosphere in school :

1. Office : The size and shape of the office should be proportionate to the numbers of students and it should be located at such a place form where the head of the institute could keep watch on each and everybody in every classroom.
2. Rest room : It is difficult to keep up attention in teaching-learning activities continuously for 5 to 6 hours. So to overcome monotony there should be a rest room with some recreational arrangements for indoor games. As a result, the students may be able to achieve educational goals with whole-hearted attention.
3. Dining hall for Mid-Day-Meal:
4. Peace and Security in school:
5. Telephone and Internet connections:
6. Workshop:
7. Garden in the school yard:
8. Discipline (rules and regulations) in school:
9. Students-teacher ratio:
10. Furniture : Furniture in classroom have impact on students health. Seating arrangements should be such that the students may sit comfortably in the classroom and acquires knowledge sitting in a comfortable posture. Otherwise students may develop different types of physical deformities. The height of the bench should depend on the height of the students and the distance of the blackboard.
11. Library : An ideal school should have a library with reference books, magazines, news papers, etc. It should be located at a calm and quiet place with in the school premises. It should be spacious enough so that students may not be disturbed while reading in the library.
12. Playground : The playground of a school is a part of the healthy atmosphere of the school. It helps develop the physical as well as mental health of the students. Swami Vivekananda once said, "It is better to play football than to read the Gita." It means, physical activity is a must to keep the body and the mind fit and healthy. Through games and sports one cam develop more able and active physique. So for the implementation of physical education programmes in this age of science, a perfect playground is a must.

13. Water Supply : Safe drinking water facilities must be there in a school. Unavailability of safe and pure drinking water leads to ill health of the students and spread of infections by water borne diseases. There should be proper drainage system too. Water-logging on the campus may help germs to spread and that is against the norms of the sound health of the students.
14. Toilets : Number of toilets in a school should be in proportion to the number of students. There must be separate toilets for the boys and the girls and male teachers and the lady teachers. Germicides like phenol, napthalin, carbolic acid, etc. should be used regularly to clean the toilets. There must be running or potted water for use in the toilets.
15. Cure Centre/Medical Clinic : There should be a Cure centre in each school. The students should learn how to diagnose a disease and treat it or to send the patient to suitable place through the cure centre in order to realize the objectives of health education. It may be done through first-aid-treatment in school.
16. Fame and social dignity:

Healthy Atmosphere of the Playground

An important constituent of physical activities/ programmes is the playground. No activities of physical education is possible in the absence of a playground. An ideal playground is necessary for different types of sports and physical activities. The playground is called the laboratory of the physical programmes. So there must be an ideal playground in each school as well as in each village or town. The environment/atmosphere of an ideal playground depends on the following factors:

1. The playground should be adjacent to the school or in the middle of a village.
2. The length and breadth of an ideal playground should be at least 130m. and 90m. respectively.
3. It should have boundary walls, so that no cattle can enter into it.
4. There should be several definite entrances into the playground.
5. The playground should have sufficient green grass cover and the boundaries should be beautified with ever-green trees.
6. The ground should preferably be in the North-South direction. There should be sufficient seating arrangements.
7. There must be separate change room for the boys and the girls.
8. There should be hygienic toilets; separate toilets for the boys and the girls.
9. The ground should be plane with the mid-field a bit higher in order to avoid water logging.

10. There should be drainage system surrounding the boundary; safe drinking water facilities must be there.
11. There should be a store to keep sports materials.
12. There should be a caretaker of the ground.
13. Permanent arrangements for goal posts, kho-kho poles, volley ball court must be present.
14. First-aid facilities should be made available; there should be light post on all sides of the ground.
15. There should be restrooms for the officials and the students and teachers from other schools.
16. There should be stipulated seating arrangements for the two competing teams.

2.3.1. Body Mass Index

Body Mass index (BMI) is a specific system of measurement of body fat on the basics of height and weight of an individual. Formerly, it was used to calculate whether an adult man or woman is over-weight or under weight and accumulation of fat is more or less than requirement. But now it is applied on the children also.

Definition: Body Mass Index is such a system that gives an idea about the amount of fat present in the body of an individual in comparison to the individual's height and weight.

The Body Mass Idex (BMI), or **Quetelet Index**, is a heuristic proxy for human body fat based on an individual's weight and height. BMI does not actually measure the percentage of body fat. It was devised between 1830 and 1850 by the Belgian polymath Adolphe Quetelet during the course of developing "social physics". Body mass index is defined as the individual's body mass divided by the square of his or her height. The formula universally used in medicine produce a unit of measure of kg/m^2. BMI can also be determined using a BMI chart, which displays BMI as a function of weight (horizontal axis) and height (vertical axis) using contour lines for different values of BMI or colours for different BMI categories.

While the formula previously called the Quetelet Index for BMI dates back to the 19th century, the new term "Body Mass Index" for the ratio and its popularity dates back to a paper published in the July edition of 1972 in the *Journal of Chronic Diseases* by Ancel Keys, which found the BMI to be the best proxy for body fat percentage among ratios of weight and height.

The formula for calculating BMI is weight in kilograms (kg) divided by height in meters (m) squared.

2.3.2. Metric Imperial BMI Formula

The metric BMI formula accepts weight measurements in kilograms & height measurements in either cm's or meters.

1 meter = 100cm

$meter^2 = meter \times meter$

$$\textbf{BMI (kg/m}^2\textbf{)} = \frac{weight\ in\ kilogram}{(hight\ in\ meter)^2}$$

Calculate your own BMI

- If you are from the US, enter your height in feet and inches, and weight in pound.
- For the rest of the world, there is a metric version for entering height in meter and weight in kilogram.
- For example if a man who is 1.6 meter in height and weighing 70 kg, then the BMI will be:

BMI = 70kg /1.6 x 1.6 mt^2= 70 / 2.56 = 27.34 kg /mt^2

Thus the person is overweight.

Test Details

- **Equipment required:** scales and stadiometer as for weight and height.
- **Procedure:** BMI is calculated from body mass (M) and height (H). BMI = M/(H x H), where M = body mass in kilogram and H = height in meter. Higher score usually indicates higher level of body fat.
- **Scoring:** Use the table below to determine your BMI rating. The table shows the World Health Organization BMI classification system. The rating scale is the same for males and females. You can also use the reverse lookup BMI table for determining your ideal weight based on height.

Health Risk Classification According to Body Mass Index (BMI)

Classification	Categories	Risk of developing health problems
Underweight	< 18.5	Increased
Normal Weight	18.5 - 24.9	Least
Overweight	25.0 - 29.9	Increased
Obese class I	30.0 - 34.9	High
Obese class II	35.0 - 39.9	Very high
Obese class III	> = 40.0	Extremely high

Note: For persons of 65 years and older the 'normal' range may begin slightly above BMI 18.5 and extend into the 'overweight' range

BMI is equal to or less than 18.5 (Underweight)

A lean BMI can indicate that your weight may be too low. You should consult your physician to determine if you should gain weight, as low body mass can decrease your body's immune system, which can lead to illness.

BMI Underweight Treatment

BMI is between 18.5 and 24.9 (Normal)

People whose BMI is within 18.5 to 24.9 possess the ideal body weight, associated with living longest, the lowest incidence of serious illness, as well as being perceived as more physically attractive than people with BMI in higher or lower ranges.

BMI is between 25 and 29.9 (Overweight)

People falling in this BMI range are considered overweight and may be benefited from finding healthy ways to lower their weight, such as diet and exercise. Individuals who fall in this range are at increased risk for a variety of illnesses.

Overweight Treatment.

BMI is over 30 (Obese)

Individuals with a BMI over 30 are in a physically unhealthy condition, which puts them at risk for serious illnesses such as heart disease, diabetes, high blood pressure, gall bladder disease, and some cancers. These people may be benefited greatly by modifying their lifestyle.

Obesity Treatment

Advantages of BMI :

- BMI is generally considered the best way to determine if an individual is at a healthy weight. Calculation of BMI is popular because it is simple, quick, effective and applies to adult men and women, as well as children. BMI is a useful tool for quickly assessing weight classification. While it does not directly measure body fat, it is more accurate at approximating degree of body fatness than weight alone. In addition, you do not have to be of an exact weight or measurement, to be considered 'normal.' There is a range within each classification to allow for different body types and shapes. For example, you can be 40 to 50 kg heavier than a same height counterpart and still fall within a normal weight range.
- only simple calculations are required from standard height and weight measurements
- Implement appropriate strategies to manage and prevent obesity on a population basis worldwide.
- Develop policy recommendations for a coherent and effective global approach to the management and prevention of obesity.
- Simple, quick, effective and applicable to adult men and women, as well as to children
- A useful tool for quickly assessing weight classification.
- More accurate at approximating degree of body fatness than weight alone.

Limitations:

- BMI has limitations. Because it is not a measure of body fatness, very muscular individuals often fall into the overweight category when they are not overly fat. BMI may place individuals who have lost muscle into the healthy weight category. Measuring BMI for very short people or pregnant women is not appropriate. It is believed that excessive abdominal fat is more health threatening than hip or thigh fat. A woman with a waist circumference greater than 35 inches and a man with a waist circumference of greater than 40 inches may be at an increased risk for developing high blood pressure, stroke and heart disease. Therefore, the National Institute of Health (NIH) has asked physicians to measure patients' waistlines.
- Because it is not a measurement of body fatness, very muscular individuals often fall into the overweight category when they are not overly fat.
- BMI may place individuals who have lost muscle into the healthy weight category.
- Muscle is heavier than fat so a very muscular person might be considered 'overweight' even if they are very fit.

The BMI system uses averages to measure what is normal. People differ, so normal in one country might not be normal in another.

- Measuring BMI for very short people or pregnant women is not appropriate. It is believed that excessive abdominal fat is more health threatening than hip or thigh fat.

Body Mass Index Chart

WEIGHT lbs	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215
kgs	45.5	47.7	50.0	52.3	54.5	56.8	59.1	61.4	63.6	65.9	68.2	70.5	72.7	75.0	77.3	79.5	81.8	84.1	86.4	88.6	90.9	93.2	95.5	97.7
HEIGHT in/cm	Underweight						Healthy					Overweight					Obese					Extremely obese		
5'0" - 152.4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
5'1" - 154.9	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	36	37	38	39	40
5'2" - 157.4	18	19	20	21	22	22	23	24	25	26	27	28	29	30	31	32	33	33	34	35	36	37	38	39
5'3" - 160.0	17	18	19	20	21	22	23	24	24	25	26	27	28	29	30	31	32	32	33	34	35	36	37	38
5'4" - 162.5	17	18	18	19	20	21	22	23	24	24	25	26	27	28	29	30	31	31	32	33	34	35	36	37
5'5" - 165.1	16	17	18	19	20	20	21	22	23	24	25	25	26	27	28	29	30	30	31	32	33	34	35	35
5'6" - 167.6	16	17	17	18	19	20	21	21	22	23	24	25	25	26	27	28	29	29	30	31	32	33	34	34
5'7" - 170.1	15	16	17	18	18	19	20	21	22	22	23	24	25	25	26	27	28	29	29	30	31	32	33	33
5'8" - 172.7	15	16	16	17	18	19	19	20	21	22	22	23	24	25	25	26	27	28	28	29	30	31	32	32
5'9" - 175.2	14	15	16	17	17	18	19	20	20	21	22	22	23	24	25	25	26	27	28	28	29	30	31	31
5'10" - 177.8	14	15	15	16	17	18	18	19	20	20	21	22	23	23	24	25	25	26	27	28	28	29	30	30
5'11" - 180.3	14	14	15	16	16	17	18	18	19	20	21	21	22	23	23	24	25	25	26	27	28	28	29	30
6'0" - 182.8	13	14	14	15	16	17	17	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	28	29
6'1" - 185.4	13	13	14	15	15	16	17	17	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	28
6'2" - 187.9	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27
6'3" - 190.5	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	26
6'4" - 193.0	12	12	13	14	14	15	15	16	17	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26

2.4.1 Obesity

Obesity, over-weight are not signs of sound/good health. Obesity is the presence of excessive fat in the body and unusual growth of adipose tissue. Generally, 15% of the body weight of a male adult is fat while 20% of the body weight of a female adult is fat. If this fat increases by 5%, obesity is caused. This problem exists not only in our country but in other countries of the world too.

Causes of obesity or over-weight: There are many reasons for obesity.

Family Trend: Many people think that obesity is hereditary. But actually obesity has nothing to do with heredity. It is sometimes found that some families have the tradition of eating too much high-calorie food like butter, ghee, sugar, etc. In such cases, obesity may be almost hereditary. But the real cause is intake of high-calorie food.

Lack of Physical Activity: Lack of physical activities and exercises is one of the leading causes of becoming fat or obese. Fat people are rare in the hilly areas as they work hard in their day to day life. If the calorie taken through food is not spent regularly, obesity may be caused.

Economic Condition: Economically well-off people take in more food than necessary, which leads to obesity.

Change of Profession: Change of one's profession may lead to obesity. For example, if a wood-cutter leaves his job and becomes a clerk and does not bring any change in his diet, he is likely to become fat very soon.

Effects of Hormones: Due to irregular secretion of hormones from Thyroid and Pituitary glands sometimes hinders the metabolic activities. As a result of that, obesity may occur and one's weight may increase. Of course, obesity due to hormonal disorder occurs only in 5% cases.

Food Habit: Food is the main source of our growth, development and energy. But overeating is one of the major reasons for obesity. The main ingredients of food are Carbohydrates, Fat, Protein, Vitamins and Minerals. The proportion of the intake of Carbohydrates, Protein and Fat should be 4:1:1 as 60-70% of calorie/energy comes from Carbohydrates, 10-25% comes from Protein and 20-30% comes from Fat. Carbohydrates and Fat are the main source of energy. On the other hand, Carbohydrate is easier to digest than Fat. So we should eat more Carbohydrates than Fat. If we fail to keep up this ratio or if we eat more Fat than necessary, there is a possibility of becoming fat.

Age Effect: There is a possibility of an increase of .5 kg weight per year after attaining 25 years of age. Food habit as per demand of younger age may be suitable for that age. But if we do not give up that habit when we grow in age, there is a possibility of becoming fat due to excess of food intake.

Principles of weight losing:

1) In case of males 7% and in case of females 12% of fat may be cut down.
2) To reduce 1lb fat one needs to spend 3500 calorie.
3) To decrease more than 4lb fat a week is not desirable, as it may be harmful for health.
4) Generation of calorie from intake of food and exhaustion of calorie through work should be recorded daily.
5) The exhaustion of calorie through work should be more than the calorie generated by food intake.
6) If one wants to eat food worth 2000 calorie less than the exhaustible calorie, one should consult a physician.
7) Life style needs to be changed and intake of cold drinks, fat, carbohydrates should be lessened.

Things to do to cut down fat:

1) Children should be fed only if they are hungry. Food habit should be restricted/ controlled.
2) Vegetables should be eaten in large quantity; fat-rich food, fish, meat, etc. should be taken as less as possible.
3) Habit of going asleep anytime should be dropped.

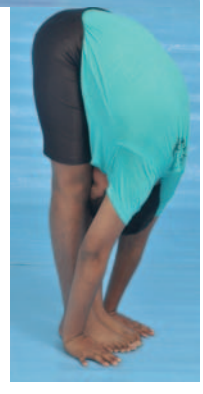
4) 30-40 minutes' strenuous daily exercise is essential.

5) Sweets, fast food, oily and spicy food should be avoided.

6) One should participate in physical exercise, games and sports regularly.

Exercises and asanas to restrict fat increase:

1) Shashangasana	2) Ushtasana	3) Ardhamatsyendrasana
4) Padahastasana	5) Ardhachandrasana	6) Trikonasana
7) Sarbangasana	8) Brishasana	9) Halasana
10) Shirshasana	11) Dhanurasana	12) Chakrasana
13) Talasana	14) sit-up	15) leg side kicking
16) Barfi	17) Spot Jump	18) Jumping jack



If the calorie generated from the intake of food daily is greater than the calorie required, the excess calorie deposits in our body. We call it the balance of positive energy. This leads to increase in body weight. Suppose a student has an excess of 500 calorie per day compared to his requirement. That is, the total excess of calorie in a week sums up to 3500 calorie. It increases 1lb of fat in his body. If that student does strenuous exercise, the excess calorie will form fatless muscles. Otherwise it will increase his body weight.

If the calorie generated from the intake of food daily is less than the calorie required, we call it balance of negative energy. To make up this deficit the fat tissues of the body dissolves to generate calorie. Suppose, the daily calorie deficit of a student is 500 calorie. That is, the total deficit of calorie in a week sums up to 3500 calorie. That means 1lb of fat will dissolve to generate 3500 calorie to make up that energy deficit. So his weight will decrease by 1lb a week.

2.4.2 Malnutrition

Intake of all types of nutrients is essential for proper growth and appropriate nutrition of the body. Lack of appropriate proportion of nutrient and amount of food intake leads to malnutrition. Lack of any of the six nutrients i.e. protein, fat, carbohydrate, vitamins, minerals and water, will cause malnutrition.

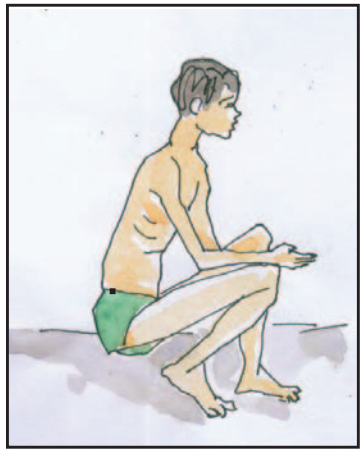
Definition : The ill health due to lack of balanced diet is called malnutrition.

Causes of Malnutrition : Two important factors cause Malnutrition. They are:

i. Insufficient intake of food or lack of food.
ii. Environmental condition.

i) Insufficient intake of food or lack of food :

a) Lack of animal protein and hike in market prices.
b) Disproportionate intake of fat.
c) Lack of in food intake of macro and micro elements (Ca, K, Na, Mb etc) in food.
d) Inadequate intake of proper amount of protein, fat and carbohydrate the body-building food.



ii) Environmental condition :

a) Decrease of agricultural land and cultivation.
b) Population explosion.
c) Excessive use of chemical fertilizers.
d) Decrease of nutritional food value.
e) Poverty, unemployment, and pollution are main factors.
f) Lack of consciousness about science of nutrition.
g) Lack of management in daily routine.

Diseases due to malnutrition : Various diseases are caused due to lack of proper nutrients and balanced diet. Generally people suffer from night – blindness, asthma, beriberi, scurvy, rickets, skin - disease etc. due to lack of proper nutrition.

Remedial measures : Proper remedial measures should be taken up to eradicate the diseases.

Steps to be taken to overcome malnutrition : The following are the remedial measures to fight against diseases caused due to malnutrition.

i. Food and nutrition are the two important pillars of healthy life and therefore it is essential to take nutritious food and maintain balance diet regularly.
ii. Along with intake of food it is also necessary to understand the requirements of the body.
iii. Sweets, fried and spicy foods should be minimized.
iv. One should not drink water during meal and intake of water should be after a gap of one to one and a half hour after a meal.

v. "Early to bed and early to rise." is essential to follow every day.
vi. One should not take tea and coffee in empty stomach.
vii. Intake of fruits is essential vis-a-vis balanced diet.
viii. Regular exercise and yoga is essential.
ix. Medical check up at regular intervals.
x. Intake of calories according to age, sex and labour.
xi. Organizing camp regarding awareness of nutrition and health.

Effect of malnutrition on sports and games : Malnutrition hinders demonstration and acquisition of skill. Generally, people suffer from various diseases due to malnutrition, which results in lack of concentration in any work. Due to malnutrition the energy of the body becomes low and as a result there is a lack of strength and endurance. Physical fitness also depends on proper nutrition that helps demonstrate the skills in sports and games properly.

Due to malnutrition any injury takes a long time to heal up. Malnutrition and inadequate diet cause malfunctioning of the internal organs of the body which make an individual gradually weak and prone to infection and as a result the performance becomes poor in sports and games.

2.5.1. Effect of Exercise on Health

Regular exercise and physical activities have special effects on the health of an individual. Exercise co-ordinates physique and mind that has a profound impact on health. Besides these an individual grows immunity that helps to sustain a healthy life. With regular exercise an individual becomes physically, socially and mentally healthy. This makes an individual muscular and strong.

Effects of Exercise on Health :

i. Improves the efficiency of the heart.
ii. Decreases the resting heart rate.
iii. Increases the volume and efficiency of the lungs.
iv. Increases the number of mitochondria in cells which liberate more energy.
v. Decreases the excess fat of an obese person.
vi. Helps to regulate the body weight.
vii. Develops strength, endurance, flexibility, speed, balance etc. which improve physical fitness.
viii. Plays an important role to regulate the blood pressure.

ix. Strengthens the frame of the body.
x. Helps to co-ordinate between nervous and muscular systems which result in efficient execution of any activity.

Effect of Exercise on Social Health :

Regular participation in sports and games gives an individual the opportunity to interact with various people of the society. This interaction helps to eliminate the difference between the poor and the rich, caste and creed etc. and establishes friendly relationship which promotes social health. Moreover excercise —

i. Increases sense discipline and punctuality.
ii. Improves co-operative mentality.
iii. Helps to grow positive attitude and respect to each other.

Effect of Exercise on Mental Health :

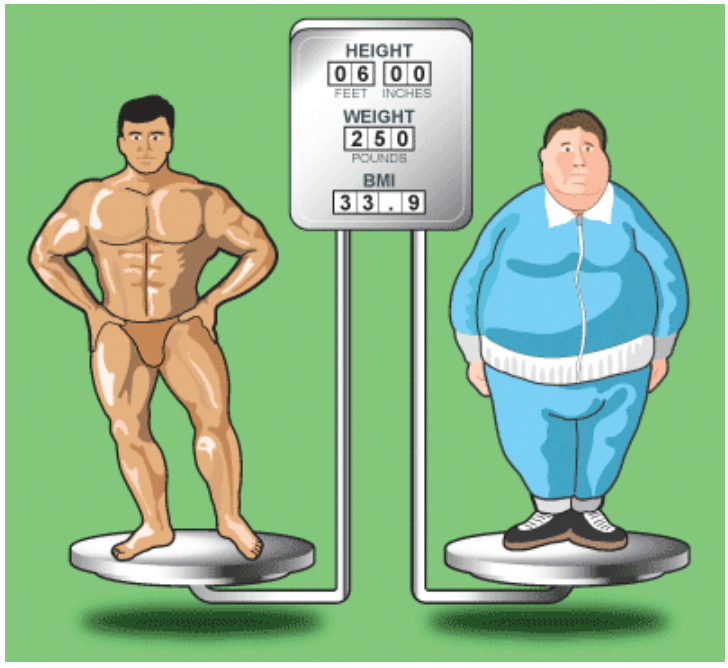
i. Helps to reduce anxiety and depression.
ii. Helps to cope with any situation.
iii. Helps to increase the concentration at work place.
iv. Improves the mental attitude.
v. Helps to reduce mental pressure and tension.
vi. Helps to improve the mental ability like analytical power, mental endurance etc.
vii. Helps to increase self-confidence and self-control.

Immunity :

i. Reduces the risk of diabetes, and if diabetic, helps to regulate and control.
ii. Helps to regulate and control blood pressure.
iii. Reduces the risk of colon cancer.
iv. Reduces the risk of Hypo-kinetics or diseases that reduces physical activity like Madhumeha, high blood pressure, spondylitis, fat and obesity etc.
v. Helps to improve the digestive system which reduces the risk of stomach diseases.
vi. Effective in curing muscle injury.

Effect of Exercise on Health during pregnancy :

i. Reduces the problems of anemia and lack of hemoglobin.
ii. Reduces the risk of foetal death.
iii. Reduces the risk of cardiac diseases.
iv. Reduces the risk of death during delivery.



CHAPTER – III

First-Aid

3.1.1. concept of First aid

The First aid concept was first introduced by German Physician Frederick Edgemarc. Franco-German War**,** also called Franco-Prussian War, was declared on July 19, 1870 and Frederick Edgemarc was appointed as Surgeon General. He thought that before the injured could be transferred to a doctor, there is one important and hard work to be done. If this simple but tough job is performed in time then the chances of survival of the patient increase. This way of primary treatment has spread throughout the world and many patients who are on death bed may be cured. Each year throughout the world, crores of the people are taking the training of this primary treatment or first aid, gaining knowledge and passing the exams. It should be kept in mind that a single person trained in first aid can save a precious life. The first thing that should be done by a first aider to save the patient is to stop the out flow of blood and arrange for artificial respiration, if necessary. Thus First Aid can be defined as an immediate and temporary scientific care given to a victim of an accident or sudden illness before the services of a physician is obtained. The various scientific steps that are taken during first aid treatment follow.....

3.1.2. First aid rules for the First Aider

- ⊙ Courage and self-confidence
- ⊙ Proper scientific knowledge about primary treatment or first aid.
- ⊙ Check for danger and then check for responsiveness of the patient with proper diagnosis.

- ⊙ Not to get excited during danger.
- ⊙ Overcome the crowd and keep working.
- ⊙ Encouragement and assurance to the victim.
- ⊙ Do not over-react.
- ⊙ Encouragement and assurance to the family members of the victim.
- ⊙ Keen observing ability.
- ⊙ To find way-outs.
- ⊙ Skilfulness
- ⊙ Clear speech.
- ⊙ Diligence and concentration.
- ⊙ Sympathetic and compassionate
- ⊙ Be tricky.
- ⊙ Physically sound and energetic.

3.1.3. Duties of the First Aider.

1. The specialist should immediately respond to a call of casualty or even if there is only information about casualty the specialist should rush there with all sorts of aids.

2. The first aid box should always be ready so that there is no wastage of time to reach the spot.

3. There should be keen attention in and around the spot to avoid further casualties from burning houses, machineries, petrol tanks of vehicles, kerosene oil stores, petrol pumps, live electric wires, leakage of poisonous gases etc.

4. Treatment can be done in open air if the environment is congenial or else the patients should be shifted indoors which are free of crowds.

5. Information to be gathered about the nearby hospitals and health centres.

6. If need be the nearby police station should be informed.

7. Clothes should be changed and clothing should be collected from nearby houses for the victims without wasting time. Anything and everything should be done immediately to save the life of the victim.

8. The work should be distributed to selected persons who will perform jobs like :
   a. Informing the doctors, nursing homes and police station.
   b. Gathering the necessary articles needed for primary treatment.
   c. To dissipate the crowd.
   d. The work of the volunteers at this time will be:
      i) To note down the names and address of the victims.
      ii) Document the details of the accident.
      iii) Diagnose the injuries in the body.
      iv) Detect the pattern of infection or poison.
      v) Diagnose the disease.

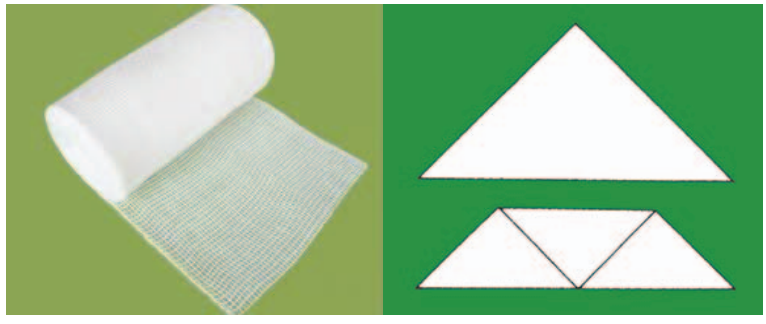
If someone falls from a bicycle or a rickshaw then the person should immediately be rescued and cleaned off the dust. If the person is bleeding then tincture iodine, nebasulf powder may be applied or the extract of marigold leaves which also act as antiseptic may be applied. If the injuries are fatal, then the patient should be shifted to the nearest hospital in a comfortable position and this is one of the primary duties that come under first aid. If the patient is suffering from respiratory trouble then arrangements should be made for artificial respiration which is also a part of primary treatment. Primary treatment consultant may go to the doctor along with the patient as he can explain the condition of the patient in detail and side-by-side the consultant should be capable enough to handle an emergency situation.

3.1.4. Concept of using of Bandages

A bandage is a primary material of first aid and it is used to hold a dressing on wounds, to create pressure to stop bleeding or to provide a support to an injured part. This is also used to support broken bones and muscle sprain of the body. Bandages are made of different types of materials like gauze, muslin, flannel, elastic webbing etc.

According to the shape, bandages are categorized into two types :

a. Roller bandage
b. Triangular bandage



a) Roller Bandage :

The uses of roller bandages are listed below :

i) Roller bandages are used to hold tightly the broken

and sprained parts of the body. Crepe bandages are used depending upon the intensity of the wound.

ii) To control haemorrhage (bleeding).
iii) To control inflammation.
iv) To protect the wounds from further injury.
v) At times to carry the patient.
vi) To protect the broken bones of the body from further dislocation.
vii) To secure splints.
viii) To hold dressings in place.

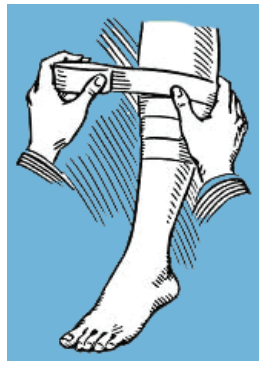
Sizes of Roller Bandages :

Roller bandages may be of any length but the width varies between 1, 2-2.50, 3-3.50, 4-4.50 inches. Generally 1 inch is applied on fingers, 2-2.5 inches on hand and head, 3-3.50 inches on legs and 4-4.50 inches over the body.

Applying the Roller Bandages :

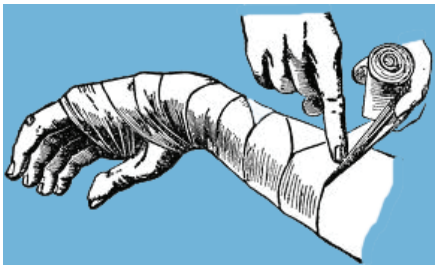
For simplicity of description let us assume that a person is standing straight and the palm is stretched out in front. The roller bandage has two parts (i) the head and (ii) the tail or the loose end.

On the wound medicine is applied and covered thickly with cotton. The wounded place should be kept still while applying the roller bandage. The roll is then passed round the wound and two or three initial turns should overlie each other to secure the bandage. The tension and direction of the bandage should be such that it does not hamper blood flow and should be comfortable. As the loose end is reached it may be tied, pinned, or fastened with adhesive tape.



Four methods to apply Roller Bandage :

1. **Circular turns**: This type of turns in the bandage is applied where the body parts are mostly cylindrical, for example fingers, wrists etc.



2. **Reverse turns**: This is applied to those parts of the body which are having unequal circumference. The initial turns of a bandage are applied securely; the subsequent turns

are applied to the body parts with smallest circumference and then towards the larger circumference, for example, in bandaging the leg or foot, the initial turns are applied immediately above the ankle. Here the circular turns are not useful.

3. **Figure-of-eight type of turns**: This figure-of-eight type of bandage is used around the elbow joint and the turns are made flexible to allow a certain amount of movement. The turns overlie each other in a criss-cross fashion that resembles a figure of 8.

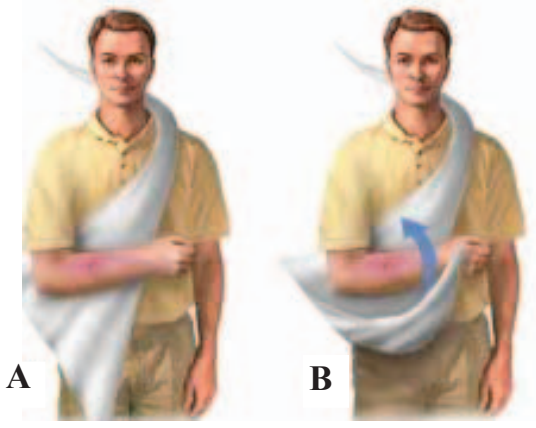
4. **Spica**: The spica method is used to retain dressing of the shoulder, armpit or chest. This is similar to the figure-of-eight turns however the succeeding turn ascending and covering two-thirds of the previous turn and forming a figure like the leaves around a corn which is called a " spica".

Triangular Bandage :

Generally a 38 by 38 inch cloth is cut diagonally to make a triangular bandage. Triangular bandage consists of three corners and three arms. The top corner is known as apex and the arm opposite to it is called the base. The corners connected to the base at the either sides is called "end".

The use of triangular Bandages are listed below-

i) Used universally for all purposes.
ii) Used as wide type bandage
iii) Used as narrow type of bandage.



(i) Universal usage: The triangular bandage is universally used without folding as arm sling, triangular sling, covering the skull and wounded regions.

(ii) Wide type bandage: When the triangular bandage is folded from the middle and refolded again it forms a wide type of bandage.

(iii) Narrow type of bandage: This type is used to bandage collar and shoulder sling as well as ring pad.

3.2.1. First aid treatment for burn-injuries

A **burn** is a type of injury to the skin caused by heat, electricity, chemicals, friction, or radiation. The more deeply the burn penetrates the more it is fatal. If 1/3 of the upper portion of the body is burnt then there may be a life risk. Burns are of two types (i) Dry burn and (ii) Wet burn.

Idea about Dry Burn :

i) Directly from fire or fire flames
ii) From heated metallic articles
iii) From high voltage wires
iv) From scorching heat of the sun
v) From lightning
vi) From frictional heat
vii) Due to acid or base

Idea about Wet Burn :

i) From hot liquids
ii) From super heated steam
iii) From chemical substances like pitch, tar, phenyl, iodine etc.

First Aid :

Water can be applied to the burn, but three conditions must be fulfilled:

i) The burnt area should be dipped in cold water in a deep bowl
ii) The water should be flowing either poured or flowing from tap
iii) Water should be clean and pure

First aid for chemical Burns :

A. If burnt by acid then :

i) First the wound must be washed properly with water
ii) Bases may be applied
iii) Baking soda, washing soda or lime may be applied

iv) If acid falls in the eyes then few drops of water is applied followed by drops of milk, breast milk if available is more effective.

B. **If burnt by bases then** : (i) Mild acid like lemon juice, tamarind or sour curd is applied.

Classification of burns and their treatment procedure :

(i) First degree burns (Ariemma): The skin usually turns red, swells and is painful with a burning sensation. Restricted to superficial skin without blisters and heals within 3-5 days, and the burnt skin peels away, however, the burn scar remains. After the burnt skin peels off then milk cream, coconut oil, egg or burnol is applied.

(ii) Second degree burns: Second degree burns are more serious and swelling is intense. The irritation is extreme and the skin turns deep red. The second degree burns penetrate below the top layer of the skin but not too deep. If there is no infection or sore then the wound is healed up from below the skin within a week and no scar is left. The skin turns normal within 10-15 days. If there is any infection in the blisters then it takes time to heal up and medicine needs to be applied. In this situation the first aider should dress the wound properly and take the injured to the doctor immediately.

(iii) Third degree burns (skin becomes dead): Third degree burns are worse and they penetrate to all the layers of the skin. Tremendous damage can occur that affects the bloodstream, major organs and bones. The blood and the protein of the skin clots and the skin looks charred and waxy below which lie the dead organs. Third degree burns heal in two steps: firstly the wound turns towards granulation tissue which gradually turns to scaled tissues.

In cases of the first three degrees of burns protein plasma oozes from the injuries. As a result, nervous injury is caused. So the oozing of protein plasma should be stopped as soon as possible. Ripe mango pulp and the white substance of the egg minus egg yolk should be used very gently over the wounds. The patient should be sent to a doctor or to the hospital very soon, placing the victim on banana leaves or on something comfortable. Sometimes skin grafting is done to heal the wounds.

(iv) Fourth degree burns : Such burns are caused by the effects of hyper-thermal agent on body tissues, such as open flames, molten metal, etc. This is the most dangerous burn that affects skin, muscles, bones and other parts of the body. The wounds dry up very slowly. To cover up the wounds skin grafting is done. So many symptoms start from these burn wounds as

a result of change in the central nervous system (pain shock). Moreover, as a result of oozing of plasma and absorption of poisonous decomposed dead tissues of the burnt spots, blood is deformed internally and the functions of different internal body systems collapse.

Duties of a first-aider : The first-aider should stop the effects of the hyper-thermal object on the body. The victim should be taken away from the source and fire of the victim's dress should be put out. It is better to cut open the dress so that the wholeness of the skin is not damaged. If any part of the dress stick to the skin, it is better to keep that part of the dress as it is. The victim should not be laid bare. Especially in cold weather the patient may get shocked. The burn injuries should be bandaged with dry and sterilized bandage to avoid infections to the injuries. Clean home clothes ironed and soaked in ethyl spirit or potasium permanganate solution may be used as bandage. The bandage may give a bit of relief from inflammation. Moreover, ice or ice-cool water may be used for the wounds so that heat may not penetrate deep into the body. The victim's body should be covered with warm clothes and he/she should be given warm drinks. The victim should better be removed to hospital. The victim should be kept still and in comfortable posture. The first-aider should keep vigil till a doctor attends the victim.

What should not be done: (i) At all cost the victim should be kept away from dirt and filth. (ii) The burnt spot should not be touched; blisters should not be pricked with needle to drain out water; the part of the clothes sticking to the burnt spots should not be removed by force; ointments (vaseline, fat oil, etc) should not be used in the burn injuries. These things help neither in healing the wound nor in giving relief to the victim. On the other hand they hinder in surgical cares later on.

Measures to be taken if and when fire breaks out :

1. Initially try to fight the fire with things available at hand.
2. Do not create panic by shouting or running to and fro.
3. If the fire is caused from electric materials, turn off the main switch.
4. Never take shelter in any room or in the bathroom if fire breaks out.
5. To put out fire proper fire extinguishing system should be used.
6. Vacate all the floors in a disciplined way.

7. Use the stairs instead of lift in case of fire mishap.
8. Never try to recover personal property entering into the ring of fire.
9. Crawl out to safety from the places filled with smoke.
10. The door and window fittings and the fire extinguishing should be as per 'National Building Code'.
11. Furniture and decorations should be fire resistant as much as possible.
12. Keep the switches turned off during load shedding.
13. Open the doors and windows of the room if you get gas-smell on entering the room. Check if the gas cylinder is switched off or not; turn off the gas knob if it is on. Any sign of disorder or leakage of gas tools should be informed to the gas supplier. Put off the gas oven as soon as cooking is over. Before going to bed at night of leaving the house, check if the gas knob is off or not.
14. The elderly people should give up the habit of smoking lying on the bed.
15. There must be more than one stair and fire safety measures at home or at school.
16. In case of multi-storey apartment/ building, there must be provision for a huge water tank with sufficient water to extinguish fire.
17. The exit of a building should be kept clean and barrier-free so as to facilitate escape during fire mishaps.
18. If you are trapped inside a flat during fire mishap, the opening of the doors and windows should be tightened with wet towels or clothes. Keep only one window open and lie down under that window; wave a bright cloth/handkerchief through the window to attract the attention of people outside for help.
19. Bursting of fire-crackers should be banned in crowded/ residential areas.
20. 'Emergency Exit' board and 'No Smoking' board, phone number of nearest fire station, etc. should be put up at a place to which everybody's notice is drawn easily.

How to Rescue People from the Spot of a Fire Mishap

1. If fire breaks out inside the house and people are trapped inside the room, assistance of trained personnel should be sought.
2. Pure air is available only in a layer close to the floor of the room. So one should crawl into the room.
3. Bring out the person trapped on the floor or on bed of that room just by crawling.
4. Before rescuing that person tie a wet cloth or handkerchief in the mouth.

5. If fire breaks out CO is produced and the gas is very poisonous. So using presence of mind things available at hand should be used to do the rescue work immediately.
6. If the doors and windows of the accident room are closed, never open them. The fresh air will spread the fire rapidly.

First-aid treatment of minor burns and blisters:

1. Lay down the burnt person/victim.
2. Give assurance to the victim.
3. Give a flow of cool water on the burns slowly.
4. Remove things like ring, bungles, wrist watch, shoes, socks, etc. that are tightly attached with the body.
5. Tie the wounds with sterilized cloth or gauge bandage.
6. Let the victim drink a lot of water or liquids.
7. If the victim is conscious, let him sip water now and then.
8. If the heartbeat and respiration stop, re process should be kept running.

How to help a person whose dress has caught fire

1. If one's dresses catch fire, it should be put out in a convenient way.
2. Try to put out the fire by covering/ pressing the victim with quilt, blanket, etc.
3. Continuous flow of large quantity of water may also be used to puts out the fire.
4. Applying lot of water in the burnt spots is good for the victim. It not only puts out the fire but also cools down the burnt spots. It minimizes harms of the body.
5. If dresses catch fire never run to and fro, but roll along the ground to put out the fire.
6. If possible, try to remove the burning dresses as soon as possible.

What should not be done

1. Residential houses should not be built with inflammable materials.
2. Never pour oil in a burning stove; never over-pump a stove. Stove is highly dangerous. Inflammable things like kerosene should not be kept near a stove.
3. If you smell gas on entering a room never turn on or turn off the any light.
4. Never store a gas cylinder in the bed room.
5. Never allow anybody to keep inflammable things like petrol, spirit, etc.
6. Never use many electric appliances in a single plug.
7. Never pour oil in a burning or running machine or generator. Using a lighted candle while filling oil is dangerous.
8. Never throw away a burning butt of a bidi, cigarette or match stick.
9. Never do hooking for electric connection.

Things to do to Rescue School Children from Fire Mishap

1. The building materials should not be inflammable.
2. At least two stairs must be there in a school building with more than one storey.
3. Classes should not run under any temporary structure.
4. The dangerous chemicals of the laboratory should be kept sealed in a container after use.
5. The kitchen shed of the Mid-Day-Meal should be built at a safe place at least 100 metre away from the classrooms.
6. The electric wiring systems should be observed /checked regularly. If any fault is noticed, it should be repaired instantly.
7. A large water reservoir with sufficient capacity should be built and a system to fill it must be there.
8. The Headmaster, teachers and non-teaching staff should have the knowledge and training about emergency plan and duties to put out fire and to vacate the school building during the mishap.

Measures to extinguish fire at a temporary pandal of the village

1. Before the erection of a pandal, guidance and advices of the fire services about the safety measures and necessary permission should be taken.
2. No electric wire should be placed near clothes or tripal.
3. Fire extinguishing system should be kept ready all the time.

4. Petromax or other open lights/lamps should not be used in a pandal.
5. Emergency exit must be there for emergency situation.
6. Installation of the main switch board near the temporary pandal is prohibited.
7. Electric systems should be hired from licensed agency.
8. Bursting of fire crackers near the pandal is banned.

If the villagers, city dwellers and slum-dwellers come forward and abide by the safety rules and do one's duty rightly at the right times, we may be able to enrich the fire extinguishing systems in schools, society and the state. As a result of that loss of property, wealth and life may be stopped and restricted. To strengthen the fire safety we should work like volunteers. Active and co-operative role of each and everyone is necessary. The Government has introduced new fire safety laws. Lets us build a fire-proof society for all by our united efforts.

3.3.1 Dog Bite

Dog-bite may sometimes be dangerous. Dog-bite may prove fatal. If domestic or pet dogs are given vaccines, there may be less risk. But the modern medical science does not say that it is completely free from danger. Modern medical science advises that the victim should be taken to a health centre or hospital immediately. The treatment should start without any negligence. Generally, bites of a dog, a cat, a fox and a wolf cause hydrophobia. Bats and other animals may spread this disease. Bite of a mad dog is the most dangerous. The saliva of a mad dog contains the germs of hydrophobia called rabies virus. If the wounds of the bite are deep or big, bleeding may occur. If the wounds are infected, the victim may have an attack of fever after two hours or so. Puss may form in the wound; it may swell and turn red.

Symptoms of dog-bite victim:

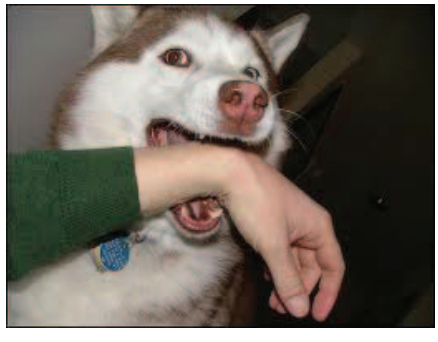
1. The injured spot may give pains and there may be a pain-like sensation.
2. Irregular breathing, crying, fever, painful throat while swallowing and other troubles.
3. Thick and sticky saliva comes out in large quantity.
4. Initially the victim is afraid of drinking water and later he becomes afraid of water itself.
5. Sudden outbreak of anger though remaining calm most of the time.
6. The victim remains alert but anxious and excited at the same time.
7. At an advanced stage when death is nearing convulsion and paralysis occur. The sweat, saliva and urine of the victim of hydrophobia are poisonous; coming in contact with these things may be dangerous.

First–aid

1. Wash the wounds with soap immediately after dog-bite and use germicide in the wounds.
2. Apply spirit a minute later.
3. If spirit is not available, tincture iodine may be applied.
4. Keep the wounds open, don't cover them.
5. If the victim was not vaccinated for tetanus, he should be given tetanus antitoxin injection.
6. The first symptom of hydrophobia is noticed within 10 days to 2 years after the dog-bite. Once hydrophobia starts, it is almost impossible to save the victim's life. So preventive treatment with anti-rabies vaccines should start immediately.
7. If the wound is deep, water-flow should be applied for 10-15 minutes.
8. Apply ice if there is a burning sensation or swelling.
9. If bleeding continues, the wound should be kept upwards. If bleeding does not stop within 10 minutes, the victim should be taken to a doctor.
10. The victim should be taken to a doctor; tetanus vaccine should be applied simultaneously with other treatments.
11. Dry dressing should be used round the wound all the time.
12. Do not rub the wound; the rabies virus may go deep inside the body in that case.

Preventive Measures:

1. If you suspect an animal to have become mad, keep it in a cage for 15 days.
2. Vaccinate all the stray dogs, if possible.
3. Pet dogs too should be vaccinated regularly.
4. Remain alert about a bird or animal if it looks sick or behaves abnormally. Precautionary measures should be taken.



CHAPTER – IV

Consumer Protection

4.1.1 Sample Project of Consumer Protection

Two third of the financial transaction in the entire world is provided by the consumers, yet their opinions are never entertained. 'Actually everyone is consumer'. In the financial market consumers are the most important. Inspite of such importance no attention is paid to them. However 24th December, 1986 is a very memorable day for the consumers of India. From this very day the Consumer Protection Act, 1986 was put to action.

Yet quite a long period after this act was put to action the interests of consumers are still not protected, The reasons are —

- Ignorance of consumers about their rights.
- Maximum consumers are not organised.
- Maximum consuemrs are not ready to exercise their rights.
- Most of them do not know where and how to apply for the remedies.

The C. P. Act, 1986 announces six times of rights for the consumers. Specific forum has been set up for setting different issues.

Six rights of the consumers have been acknowledged in the C. P. Act, 1986. Forums have been set up for setting issues. The rights are —

(1) Right to protection from the marketing of goods or services which are harmful for life and property.

(2) Right to information about goods or services.

(3) Right to selection from amongst goods or services in competitive price.

(4) Right to hearing.

(5) Right to seek remedies.

(6) Right to consumer education.

Some facts regarding Consumer Protection :

Often we get cheated at the time of purchasing something. How?

When we are purchasing or accepting any service, we expect

(1) Right quantity [measurement, weight, number or volume].

(2) Right price.

(3) Right quality.

(4) Security - our life or health should never get harmed, or our security never gets hindered while using something or some service.

Customers are cheated by any fault or deficit in these cases. Some preventive measures have been by the government for protecting customers from being defrauded or for faster remedies in such cases. These are called consumer protection.

4.1.2 Steps taken by the government :

1. Right quantity, right price : The government has accepted several measures in order to ensure right price and right quantity for the customers :

(a) The standard weights and the weight machines should bear proper marks or seals from the department of measurement. It will speak for their accuracy.

(b) For measuring cloth etc. metal scales should be used and they should bear legal marks as a proof of their accuracy.

(c) The measuring containrs should have legal marks on them as proof of accuracy, while measureing kerosene oil or other liquids of that kind.

(d) Packaged products should bear on them the details like — name of the product (quantity, weight, number or volume), complete name and address of the manufacturer, manufacturing date, maximum retail price and also complete address of the authority to be addressed in case of any fault.

It should be remembered that taking higher price than the one mentioned on the packet is illegal and punishable offence.

2. Correct quality : The government has determied some standards and some logos or certain signs in order to ensure quality and service for the customers.

Name of the product or service	Quality indicator	Logo
Ornaments of gold	Hallmark	मानक: पथप्रदर्शक

Name of the product or service	Quality indicator	Logo
Spices, edible oil, ghee (clarified butter), honey, pulses, flour, coarse flour etc.	Agmark	
Biscuit, packaged drinking water, cement, baby food, electrical equiptments etc.	ISI	IS 15298 CM/L-3793581 Part-2
Wool and woolen materials	Woolmark	WOOLMARK
Silk and things obtained from silk	Silkmark	SILK MARK
Handloom cloth	Handloom mark	Handloom
Hospitals	NABH	NABH
Medical laboratories	NABL	NABL ACCREDITED M-0351

3. Safety :

In order to prevent adulteration in food the Government of Indian had compiled two laws; first The Prevention of Food Adulteration Act, 1954 and later the modified and extended version of it - The Food Safety and Standards Act, 2006. In this act special attention has been

given on physical safety and control and prohibitions have been attributed to marketing of food, so that selling of adulterated food can be controlled and legal steps can be taken against dishonest traders.

The Drugs and Cosmetics Act, 1940 has ascribed some controls and prohibition in case of selling medicines so that selling of wrong or adulterated medicines can be stopped, as well as necessary legal actions can be taken against dishonest traders.

According to The Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954 control and prohibition have been attributed to advertisements of immoral and magic remedies; provisions for necessary legal steps against dishonest traders have also been mentioned in it.

In the field of medical services The Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002 has enforced necessary directions for the interest of consumers.

Here are some examples :

- Nutritional values and the date before which it would be the best should be mentioned on the packet of the food.

- Baby food should be ISI marked and the packet or tin should bear the declaration, "mother's milk is the best for body".
- The declaration "Not suitable for children under 12 months of age" should be mentioned on the packet of ajinomoto (Monosodium glutamate).
- Powdered spices cannot be sold if they are not packaged. Salt which does not contain Iodine is injurious to health; hence selling of edible salt without iodine has been prohibited.
- If colours and additives are to be used, they should be ISI marked and their quantity should be specific and limited. Using unauthorized colours or using them in unapproved measure is punishable.

- Only 'food grade plastics' should be used if the food is to be contained in plastic. For using in food forks and spoons should be made up of 'food grade plastic.'
- Medicines can not be sold without proper receipt.
- Expiry date should be mentioned on the packet of the medicine.

- The registration number of the doctor and provisional diognosis should be mentioned in the prescription.
- The prescription prepared by the doctor should bear both-the brand name and the generic name of the medicine.
- No advertisements can be made declaring diseases like Cancer, Diabetes, Epilepsy, Glaucoma, Rheumatism are cured.
- No advertisements can be given displaying magic remedies.

5. Preventive Measures :

The government has started a new court so that the defrauded customers can get the easiest and quickest remedies at minimum expense. These courts which are meant to settle the clash between the buyer and the seller are called the 'Consumer Forum.'.

The Consuemr Protection Act, 1986 - This act received the approval from the president of India on 24th December, 1986. Hence the day 24th December is observed as the National Consumer Day in India to commemorate the historic attempt to maintain and secure the interest of consumers.

However before the introduction of this act, there have been many other acts; but these acts did not have any provision for quick remedies or compensation for the consumers. Provisions for proper compensation for the defrauded consumers were included in The Consumer Protection Act, 1986 for the first time.

But this act would be applicable for those customers only who would things for their own use and not for business purpose.

Other than that, this act would also facilitate those who are engaged in a business through self-employment only for earning livelihood.

In this act these buyers have been described as 'Consumers'. Consumer-nominated users or even those who enjoy the servicec or convenience would also beregarded as consumers. Six rights of the consumers have been accepted by the act—

(a) Right to protection against the marking of goods or services which are harmful to life or property.

(b) Right to information about the quality, quantity, purity, utility, price of the product or service.

(c) Right to select.

(d) Right to hearing.

(e) Right to get remedy.

(f) Right to consumer education.

The benefit of this act is that the consuemr himself or through his rominated representative can complain or present his proposal; appointing a layer is not compulsory.

Procedure to lodge a complaint in the Consumer Forum :

At least three charge sheets written appropriately and extra copies which must equalize the number of accused persons should be submitted to the concerned forum.

Little amount of fee is required to submit the charge sheet. The amount depends on the claim.

No fee is required to lodge complaint for the claim up to Rs. 1 lakh if the consumer is Antodaya Anno Yojna cardholder or belongs to BPL category.

If the charge is found to be correct, then it is ordered to repair or replace the defective material, to ensure proper service, to refund the price of the material or service or even to compensate if the consumer is harmed due to the negligence of the seller or the service provider.

Special initiative by the Government of West Bengal :

If the consumers wish, then instead of lodging complaint in the consumer forum, they can appeal before the consumer department to have a mutual undertanding. In that case the officers of the consuemr department try to settle the issue by having a discussion in the presence of both — the buyer and the seller. Quick settlement is achieved in many cases. The main benefit of this system is that the entire process goes on without any expense, i.e. no fee is required to appeal for mutual settlement.

4.1.3 Some important facts regarding the reation taking place in the body due to the adulteration and other harmful materials used in food.

Sl. No.	Probable adulteration	Foods in which they mixed	Harmful effects on body
01.	Argemone seeds Argemone oil.	Mustard oil, other edible oils and fat.	Dropsy, Glaucoma, Heart blockade.
02.	TOCP	Oil	Paralysis
03.	Rancid oil	Oil	Destroys vitamins-'A' and 'E'.
04.	Artificially coloured projuected seeds.	Poppy-seeds, black cumin etc.	Injurious to health, dread of cancer
05.	Artificially coloured, rotten tealeaves or other leaves, sawdust etc.	Tea	Injurious to health, stomach pain, dread of cancer
06.	Mineral Oil	Edible oil and oily food.	Cancer.

Sl. No.	Probable adulteration	Foods in which they mixed	Harmful effects on body
07.	Arsenic	Lead Arsenate is sprayed over apple and other fruit	Weakness, dizziness, shivering, hitch, paralysis, death.
08.	Lead	Water, natural or processed food	Symotoms related to lead-pollution—Insomnia, anaemia, constipation, mental depression ect.
09.	Copper	Food	Vomiting tendency, Diarrhoea.
10.	Zinc	Food	Stomach pain, vomiting tendency.
11.	Monosodium Glutamate	Chinese food, meat or such food.	Injury in child's brain. Growth of embryo's brain is obstructed. Bulging, epilepsy etc.
12.	Sulphur dioxide and sulphite.	Preserved food, sweets.	Inflammation in stomach and intestine, dread of cancer.
13.	Aluminium	Ball of sweetmeat, betel-leaf.	Mental depression, bone becomes spongy, memory, loss.
14.	Rhodamine b	Beverage, candy, sugar-lump candy	Diseases related to kidney, liver and spleen.
15.	Urea	Fried rice, milk	Rheumatism, inflammation in skin, eye and trachea.

When the mentioned metals or compounds exceed the tolerance limit in the food, the diseases and averse reactions take place in the concerned body.

Indispensable for consumers :

- Having self-awareness about the adverse effect caused by adulterated materials and use of unapproved colours in food and accordingly making others aware.
- Many confectioners, vegetable vendors, fish vendors, food manufacturers and sellers themselves do not how harmful the unapproved colours and chemicals (used by them) are to health. They should be made aware so that they are restrained from using them.
- Public opinion should be constituted against the use of harmful elements and colours; if necessary support from the distinguished or famous person of the locality, social-workers, voluntary organisations and local authority will be accepted.

CHAPTER – V
Disaster Management

5.1.1. Flood

Temporary inundation of a large area of land due to different reasons is known as flood. Flood is the most common example of natural disaster worldwide. Flood occurs in most of the riverines in our country. Floods generally occur in rivers, rivulets, lakes and small water reservoirs when the water exceeds the capacity due to heavy rainfall. Flood waters generally inundate the land and its current damages, destroy and sweeps away the properties of the residents. Generally flood hazard can be minimized by afforestation, constructing dams, embankments, flood walls, deepening rivers by removing silt and constructing spill ways. The main aim of controlling flood is to save the loss of life and property from flood .

5.1.2. Causes of Flood

i) Torrential rain is the most frequent cause of floods which leads to overflow of water from river banks, breaching of embankments and collapse of dams. This inundates wide areas of the land.

ii) The water carrying capacity of the river decreases if the river course is choked, if the channel is narrowed down, or due to excessive siltation or if, the river changes its normal course. This disturbs the equilibrium of the river and the excess water overflows its banks leading to a disastrous flood.

iii) Excessive rainfall also causes flash floods, especially in mountainous regions. Excessive rainfall on the mountainous regions causes flash floods that can roll down boulders and debris through the channels towards the lower reaches of the rivers. Flash floods are short-term events, occurring within 6 hours of the heavy rainfall, cloud-bursts and cyclones following.

iv) Lack of proper drainage system that can dispose off the rain waters quickly and efficiently to the nearest rivers, lakes or reservoirs is another important reason of flooding.

v) Substantial water level of rivers rises due to melting of ice and can cause flooding. Global warming due to urbanization is speeding up the melting of ice sheets, glaciers and ice caps that increase the risk of disastrous flood events.

vi) In the coastal regions cyclones, high waves and tides forecast flood and cause flooding of the coastal regions.

vii) Earthquakes under the sea causes huge amount of water to gush into the coastal regions which is also called Tsunami and causes deadly floods within a few moments.

viii) Flooding also occurs temporarily near the bay or the river mouth during tidal waves.

ix) Majority of the drains in the cities and townships are highly exposed to misuse by residents of the city who dispose of all kinds of solid waste into them, choke them with filth and this also causes floods.

x) Vulnerability to flood is also related to the geomorphologic set up of the region. Most of the rivers of our country cause floods and most flood prone areas are in the North-Eastern regions. More than 60% of flood events occur in these regions where 47% of the country's total population resides.

xi) Floods are also caused due to climatic factors. As in our country, the monsoon pours heavy rain from June to September. During this time 75% of the annual rainfall is precipitated which rapidly raises the water level of the rivers and lakes that increases the vulnerability of floods and inundation of the low lying areas.

5.1.3. Damages caused by Flood

i) Damages to residential property and public infrastructure : The huge amount of flood waters devastate property and infrastructure and instigate landslide due to water logging. Coastal flooding destroys and damages the fishing boats and fisheries, which are sometimes totally wiped off. Houses with poor foundations and mud walls are easily damaged and even destroyed that result in loss of property and hampers life of the occupants.

ii) Loss of life and public health : Drowning in flood waters causes death both to humans, animals and livestock; sometimes causes fatal injuries. There also exists the potential for transmission of water-borne diseases, viruses and increases the levels of endemic diseases like respiratory infectious diseases, cholera, malaria and diarrhoea.

iii) Hamper water supply and crisis of drinking water : Water in wells, groundwater and water supply system all get polluted that result in the scarcity of drinking water.

iv) Damage to agriculture and shortage of food : Floods destroy several agricultural lands that adversely affect food production and is inextricably linked with food insufficiency. At the same time animal fodder is also destroyed. Flood-waters invade the granaries and other food storage infrastructure which initiates scarcity of foods.

v) Damage to agricultural lands : Flood water often changes the properties of the soil, erodes the topsoil or inundation of agricultural lands by salty waters reduces the fertility of the soil.

5.1.4. Remedial measures to minimize losses in flooding

i) Floodwaters can be brought under control through wetlands, natural and manmade reservoirs, construction of dams and alternate spillways and afforestation. Preventive measures also include de-siltation of rivers and plantation of trees.

ii) In flood situations, the hazard can be minimized easily if residents in that area can be evacuated in time and rehabilitated somewhere else. Large scale developmental works should not be permitted in flood affected and potential flood risk zones. Schools, hospitals, panchyat offices and other important public places should be constructed in protected areas.

iii) Dams should be maintained properly and efficiently to control the storage and release of water.

iv) Buildings and houses can be constructed on elevated lands and should be at a safe distance from water bodies. Buildings and houses should be flood-proof and flood-rescue constructions should be erected for public interest.

v) During floods cultivation can be carried out with the then available natural seeds.

vi) During flood alerts, immediate steps should be taken up to move to the nearest specified safe places.

5.1.5. Preparedness of Students to Mitigate flood Hazards

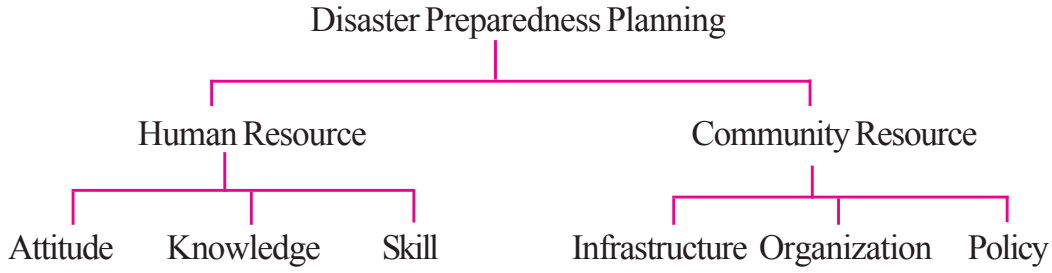
i) **Flood zone maps and flood forecast** : Students can easily prepare flood zonation maps to indicate the flood prone areas that can substantially minimize flood hazards.

Early records of flood can easily demonstrate the time, intensity and spread of the flood in the flood prone areas. Early flood records and maps when blended with the base map of the area,

proper assessment can be made of that flood prone region. If there is an indication of flood, then based on previous year's flood height record, forecasting can be made and accordingly an alert may be sounded. An idea can be generated about the flood prone area by knowing the wave height and character of the landscape in coastal regions. The flood hazard zone map also give an idea regarding the water currents during floods. On these maps the safe places can be marked which helps to take immediate shelter during floods.

ii) **Training for implementing renovation strategies** : Protection of trees, cleaning up silt and pebbles from water ways, repair and restoration of lakes and ponds, etc. can control floods and prevent the susceptibility of being flooded.

To decrease the intensity of floods, students can work together to clear the waterways like drains, etc. of the affected areas. Students can obtain training to bring into control the flood water currents and work as a team member of the highly trained flood mitigation squad and understand the procedures of constructing river embankments and flood walls, stacking of sand bags and help them to gather the essential materials they need.



Post-flood responsibilities :

- To combat natural disaster like flood, each and every individual and every family should perform their duties within proper time and with full efficiency.
- The flood mitigation squads should be in continuous interaction with the inhabitants and they should always encourage them to take part in the flood preventive measures programme.
- The residents should be made aware of the flood mitigation programme and a clear view regarding the strategies should be among them.
- Houses should be built according to disaster managements and minor repairs should be done.

- Arrangements should be made for temporary storage of important documents and costly belongings in the houses of residents which are safe from flood.
- The villagers should be made aware to avail of the particular roads to be used during floods.
- Houses should be constructed on elevated lands.
- Houses should be built near the dams.
- Houses whose floors are at lower levels should be elevated before the onset of flood.
- Trees should be planted in more numbers to resist the erosion of the soil.
- Every individual including children and the youth should know how to swim.
- The strategies to mitigate flood should be rehearsed several times.

What to do during flood situation :

- The windows should be closed properly and nailed.
- Proper inspection of the roads to safe shelter should be done to ensure that it is not damaged.
- Ladders, tubs and other things should be moved to such places so that they do not fly off and injure others.
- Continuous inspection and examination of dams are necessary.

- Important documents, costly belongings, fertilizers, etc. should be shifted to the houses of residents temporarily which are safe and are able to withstand flood.
- Boats, fishing nets, etc. should be shifted to safe places.

- There should be documentation of the movable and immovable properties of each family and important documents must be sealed in plastic bags so that these are not damaged by water.
- Keep listening to the local radio for updates and alerts so that the inhabitants get themselves prepared to fight this natural disaster.
- Food grains like wheat flour, puffed rice, etc. and drinking water in canister and plastic bags should be stored so that they are adequate for 2-3 days.
- Lantern, torch, match box, battery, etc. should be available at hand.
- Evacuation must be done immediately after alerts.

- It should be ensured that everyone is safe and in the same place or at least in a place where they are safe.
- To ensure that everyone gets proper food.
- To make sure that there are no rumours spreading.
- Health camps must be conducted properly.
- Drinking water should be collected only from tube-wells.
- Water from ponds and wells has to be boiled properly before drinking.
- Diarrhoea patients must be immediately given easily digestible drinks like liquor tea, rice starch, green coconut water, etc.
- If the diarrhoea gets out of control then the patient should be shifted immediately to the nearest health centre or doctors and other medical staffs may be consulted.

- Shelter must be taken on safe and higher grounds.
- Battery operated radios must be used.

Things should be avoided during floods :

- Water from ponds and wells should not be taken without boiling.
- Wastes must not be thrown here and there.
- Toilets and latrine must not be done in open air.
- Without a great necessity, one should not get into the flood waters.
- Should not eat foods that are not fresh.
- Electrical appliances must not be used.
- Doors and windows must be kept closed.

Things to be done after floods :

- Administrative rules and regulations to be followed.
- Cooking, preparation of toilets and latrines and searching operations to be done.
- Clear/pure drinking water must be made available and along with clean toilets so that it prevents spread of endemic diseases.
- To be always in touch with the rescue team.
- Information, if any, about those who are missing to be conveyed to the local administration.
- Clean waste materials and litters from the surroundings.
- Immediate renovation of the damaged houses.
- Arrangement of small-scale finance/loans and source of income.

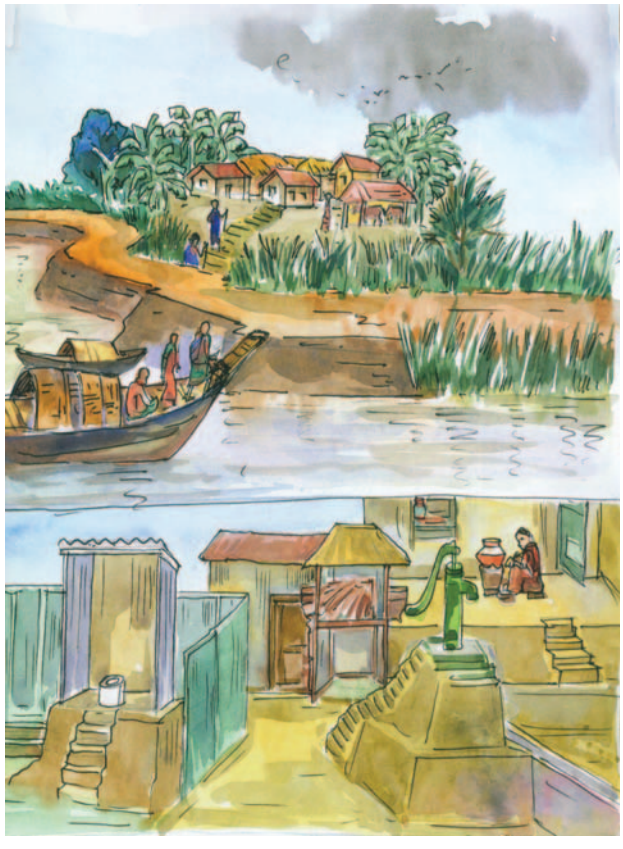
5.1.6. Flood Hazard Management Planning

Construction of dams and reservoirs and their proper management, proper spillways, etc. and plantation of trees help to control and reduce the floodwater hazards. Dredging and removal of silts, afforestation, etc. can be the major curriculum of public sectors and N.G.Os. There should be support for the rehabilitation of people affected by floods. There should be a vigilance that the poor people should not try to settle near the river banks and there should be laws to enforce this. Schools, hospitals, panchayat offices, etc. should be constructed at protected places. Houses and other constructions should be made such that they are able to withstand flood hazards.

Natural disasters are inevitable and cannot be stopped, but they can be brought under control. To prevent natural disasters is to manage and mitigate it. Management and mitigation of hazards is the way of life.

To formulate the management and mitigation programmes for pre-, syn- and post-natural hazards, there should be nine well-coordinated committees consisting of students, teachers, guardians, women's executive committee, youth leaders and NGO workers and each working group should consist of 6-10 active members. The names and the function of each committee are detailed below:

i) Flood alert committee
ii) Rehabilitation committee
iii) Rescue committee
iv) First aid and health committee
v) Water supply and hygiene management committee
vi) Funeral committee
vii) Advisory committee
viii) Loss and damage assessment committee
ix) Relief and assistance committee There is a need to construct different working committees to combat natural disasters. Flood alert committee is one example of such committees and its work is given below:



1. Actions of the flood alert committee-

a. Alert before the onset of flood:

- Continuously listening to the radio, watching the television and wireless forecasting of alerts by the administration should be done.
- With the sound of alert the people should be informed immediately through loud speakers or any other devices. Cycles, bullock carts, boats or any other available vehicles can be used.
- It should be ensured that this committee possesses the address and telephone numbers of the nearby administrative offices.

b. During flood (when flood alert has been sounded)

- Alert should be communicated to all the area, especially, to those places which are marked as danger zones.
- Immediate contact should be made to the rehabilitation camps.

c. Post-flood situation

- Know the flood situation through radio.
- Make people aware of the various health problems and their remedies.
- Constant consulting e.g., with rehabilitation and rescue committee and also with other committees and seek their help.

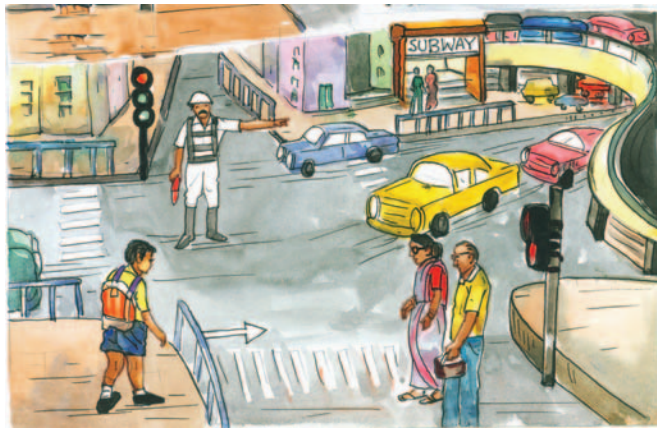
2. Other working groups or committees—

There are other groups like patrolling group, communicating group, police volunteers, various other volunteer groups and relief collecting group, etc. It is not expected or mandatory that each and every student should work in every group but they should be attached to that group in which they feel comfortable. It is the prime duty of the members of the working groups that each and every student should be safe during their work execution. This is because today's students are the future citizens of the nation. We cannot stop natural disaster, however, this is an endeavour to teach the students to fight against natural disaster according to their ability and to develop a mentality to help the affected people.

CHAPTER – VI

Road traffic safety

6.1.1. Role of Traffic Police in Road-Traffic Safety



Traffic police is an icon of honesty and responsibility. We are always used to see traffic police controlling road traffics and vehicles under the scorching heat of the sun, heavy rains or in severe winters. The traffic police are always careful to prevent accidents of vehicles and pedestrians. The traffic police honestly and continuously work to prevent accidents in cities and metros. The traffic police are harsh to the drivers and pedestrians who try to break the rules. However, they are actually sympathetic to the people and the society. From our daily experience we have seen that the traffic police take the lead role to help the children, aged people and physically challenged individuals to cross the roads safely. The traffic police never hesitate to stop the vehicles and help people to cross the roads by holding their hands. On the other hand, if any accident occurs then the traffic police immediately rush there to help the injured and try to bring the situation under control as quickly, tactfully and smoothly as possible. Not only this, the traffic police also take the key role to direct vehicles and pedestrians who are stangers to the area. Recently they have formulated a curriculum to train the school students to make them aware of the road-traffic safety. Every year the "Road Safety Week" is celebrated from 1st January to 7th January to make people aware of the road-traffic safety. Thus the traffic police help to save life of both the pedestrians and vehicle drivers and so we can call them as our helper, saviour and friend.

6.1.2. Traffic lines

Certain measures that have been taken for the benefit of people and traffic lines are one among them-

a. Stop line : This mark is present at every crossing and STOP is written before the line. Once the signal light turns red, the vehicles come up to this point and stop. After the vehicles stop, the pedestrians start crossing the road along the specified path.

b. Pedestrian's way:

i) **ZebraCrossing :** Near the stop line there are black and white alternate strips to be used by the pedestrians to cross the road. It is known as Zebra Crossing. Apart from this, hearing zone crossing and simple crossing are also used.

ii) **Foot Bridge:** Foot bridges are available to cross the busiest roads.

iii) **Underpass:** Subways present underground to cross the roads are known as underpass.

iv) **Divider:** The main roads are divided by white marking which is known as road divider. The vehicles travel in opposite directions along roads on the two sides of the divider.

v) **Parking area signal:** The parking place beside the road is indicated by a marking.

vi) **Turning signal:** If there is a turn ahead then it is marked with a turning mark.

vii) **Lane:** Every vehicle will follow a specific lane. If the vehicle driver desires to change the lane then a specific signal should be given to the vehicle behind before changing the lane.

6.1.3. Kerb Drill

a) A carriage way is a portion of the road along which the vehicle moves in unrestricted manner. If there is no light signal or traffic police or zebra crossing, the kerb is to used by the pedestrians very carefully to cross the road. In this situation one should look to the right side first then to the left side and then again to the right before crossing. If one sees a vehicle coming then there should be a perception regarding the vehicle distance, its probable speed and then start crossing which is called Kerb Drill. Keeping in perception the distance of the coming vehicles and its speed, the pedestrain should start crossing the road.

b) One should observe the distance of the vehicle and the signals given by the driver.

(c) If needed, the vehicle can be stopped by sending signal to the driver by raising the hand.

Road Markings

Dividing line or Median strip : A dividing line or median strip or divider is a road marking formed by a white or yellow line designed to separate the road when vehicles are travelling in opposite directions. The width of the median strip depends upon the width of the road. The main aim of this median line is to divide the road into two parts. This is done in order to prevent any accidents on the road between vehicles travelling in opposite directions.

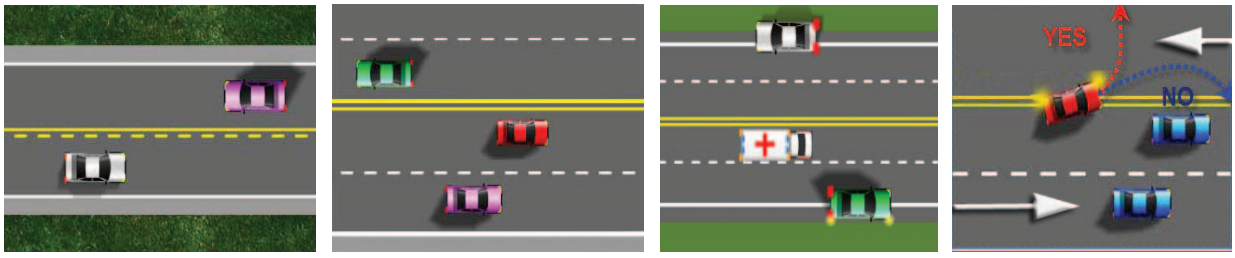
The roads having median strip painted in yellow indicates that the vehicle should not cross this line in any situation. On the other hand the same marking in white indicates that the vehicle can cross the white line only if situation permits, however, such crossings are not encouraged. These dividers are painted on the road to prevent head-on collision between vehicles moving in opposite directions.

Lane lines : Various types of vehicles move on the road like light weight vehicle, heavier vehicles and moderate speed vehicles. If the vehicles that move with moderate speed are being allowed to move along the roads without proper signals then accidents, casualty and road congestion are inevitable. To avoid these troubles, the road is sub-divided again by broken or discrete lines into many sub-lanes. This is called lane divisions. Roads where these sub-lanes are marked, the vehicle should be driven accordingly in the specific lane depending on its speed. Hence, high speed vehicles should move on the extreme right sub-lane and the slowest along the extreme left sub-lane. Thus buses, mini-buses, autos, etc. that need to stop frequently for passengers should move on the extreme left sub-lane. Apart from this, vehicless should wait for signals if there is a crossing ahead.

6.1.4. Traffic Police Directions and Traffic Light Signals

a) When the traffic police holds a **STOP** signal then it indicates that up and down movement of vehicles along that particular road is stopped, however, vehicles can move towards right or left. After a certain interval of time, the traffic police will change position and the STOP road will be opened for vehicles to move along and the open road will face the STOP signal.

b) Near the zebra crossing when the sign shows a man with red colour, it indicates that



pedestrians should not cross the road at this time. After the signal glows out and the vehicle stops then only the road should be crossed.

c) **Traffic Light Signals**: The rules and regulations for road traffic are indicated by light signals that are controlled by the traffic police.

i) The red signal prohibits any traffic from proceeding and the vehicle should wait behind the stop line.

ii) The green light allows traffic to proceed in the direction indicated. If it is safe to do so then only the vehicle can take a left or right turn with proper indications. If any pedestrian is seen crossing the road then the vehicle must be slowed down to allow the pedestrian to cross the road.

iii) The yellow light provides warning that the signal will be changing from green to red. With the blinking of yellow light the vehicle must be slowed down and it should wait behind the stop marking until the yellow light blinks again and the vehicle becomes ready to move. Thus at each change of light signal from green to red or from red to green, the yellow light will glow or blink. However, if the yellow light blinking is seen after crossing the markings then it is advised to keep moving to avoid accidents.

Signal No. 1 Signal No. 2 Signal No. 3 Signal No. 4

iv) Traffic light signals showing green arrow indicate that the vehicle should move to the particular direction pointed by the arrow.

6.1.5 Traffic Sign

Mandatory Sign


Stop


Give Way


No Entry


Cycle Prohibited


Pedestrians Prohibited


All Motor Vehicles Prohibited


Horn Prohibited


No Parking

Cautionary Sign


Trafic Signal


School Ahead


Pedestrian Crossing


Men at Work


Guarded Level Crossing


Ungurded Level Crossing


Right Hand Curve


Left Hand Curve

Informatory Sign


Petrol Pamp


Hospital


First Aid Post

Eating Place

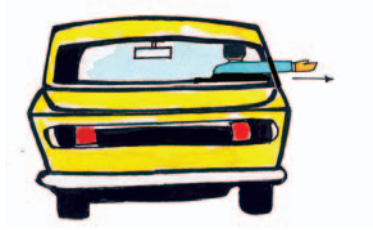

Railway Station

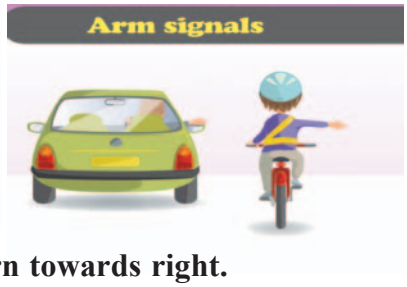

Tunnel Ahead


Pedestrian Subway

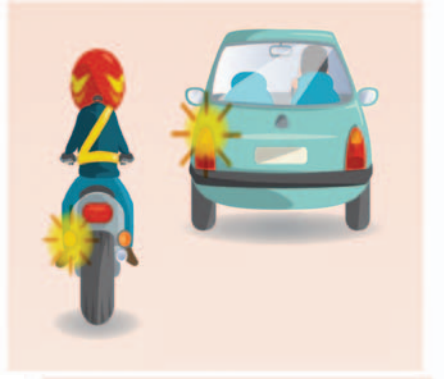
Direction Sign

6.1.6. Hand Signals Shown by Drivers

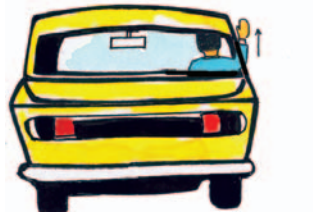




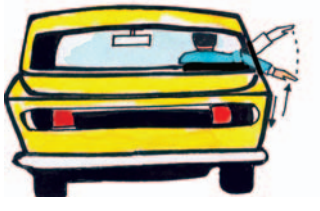
Right turn signal: to turn towards right.



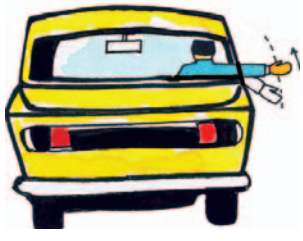
Left turn signal:to turn towards left.



Stop signal: the vehicle will stop.



Slow down signal: the vehicle is slowing down.



Passing signal: to allow another vehicle to pass and overtake

Before the onset of youth,students should acquire this knowledge and information of traffic rules and regulations and the various symbols used that are helpful for road safety for all the students. This will also increase the managerial skills of the students on the roads.

6.1.7 Safe Drive Save Life

Awareness Campaign on Road Safety

Driving at Night

Driving at night requires extra caution and alertness. Be alert for pedestrians, bicycles, animals and hand drawn vehicles that travel without light and are difficult to see.

- Drive at a slow speed to get a safe reaction and stoppage time.
- Turn on the headlights when darkness falls.
- Drive with dipped headlights in places where the roads are properly lit.
- Keep the headlights clear and clean and check themfrequently. Also carry spare bulbs.
- Keep your windscreen clean because dirty windscreen can impairyourvision.
- Avoid looking to the dazzling light if an oncoming vehicle is driving in high beam and gradually slow down your speed.
- To reduce the glare of lights following you, switch your interior rear-view mirror to the night position or slightly tilt it or tilt the exterior rear-view mirrors.
- Do not mistake cock-eyed vehicle-a vehicle with one fused headlamp—fora two-wheeler.
- Before overtaking, ensure that the oncoming vehicle is at a safe distance.

Some tips for improving your vision and driving ability at night :

- Before you hit the road, check that all exterior lights work properly (front and rear, brake lights and high beams), and ensure your windows and headlights are clean (inside and outside). Dirty windows can add to glare and impair vision, making it more difficult to see; dirty headlights can greatly reduce efficiency.
- Avoid using high beams when it is foggy - they will reduce your own ability to see and may temporarily blind other drivers.
- Avoid flashing your high beams at another vehicle that has their high beams on — this will affect their visibility and the visibility of other drivers.
- Adjust your rear-view mirror to avoid the reflection of other vehicles' headlights - most cars have 'day/night' rear-view mirrors that can be tilted easily to reduce the glare.
- Avoid using your vehicle's interior light while driving-if you need to check the map, safely pull over to the side of the road first.
- Keep your eyes moving for flashes of light, at the top of hills, at road bends and intersections that may indicate the headlights of other cars.

- Increase your crash avoidance space to make it easier to spot potential hazards and give you more time to respond.
- Night time driving requires lots of concentration, which can be tiring. To prevent fatigue, take frequent breaks to give your eyes a chance to recover.

Disadvantages of Driving at Night :

- Poorer Visibility! The visibility factor is down to less than half at night. However powerful your headlamps might be, they simply can't compete with the sun. Colour perception is reduced too, as headlights don't emit anywhere near as wide a light spectrum as the sun. You won't see obstacles in your path from far away, as during the day.
- Drowsiness - a top cause of accidents - is at its peak. Remember, we aren't a nocturnal breed; our body is hardwired to rest in the dark hours. Even if you are fresh yourself, do you really want to be sharing the road with a truck driver who has put in 18+ hours behind the wheel without sleep?
- Those driving with their high beams on can blind you on single lane highways (lesser of an issue on expressways though).
- Higher probability of Drunk Drivers. With no police enforcement to curb alcoholics on the highway, and a general tendency to drink in the evening, the night brings more drunkards on the road.
- Steeper crime rates. Crime is most rampant when there are lesser people around and the chance of getting caught is minimal. Indian highways have higher instances of criminal activity at night.
- Several vehicles don't have properly functioning headlights, tail-lights and brake lamps. Combine this with reduced visibility in the dark, and it's a recipe for disaster. Think of the number of times you've heard of someone driving into a parked truck at night. That doesn't ever happen in the day.
- Inadequate medical support. Post-incident injury treatment is bit slow on Indian roads. The number of injured people who die between the accident time & them reaching the hospital is high. Medical support is slower at night when staff members are in shorter supply.
- Poorer breakdown support. If your car should suffer a mechanical failure, garages open for service will be few and far between.
- Difficult to find good places to eat. There aren't too many restaurants serving clean, hygienic food all through the night. The choice is limited.
- Not too many people on the road to ask directions from, in caseyou get lost.

Advantages of Driving at Night :

- You'll usually achieve a higher average speed, despite maintaining a lower top speed. Primary reason is lesser traffic.
- Lower probability of bullock carts, three wheelers, cyclists and animals on the Highway.
- Cooler air keeps engine better! The density of cool air is higher than hot air. Thus, you end up with a superior burn, resulting in better performance. The engine feels noticeably crisper at night.
- Higher fuel efficiency due to lesser traffic and cooler air.
- You can see a vehicle coming around a blind corner due to its headlamps (assuming the vehicle has its headlamps running).
- This is down to personal tastes, but some find night driving very enjoyable. The pleasure of empty roads, cooler weather, crisper engine, feeling one with the car and some nice music playing is unmatched. However, safety comes first and it's best to limit night driving to as little as possible.

6.1.8 Precautions to be taken at the Unmanned Railway crossing

Unmanned level crossings spell danger across the world. At present, there are total 32694 numbers of Level crossings over Indian Railways out of which 14853 are unmanned where the accidents occur primarily due to inadequate precautions by the road users failing to observe mandatory sign boards, signals and basic traffic safety rules. Out of the manned level crossings only 54% are interlocked i.e. protected by a Gate Signal as an additional Layer of Safety.

According to a high-level safety committee set up by the government of India, Indian Railways recorded about 15,000 deaths in 2011-12. 40% of consequential accidents and 60% of fatalities are accounted for by level crossings. Unmanned level crossing accidents result in 59% deaths as per Railways' High Level Committee Report. To enhance the safety and reduce inconvenience to road users, busy level crossings are being replaced by road overbridges (ROB) / road underbridges (RUB) and limited height subways (LH5) gradually. A public safety project in 2009 to minimise deaths from trespassing along Mumbai's suburban railway network said that it was no easy task, considering that trespassing used to take at least one life every day. This was despite putting in place all traditional methods to spread awareness: danger signages, educational programmes, and awareness drives. But nothing worked. That shows the carelessness of those crossing: by driving, cycling or walking. Here comes the importance of care to be taken while crossing,

especially while driving. In manned railway level crossings, you must not cross or pass a stop line when the red lights show (including a red pedestrian figure). Also do not cross if an alarm is sounding or the barriers are being lowered. The tone of the alarm may change if another train is approaching. If there are no lights, alarms or barriers, stop, look both ways and listen before crossing.

6.1.9 Common Causes of Road Accidents

Road accident is most unwanted thing to happen to a road user, though they happen quite often. The most unfortunate thing is that we don't learn from our mistakes on road. Most of the road users are quite well aware of the general rules and safety measures while using roads but it is only the laxity on part of road users which cause accidents and crashes. Main cause of accidents and crashes are human errors. We are elabo-rating some of the common behaviour of drivers which result in accident:

1. Over Speeding 2. Drunken Driving 3. Distractions to Driver

Road Accident Scenario in India :

Year	Total No. of Road Accidents	Total No. of Persons Killed	Total No. of Persons injured
2005	439255	94968	465282
2006	460920	105749	496481
2007	479216	114444	513340
2008	484704	119860	523193
2009	486384	125660	515458
2010	499628	134513	527512
2011	497686	142485	53394
2012	490383	138258	509667

During the year 2011, there were around 4.9 lakh road accidents which resulted in deaths of 1,42,485 people and injured more than 5 lakh persons in India. These numbers translate into one road accident every minute and one road accident death every four minutes, for India.

HEALTH AND PHYSICAL EDUCATION PRACTICAL

Chapter - VII
Diciplined Body Movements

7.1.1 Bratachari

SONG OF BENGALEE YOUTH

We are the youthful sons of Mother Bengal --
Untiring, alert, unmoved in misfortune !
The glorious valour of the Gangaridae and Pal Kings,
The beautiful harmonies of Chandidas and Jayadev,
The might and power of Hussein Shah and Isa Khan
Ceaselessly send the waves of their rhythms
coursing through our souls !
We shall remove all poverty from our midst and
all ignorance,
And usher in the bright light of a new age.
We shall practise valour and restraint
And the patient discipline of labour,
And banish all the ills of our dear country
And make her happy.

7.1.2 Marching

Marching is one of the best among all the formal physical activities. Marching is the combination of standing in files, walking, changing of direction while walking and moving following the commnads of the commander. To maintain discipline is the prime factor to lead a smooth and healthy life. The foundation of personality and wisdom in a human being is built with the sense of discipline. We all should take care so that we can grasp the art of sitting, standing, walking etc. in proper posture.

Marching not only improves the physical and mental state of a person, develops the society but also adds attraction to the annual function of an educational institution, reception ceremony of a special guest, inaugural ceremony of a sports championship.

Objectives of Marching :

(i) Development of physical strength.

(ii) Achievement of good control over limbs and to develop proper physical postures.

(iii) Manifestation of the sense of discipline, self-confidence, leadership quality, law-abiding attitude, self-restrain in a person.

(iv) To develop patriotism and inclination towards working hand in hand.

Marching is to be learnt through the following two steps :

(A) Art of Ccommanding (B) Execution following Command.

(A) Art of Commanding :

1 An alert is given before command as Class/Platoon/Squad.

2 A command consists of three parts as (i) Explanatory (ii) Pause and (iii) Execution.

Points to be noted while teaching the art of Marching :

(i) Complete demonstration is to be given properly step by step.

(ii) Demonstration should be given with number-count along with illustration.

(iii) Practice is to be done in group.

(iv) Movements of the body and limbs are to be made perfect.

(v) Individual practice with number-count is required.

(vi) Practice with number-counts in group is also important.

(vii) Group practice is to be done keeping time factor in mind.

(viii) Each one of the group should be given the opportunity to command.

(ix) Practice may be arranged in small groups if required.

Different Skills of Marching:

(A) 'Attention' posture :

(i) Two heels are to be kept conjoined in a time.

(ii) An angle of 30º is to be maintained between two feet.

(iii) The knees will be kept straight and normal.

(iv) The arms will hang normally maintaining contact with the body all along.

(v) The fingers will remain lightly closed.

(vi) The nails of both the thumbs will be clearly visible from the front.

(B) 'Stand at ease' Posture : (From 'Attention' position to 'Stand and ease' position)

(i) The left heel to be placed 12" (inches) away in the same line of the right heel by lifting the left foot 6" (high) from the ground.

(ii) Simultaneousy, the arms are to be placed at the back below the waist keeping the right palm on the left one.

(iii) The arms are to be kept locked by keeping the left thumb on the right plam and the right thumb across the left thumb.

(iv) Both the arms are to be pushed downwards and the chest a little forward so that no gap remains in between the arms and the body.

(v) Body will remain straight, bodyweight is to be kept equally on both the legs. The head is to be kept straight, chest forward, shoulder aligned and vision is to be kept in front and far away.

(vi) Breathing will continue normally.

(C) 'Left Turn': (From 'Attention' position)

(i) Pivoting on the left heel and the ball of the right foot the body is to be turned left in 90º angle (anti-clockwise half-turn).

(ii) Body weight is to be kept on the left leg.

(iii) On completion of the 90º left turn the left foot is to be kept flat and the left leg straight and the right heel is to be kept high from the surface.

(iv) Keeping the left knee straight the body weight is to be kept on the left leg and the arms are to be clung to the body with lightly closed palms.

(v) Simultaneously, the right foot is to be lifted 6" (inches) high and the heel be placed in touch with the left heel to come in 'Attention' position.

(D) 'Right Turn': (From 'Attention' position)

The steps of 'Right Turn' is just the reverse of the steps to be followed during 'Left Turn'. The turing of the body will be clock-wise. As in case of 'Left Turn' the body moves to the left pivoting on the left heel, likewise, in case of 'Right Turn' the body will move to the right pivoting on the right heel and the ball of the left foot and the rest of the steps as indicated for 'Left Turn' will then be followed.

(E) 'About Turn': (From 'Attention' position)

(i) The right foot is to be rotated 180º (Full turn) towards the right-hand side (clockwise rotation) pivoting on the right heel and the ball of the left foot. Both the hands will remain clung to the body. Equilibrium of the body will be maintained by crisscrossing two thighs. The body weight will solely be on the right leg.

(ii) The left foot is to be lifted 6" (inches) high, on completion of the back turn, the heel be placed in touch with the right heel to come in 'Attention' position.

(F) 'Mark Time Mark': (Kadam Tal)

From 'Attention' position immediately on hearing the command:

(i) Creating an angle of 90º at the knee-joint the left knee is to be lifted up to such a height so that the left thigh remains parallel to the ground and the toes of the left foot are bent downwards.

(ii) On Number-count-1(one) the Left foot will come down to the ground and as soon as the left foot touches the ground, the right foot will be lifted up like the left foot, keeping the body balance on the left leg.

(iii) On number-count-2 (two) the right foot will come down to the ground like the left foot and as soon as the right foot touches the ground, the left foot will be lifted up.

(iv) Both the hands will remain straight and clung to the body. The head will be kept straight and vision is to be kept in front and far away. This process will continue with the number-count 1-2, 1-2, 1-2,...

(G) 'Stop' Command:

The command 'stop' is uttered when the right foot is coming down to the ground. Then the raised left foot will touch the ground and the heel of the lifted right foot comes down to the ground and touches the left heel to stand in 'Attention' position.

(H) 'Quick March':

Immediately on hearing the command the participants shall act as under:

(i) On number-count-1 the left heel is to be advanced around $2\frac{1}{2}$' (two and a half feet) without bending the knee and at the same time the right arm is to be stretched up to the shoulder height keeping the palm lightly closed and the left arm, with palm lightly closed, is to be swung back as much as possible. The elbows of both the arms will remain straight.

(ii) On number-count-2 the right foot and left arm will be stretched forward and the left foot will remain behind and the right arm will be stretched backward.

(iii) At the time of marching forward the two arms are to be swung forward and backward from the shoulder joints freely and the legs are to be advanced alternately. No stiffness of body will be there at the time of marching.

(I) 'Halt':

'Halt' command is to be given during marching when the right leg is advancing from the left leg. Immediately on hearing the command 'Halt' the participants shall act as under:

(i) The right heel is to be grounded to stop the advancement.

(ii) On number-count-1- the left foot is to be stretched forward with a short step of about 15" (inches) and the left foot will be placed completely on the ground.

(iii) The hands will continue swinging before the left foot is placed on the ground and the moment the left foot is fixed on the ground the swing of the hands will stop and they will cling to the body on both the sides in full stretch keeping the palms lightly closed.

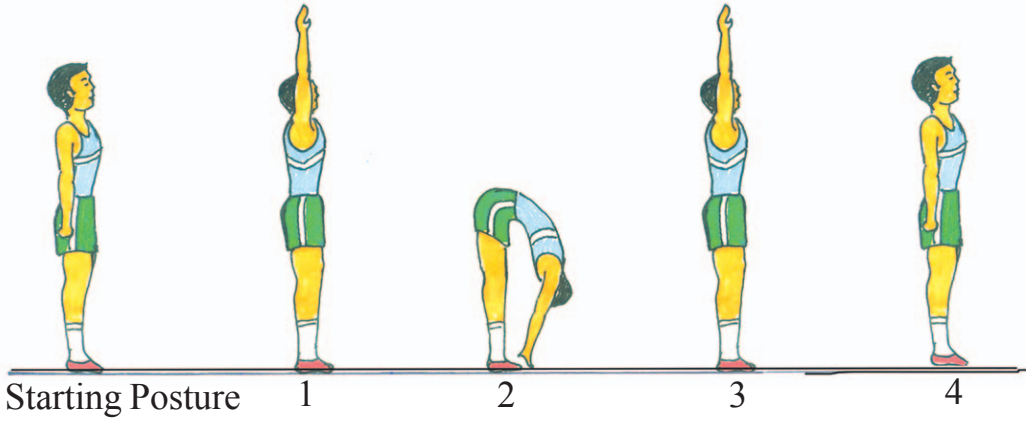
(iv) On number-count-2 bending the right knee the right foot is to be lifted 6" (inches) high and the heel be placed in touch with the left heel to come in 'Attention' position.

7.1.3 Calisthenics

- **Stand in a row according to height**
- **First exercise**

First exercise (stand in attention position)

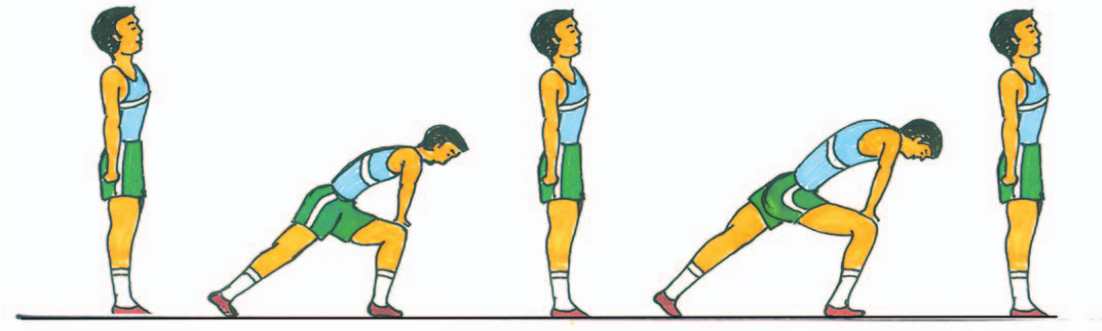
1. Keep the hands straight forward and raise them above the head with the palms forward.
2. Bend forward bending the body forward from above the waist; touch the ground with the hands keeping the knees and elbows straight.
3. Similarly get back to the initial position keeping the legs and hands straight.
4. Put down the hands sideways in attention position.



Second exercise

Second exercise (stand in attention position)

1. Put the left foot forward on the ground at some distance and fold the knee. Rest the hands on the folded knee straight. The rear leg, i.e., the right leg should also be kept straight.
2. Get back the legs and hands in the first position.
3. Repeat the exercise with the right leg forward.
4. Then come back to the attention position.



Starting Posture 1 2 3 4

Third exercise

Third exercise (Be seated on the feet and keep the palms on the ground)

1. Raise the waist a bit putting pressure on the hands; stretch the right leg on the right.
2. Then fold the right leg and put it back to its previous position.
3. Likewise, stretch the left leg on the left.
4. Then fold the left leg and put it back to its earlier position.

Starting Posture 1 2 3 4

Fourth exercise

Fourth exercise (Stand in attention position)

1. Squatting on the haunches with folded knees, put the hands on the ground.
2. Resting on the hands stretch the legs straight backward putting them together. Make sure, the body should be in a 'Don' position resting on the hands.
3. Likewise, the legs should be brought back to the earlier position resting on the hands.
4. Finally, resting on the legs the body should be brought back to the attention position.

Starting Posture 1 2 3 4

Chapter - VIII
Individual Game

8.1.1 Yogasanas

SHASHANGASANA

Procedure : Sit in the posture of Bajrashana holding the heels of both legs while projecting out the thums. Then leaning forward place the crown of head in front of the knees, whole the forehead will touch the knees. Raise the buttock in the posture of summersault (but do avoid summersault). Maintaining the rate of respiration normal count one to ten increasing to thirty. Then take rest in shabasana. Practise thrice.

Benefits : Alleviates cough and cold, Tonsillitis, Loss of memory, Increasing height, Menalcholia, Insomnia, Epilepsy, Otitis, Nesal polypus, Headache, Aphonia, Sinusitis and Asthma.

USHTRASHANA

Procedure : Sit in kneeldown position. Lean backward to hold the heels firmly with both palms such that the thumb will remain inwords and other fingers onwards of the respective hands. Now suspend the head downward while slowly pushing the bally forward. The feet will lie flat on the floor with the soles upward. Maintaining the rate of respiration normal count upto 10 and then gradually incresing to thirty, and take rest in Shabasana. Practice thrice.

Benefits : Pain in the belly, Structrual defects of the cage of chest, Constipation, Omalgia, Fat in belly, Bronchitis, Asthma, Low blood pressure are alleviated and corrected.

BAMANASANA

Breathing : Breathing is normal.

Procedure :

1. First sit in sukhasana with folding legs.
2. Now fold the right leg from knee and keep the right foot on left thigh like padmasana.
3. Now stand with two arms and right knee.
4. The left leg remains folded and the heel of left leg will touch the right knee. Keep the left foot on ground. Keep attention, right knee and left foot will remain at straight line.
5. Now fold two arms from elbow and keep them near chest like salute posture.
6. Then do the similar posture by changing the leg

Benefits : It increases the strength of leg muscle, helps to keep the balance of body, remous the restlessness of mind, increases concentration and stability of mind.

PADMASANA

Breathing : Breathing is normal.

Procedure :

1. At first sit by stretching out the legs.
2. Now bend the right leg at the knee and place it on the left thigh.

3. Similarly bend the left leg at knee and place it on the right thigh.
4. The backbone should be straight.
5. The hands should be placed on knees straight.

Time : Stay in this posture upto 10 count. It can be increased upto 30 counts.

Benefits : It helps to cure pain in the lower limbs (the knees and the ankle joints). Weakness of the leg, feeling breathless or getting tired while walking a short space, shiftness of the spine, insomnia and weak memory etc.

TAULANGASHANA

Procedure : Sit in Padmashana. Lie down with the support of elbows. Tha palms of both hands shall be placed under the buttock side by side so as to enable the buttock to rest on the palms. Now with the support of the elbows raise the chest and both the legs above the floor. The hand and the legs will rise up uniformly in order to make them lie at the same level. Maintaining the rate of respiration normal count one to ten increasing to thirty.

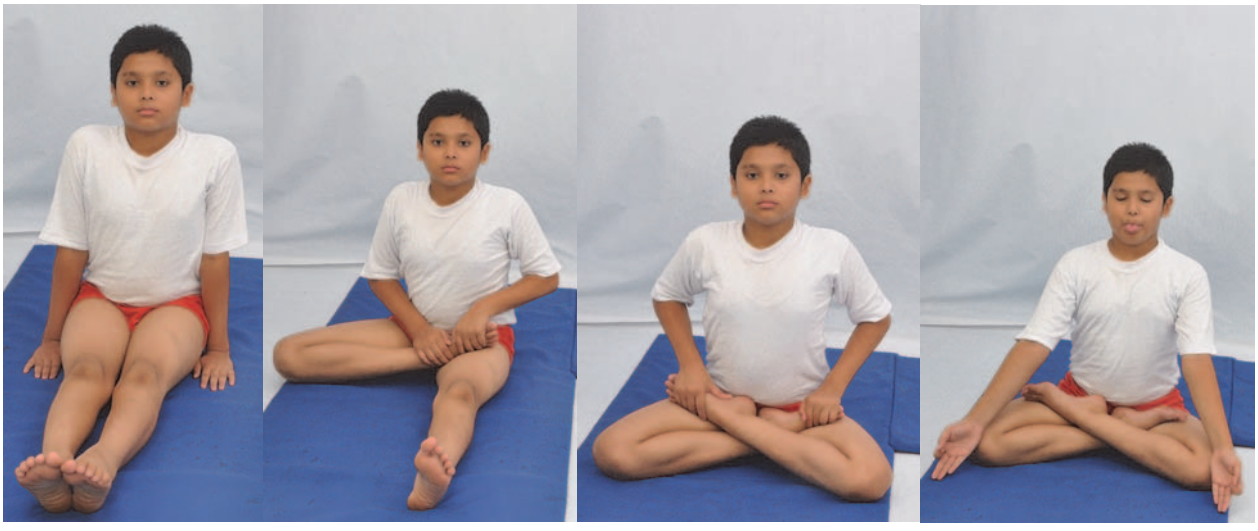
Then releasing the legs take rest in shabashana. Practice thrice.

Benefits : Suffering due to cough and cold, Tonsillitis, Loss of memory, Increasing height, Melancholia, Insomnia, Epilesy, Otities, Nasal polypus, Headache, Aphonia, Sinusities and Asthama are alleviated.

SHITALIPRANAYAM

Procedure : We may breathe in by three way : (1) through nose (2) through mouth and (3) through throat. Shitali pranayam is practised using the throat by producing sounds like 'swa', or 'Aa'. In the throat there are two folds of mucous membrance called vocal folds constituting the vocal cords. When these two layers of vocal cords come closer the wind pipe becomes narrow. Breathing in through this narrow passage causes vibrations in the folds giving rise to sounds like 'Swa' of 'A'. So while breathing in through the throat with

'Swa' or 'Aa' sounds count six and then breathe out producing similar sound. During breathing it is necessary to be careful to see that there is no ratlling noise of respiration is not intermittent and perform it in a easy way. Always keep the body in relaxed condition without slighest rigidity or movement. After completing respiration through the throat, start nasal breathing in and breathing out accompanied by vocal sounds. During respiration the vibration of vocal cord can be felt by touching the Adm's apple. Breathing in and breathing out shall be counted as one time and a total of six times shall be practised. Duration of counting from 1 to 16 is called six unit. When capable of performing well the duration may be extended from 10 to 15 units. Always keep the spine upright when sitting in Padmasana or Sukhasana.



Note : Some persons breath in and breath out even for longer period then that prescribed above, but the same shall be practised under completent guidance.

Benefits: High blood pressure, Nervous tension, Restlessness, Lassitude, Short-temper are relieved.

JANUSIRASANA

Breathing : Breathing is normal as we breath in an breath at always.

Procedure :

1. Sit esect by stretching out the legs with feet closed together and hands at the side of the body.
2. Now bend right near the knee and place the right heel on the ground of the left thigh with sole of right leg touching toneching the inner side of left thigh.
3. Then stretch out hands to hold the we. Bend forward slowly unill the forehead lonehes the knee. Left leg will be remained straight.
4. The elbows touch the ground.
5. Interchange the leg to complete the posture. Take rest.

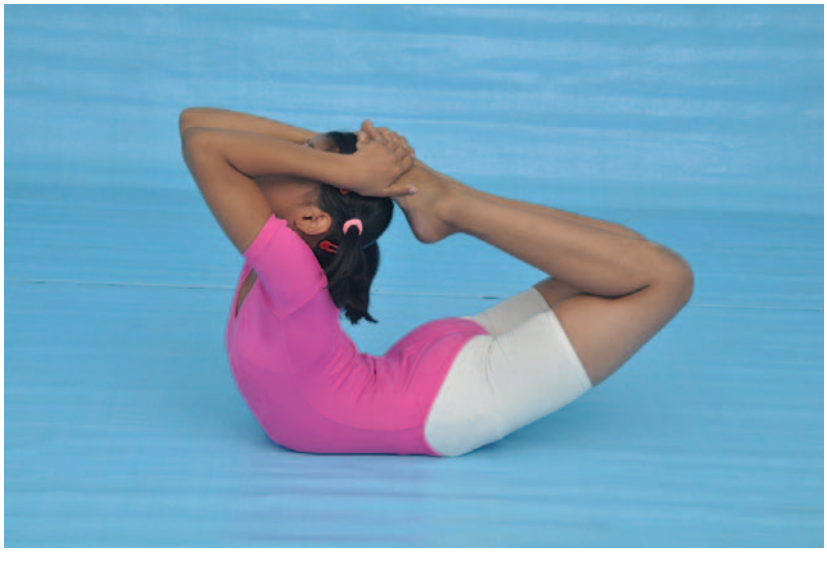
Time : Retain this posture from 10 counts to 30 counts. Do 2 or 3 times.

Restriction : consult with yoga Doctor before during this asana in case of high blood pressure, usthoarihthis, low back pain etc.

Benefits : It cures acidity, anonexia, diabates, sciatica, back of concentration, nervousness, idleness and flatulence etc. It increases the flexibility of spine and strenghter the muscles of legs.

PURNA DHANURASANA

Breathing : Breathing is normal.



Procedure :

1. At first lie straight on stomach with legs closed together and arms at the side of the body.
2. Bend the two legs from knee.
3. Now grip the great toe of right leg with right hand and great toe of left leg with left hand. Fold the elbows and stretch the feet forward to touch the head.
4. Keep the folded elbows front by the side of the head and knees will remain closed together.

Time : Retain this posture for 10 counts. Counts can be increased upto practice well.

Restriction: This asana is prohibited for high blood pressure, frozen shoulder, actub bone diease and weak muscles. It is necessary to counsult with Yoga Physician.

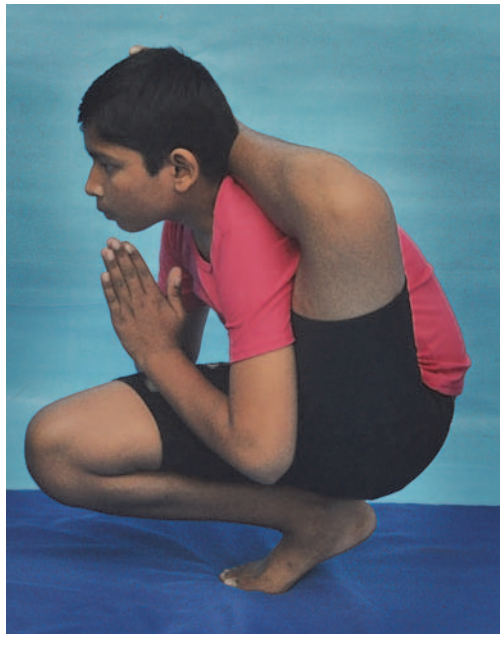
Benefit: It reduces fat in abdomen. It is effective for back pain, constipation, flatulence, acidity, colitis, asthma. It helps to reduce the defect of rib and increases the flexibility of spine, waist, neck and knee.

SANKHASANA

Breathing : Breathing is normal.

Procedure :

1. First sit in sukhasana (easy posture) with folding legs.
2. Now catch the ankle joint of right leg with two hands and place it on the shoulder taking over the head.
3. Now keep the hands in front on the floor and sit on the heel by the support of the toes of left leg.



4. Now keep the folded palms near the chest in salute posture.

5. Do the similar posture by changing the leg ie left leg on the shoulder and sit on the right heel by the support of the toes of right leg. This is the one set Practice 2 sets.

Time : Stay on this posture for 10 counts. It can be increased upto 30 counts.

Restriction: This asans is not good in case of acute joint pair of knees, heels, pain is the break bone muscles and spine.

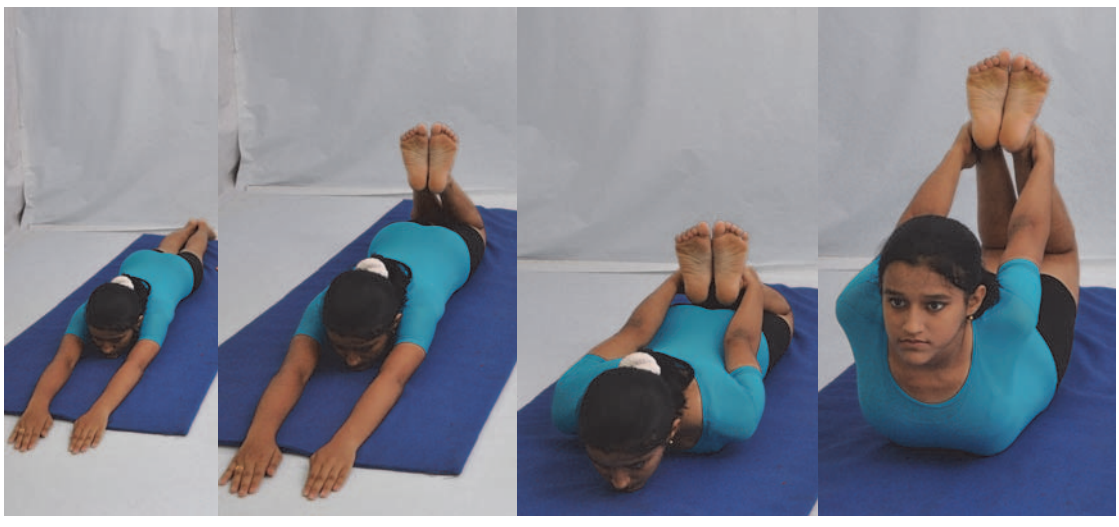
Benefit: It helps to maintain the elasticity of muscles of legs, strengthen the muscles of legs and reduces the loosness the muscles of hands. It increases the concentration and reduces the in abdomen.

DHANURASANA

Breathing : Breathing is normal.

Procedure :

1. Lie straight on stomach.
2. Now bend the legs backward at the knees and place the heels close to the buttock.
3. Now grip the right ankle with right hand and left ankle with left ankle firmly.
4. Raise the chest and the thigh from the ground.
5. The abdomen should remain touched the ground.
6. Bend the neck slightly backward with vision forward.
7. Retain this posture sometime and return to normal position.



Time : Do practice for 10 counts. It can be increased upto 30 counts and repeat 2 or 3 times.

Restriction: Take advice of Yoga Doctor in case of High blood pressure, lumbar, knee and shoulder pain, weakness of muscles.

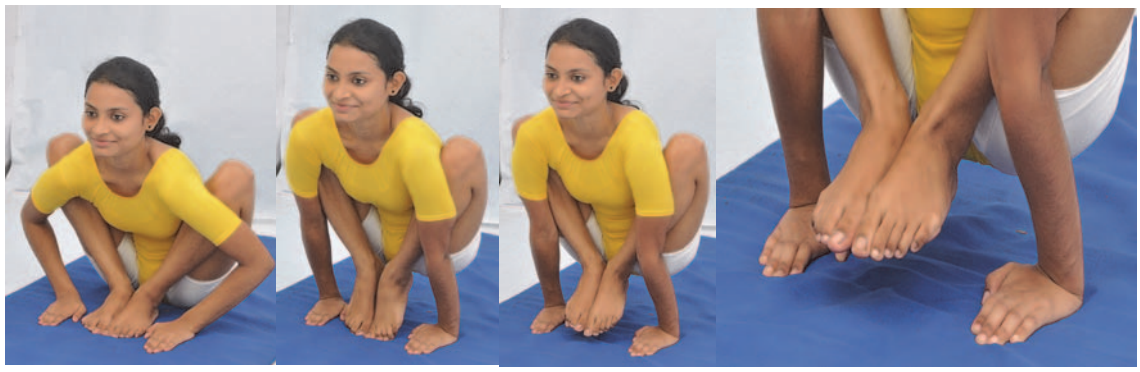
Benefit: It helps pain of upper and lower back, constipation, acidity, colitis, asthma and deformities of the ribs. It reduces fat in abdoman.

BAKASHANA

Procedure : Sit spreading both legs. Now fold the legs so that the knees reach near the chest and the heels lay side touching the base of thigh. Now separate the knees slightly and the body should lean forward to provide space for both hands, one on each side of the sole of legs, to be placed on the floor. Then incerting the two knees under the armpits push the entire body upwards with the pressure of the palms keeping the jointed feet under suspension.

Maintaining the rate of respiration normal count 10 gradually in creasing to 30 and then take rest inshabasana. Practice thrice.

Benefits: Omalgia, Myalgia, Trembeling of hands, Weakness of the muscular of abdomen, Fat in belly, Neuralgia etc may be relieved.



8.2.1 Gymnastics

Floor Exercise

FORWARD ROLL

Initial Position : Bringing both the feet and knees together, the palms are to be placed 2′ (feet) ahead of the feet on the ground creating a gap as per the shoulder length. The fingers will remain towards front.

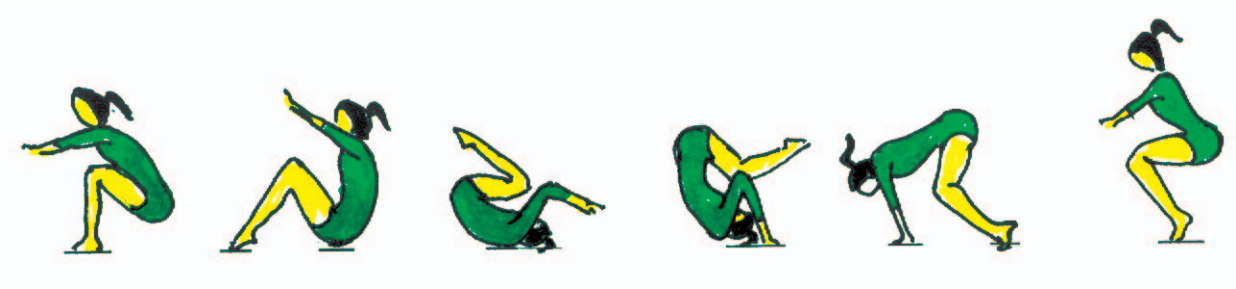
Techniques :

(i) Slowly the lower part of the body is to be lifted up and bending the neck inward, the chin will touch the chest.

(ii) Two arms are to be brought down so that the neck and the back portion under the shoulder touch the ground; now the legs are to be raised from the ground and contracting the limbs the body is to be rolled forward.

(iii) Placing the feet on the ground the body weight is to be brought to the feet and keeping balance of the body the gymnast is to stand straight.

BACKWARD ROLL



Initial Position : The gymnast will stand in squat position with conjoined legs in the direction opposite to the direction of rolling.

Techniques :

(i) Folding the two knees the gymnast is to bring down the body to almost sitting position and to place the palms on the ground beside the body.

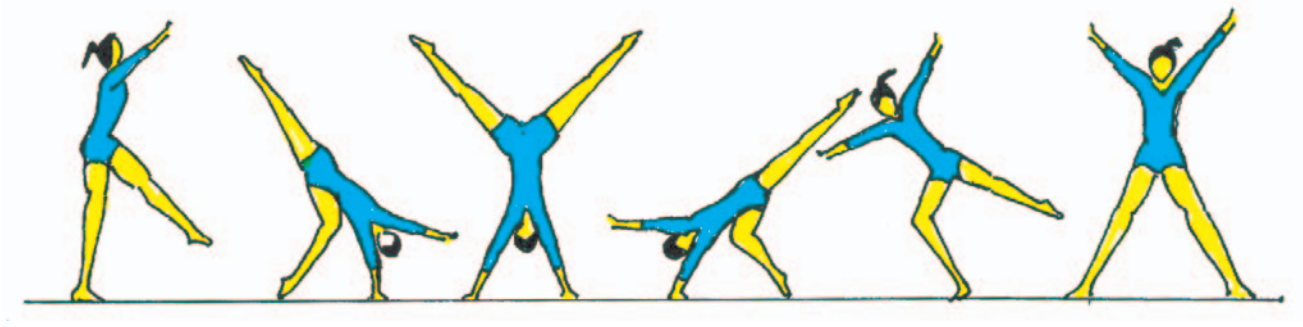
(ii) Transfering the body weight on the back, the gymnast is to roll the body back and as soon as the middle of the back, touches the ground the two palms are to be placed on the ground beside the ears.

(iii) Contracting the body using the pressure of the hands the gymnast will complete the backward rolling so that the feet touch the ground.

(iv) Keeping balance of the body the gymnast is to stand straight stretching the folded knees.

(v) In this whole process head will never touch the ground.

CART WHEEL



Initial Position : The gymnast is to place either left or right leg forward, shoulders are also to be put forward and the hands will be over the front leg.

Techniques :

(i) The upper part of the body, i.e. the trunk, the left arm and the left shoulder (if left leg is advanced) are to be placed about 1 feet advance of the left leg very quickly.

(ii) The right arm is also to be kept in line with the left arm as per shoulder distance.

(iii) Now, folding the front knee a little, the gymnast will give a heavy thrust on the ground with the foot and the other leg and hip will be lifted up. The head will remain a little back.

(iv) Bringing the body in upright position with the head down and legs up, the legs are to be spread on oppostite directions as far as possible and bending the waist sideways and bringing down the leg the foot is to be landed on the ground.

(v) Simultaneously, the hand will also be lifted from the ground with a jerk and thus the gymnast will stand on both the legs with the hands up.

'T'-BALANCE

Initial Position : To stand straight keeping the hands in line with the shoulder parallel to the ground.

Techniques :

(i) Without folding the knee a leg is to be lifted back.

(ii) The leg in contact with the ground and the raised leg both will be straight.

(iii) The back leg is to be raised so high as possible and at the same time the trunk is to be brought forward bending the waist.

(iv) The line of the back raised leg and the back will look almost aligned and parallel to the ground. Vision will remain towards front and the hands will be parallel to the shoulder with palms facing downwards.

ARCHING OR BRIDGE

Initial Stance : To stand astride keeping the two feet directed towards front and maintaining the shoulder distance. The hands are to be kept raised beside the ears over the head with the palms facing fror

Techniques :

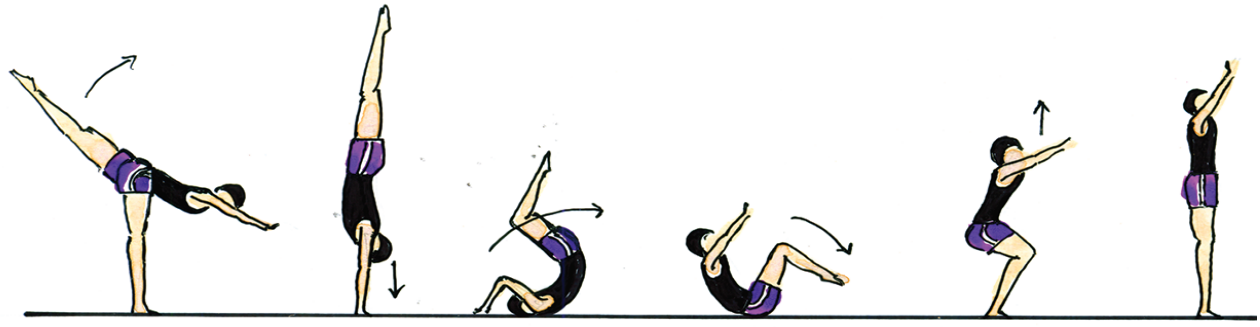
(i) From the initial stance the gyr
the waist slowly.

(ii) Maintaining the body balanc
will face towards the heels.

(iii) Giving pressure with the pal
like figure. The feet will rer

(iv) The bent trunk will look lik

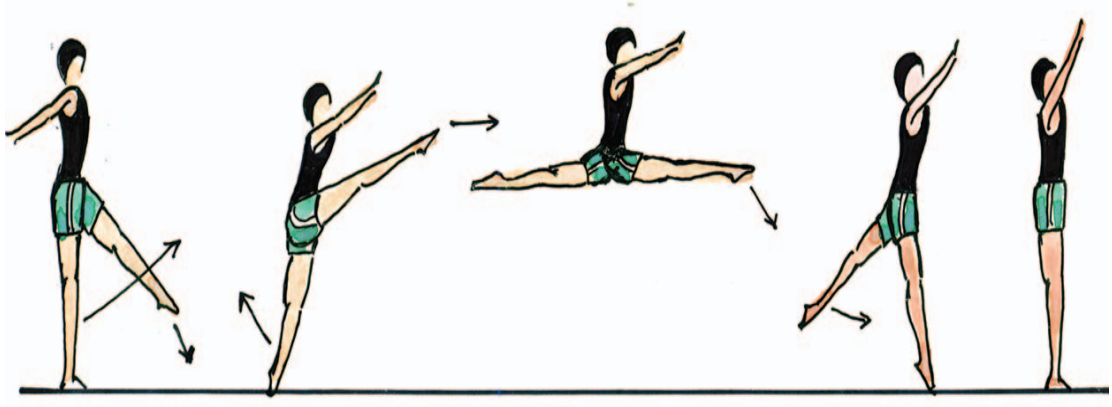
Handstand to Forward Roll



a) First, stand erect and do handstand.
b) Put both hands flat on the floor and squat with your knees together. While tucking the head, push with the legs and use the arms to support some of the weight and roll forward.
c) Finish by rocking onto the back and then rolling to the feet.
d) When finished, stand tall with your arms straight out to the sides, which is the stance taken when any gymnastics move is completed.

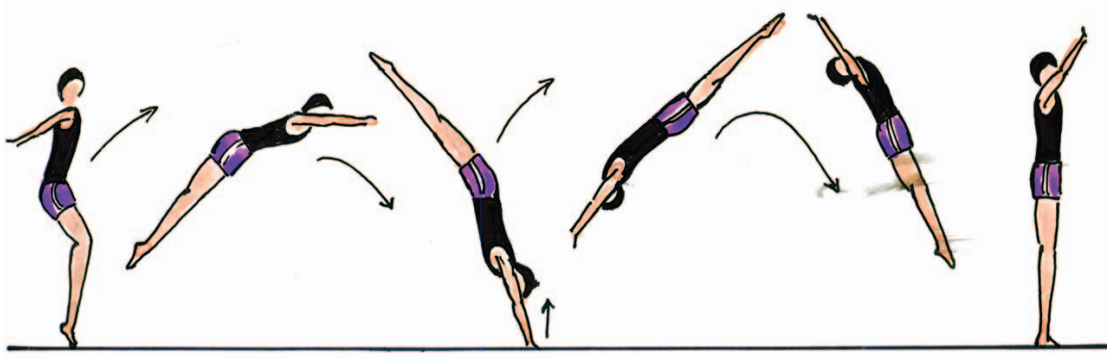
Push Ups

a) Take a couple of running steps. Push the ground with one leg and raise your dominant leg. Keep it straight and tight forward.
b) Simultaneously pressing the ground the lower leg is to be stretched backward.
c) In that posture stand on the front leg.



Front Handspring

1) Take a couple of running steps. Lunge forward with the dominant leg, placing it flat on the ground. Place your hands ahead of your body on the ground in the handstand posture. Kick your back foot upward while pushing off with your front foot. Lock your ankles together into the handstand position
2) As soon as the hands touch the ground, give a big push. Continue pushing off the ground until you spring off.
3) Land on your feet once the revolves back to a straight position. Raise your arms up and keep your legs slightly bent.



Aerobic Exercises

Everybody wants to keep fit, healthy and fresh. To keep the body agile, aerobic exercises are important. These exercises cut down fat amounts in the body, maintains in proper blood circulation, removes the inertia in the joints, supplies required amount of oxygen to all the muscles, reduces body weight. Above all these exercises makes the gymnast feel his bodyweight as light as a feather. These exercises are done in tune with music with rhythmic movements of the hands and feet.

Tools/appliances

1. a tape recorder
2. a stereo box
3. musical disc or cassette
4. enough open space for practice allowing many gymnasts practicing together

- **Uniform/Dresses**
  1. Vest
  2. Shorts
  3. Cates shoes

Basic Steps:

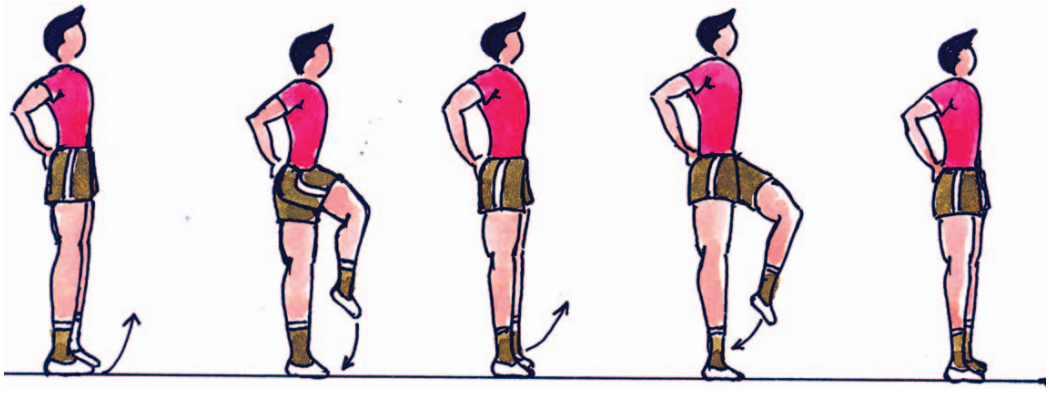
1.Marching—

a) Fold the legs before the body and raise them

b) keep the hips and the knees flexible

c) move the body upwards

d) keep the backbone/spine erect



2. Jogging:

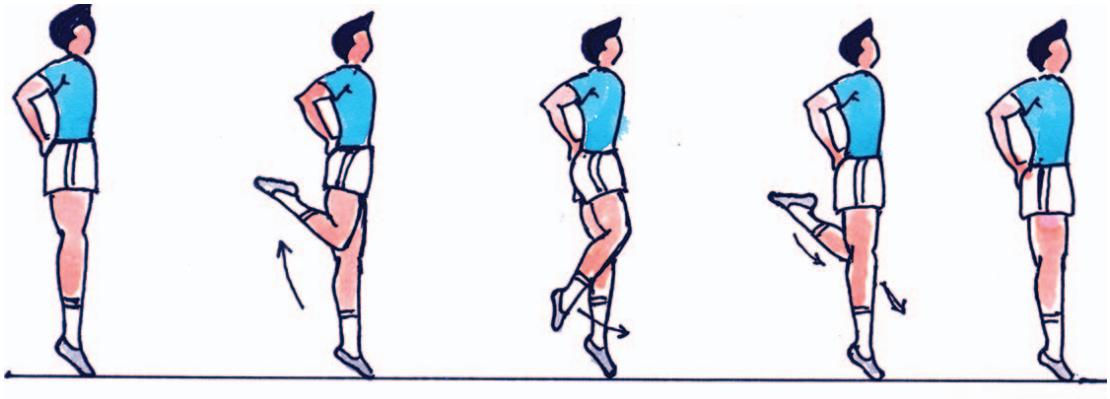
a) Fold one leg from the knee and bend it backward to such an extent as it reaches closest to the hips.

b) The hips are stretched and contracted a bit.

c) Keep the feet as straight as possible.

d) Keeping the feet movement in control leap or land on the feet.

e) Keep the spine straight/erect.

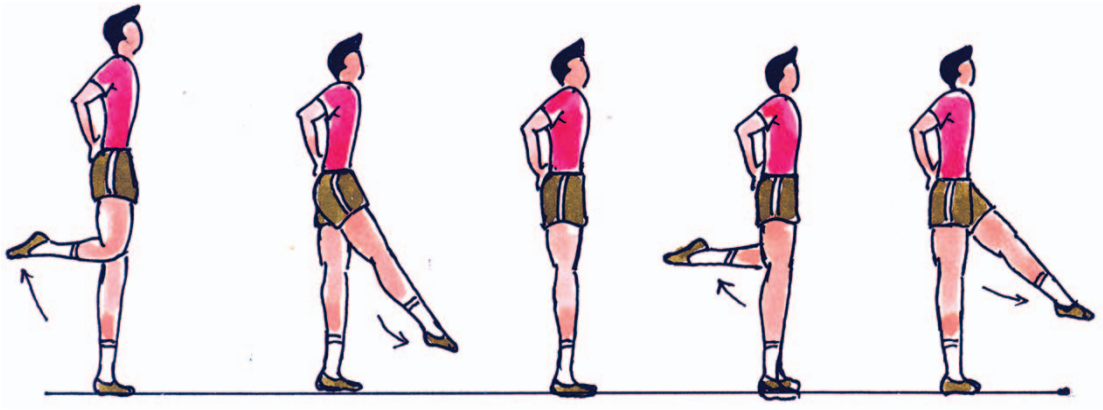


3. Skipping:

a) Stand in jogging position before starting to skip. Fold the heels backward, lift them. Throw the legs from below the knees at full length.

b) Swing with the help of the hips.

c) Keep the spine straight/erect.



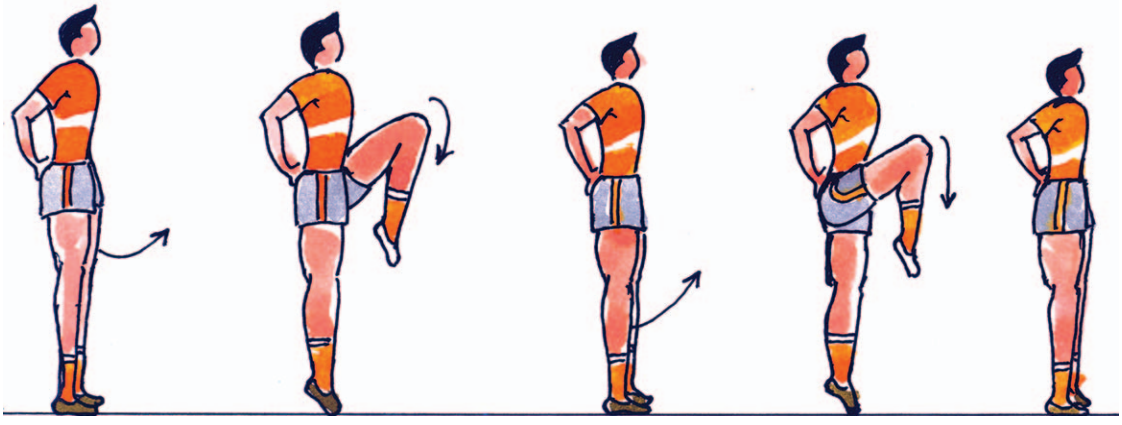
4. Knee-lifting-

a) Keep the dominant leg forward, placing the knee at least at 90 degree angle and then keep it stretching and contracting.

b) When the dominant leg reaches the highest position, the other leg is to be placed vertically.

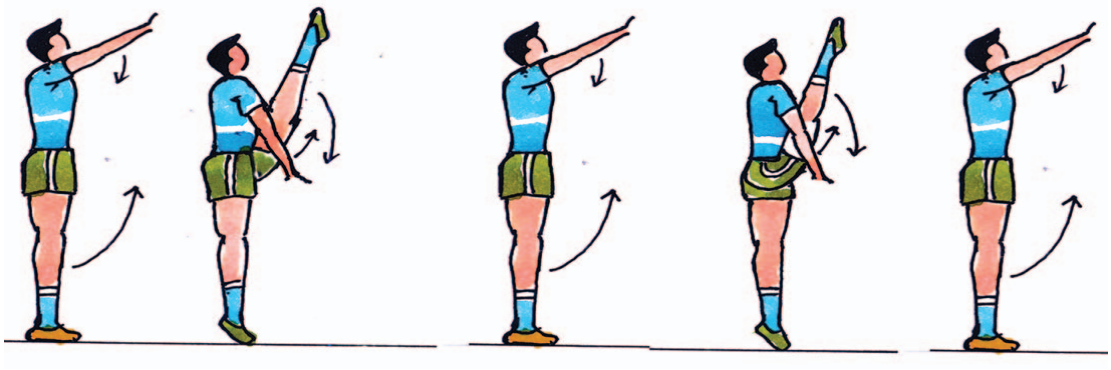
c) Keep the heels flexible while lifting and landing the leg.

d) Keep the spine straight/erect.



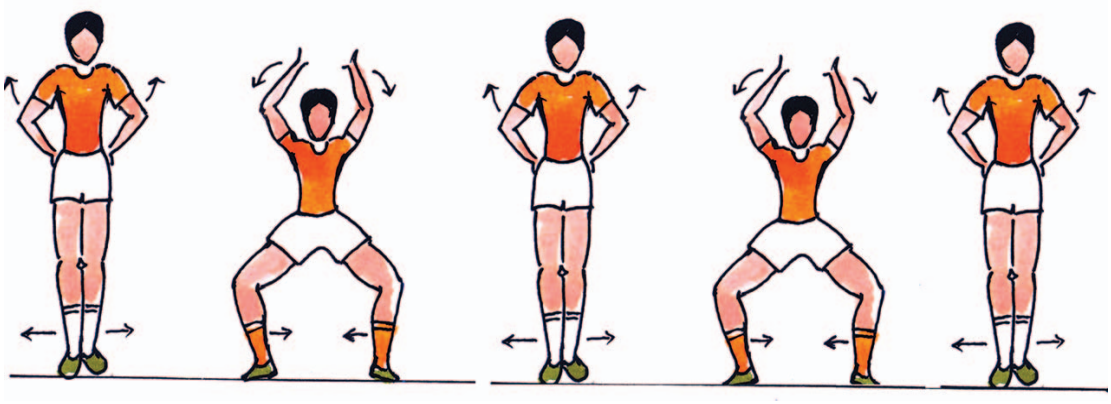
5. Keeping—

a) Keeping the dominant leg straight, lift it above the shoulder height giving a thrust on the ground.
b) Only the hips should be kept flexible; the knee must be kept straight.
c) The other leg is kept vertically on the ground.
d) Keep the spine straight/erect.



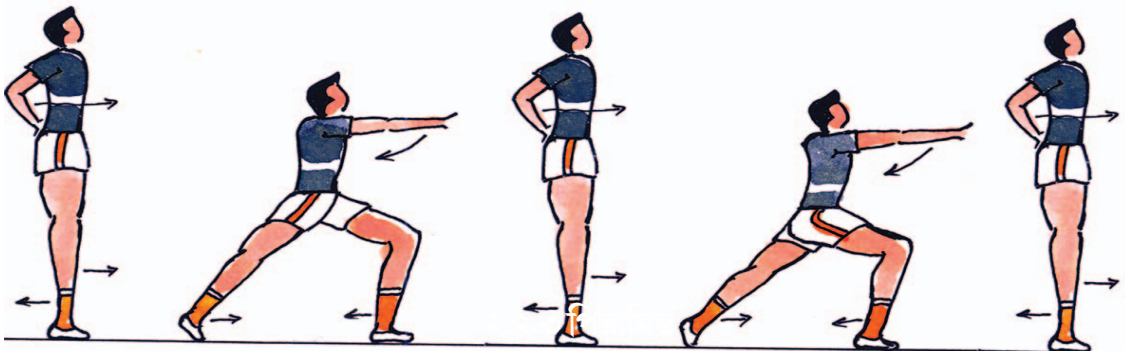
6. Jerking—

a) Jump up and put the two legs apart folded at the knees. Keep the hips a bit outwards.
b) Get back to the starting position leaping up.
c) Keep the spine straight/erect.



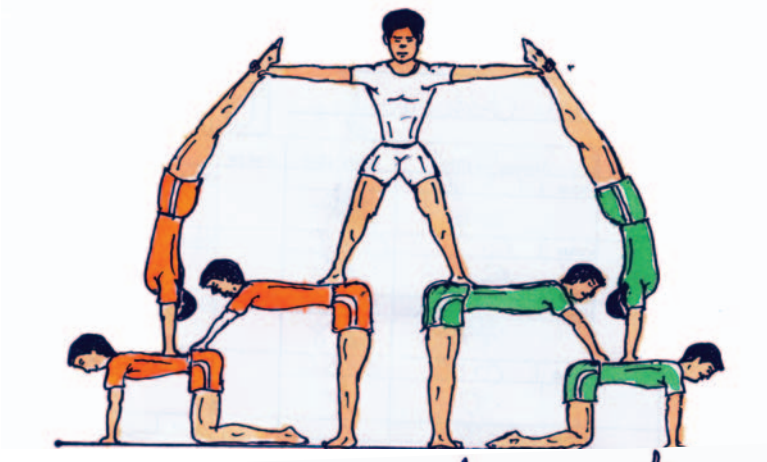
7. Longing—

a) Jump with the two legs together and land with one leg forward while the other backward.
b) Fold the front knee but keep the hind leg straight.
c) Jump back to the starting position.
d) Move the legs backward and forward in a line without changing the direction of the hips.
e) The body may lean forward a bit.



Pyramid

Formation of a human pyramid includes a number of postures and excellence. It increases the mental energy, physical energy and the body balance. These collective postures take the shape of a cone, that may be formed by two to many participants.



8.3.1 Badminton

The sports-experts assume that badminton had its origin in India. Some others are of the opinion that the modern game of Badminton came into being from a similar game played in ancient China. In the seventies of the 19th century, some army officers who had returned from India showed the exhibition of this game at the Badminton House, Gloucestershire, owned by the Duke of Beaufort. So the game was called by the name of Badminton. The first international match of badminton was played in 1903 between England and Ireland. The International Badminton Federation was formed on 5 July, 1934 under the supervision of Sir George Thomas. Badminton competition got the official recognition as an international level in 1948 through the Thomas Cup competition of men. Women's international competition was introduced through Uber Cup in 1956. Now-a-days badminton has become a very popular game in India.

General Rules and Regulations—

a) Measurement of the court—Length : 13.40 m. (44 ft)
Width : 6.10 m (20 ft)

b) Post and Net— Height of the post : 1.55 m(5ft 1inch)
Height of the net from the ground : 1.524 m (5ft)
Width of the net : 76 cm (2ft 6inch)

c) Racquet and shuttlecock—

Racquet length-	:	68 cm
Width	:	23 cm
Shuttle weight	:	4.74 gm – 5.50 gm
Length	:	6.4-7cm
Number of feathers	:	14-16
d) Number of players (in a side)	:	Doubles-2
	:	Singles-1

e) Toss : Before the start of the game the referee toss the coin to decide which side/ team is to serve first or to allow the team to choose a particular side of the court.

f) Service : i) The feet must be kept in touch with the ground while doing the service. The shuttle is to be dropped from the hand and the racquet must be placed below the waist.

ii) 0,2,6,8,10, etc.- these even numbered services are done from the right hand court and uneven services like 1,3,5,7,9, 11,etc are done from the left hand court.

iii) In case of doubles games, the player on the right half of the court serves diagonally first. If he/she scores a point, the next service is done by him/her from the other half of the court in the same manner.

iv) Only if no point is scored from the first service, the opponent will get the opportunity to serve. But from the next service both the players (in doubles game) will get the opportunity to serve, even if his partner fails to score a point.

v) In a doubles game the same player is not allowed to receive two consecutive services.

g) **Wrong Service:**

1. If the shuttle does not cross past the net
2. If the shuttle falls within the short service area
3. If the shuttle falls in the wrong court, that is, the court straightly opposite to the service court
4. If the shuttle falls outside the court
5. If the feet of the server and the receiver are not in their respective court

h) **Let:** If the shuttle gets stuck into the net after crossing over during a rally, the judge calls "Let" and stops the game. The judge asks the server for re-serve. No point is allowed in this case.

i) **The Judge:** To conduct a game of badminton a referee, an umpire, two linesman and two scorers are required.

j) **Results:** 1) Three games are played in a match. One who wins two of them is declared the winner.

2) If a player or team wins the first two games, the third game is not played.

3) Each game is of 21 points. If scores are level at 20-20 points, it is called deuce. The team that takes a lead of 2 point from 20-20 will win. From 29-29, the player/ team that reaches 30 first is declared the winner.

4) If the result after the first two games stands at 1-1, the teams change sides after one team reaches 11 point.

Some Important Techniques for Playing Badminton

A. How to hold the racket:

1. Hold the racket head with your non-playing hand so that the handle points towards you. Place your playing hand on the handle as if you are shaking hands with it.
2. There shall be a V shape in between your thumb and your index finger.
3. Hold the handle with the thumb and the index finger of your playing hand maintaining the "V" shape with the vertical line of the handle. Then put the other fingers on the handle.

B. Feet Movement: To become a skilled player of badminton, the feet movement must be proper and fast. The right-hand players make the left foot the 'pivot'. On the other hand, the left hand players make their right foot the 'pivot'. Feet movement can be well controlled through shuttle chase and shadow-practice.

The feet movement of a player during shuttle chase and shadow practice are described below:

- **Shuttle Chase:** First, the player stands without the racket in the centre of a court marked with (*)

1 . From there he/she will go to the left corner ahead to the position marked as Station-1 and fold right knee forward. Touch the shuttle kept at Station- 1 with straight left knee and get back to the earlier position.

2. Likewise, go to Station-2, touch the shuttle there and get back to the initial position.
3. Put the two legs side by side, fold the right knee towards Station-3 and keep the left knee straight; then touch the shuttle at Station-3 and get back to the centre of the court.
4. Likewise, touch the shuttle kept at Station-4 on the right of the court and get back to the centre of the court.
5. Then touch the shuttle kept at the left corner of the back of the court marked as Station-5 and get back to the centre.
6. Likewise, touch the shuttle kept at the right corner of the back of the court marked as Station-6 and get back to the centre.

Once you complete Station-1 to Station-6, you complete the first round. Practice this for 9-10 rounds at a stretch.

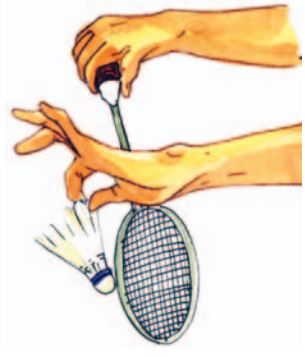
Shadow Practice: Stand at the centre of a court with the racket in hand.

1. Go to Station-1 and stand in the posture of shuttle chase, do back hand lift and get back to the centre.
2. Go to Station-2, play a fore hand shot with the racket and get back to the centre.
3. Go to Station-3, play a back hand shot and get back to the centre.
4. Go to Station-4, play a fore hand shot and get back to the centre.

5. Do backward running and stand at Station-5 with the left leg forward and the right leg backward. Lift the racket instantly and do a head toss and get back to the centre of the court.
6. Similarly, go to Station-6 and repeat the postures done at Station-5 and get back to the centre. Movements from Station-1 to Station-6 completes a round. Practice these activities for 9-10 rounds at a stretch.

Service Techniques:

1. Stand by the Centre Line away from the Short Service Line; stand at ease with the left leg forward and the right leg backward.
2. Hold the upper part of the shuttle with the thumb and the index finger of the non-playing hand at shoulder height.



3. Let the shuttle fall from the non-playing hand and instantly swing the racket with the playing hand from behind the body and hit the shuttle from the waist height.
4. Transfer the body weight from the back leg to the front leg while hitting the shuttle with the racket. Make sure, the back leg does not come off the ground while transferring the body weight.

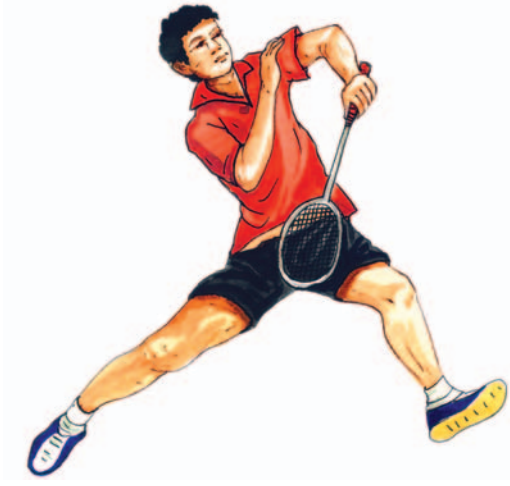
How to Receive a Service:

1. The receiver should stand in the middle of the court with the left leg forward and the right leg backward. Keep the racket head up in front.
2. Keep the body weight on the left leg.
3. Stand in such a place so that both the short service and the long service be returned easily to the opponent court.

How to Play Fore-hand Stroke:

A Fore-hand Stroke is used by a right-hand player to hit the right side shuttle from the shoulder height and the left-hander to hit left side shuttle from the shoulder height.

1. The left-hander should stand with the left foot forward and the left shoulder leaning towards the net.
2. While holding the racket the hand and not the palm should be kept outward. Hit the shuttle swinging the racket from behind.



3. The right-handers stand with the right foot forward and the right shoulder leaning towards the net. Then hit the shuttle in a similar way.

Backhand stroke :

To deliver a backhand stroke the player is to keep the back of the hand holding the racket in the direction of the net. This stroke is used when the shuttle comes to the direction opposite to the hand holding the racket. To deliver the backhand stroke a right handed player has to place his right foot infront and the right shoulder forward towards the net. The player comes to the normal position immediately after delivering a back hand stroke to keep himself ready for the next action.

Smash and over-head stroke :

A player delivers a smash with an intention to kill a rally when the shuttle floats over his head. Over-head stroke is also played as a defensive technique. Smash is delivered mostly from middle part of the court or from close to the net. But a player uses defensive overhead stroke usually from the remote part of the court.

To deliver a smash a right-handed player takes his left foot forward in the line of the shuttle. The body weight will remain on the right leg. The head of the racket is to be taken back of the head a little close to the left shoulder and the right shoulder is to be raised a little. When the shuttle comes to such a height that the combined length of the raised hand and the racket can reach the shuttle and the racket will be brought from the back with a quick swing to hit the shuttle forcefully. Just at the time of contact the wrist of the racket-holding arm will be bent downward so that the shuttle drops in the opponent's court with a sharp angle. The left hand (non-striking hand) will remain stretched forward. The heels of the feet are to be kept raised from the floor at the time of smashing. Smash is also done lifting the body up in the air. In all the cases body is to be bent back like a bow.

To deliver a over-head defensive stroke a player strikes the shuttle when it is in maximum height bending the body a little back. The intention of a player is to send a shuttle to either of the remote corners of the opponent's court so that he can have an easy return.

Net placing :

When an opponent places the shuttle just over the net the player taking his right or left foot close to the shuttle according to the situation and bending down the waist lifts the dropping shuttle up with a back-hand or fore-hand flick with the wrist to make the shuttle just cross over the net and drop down the opponent's court almost rolling along the net. If the gap between the net and the dropping shuttle be a little bigger the player sometimes lifts the shuttle to the back of the opponent's court with a forceful flick of the racket if the opponent's position remains close to the net.

8.4 Athletics

8.4.1 Run

In competitions three categories of running events are organised. Depending on distance they are–

(i) Short distance run or sprint: 50 mt., 100 mt., 200 mt. & 400 mt. run

(ii) Middle distance run : 800 mt., 1500 mt. & 3000 mt. run.

(iii) Long distance run : 5000 mt., Marathon race etc.

Speed of running depends basically on 3(three) factors. They are—(i) Leg Explosive strength (ii) Stride Length & (iii) Stride Frequency.

Particular scientific practice is a must to achieve maximum improvement in these sectors. Spontaneity and effortlessness in running generally depend on proper movements of the arms and legs.

At the time of swinging of arms the fingers are to be clung to each other and the fists will remain loosely open. The arms will swing forward and backward rapidly keeping the elbow joints in an angle of 90^0 and close to the body. The upper part of the body will remain a little inclined to front at race. The heels will never touch the track. To generate speed the front knee is to be lifted up to the waist height. Depending on speed running technique can be divided into three basic parts.

Technique of sprint (short distance run) :

Though velocity is the prime factor in case of sprinting, still techniques are no less effective. The techniques are : (1) Start (2) Body at race (3) Finishing

(1) Start– Two kinds of start are usually adopted in all the running events of a track and field competition depending on distance. They are

(a) Crouch Start (for Sprint),

(b) Standing Start (for Middle & Long distance run)

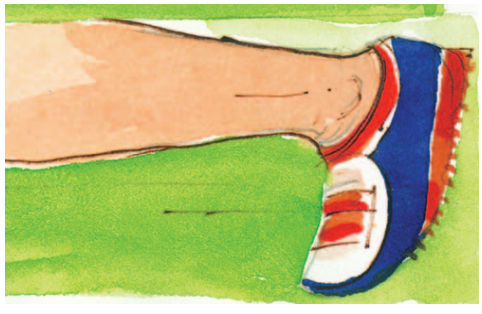
(a) Crouch Start– Crouch start is used for sprints like 100 mt., 200 mt. and 400 mt. run. The three parts of the starting command are :

(i) On your marks (ii) Set (iii) Fire Sound/Clapper's Sound.

(i) "On your marks": On hearing this command the athelete is to come up to starting block already placed just behind the starting line from the Assembly line drawn 3 mt. behind the starting line. The athlete will sit on the starting block placing the feet on the two steps. Now the hands are to be placed on the ground just behind the starting line and the body weight is to be transferred on the hands. The front foot will be comparatively strong (generally left leg) which will be placed $1^{1/2'}$ to $2'$ back from the strating line depending on the length of the torso of the athlete. If the torso is big the front foot is to be placed $2'$ back from the strating line, otherwise $1^{1/2'}$ will serve the purpose. Then the other foot is to be placed in such a manner so that the knee of that leg is placed beside middle of the inside of the

front foot or beside the heel of the front foot. It depends on the length of the lower part of the body. To obtain maximum mechanical advantage the difference of the two steps of the block may be set in three different distance. The shortest distance between the two steps is called **'Bullet' start position**, next is called **'Bunch' start position** and if the distance between two steps on the block is maximum it is called **'Elongated' start position.** Now the fingers of the hands are to be placed just behind the starting line. The two thumbs will remain face to face towards the body and the other four fingers of both the hands will remain away from the body and those four fingers will remain clung together. The index finger and the thumb will look like a tick (P) mark. The difference of two arms will be a little more than the shoulder length. The head is to be kept downwards and the vision will remain a little ahead of the starting line.

(ii) 'Set' : From 'On Your Marks' position the hip is to be lifted slowly a little above the shoulder so that a 90^0 angle is formed at the front knee-joint and 100^0 to 110^0 angle at the rear leg knee-joint. The body weight is to be transferred from the feet to fingers of the two arms so that the centre of gravity remains a little ahead of the starting line.



Now, the body is to be kept stationary and full concentration is to be given for hearing the next command. In this point of time the centre of gravity of the body is to be transferred slowly towards front so that owing to the disturbance of body balance a sensation is felt within the body. The advantage of this state of body is that the body can achieve a flying start with a little thrust of the rear foot. In this state head is to be bent down more and vision is to be fixed on the starting line.

(iii) 'Fire Sound/Clappers Sound': With the sound of the gun or clapper the sprinter will start running with a heavy thrust on the block with the rear foot in no time.

Technique of Starting for Middle and Long distance run :

Two commands are given in such running events. They are (i) 'On Your Marks' and (ii) 'Fire'/'Clap'

(i) 'On Your Marks': With this command the athlete is to place the comparatively strong foot just behind the staring line. The bodyweight will be on this leg. The

other foot is to be placed lightly a little behind the front foot depending on the height of the athlete.To keep the body balance and to start with more thrust both the knees are to bent a little. The front knee is to be bent a little more than the rear knee. The opposite hand of the front leg will have to be kept in front of the body forming an angle of 90^0 at the elbow-joint. The palms will be lightly closed placing the thumbs lightly on the bent index fingers. The head is to be kept a little inclined towards ground and the vision will be fixed at 3 to 4 feet away from the strating line along the track. Now the body weight is to be transferred slowly on the front leg so that the centre of gravity remains ahead of the starting line and the athlete will remain still with rapt attention to hear the next command and to start in no time.

(ii) 'Fire/Clap': With the sound of the gun or clapper the runner will start running with a heavy thrust of the rear foot on the ground immediately keeping normal swing of the arms.

Technique during body at race (In between 'Start' & 'Finish') :

(a) Just after start the first few steps will be comparatively short and very quick and the balance of the body is to be kept leaning forward. Gradually the stride length will be increased up to optimum length and the movements of the arms and legs will be accelerated.

(b) The acceleration of the running speed will have to reach its maximum level within the first 30mt. to 40mt. distance. Outstanding runners are capable of gaining maximum speed within lesser distance.

(c) From start to finish the swing of the arms will be normal and fast. 90^0 angle at the elbow-joint should be maintained. During front-swing and back-swing the arms should not cross the chin-line and the shoulder line respectively and the arms will never cross the vertical midline of the body.

(d) The fingers of both the hands will remain lightly closed and the thumbs are to be kept on the index fingers.

(e) During run the toes and the upper part of the sole keep in touch with the surface of the track but the heel does not come in contact with the surface. To increase the length of the stride the knee should be lifted up to the waist height.

(f) The trunk of the body will remain slightly leaning forward during the body at race. The tossing of head or the lateral movement of the body should be stopped.

Unnecessary tension or rigidity should not be there in the body. The body is to be kept at ease and normal.

(g) Power of muscles and endurance play the most vital role to maintain the maximum speed of the runner. A runner with a greater degree of the power and endurance of muscles will be able to maintain maximum speed up to a longer period of time.

Finishing :

Nowadays in the international meets judgement at the finishing line of short distance running events is taken through **'Photo-finish'** and so the necessity of learning high quality techniques has increased. The following two finishing techniques for running events are extensively used :

(a) At the time of finishing the athlete will run aiming at an imaginery finishing line 10 mt. away from the original finishing line so that the athlete can maintain highest speed at the finishing line.

(b) To lean forward the body at the finishing point. In this technique at the time of taking the last stride just before touching the finishing line, the chest and the trunk are stretched forward in a jerk by bringing down both the arms backward with a great force. This technique is very fruitful if it is properly practised. If the timing of the application of this technique fails the body may lose balance and the finishing will be disturbed.

8.4.2 Long Jump

Requisites :

(i) An even surfaced Runway of 30 to 45 mt. length and 1.22 mt. breadth.

(ii) Wooden 'take-off board' measuring 1.22 mt. long, 20 cm. wide and 10 cm. deep.

(iii) Plasticine Indicator Board or Putty which is used to fix glass on window or any soft soap as indicator.

(iv) Landing area filled with soft, damp sand the top surface of which is level with the take-off board. The length of the area will be 7 to 10 mt. and width will be 2.75 mt. to 3 mt.

(v) Measuring Tape.

Technique :

Approach Run :

(i) Generally running starts from 30 to 35 mts. back of the Take-off board.

(ii) The athlete will start running bending the waist forward and folding the knees.

(iii) The athlete will gradually increase speed towards the direction of the take-off board up to 5 to 10 mts. to reach the highest speed and then up to the take-off board same speed will have to be maintained.

(iv) Each stride length will have to be perfectly measured, so that the strong foot can be smoothly placed on the take-off board for taking off the ground.

(v) The last step will be comparatively short and the centre of gravity will be inclined to the front which will help taking off the ground.

Take-off :

(i) The strong foot is to be placed competely on the take-off board.

(ii) The knee and foot of that leg will remain towards the landing area, the body weight will be transferred on this leg, the knee will be folded and the back leg will remain straight in the air .

(iii) Two hands will be brought forward and go up with a swing.

(iv) The take-off foot will immediately be straight and at the same time the knee of the back leg will be brought in front of the body with an upward swing.

(v) The body weight will be shifted from the heel to the ball and toes of the take-off foot and in no time the body is to be lifted from the take-off board.

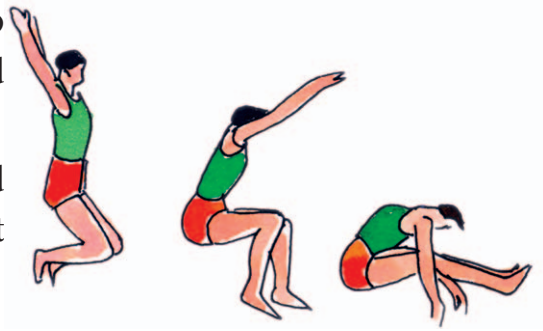
Air-borne Position (Flight-in-air) :

(i) As soon as the take-off foot leaves the ground the other leg will have to be brought forward and up with a swing and the hands will now go back.

(ii) At the same time the take-off leg is to be brought forward by bending the knee. The opposite arm will come from back over the head.

(iii) Thus step-in-air is to be done and in no time two legs are to be brought forward together side by side.

(vi) Both the hands are to be stretched forward from the side of the ears and to be kept parallel to the two legs.



Landing :

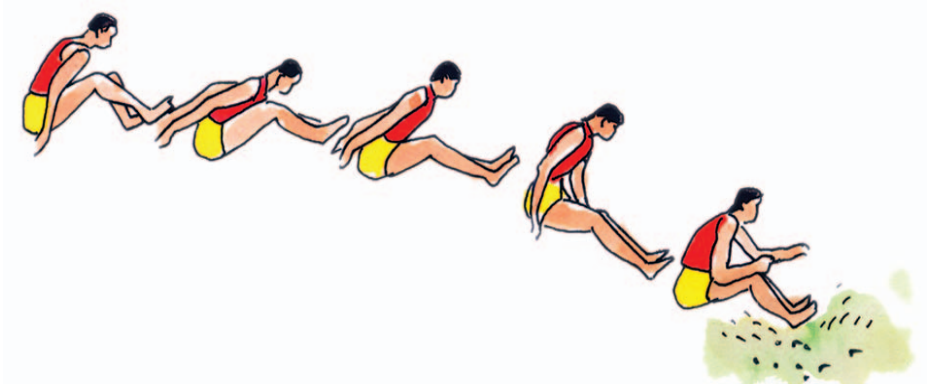
(i) Just before landing, the legs are to be kept stretched and parallel to the ground as best as possible.

(ii) At first both the heels will touch the sand together.

(iii) By folding both the knees the body weight is to be shifted to the front part of the feet from the heels.

(iv) At the time of folding the knees the hip is also to be glided forward keeping the arms alongside.

(v) The head along with the upper part of the body will also be brought forward.



8.4.3 High Jump

Fosbury Flop

Requisites :

(i) High Jump landing mattress.

(ii) High Jump Cross-bar and a pair of uprights.

(iii) 20 mts. to 25 mts. even surface for approach run.

Fosbury Flop Learning Technique

(a) Approach Run :

(1) Approach run starts from the opposite side of the take-off foot.

(2) Two phases of approach run :

(i) Straight approach --- To increase speed first 5 to 6 mts. run will be on straight line.

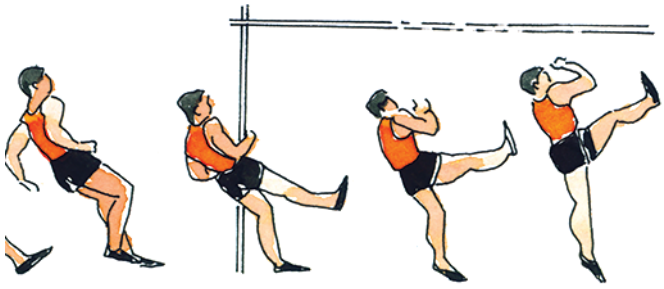
(ii) Curved or Semi-circular approach — The last 4 to 5 mts. run will be on semi-circular path.

Hence, the total approach path will look like capital 'J', the 10th letter of the English alphabet.

(3) As soon as the athlete approaches the circular path the upper part of the body, i.e., the head and shoulder will remain inclined towards the centre.

(4) The swing of the outside arm will be faster than the arm towards the centre.

(5) During approach run the knees are to be lifted high.



(b) Take-off :

(1) The take-off foot will be placed a little away from the Cross-bar and the opposite foot and shoulder will remain close to the cross-bar. If an athlete takes off with left foot, his/her right shoulder and right foot will be nearer to cross-bar.

(2) Take-off Spot— The spot on the surface from where the athlete jumps up is called take-off spot. Though it depends on the height and skill of the athlete but generally the take-off spot is 50 to 80 cm. away from the cross-bar and 50 to 80 cm. inside the nearest upright.

(3) The heel of the take-off foot will hit the ground first keeping the centre of gravity of the body backward.

(4) The body weight is to be transferred the take-off foot, knee will be folded, two arms with folded elbows are to be lifted up with a swing. The other leg, i.e., the swinging leg will be brought towards the chest by folding the knee.

(5) From this position the body weight is to be brought to the toes of the take-off. foot. The back of the body will move towards the cross-bar. The body will be lifted up by bending the head back and raising the two arms and the waist. The take-off leg will be straight.

(c) Crossing over the Cross Bar :

(1) Taking both the hands alongside the body, bending the head backward from the neck, at first the head and the hand opposite to take-off leg will cross over the cross-bar.

(2) Immediately after, from the waist the back is to be bent upward which will form a semi-circle over the cross-bar and thus the back and waist will cross over the cross-bar. In this particular point of time both the legs will hang from the knees downwards across the cross-bar.

(3) In the last moment, the hip is to be brought downwards, the hands and the head also are to be brought forward and the legs are to be lifted towards the sky to cross over the cross-bar.

(d) Landing :

(1) Just before landing, the legs remain stretched towards the sky in the air.

(2) The hands are placed alongside the ears.

(3) Keeping the head up, the back and the waist will land on the matress.

(4) As soon as the back touches the mat both the hands and legs also fall on the mat.

8.4.4 Putting the Shot

Parry O' Brien Method : This method is comprising of seven stages. First of all these six stages are to learn step by step and then these stages are to be executed together as a whole maintaining the sequence of actions. The cocept of kinetic mechanism has been most effectively applied in this method.

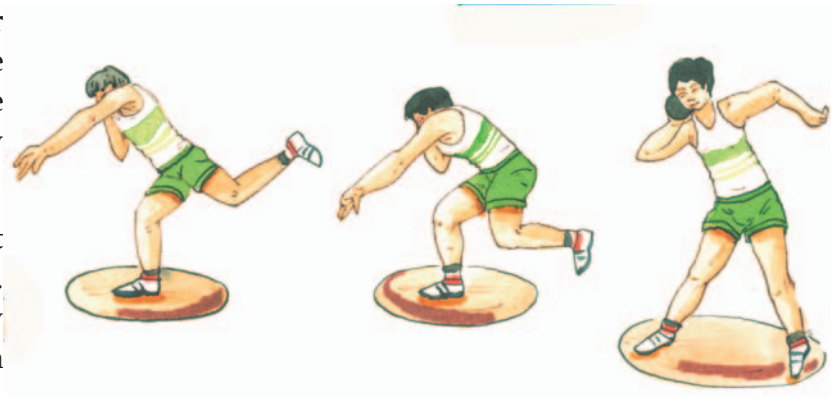
Holding & pleacement : At first the shot is to be held with the spread-out three fingers in between the thumb and the little finger. The thumb and the little finger will provide support from two sides for holding the shot. If the shot is not held with spread-out fingers the pressure will not be equally distributed on the wrist and the fore-arm and the sense of comfort will not be there. After holding the shot in such a way the shot is to be placed on the collar bone under the jaw and shall be in close proximity to the chin. The shot will never touch the palm and must not be brought behind the line of the shoulders.

Initial Stakee : On holding the shot properly the shot-putter will stand at the back portion of the circle keeping the sector back. In case of right hander the body weight will be on right leg and the left foot will be kept around 30 cm. back. Thus the shotputter will keep his body in a relaxed state and concentrate on starting the actions for putting the shot.

Bringing the body down : The shot-putter bends the body down and a little forward to drag the body back explosively. The inertia of rest of the body and also of the shot is broken by bending the right knee a little and lifting the left foot, the left knee is brought near the right leg. The shoulder line remains remarkably inclined and the folded left arm is placed near chest. Immediately on getting this stance with holding the shot the gliding aciton is to be completed.

Gliding : Gliding is essential to gain velocity and momentum towards the direction of delivery. The co-ordination of the movement of the right and left legs towards the direction of delivery is very important. This gliding action starts with the back thrust of the left leg which will be downward maintaining a contour line. During downward movement of the left leg, the leg will be almost straight. The centre of gravity of the body will be downward.The minimum is the angle of inclination at the waist point the maximum will be the extent of casting the shot. At the time of thrusting the left leg it

rotates a little but the upper part of the body remains the same. For putting the shot the strength of legs is very important.



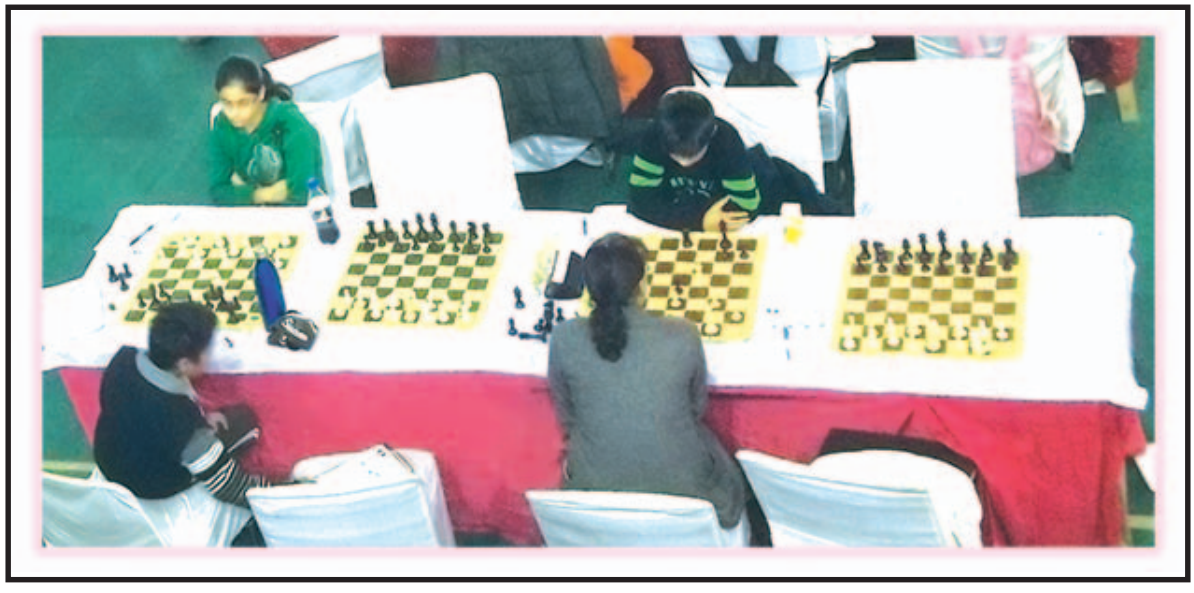
Release Stance : The right foot will be just under the body. The left foot will remain strongly straight. The difference between two legs will be about 90 cm. Shoulder will remain back and across, the left arm will be positioned across the chest, shot will be held close to the chin and the right heel and the left foot will remain almost aligned.

Release action : Applying a hard push on the ground with the right foot the knee and the heel stretched and at the same time the body is stretched upward towards the direction of delivery. Finally the shot is put with the combined effort of the leg, hip, trunk, right shoulder, right arm, wrist and at last the fingers. They will be stretched vertically. The placement of foot and the attainment of delivery height will be so well co-ordinated that the body can be stretched up to maximum height. The trasactory of the delivery will be between 35^0 and 40^0.

Return to equilibrium (Recovery) : As an enormous force is applied at the time of delivery, the body sometimes crosses over the circle owing to disturbance of body balance. So, to maintain body balance, immediately after putting the shot the right foot is to be placed just against the 'Stop Board' or the inner edge of the front of the circle and the left leg is to place back and across above the surface and to bring the centre of gravity of the body downward by bending the right knee a little.

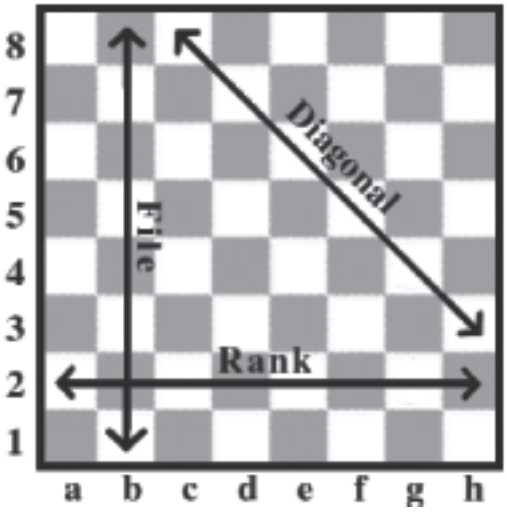
This technique of putting the shot is known as 'Parry O'Brien' technique. The shot-putter should be alert that the elbow position of the arm holding the shot is not displaced and after the casting of the shot he/she is to leave the circle through the rearhalf of it, the failure of which will be treated as wrong action liable to be disqualified.

8.5.1 Chess



How to record the moves in a game of chess

We can note down each move while playing a game of chess in order to study the moves later on. If you know the following rules, you can easily note them down.



File, Rank and Diagonal

We can divide the chess board into eight vertical lines as well as in eight horizontal lines. There are eight squares along the vertical lines; these are called FILEs. The FILEs are marked as a, b, c, d, e, f, g and h. The square along the horizontal lines are marked as 1, 2, 3, 4, 5, 6, 7, and 8. The slanted lines are called diagonals.

Names of different squares: Each and every square of the chess board has a name of its own. These squares belong either to a FILE or to a Rank. The names of the squares are coined from the names of Files and Ranks. For example, the square a1 in under File-a and Rank-1 and the two names combine into the name of the square.

The following table gives you an idea about the symbols of the pieces, their names, their values and the letters used to denote them.

Symbol	Names	Value	Letters used to denote pieces
	KING	-	K
	QUEEN	9	Q
	ROOK	5	R
	BISHOP	3	B
	KNIGHT	3	N
	PAWN	1	-

Symbols/Marks	What they mean/Explanation
X	'x' denotes capture
+	'+' denotes check
#	'#' denotes check-mate
0 – 0	This symbol denotes Short Castle/ Kingside Castling
0 – 0 – 0	This symbol denotes Long Castle/ Queenside Castling

How to note down the moves of the Pawn: There is no symbol to note down the moves of the Pawns. So to record the move of the Pawn, the File name of the move is noted down. Basically, we note down the name of the square where the Pawn moves. For example, if the Pawn moves two squares ahead of the King, we simply note down the move as e4. Otherwise, X is used to denote captures and at the same time the name of the square that the Pawn occupied is mentioned. For example, if a Pawn of e4 captures a Pawn at f5, the move is written as eXf5.

If one reaches the last Rank, one may replace the Pawn with another piece. The new piece is indicated by the notation '=' and the move is noted down by the name of the square occupied. For example, if the white pawn at g7 is replaced by the queen at g8, the notation should be g8=Q.

Notations of the movements of other pieces: Of the pieces of Chess, all except the pawns have a particular notation/symbol to identify them. While noting down the moves the symbol of the pieces and the squares occupied combine together to name them. For example, if the queen moves from d4 to h8, then the move is noted as 'Qh8'.

In cases of capture the 'X' symbol is used between names of the square and the notation. For example, QXh8.

Check and Checkmate: In case of Check '+' is used after the move. For example, 'Qh8+', 'Be7+' , 'dXe5+' etc.

In case of Checkmate '#' is used and the notation of Check is also used. For example: 'Qh8+#', 'Be7+#' 'dXe5+#' etc.

For greater understanding the following examples of the game of chess are given in diagrams. The right hand-side diagrams show the moves with white pieces and the left hand-side diagrams display the moves with black pieces.

For Diagrams please note the original book

Moves with white pieces Moves with black pieces

1. e4

1... e5

2. f4

2... e×f4

3. Nf3

3... h6

Moves with white pieces Moves with black pieces

4. Bc4

4... g5

5. h4

5... f6

6. N×g5

6... f×g5

7. Qh5+

7... Ke7

Moves with white pieces Moves with black pieces

8. Qf7+

8... Kd6

9. Qd5+

9... Ke7

10.Qe5+ #1-0

The above mentioned game is noted down in the following manner

(i) Noting Up and Down :

White : Greco
Black : No Name

White	Black
1. e4	e5
2. f4	e×f4
3. Nf3	h6
4. Bc4	g5
5. h4	f6
6. N×g5	f×g5
7. Qh5+	Ke7
8. Qf7+	Kd6
9. Qd5+	Ke7
10. Qe5+	#1-0

(ii) Noting Across

White : Greco
Black : No Name
(1) e4 e5 (2) f4 e×f4 (3) Nf3 h6 (4) Be4 g5
(5) h4 f6 (6) N×g5 f×g5 (7) Qh5+ Ke7
(8) Qf7+ Kd6 (9) Qd5+ Ke7
(10) Qe5+ #1-0

Chapter - IX
Team Game

9.1.1 KHO-KHO

Kho-Kho is known as a traditional indegeneous game of India. Primarily this game was played in the bordering villages of Gujrat, MadhyaPradesh and Maharastra and it was very popular in those areas. In the year 1914 this game was officially held at Maharastra Gymkhana Club in Pune as Sholpuri Kho-Kho club. But then this game had no fixed rules. Different rules were followed in different regions. In the year 1933 in a meeting at Sikim and Maharastra rules and regulations of Kho-Kho were framed and since then these rules are being followed everywhere in India.

The game of Kho-Kho requires the highest level of endurance, agility and presence of mind. This is a small area game and inexpensive. Men, women, boys, girls all can play this game. Kho-Kho has now achieved the honour of being the national game.

Rules of Play (Men/Women, Boys/Girls) -

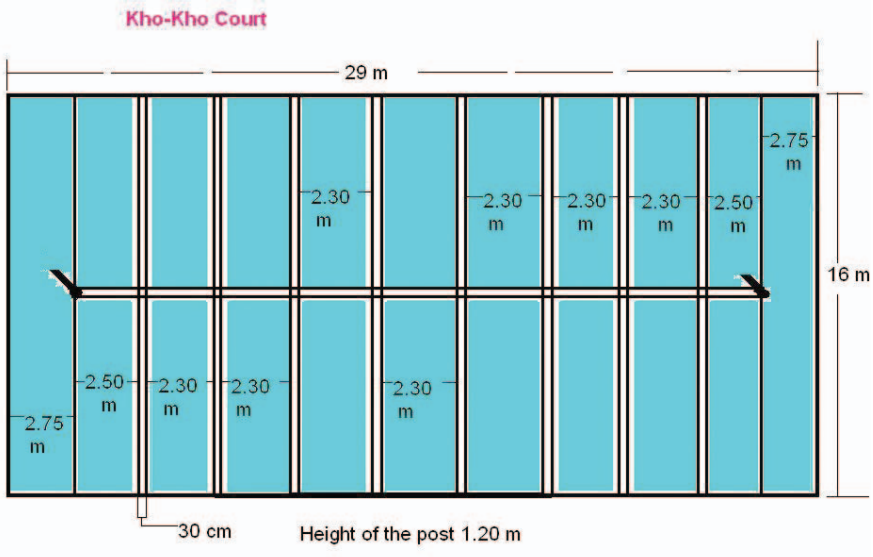
(1) Teams : Each side shall consist of 15 players and a coach and a manager. Out of 15, 12 players will be named for a match. Only 9(nine) players shall take the field for a match.

(2) Innings : An innings will consist of chasing and running turns. Which shall be of nine minutes each. There shall be an interval of nine minutes after an innings and five minutes break between turns. Hence, the total duration of a match is 9+5+9+[Int.9]+9+5+9=55 minutes. For sub-junior an mini group the duration of a match is 7+3+7+[Int.6]+7+3+7=40min.

(3) Sitting on the square : Any eight chasers shall sit on the square facing the side lanes in such a way that no adjancent chasers face the same side lane. The 9th active chaser shall stand in either of the rectangles to start the pursuit.

(4) To give Kho : To give Kho perfectly, an active chaser shall touch the sitting chaser by hand from behind and utter the word 'KHO' loudly and distinctly. Touching and uttering of the word 'Kho' shall be simultaneous. At the time of giving 'Kho' the feet of the active chaser shall not go beyond these cross lane.

(5) To take a direction : If an active chaser goes from one post line to the other post line and/or after getting a 'Kho', he goes towards a particular post line, he is said to have taken a direction.



(6) To recede : When an active chaser touches the ground which he had already covered, while going in a particular direction, he is said to have receded. This is not applicable in case of Free-Zone.

(7) To touch the first and eighth sitting chaser : While chassing, the active chaser may not give kho to any sitting chaser inspite of touching except the first and eighth chaser but he will have to give 'Kho' if he touches the first and the eighth chaser.

(8) Foul and correction of fault : If a sitting or active chaser commits the breach of any rules, it is known as a foul. The umpire shall declare a foul by blowing a 'short' whistle continuously until the foul is corrected by compelling the offending chaser to go in a direction opposite to that in which the active chaser himself is going. The chaser then may give 'kho' to a chaser sitting along the direction indicated by the umpire or he may go to the free zone of that direction.

(9) Entry : At the commencement of turn, the first batch of three runners (defenders) shall be inside the limits and the remaining two batches of three runners each shall occupy the blocks marked for them near the scoring table. The last runner of a batch inside the limits being out the next batch of three runners shall have to enter inside the limits no later than two 'kho's are given by the chasing side in absence of any runner inside the limits.

(10) Out : A runner (defender) shall be declared out, if any part of his body is touched by hand by an active chaser without violating any rule or if the runner goes out of limits, he shall be declared out by a short blow of the whistle.

(11) Officials for the Management of Match : 6(six) officials are required for the management of a match. They are two Umpires, one Referee, one Time-Keeper and two Scorers.

(12) Referee : The referee shall perform the following duties.

(a) He shall check up the score-sheet, ground etc. and takes the toss before starting the match. He shall help the umpires in performing their duties and shall give his final decision in case of any difference between them.

(b) If a player intentionally obstructs the conduct of the play or behaves in an ungentlemanly or mischievous manner or intentionally violates any of the rules, the referee shall, at his discretion, penalise the defaulting player. The penalty may go to the extent of forbidding a defaulting player or the entire team to participate in further play.

(c) He shall announce the warning by calling the chest Number of the defaulting runner or the chaser and showing a 'yellow card'. It shall be recorded by the scorer-I by marking the chest number in warning column. He shall announce the forbiddence from participation in remaining part of play in similar way as warning but showing a 'Red-Card'. This will also be recorded by the scorer-I by marking 'F' against the chest number.

(13) Umpire : The umpire shall move in the lobby outside the limits and shall watch the game in his ground which is divided by the Central-Lane. For any reason, if the umpire enters the limits, he shall come back to the lobby immediately without obstructing the progress of the match. He shall give all decisions in his half and also help the other umpire to give correct decision in the other half. The umpire shall declare a foul and compel the active chaser to act up to the rules, if the latter does not follow the rules.

(14) Scorer : The scorer-I shall note down and check carefully the names and numbers of the players and performance (scoring pattern) of the players.

Scorer-2 shall note down the order of the runners and a record of the defenders (runners) who are out and make them sit in the blocks provided for them.

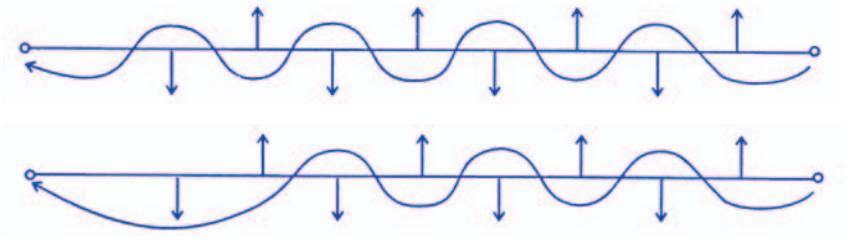
(15) Time keeper : The time keeper shall start the turn by blowing a whistle one long and one short in succession after getting direction from the referee. The end of the turn shall also be declared by him by blowing the whistle long. He shall enter the lobby and shall raise his arm holding an indicator and declare the completion of each minute loudly.

Sitting commonly used in playing Kho-Kho :

Sitting on the square : This skill is to be used by the chasers. One out of 9 chasers (attackers) shall stand at either of the poles. He is called the active chaser. The remaining 8 chasers will be seated on the 30 cm × 30 cm. squares. They are called the sitting chasers. The feet of a sitting chaser shall remain side by side and parallel. The body weight will remain on the feet. The feet being parallel, the centre of gravity of the body will remain on the feet. So, after receiving a 'kho' it will be convenient for a chaser to get up at both the right and left directions. The fingers of both the hands shall remain clinged to each other and keeping the thumb and the other four fingers apart the two palms will be kept beside the two thighs on the ground. The distance between the two palms will be as per the shoulder line. It is to be taken care of that the palms or any part of the body, except the feet, do not touch the central lane.

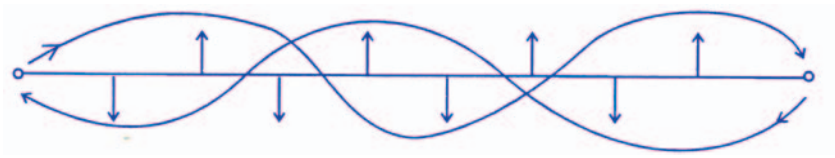
To give Kho : For chasers this is one of the most important attacking skills. When an active chaser chases a runner to make him out he gives 'kho' to a sitting chaser on his back to change the direction of the chasing as a part of the attacking strategy. On receiving the 'kho' the sitting chaser becomes active and the former active chaser takes his seat on the square to be a sitting chaser. To give 'kho' an active chaser shall touch the sitting chaser by hand from behind and utter the word 'kho' loudly and distinctly. Both the actions should be simultaneous. Touching may precede the utterance of 'kho' but a chaser cannot utter the word 'kho' first and then touch the sitting chaser. It will be treated by umpire as a breach of rule.

Single Chain Defence Technique: Single chain defensive technique is one of the most important defensive system of the runners. When the chasers chase runner to make him out, the runner adopts zigzag course by crossing the central lane through every back of the sitting chasers to defend himself from being touched by the active chaser. In this technique the runner crosses the central lane in between every sitting chaser in zig-zag course upto the sixth sitting chaser. Then in between the eight sittings chaser and the pole the run-



ner looks back with a body feint. If the 6th sitting chaser after being the active chaser gives 'kho' to the 7th sitting chaser, the runner will go directly to the pole. But if the 6th chaser afger being active does not give 'kho' to the 7th sitting chaser and directly chases the runner, the runner takes the course opposite to the active chaser's by crossing the central lane through the gap between the pole and the eighth sitting chaser. Thus the runner continues the single chain technique.

Double Chain Defence Technique: Double chain defensive technique is also used by the runners to protect themselves from being cut. When the chasers chase the runners by giving quick 'Kho' one after another, the runners also adopt double chain defensive technique to counter the speedy attack of the chasers. In this system a runner initiates the chain by crossing the centre lane from behind the 3rd sitting chaser and changes his direction by crossing the centre lane from behind the 6th sitting chaser. Then in between the eighth sitting chaser and the pole, the runner looks back with a body feint to look whether the 6th sitting chaser being the active chaser gives 'Kho' to the seventh sitting chaser or not. If the 7th sitting chaser becomes the active chaser the runner will go to the pole but if the 6th chaser directly chases the runner instead of giving 'kho' to the 7th sitting chaser, the runner will take the course opposite to the course of the active chaser by crossing the central lane through the gap between the pole and the 8th sitting chaser. Thus the runner defends himself from the chaser's attack. This defensive technique is called the double chain defensive system.



9.1.2 Football

Football is the most popular game in the world. Like many other games there are difference of views regarding the origin of football. In some countries football is known as soccer. Many people believe that like most other ball-games football was also originated in England. Stories go that in 500 B. C. the Greeks used to play a game like football in Sparta which was known as 'Harpaston'. Generally inflated bladder of a beast would be used as ball and the system of scoring a goal was to make the ball cross over the goalline of the opponent, because they did not have the concept of goal-post.

The Romans learnt this game from the Greeks. The Romans are said to have fostered football as a part of their military training. It is generally assumed that Roman soldiers brought the game to Britain when they conquered England in the eleventh century. Goal-post was started to be used from that time but the number of players in a team was less. To run with the ball and kick is called 'Rugby'. To make a difference between Rugby and this game, it was named as 'Soccer'. which is now

popularly known as 'football'. The name 'football' was introduced by 'London Football Association' formed in the year 1863 and in 1864 new rules of this game were framed. In fact 'Soccer' gained popularity in England first and then gradually it became popular in the countries like France, Germany, Belgium, Denmark, Italy, Spain, Austria, Hungary, Polland, Brazil, etc.

Football was introduced in India by the British in 1840. Indian Football Association (IFA) was formed in 1893 as the controlling body of football in India. IFA organises 'Santosh Trophy' football tournament as the inter-state national football competition. Later, it starts organising 'Indian Football League' (i-league) in which the top national clubs take part. It is now regarded as the most famous and popular football competition in India.

Considering the growing popularity of the game, delegates from seven nations met on May 21, 1904 to form Federation International de Football Association (FIFA) as the controlling authority of international football.

Some Essential Rules of the Game :

(1) Field of Play : The field of play shall be rectangular. In international matches the length shall neither exceed 130 yds. nor be less than 100 yds. (90-120 mt.) and the breadth not more than 100 yds. not less than 50 yds. (45-100 mt) the length shall in all cases exceed the breadth. The field shall be marked with distinctive lines of 5 inches (12 cm.) width. The longer boundary lines are called the touch lines and shorter the goal lines. A flag on a post not less lhan 5 ft. high shall be placed at each corner, a similar flag post may be placed opposite the half way line on each side of the field, not less than 1 yd. outside the touch line. A half way line shall be marked out across the field of play. The centre of the field shall be indicated by a suitable mark and a circle with a 10 yds (9.15mt) radius marked round it. It is called centre-circle. From each corner flag post a quarter circle, having a radius of 1 yd. shall be drawn inside the field of play. It is called corner area. The other marks like Goal-area, Penalty-area, Penalty-arc, Penalty spot etc. shall also be marked properly.

(2) The Goals : The goals shall be placed on the centre of each goal-line and shall consist of two upright posts, equidistant from the corner flags and 8 yds. (7.32 mts.) apart (inside measurment), joined by a horizontal crossbar the lower edge of which shall be 8 (eight) ft. (2.44 mts.) from the ground. The width and depth of the goal-posts and cross-bar shall be 5 inches. If the goal-posts and cross-bar are made of metal pipe the diameter of the pipes shall be 5 inches. Nets shall be attached to the posts, cross-bars and ground behind the goals and each of the nets should be appropriately supported and be so placed as to allow the goal-keeper ample room.

(3) The Ball : The ball shall be spherical and the outer casing of which shall be of leather or of other FIFA approved material. The circumference of the ball shall not be more than 28 inches or less than 27 inches. The weight of the ball shall not be more than 16 oz (450 gm) or less than 14 oz (410 gm). The air pressure inside the ball shall be 600 to 1100 gm/cm^2.

(4) Player's Equipment : The basic compulsory equipment of a player shall consist of a jersey, shorts, stocking, shinguards and footwear. A player is not allowed to wear any thing which is dangerous to other players. Shinguards must be covered entirely by the stockings and the studds under the footwear shall not be sharp and shall be made of leather or other approved material. The goal-keeper shall wear colours which distinguish him from the other players. The colours of the match officials shall be different from the players.

(5) Team : A team consists of 18 (eighteen) players. Out of those eighteen players 11(eleven) players play at a time, one of whom shall be the goal-keeper. Without a goal-keeper a team is considered as incomplete. A team shall be permitted to use 3(three) substitutes in a match.

(6) Duration of the Game : The duration of the game shall be of two equal periods of 45 minutes each with a half-time interval of 10 minutes unless otherwise mutually agreed upon. Lost time owing to substitution or injury is added to the stipulated time in either half. Time shall also be extended to permit a penalty kick being taken.

(7) The start of Play : At the beginning of the game choice of ends and the kick-off shall be decided by the toss of a coin. The team winning the toss shall have the option of choice of ends or the kick-off. The referee having given a signal, the game shall be started by kicking off from the centre spot. After a goal is scored, the game shall be restarted in a like manner by a player of the team conceding the goal. After half time ends of the teams shall be changed and the kick-off shall be taken by a player of the opposite team to that of the player who started the game.

(8) Scoring a Goal : A goal is scored when the whole of the ball has passed over the goal-line between the goal-posts and under the cross-bar. The team scoring the greater number of goals during a game shall be the winner.

(9) Ball in and Out of Play : The ball is out of play (a) when it has wholly crossed the goal-line (except between the goal-posts) or touch-line, whether on the ground or in the air; (b) When the game is stopped by the referee. When the ball goes out of play the game restarts with a goal-kick, throw-in, corner kick or drop by referee as the case may be.

(10) Off-side : A player is in off-side position if he is nearer to his opponent's goal-line than the ball unless : (a) He is in his own half of the field of play or (b) there are at least two of his opponents nearer their own goal-line than he is. A player shall only be declared off-side if at the moment, the ball is played by one of his teammates, he, in the opinion of the referee, is interferring with play or with an opponent or seeking to gain an advantage by being in that position.

A player shall not be declared off-side by the referee merely because of his being in an off-side position or if he receives the ball, direct form a goal kick, a corner kick, a throw-in or dropped by the referee.

If a player is declared off-side, the referee shall award an indirect free-kick to the opponent team.

Some skills of playing football

The following basic skills need to be achieved for playing football.

(i) Kicking the ball (ii) Passing (iii) Trapping (iv) Dribbling (v) Heading (vi) Intercepting (vii) Tackling (viii) Goal-keeping.

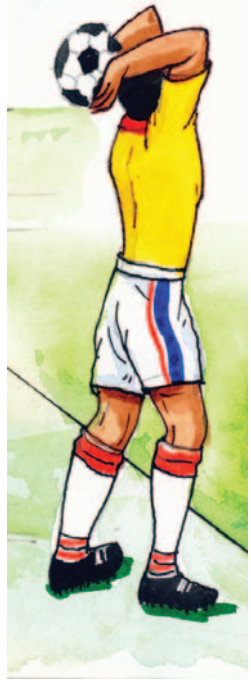
Discussion about some of the basic skills

A. Kicking : This is the most essential skill to send a ball to any distance short, medium or long for passing, clearing or shooting at goal. A ball can be kicked when it is in stationary or in running condition. Kicking a running ball is more complicated than kicking a stationary ball because to kick a running ball a player is to adjust the position of his body calculating the direction and velocity of the ball almost in no time.

The followings are the basic principles for kicking a ball.

(a) The non-kicking foot will remain 6" to 8" away from inches the ball.

(b) The body is to be bent a little and the head will remain still above the ball.



(c) The kicking foot will come from the back with a swing and the arm opposite to the kicking foot will be in front and the other at the back.

(d) The ball can be hit with the inside of the foot, outside of the foot, instep of the foot or sometimes with the toes or heel.

(e) The ankle, knee and hip joints of the kicking foot shall be kept strong.

Different Techniques of Kicking the Ball :

(i) Kicking the ball with the inside of the foot : The non-kicking foot is to be kept 6 to 8 away from the side of the ball and the knee will remain folded a little. Running a few steps from the back, the ball is to be hit with the inside of the foot below the biggest toe on spot just below the midline by bringing the kicking foot from the back in a swinging action. The upper part of the body will lean forward and at the time of contact with the ball the knee and ankle joint are to be kept strong and vertically alligned to the ball. Vision will remain straight towards the direction of the ball. In the follow through the kicking foot will move forward.

(ii) Kicking the ball with the outside of the foot :
This technique is also known as 'outstep kick'. The part of the kicking foot just below the smallest toe is used to take an outstep kick. The swing of the kicking foot will be from the back and position of the foot will be inside out. Other actions will be similar to the former technique.

(iii) Instep Kick-Low drive : The position of the non-kicking foot will be same as kicking the ball with inside of the foot. The player will come towards the ball running from 4 to 5 steps back. Keeping the non-kicking foot beside the ball the instep of the kicking foot will hit the centre-point of the vertical midline of the ball. At the time of kicking the toes are to be kept hard and the ankle joint will be opened completely. The kicking foot is to be moved forward after hitting the ball and the body will lean forward and the arms will be stretched alongside to maintain body balance. This technique is used to make the ball travel with great speed all along the ground.

(iv) Instep Kick-High drive : The non-kicking foot is to be kept 1" ft. back and 6"-8" away from the line of the ball. The player is to run 4 to 6 steps in a curved path to reach the ball. The kicking foot is to be brought from the back with a great swing to hit the ball just under the horizontal midline with the instep keeping the upper part of the body straight and vision towards the direction of the target and hands alongside the body. The kicking foot is to be stretched a little upward in the follow through. This technique is used to make the ball travel in the air in a desired trajectory with a force as applied.

(v) Chip shot (kick) : This technique is used for kicking the ball high in the air so that it lands within a short distance. It is generally used to give a pass over the head of an opponent player or to place the ball towards the goal over the head of the advancing goal-keeper. The non-kicking foot will remain away from the side of the ball and the kicking foot will come from back with a short but fast swing to hit the bottom of the ball. The body will be bent a little over the ball.

B. Passing : Passing is a very important basic skill of football. There are many kinds of pass as which are used as situations demand. They are—(i) Short Pass (ii) Long Pass (iii) Square Pass (iv) Diagonal Pass (v) Through Pass.

(i) Short Pass : This pass is played when a teammate remains close to receive

the pass. This pass is given direct to the co-player or in a gap so that a teammate can receive the pass by running a few steps. To give a short pass a player pushes the ball lightly with the instep or the outstep.

(ii) Long Pass : Generally long passes are given through the air to a teammate standing or on the move at a distance of 25 yrds. to 40 yrds. This kind of pass is given to open up the game or to switch over the game from left wing to right wing or vice versa. Excellence and perfection are the basic needs to execute this skill effectively.

(iii) Square Pass : When the co-players stay within 15 to 20 yrds. distance this pass may be played to build-up an attack or to kill time with an intention in combination with other kinds of short passes.

(iv) Diagonal Pass : This kind of pass is played diagonally aiming at a gap at 20 to 30 yrds. so that a teammate can receive it coming from behind. This diagonal pass is also given directly to a teammate.

(v) Through Pass : It is generally a middle distance pass. Using instep or outstep the ball is to be hit in such a way that the ball travels all along the ground passing through two or more opponent players to a gap at 15 to 25 yrds. away so that a team-mate can receive the pass running from behind. Such through passes can also be played over head of the opponent player or players.

C. Trapping : Before passing, dribbling or kicking a ball during a game the ball needs to be trapped most of the time. Trapping can be done with different techniques according to the speed, height and direction of the ball. A ball can be controlled by trapping with the foot, thigh, chest, belly and head as the situation demand.

(i) Trapping with foot : Foot trapping is done using different parts of the foot depending on the pace, height etc. of the ball. The parts usually used for foot trapping are (a) sole of the foot, (b) instep of the foot, (c) outside of the foot and (d) inside of the foot.

Sole-trapping is used to control a ball running all along the ground. The other three techniques are used to control high balls. The main objective of this trapping is to control a high ball and bring it down to the ground quickly. Special care is to be taken at the time of trapping lest the ball should

go-out of control due to stiffness of the muscles. Just at the time of contact with the ball the foot will act like a cushion by keeping all the joints of the foot loose and in no time the foot will have to be detached from the ball.

(ii) Thigh Trapping : To control a high ball this technique of trapping is used. In this trapping the thigh is to be brought under the ball in such a manner that the ball comes to the contact of the middle of thigh and the moment the ball touches the thigh it is to be detached to avoid rebound. Folding the knee the thigh is to be lifted up to a level parallel to the ground and after the contact with the ball the thigh is to be brought down.

(iii) Chest Trapping : When a ball comes in a high trajectory the ball is controlled by chest trapping. To trap a ball with the chest the upper part of the body is to be bent backward from the waist, chest is to be pushed up to the ball in such a way that the ball touches the middle of the chest. The muscles of the chest are to be kept relaxed and shoulders to be bent a little forward. Two hands will remain extended away from the body to keep the balance of the body and to avoid possibility of handling the ball. Chest trapping is generally done by keeping the chest position either convex or concave. Sometimes a player after trapping the ball with chest allows it to come down to the ground and sometimes he volleys the ball.

(iv) Trapping with the belly : When a ball comes with a moderate pace at the waist level the ball is trapped with the belly. In this skill the player invites the ball on his belly by bending the waist forward. The muscles of the belly are to be contracted to absorb the shock and minimise the deflection.

(v) Head trapping : This trapping technique is used to control a ball coming high up to the head. Such balls may be trapped using the forehead. The moment ball touches the forehead the head is to be pushed a little back to minimise the rebound effect and thus the ball drops down on the ground within the reach of the receiver.

D. Dribbling : Keeping the ball in control when a player moves from one place to another or up to the goal of the opponent along with several short kicks this skill is called dribbling. To dribble the ball a player uses his inside of the foot, outside of the foot and the instep. Toes are never used for dribbling. A player adjusts his strides with the ball according to the pace of his movement so that his control over the ball is not lost.

E. Heading : Heading is done with the different parts of the forehead. To hit a ball with the forehead a force is to be applied on the ball. The force is generated by bending the body back and bringing back forward to meet the ball with a thrust of the neck. The muscles of the neck are to be kept strong to avoid injury. If needed this skill is applied by lifting body up to meet a ball coming in a high trajectory. This skill is used to clear a ball, to pass and to score goal. Either of the temples of the forehead is used to flick a ball by heading. At the time of heading both the hands are kept above the shoulder by folding the elbows.

Chapter-X
Human Resource Development Programme

10.1.1 Local Social Service Programme

School is a social institution. A social relation is developed among the students reading in a school. The students spend a major part of the day with friends of almost the same age and they co-operate with one another in different activities. The school is the second most important social institution after home in their way to the larger society. School takes an important role in socializing the students and in transmitting in them a sports-culture. A student develops his/her personal values, ideas, behavior, morality and a philosophy of life at the school level. He/she gets trained in some social behavior at this level. For example, such good qualities as fraternity, friendliness, empathy, cooperation, sympathy, tolerance, patience, etc. are developed at the school level. A child also gets lessons on how to behave in different situations in his future life from his school environment.

Ours is a secular, democratic, republic nation. So it is the duty of the school to develop the students into citizens of a secular democratic republic. So the qualities of the citizens of a secular democratic republic are to be developed among our students.

In a democratic society, a disciplined and co-operative mentality to work together is to be nurtured and at the same time it is also necessary that individual efforts are made to work impartially. In our country group activities have just began to be encouraged. In different schools competitive mentality is given priority. Though competitive mentality is necessary in some limited fields, students cannot participate in social life successfully. They learn the lesson only through group or joint projects.

Different types of social service projects develop civic consciousness and democratic mentality among the students. Social awareness programmes and social services not only develops the inherent qualities of the students but also develops such qualities as co-operative mentality, empathy, sympathy, discipline, self control, etc. It a world, the social qualities are developed in a balanced way.

Steps, rather development plans, are to be taken to uplift the society from its present condition to a better level.

Today's students are tomorrow's citizens; so if the students come forward to take part in nation building, it will soon lead to the well being of the state as well as the country. To develop the students to match the social needs, the lack in the education of the disadvantaged sections of the society is to be identified first. Then we should reach out to those students and take remedial measures. They should be brought to the school yards, provided better facilities to give them equity. By utilizing the vacations of the students properly, taking collaborative efforts by the school and the local people, the disadvantaged students may be provided proper education. By participating in such social work, the students may learn a lesson to become responsible citizens of tomorrow. They will get an idea of their duties and responsibilities as social beings.

For the all round development of the society, both the school and the society need a mutual understanding. The students- teachers- guardians-and peoples representatives should work hand in hand to serve the society. This will lead to social reform movement and the students will thus become a partner in the development of the society as well as the nation.

At the school level project-based or activity-based learning methods have been integrated. The students are expected to participate in such activities that make him come in direct contact with society. These activities not only involve the students' motor organs but also his brain and at the same time they are not forced upon the students. There will be lot of options for the students to choose from the given projects. Even the fields of his or her liking may be taken up as a project. A direct relation between personal efforts and life experience may be established through such projects. The students will develop skills in polite conversation, decency, good habits and creativity. Activity based learning methods will change the school from book-centrism to work-centrism. The school will become the centre for the all round development of the students.

Specimen Projects for Local Social Service Activities

The students will choose one project and utilize their spare time and spend 20 hours a year to complete the project.

A) Health Service Project:

1. Awareness campaign regarding personal cleanliness.
2. Awareness campaign regarding drinking pure water.
3. Continuous awareness campaign regarding using scientific toilets/ urinals.
4. Awareness regarding pulse polio, Aids, diseases caused by iodine deficiency and cancer.
5. Health awareness drive in the rural and slum areas.

B) Education Service Project:

1. Providing legal aids to helpless people.
2. Awareness campaigns regarding human rights.
3. Projects regarding Children's Rights.
4. Right to Information Act.
5. Awareness about rights of the girl child and woman.
6. Drive to bring back the drop-outs to school.
7. Awareness drive regarding child labour.
8. Activities related to Mid-Day- Meal.
9. Literacy programmes for the elderly people.

C) Social Aids Projects:

1. Consumers awareness campaign.
2. Tree Plantation programmes.
3. Making lists of old and helpless people and helping them.
4. Helping the CWSCS.
5. National Green Brigade Project.
6. Our duties to our earth.
7. First-aid camps during fairs or festivals.

8. Helping people with their bank pass books, electric connection and ration card applications as required by them.

D) Disaster Management Projects:

1. To make people aware about the means and methods of disaster management.
2. To help people before, during and after floods.
3. Collection and distribution of relief materials.
4. To collect money for The Prime Minister's and the Chief Minister's Relief Fund.
5. To provide first aid treatment to the affected people.

E) Traffic Control:

1. To control the viewers and visitors during festivals or fairs.
2. To work in Traffic Control.
3. To make people aware about road safety.

F) Awareness about Government Aids:

There are many Government programmes and projects for the poor and the helpless rural people. Students should make people aware about those programmes so that they may get the benefit of those programmes/projects. Moreover, they should help in the proper utilization of those government programmes.

G) Environment Development Projects:

1. Projects regarding development of school and social environments.
2. Tree plantation Projects.
3. Projects for the development of cultural environment.
4. To grow flower gardens in school and local areas.

H) School Projects:

1. To help the poor students of the school and the neighbouring schools with books , khatas and such other things. The students should contribute liberally for the purpose.
2. To make the Mid-Day-Meal project secure and provide service to keep it running properly.
3. Service related to preparation of Health Card and Physical ability card.
4. To form and conduct Child cabinet.

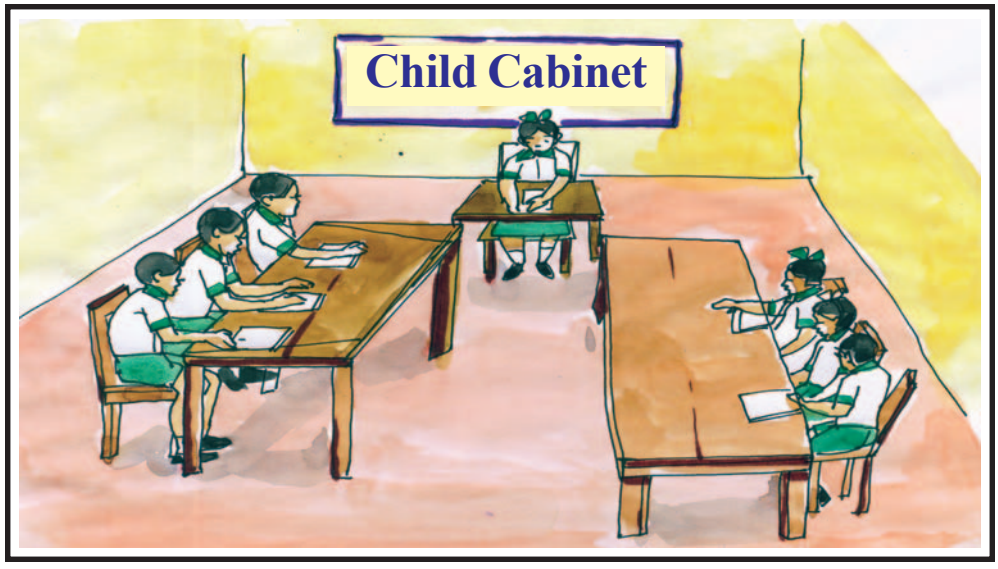
The students, teachers and the school authorities are partners in the development of

education and society. Changes occur regularly in our social life. These changes should be made for the better. When we think of a progress, we visualize an ideal society/ an ideal village/ an ideal locality/ an ideal ward. T do our bit for this progress is what we call service for the progress of the society. Our ideal society will be one that will be based on the ideals of equality, fraternity and liberty; it will be based on the secular and democratic constitutional system. The students- teachers- guardians- people's representatives will work together to reach that goal. The process will lead to an all round development of each individual and at the same time he/she will work for the well being of the society.

Duties of the students:

- The students may participate in social service programmes individually or in groups. In group projects the number of beneficiaries/ consumers may increase proportionally with the number of group members.
- A survey should be undertaken in the area where the project work will be carried out. It will give them a view about the requirements of the locality and the aids required for the project. The survey will decide the mode of aids for the particular locality.
- A complete work plan should be made and approved by the Physical Education teacher of the school.
- The methods of work and the execution plans should be recorded in a record book.
- The names of the beneficiaries and the list of aids/materials should be noted down in the record book.
- Help from the local people and certificates should be mentioned in the record book.
- The attention of the local administration may be drawn to the project.
- The students will select any one project and spend 20 hours a year from their leisure hours to realize the project. The success of the project will not only help in his/her knowledge development but also help him/her developing into an ideal citizen in future.

10.1.2 Child Cabinet



Introduction

Right to Education Act was introduced on 1st April, 2010. In the 19th clause of this act the minimum standard of a school has been explained. A school must have the following facilities—

(i) Facilities for the CWSNS or the differently able children
(ii) Separate toilets for the boys and the girls
(iii) Safe drinking water facilities
(iv) Kitchen for mid-day-meal and
(v) The boundary wall

The aim of education is not just cognitive development of the children; it should develop them into ideal citizens. All round development of the children needs a collective effort that will make them aware of health and hygiene, health education and nutrition.

Advanced, hygienic and scientific facilities help in developing good habits among the children and children in turn can play an important role in developing them. In fact, the Child Cabinet is formed in a school to make all the systems child-centric. We all expect that the Child Cabinet will create an ideal educational environment in the primary, secondary and higher secondary schools of the state thereby setting an example for all.

Objectives

- The learners will develop an idea about the school environment and its effect on them through participation in the daily activities of the school. They will feel encouraged and enthusiastic in taking part in such school activities.
- To improve the school environment and to maintain water facilities and hygiene properly and to enhance team efforts and develop leadership qualities among the students.
- To build up a regular system to supervise of student-hygiene and to spread the lessons of health and hygiene to their homes and society through the learners.

Organizational Structure

The Child Cabinet consists of five ministers. The Prime Minister is the leader of the cabinet. The other ministers are the Food Minister, Sports and Cultural Minister, Education and Environment Minister and the Health Minister.

There will be a standing committee under each ministry—Food Standing Committee, Sports and Cultural Standing Committee, Education and Environment Standing Committee, and Health Standing Committee. Each standing Committee consists of not more than five members including the departmental minister. The standing committee plays active roles in executing the departmental works. The concerned minister will lead these activities.

Formation Procedure

1. Before the formation of the Child Cabinet, the Headmaster/Headmistress will convene a meeting of the Village Education Committee and the Mother-Teacher Committee to discuss about the importance of the Child Cabinet in a school.
2. The learners may elect the ministers under the guidance of the Headmaster/ Headmistress. For example, a student may propose the name of a classmate as the Prime Minister and the other students will support his proposal. If the majority of the students support the name, then he may be elected as the Prime Minister.
3. The Headmaster/Headmistress will conduct this election/selection process. The Pradhan or a member of the local Gram Panchayet or a respected person may be invited to the school on that day.
4. The same procedure is followed in electing the other ministers.

5. The Headmaster/Headmistress may nominate a student a Prime Minister on the basis of his/her performance in studies and efficiencies in other activities in school. Likewise he may nominate the other ministers.
6. Then the Prime Minister will nominate the members of the standing committees in consultation with the Headmaster/Headmistress. Equal numbers of girls should be included in the cabinet and the standing committees. Children with special needs or differently able children, if any, need to be included in the standing committees.
7. Once the Child Cabinet is formed the Headmaster/Headmistress may take out a procession in the neighbouring areas of the school. It will spread the news of the formation of the Child Cabinet and the student-members will feel proud.
8. The Headmaster/Headmistress will convene a general meeting of the cabinet. The members of the standing committees will also attend this meeting. The Headmaster/Headmistress will discuss the duties and responsibilities of all the ministries in this meeting.
9. The Headmaster/Headmistress will then call all the students, the VEC, the School development Committee, Mother –Teacher Committee and the guardians to a meeting. He will introduce the ministers to all present in the meeting and discuss about the importance of the Child Cabinet and the importance of the Standing Committees.

Prime Minister

- A weekly meeting to be convened on Saturday to discuss the overall performance.
- To take the responsibility of the Child Cabinet of the school.
- To help the Headmaster/Headmistress in the management of the school.
- To help the ministers in their works and to evaluate their performance.
- To manage the activities of the departmental ministers with the help of the members of the standing committee in the absence of the ministers.

Responsibilities of different Ministers

Food Minister

- To supervise actively that the kitchen and the dining hall of the mid-day meal are kept tidy and clean.

- To arrange for water and soap for hand washing and cleaning of the dishes before eating mid-day meal.
- To make sure that the cooks wash their hands with soap before cooking and serving meal and that they maintain overall cleanliness.
- To see if tube-well water is used for washing utensils and cooking.
- To help in serving mid-day meal.
- To help the Prime Minister in making a weekly menu, if necessary.
- To keep drinking water in a clean and covered pot and to inform the learners rules of using drinking water.
- If and when soaps go out of stock, he/she should bring it to the notice of the Prime Minister.

Sports and Cultural Minister

- To keep the sports equipments in order and to make sure that all the students can make use of them.
- To assist the Prime Minister in organizing sports and cultural competitions in school.
- To organize programmes on different observation days like, the Independence Day, The Republic Day, Rabindra Jayanti, School Hygiene Day, The Children's Day, the Book Day, etc. and to take active part in bringing in the members of the VEC, Mother-Teacher Committee, guardians and the students on such occasions.

Education and Environment Minister

- To assist in using and preserving different teaching-learning materials in the school.
- To prepare a weekly list of topics on environment for discussions in the prayer and to conduct them.
- To involve all the students in the cleaning up operations to keep the school environment clean and beautiful and take a lead role in executing them.
- To make the students identify the biodegradable and non-biodegradable wastes and to dump them in particular dust/waste bins.
- To involve all the students in making gardens of flowers or vegetables within the school premises and to take care of them (flower/vegetable plants).
- To find out the cause of a long absence of a student.

Health Minister

- To arrange for water and soap in the toilets and lavatories. To make the students about the proper use of the toilets and lavatories.
- To involve all the students in keeping the toilets clean.
- To assist in using and preserving health and hygienic kits.
- To make the students aware of the importance of hand washing with soap and to supervise it.
- To see in the prayer line if the teeth, nails, eyes, hair and uniform of the students are neat and clean.
- To make all aware that the school environment and the outer environment are kept clean and tidy. A monthly drive may be taken up to maintain a clean environment in and around the school.
- To inform the Prime Minister if there is scientific toilets in the house of each student or not and whether they are used or not.
- To make the students aware about the maintenance and use of the toilets and lavatories, the Health Minister should work in communion with the Education and Environment Minister.

10.1.3 Awareness Campaign on Kanyashree Prakalpa

What is Kanyashree Prakalpa?

Kanyashree Prakalpa is one of thec major flagship programs of the State of West Bengal. This scheme aims of improving the status and well being of the girl child in West Bentgal by incentivizing schooling of all teenage girls and declaying their marriages until the age of 18, the legal age of mariage. Kanyashree Prakalpa is a West Bengal Government sponsored scheme which is being implemented henceforth in all districts of the State.

The scheme has two components:

K1 - Annual Scholarship of ₹ 750/- (Rupees seven hundred fifty only)

K2 - One-time Grant of ₹25,000/- (Rupees twenty five thousand only)

The Annual Scholarship is for unmarried girls aged 13-18 years, enrolled in government recognised fegular or equivalent open school or equivalent vocational/technical training course.

The One-time Grant is for unmarried girls turned 18 of the time of application, enrolled in government recognised regular or open school/college or pursuing vocational/techinical training or sports activity or is one inmate of Home registered under J.J.Act 2000.

Both the benefits under the scheme will be granted to girls who belong to farmiles with annual family income not more than ₹1,20,000/- (Rupees one lakh and twenty thousand only). The bar for family is not applicable if the girl has lost both parents, is physically challenged (40% disability) in terms of the provisions of Persons with Disabilities Act, 1995, as certified by any Medical Board, recognised by the Government of West Bengal in the Department of Health & Family welfare or is on inmate of J.J.Home.

Where to get the Kanyashree application form and how to apply

1. Application forms are available at all schools and colleges and the Head of Institution (HOI) is responsible for distribution of printed numbered application forms for Annual Scholarship (K1) and One-time Grant (K2) from this Department. Forms may also be abtained from offices of BDO/SDO/Kolkata Municipal Corporation or Commissioner Social Welfare.

2. Single page simplified bank account opening forms will also be available of institution level and HOI will faciliate opening of zero balance accounts simultaneously. The student must have a bank account in only branch of the 27 Nationalised Banks or in any banks having direct transfar facility.

3. Beneficianies will submit the filled up forms to the HOI with required certificates.

4. Head Institution/authorised officer of the institution is required to certify in the space aollotted for the studentship and DoB in the 3rd page of the form. Other certificates in the last item of 3rd page of the form will be issued by Municipal Ward Councillor/Borough Chairperson/Pradhon, Gram Panchayat/MLA/MP/Any Cr. A Officer of GOI or this State Government under whose jurisdication the particular student resides.

5. The HOI has been entrusted with the responsibility of uploading all the information furnished by the applicant girl student in her form to the KANYASHREE PRAKALPA, available at wakanyashree.gov.in along with scanned coloured photo (100kb) of the applicant, as pasted on the body of the application and entire 3rd page (200kb) of the application.

6. HOIs may outsource the data entry by making payment not exceeding ₹ 10/- per application form for which the fund may be claimed from the Department. Each institution is being provided with a User ID and Password for entering into the Portal which is being made available through e-mail to the HOI.

7. Data entry may also be done at the level of CLRC or BDO; in case of adequate infrostructure not being available at institution level.

Scrutiny and sanction

The scrutiry and sanction of the application will be done online by the assigned and appropriate outharity at DPMUs and fund will be created to the bank account of the eligible candidate through NEFT in deserving cases. Arrangement has also been made for issuing a SMS alert to the cell phane of the applicant, as provided in the application, in the event of sucessful transfer of money to the respective bank account. Moreover, applicants/individuals may track the location of any application online having form serial number, type of scheme (K1/K2) and DoB of the student offer the entries in the partal.

For any technical difficulty. NIC may be contacted at support.kanyashree@nic.in.

Department of Women and Child Development and Social Welfare

www.wbkanyashree gov.in

Monika Soren

Archery is a survival skill for Monika Soren. Withy every arrow, she unleashes her will to succeed, her determination to be different, and her quest for excellence. While many of her childhood friends are getting engaged or married, this 19 years old from Bhalia Ghati village in Paschim Mednipur is winning laurels for India at international archery competitions. However, her dream of representing India in archery would have never have come true had it not been for the unfliching support of her father, the financial support received from the Kanyashree scheme.

Monika comes from the Santhal community that is mired in poverty, illiteracy, unemployment and malnutrition. Underage marrage is the norm, and the education of girls is rarely considered. Her father is the sale earnner in a six-member family, and financial hardship is a way of life for the Sorens. Fartunately for Monika, her father borrowed money to sustain her passion, risking community censure and social ostracism to allow her to pursue her career as an international level archer. When community leaders berate him for not forcing Monika to get married, the doting father states emphatically. "Just give her a few years, and watch how she grows."

When Monika's talent for archery was spotted by her teachers, Ila Manna and Soumitra Biswas, her school arranged for a professional trainer for her in 2012 Currently, she is being coached by the Sports Authority of India (SAI) in Kolkata for someone who had her first brush with professional archery in 2013. Monika's progress has been rapid. While she has won several prestigious national level competitions, her proudest moment was hen she won the team bronze medal at the 2015 Asia Cup World Ranking Tournament (Stage II).

Despite her many accumplishments, however, Monika's financial struggle continues. The Kanyashree annual scholarship made it possible for her to hire private tutors to make up for being unable to attend school regularly because of her sporting commitments. In 2015 she received the one time grant of Rs. 25,000, which she has used for buying equipment. Further, on Kanyashree Day. August 14, 2015, the Chief Minister presented her with a sedt of arrows, the price of which was out of her reach. The high cost of professional quality archery gear and travel expenses used to be a constant worry for her, but now that the Paschim Mednipur district administration has promised to meet her travel and equipment expenses, Monika feels she will be able to concentrate better on showing her competency at the international level. Along with archery, she also wishes to continue with her studies. ''I want to go to college and then on to higher studies, becauses some day. In would like to get a good job'' she clarifies.

Monika is a role model in her school. Currently eight students from her school have been selected for training at SAI. Six of these young girls are also beneficiaries of Kanyashree Prakalpa

Kanyashree

"Kanyashree-A dream, more than a social scheme"
Touching from villages to towns,
Shaping country to globe;
The thought of Bengal,
Showing hope for the rest of all.

Labini Sarkar, Chilakhana High School

Nobody, but nobody came in her harder days and sat beside
All the dreams swept away and alone she fought her fight
Now a ray of Hope, Kanyashree comes through a new window
Never lament, She hugs you, Let's run and catch the rainbow.

Madhuri Goswami, Maruganj High School

We are the girl
The proud of our Nation
Kanyashree helps us to reach our destination.

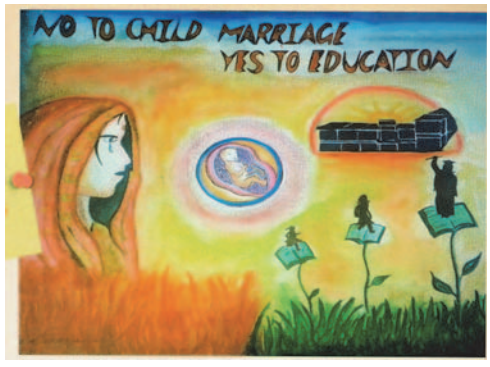
Shyama Saha, Debinagar K.C.R. Vidyapith

Let Me Live
Let Me Shine
Let Me Bloom
Like Beautiful Moon

Arishna Rai, Bhagat Ram Vidyapith (H.S)

One give me support
One give me strength
Poverty and Ignorance will run
K1 and K2, my two weapons.

Manisha Mishra, Garopara B.C. High School(H.S)



I had not my way,
I had not my choice.
But now, I have my life,
I have my Right.

Parbati Pandit, Birpara Shree Mahavir Hindi High School

Proud of being a girl
Proud to learn
Armed with Kanyashree
We shall overcome

Monisha Ghosh, Medgachi High School

Kanyashree means "Go Ahead"
Complete Education
Fight against early-marriage
Achieve ambition

Kasturi Chowdhury, Kota Chandipur High School

10.2.1 Awareness Campaign on Personal cleanliness

Introduction:

The cleanliness of the outer parts of the body depends upon man's personal habits. But every person should attend to the cleanliness about it, without hindrance in the way of social, mental and special development of a person. If the various parts of the body are not kept clean, it causes many diseases. Personal hygiene includes ill these things which are essential for the health and cleanliness of a person, such as food, cleanliness of body, living habits, sleep, rest, exercise etc. All these things should be well considered in order to keep the body quite healthy.

Need of personal cleanliness:

- Various types of infectious disease may spread from untidiness like dirty hands, untidy cooking utensils, withered food, unclean and spoiled water etc.
- Personal cleanliness may develop the resistance power of the body.
- Personal cleanliness preserves health and also develops it.
- Protect infections by which bowels complaint, diarrhea may removes.
- Health instruction and health education build up safe, healthy and secured a clean atmosphere towards children for their health.
- Better learning in school is depends upon the student's health and high quality nutrition.

Care of different parts of the body Care of Skin

Various disease of skin:

(1) Ring worm, (2) Itching, (3) Pimple, (4) Eczema, (5) Freckles, (6) Psoriasis, (7) Skin crack

Care of skin:

1. Take bath with warm water.
2. Try to protect body from oil or dirty substances use warm water and soap.
3. Use cream for dry skin.
4. Use cloths according to climatic condition and weather.
5. Take bath with antiseptic lotion for healthy skin.
6. Take nutritious and balance diet for natural health of the skin.
7. Don't use another person's garment, towel etc. Always clean under garments.
8. For Psoriasis patients, try to take bath under shower.

9. Sun bath, air bath and sea bath is helpful for health.
10. Always take attention to personal cleanliness and take advice from skin specialist.
11. If any member of your family is suffering itching it is necessary to take medical advice from skin specialist as early as possible.
12. Take sun bathin winter for take vitamin 'D' with necked body which make resistance power of disease for body.

Care of Nose, Ear and Eyes

Care of Nose:

We take air from nature through nose; there are so many substances like air dust and micro germs we inhale through acquired air. If we do not clean the nasal pathway these substances are accumulate inside the nose, for resulting we face various disease of nose.

Rules:

(a) Don't insert finger inside the nose.

(b) Clean nose with soft and clean soft cotton cloth.

(c) When you walk along the road try to cover your nose with clean handkerchief.

(d) To clean nose dragging some clean water through nose and bring out the same amount of water from nose.

(e) Catheter may use for rear part of the nose cleaning.

Care of Ears:

1. Hard ear-wax: Inside the ear a huge ear-wax may cause of ear pain or damage hearing power.
2. Suppurate in ear: The dirt which accumulates in the ears causes itching sensation and some other defects of ear and sometimes liquid coming out of them and we cannot listen properly. If suppurate forms in ear it must bring out and take proper treatment, otherwise it may damage ear or occur cancer.
3. Tear of Ear-drum: Ear-drum can tear due to excess pressure of air caused by an injury. It also tears due to water pressure or sharp and powerful sound and its result victim cannot hearproperly.

Care :

1. Do not allow wax product into ear, clean ear regularly.
2. Avoid loud noise of vehicles and factories.
3. Everyday clean your ear when you take a bath.
4. Never try to clean the ears with some needle or any sharp thing. The ears get scratched by doing so.

5. If mosquito or any other insect enters the ear, it should be got remove by an ear specialist.
6. If you found any symptom of ear disease, immediately take consult with ear specialist.

Care of Eyes:

Various diseases of eyes:

1. Sty, 2. Conjunctivitis, 3. Long term inflammation, 4. Cataract, 5. Night blindness, 6 Different visual problem, 7. Color blindness.

Safety measures taken for deseases of eyes: Proper and time to time vaccinations must apply on children through primary or sub Health Centre.

Care:

1. Eyes should be splashed with cold water every day four to five times.
2. Do not use others handkerchief or towel.
3. Eyes should be never touched with dirty hands or dirty cloth.
4. Eyes should always be protected from dirt and dust.
5. If there is some foreign substance in eyes, they should not be rubbed; eyes should be washed well to remove the foreign substance.
6. No work like reading and writing work should be done with eyes in insufficient light. It causes strain upon the eyes. Always take attention about sufficient light during reading and writing which comes from correct direction.
7. Keep at least one feet distance from eye to books when you reading.
8. Don't use others eye glass of goggles.
9. Keep away from television at least three meter when you watching any program.
10. The eyes should be protecting from smoke.

Care of Throat

Throat is connected with other sense organs like ear, nose, tongue etc. if we not kept clean may cause serious borders. Take proper attention on this organ to free from calf and cold and influenza, because food, air, water passing through this way.

1. Protect Your Throat from Cold Temperatures. Get in the habit of wearing a scarf around your neck to keep the throat area warm.
2. Gargle every night with a mixture of warm water and salt. Just a pinch of salt will do. During cold and flu season, this is a habit that will help to disinfect the mouth and throat.
3. Clean coagulated cough inside the throat regularly.

Care of Teeth

Various diseases of Teeth;

1. Tooth Erosion - Tooth erosion is the loss of tooth structure and is caused by acid attacking the enamel. Tooth erosion signs and symptoms can range from sensitivity to more severe problems such as cracking.
2. Pyorrhea - Pyorrhea is a gum disease that comes when the roots of the teeth are loose thereby forming pus and shrinking the gum.
3. Bad Breath - Bad breath, also called halitosis, can be downright embarrassing. Gum disease, cavities, oral cancer, dry mouth and bacteria on the tongue are some of the dental problems that can cause bad breath.
4. Inflammation of the tooth (pulpitis) - Inflammation of the tooth occurs when one of the teeth has a large lesion of tooth decay which is not treated. As long as this decay is on the outside layer of the tooth (enamel) or in the dentin (layer below the enamel), the tooth does not hurt. However, once the decay reaches the center of the tooth and bacteria infect the nerves and blood-vessels, acute pulpitis occurs.

Rules for keeping teeth well:

1. Always clean your teeth with brush and tooth pest and wash mouth by clean water.
2. Brush teeth from up to downward direction daily two times after every meal.
3. Take vitamin A-B-C food regularly.
4. After cleaning the teeth, clean your tongue also. It removes bad smell from the mouth.
5. Hard substances such as almonds, walnuts etc. should not be cracked with teeth, because by doing so the teeth get broken.
6. Get your teeth tested regularly by a good and qualified dentist.

Care of Hair

Rules:

1. Whether we have long hair or short, always keep them clean and should be well combed.
2. Before take bath gently massage root of the hair.
3. Keep attention about dandruff and louse which may not set up into hair.
4. As far as possible, protect the hair from dirt and dust.
5. The hair should be washed with soap or some good shampoo and cleaned with sufficient clean water and oil should be applied to the hair occasionally.
6. Every person should have his/her separate combs.

7. As far as possible, hair dyes or artificial color should not be used on the hair. They are harmful for the hair.

Care of legs Rules:

1. Must wash feet when you come from outside because fungal attack may occurs between the fingers of the foot due to deposition of dirt and sweat.
2. Take into consideration the right structure of our feet before buying shoes for your feet and do not walk bare foot.
3. Don't use nylon or artificial thread made socks.
4. Don't use high hill shoe. It may affect back pain or spondylitis.
5. Regularly cut the nails.
6. The feet should be washed and dried properly before retiring to bed.
7. Always take care on hill, sometimes you may suffer by hill crack.

10.2.2 Awareness Campaign on Environment Cleanliness

Introduction:

Cleanliness is must in today's world as we all live in such in a good society and obviously if our home or work place is not clean one can't get into it. The term 'environment' means the surrounding habitat of man. In its widest sense, it refers to the entire earth with its green forests, vast oceans, the layers of air and oxygen, etc. In its narrowest meaning, environment means the immediate surroundings of man - his home, work place, market, neighborhood, etc. It also includes the atmosphere in which he lives. According to many scientists, the factor which influences the growth of individuals most is environment. But unfortunately, the various elements of | environment such as, air, water, land, etc., are polluted and contaminated. Environmental pollution is "the contamination of the physical and biological components of the earth/atmosphere system to such an extent that normal environmental processes are adversely affected".

Good habits for resistance of disease and better quality of lifestyle:

- Everyday brush your teeth after lunch and dinner.
- Everyday clean your body by taking bath with clean water and soap.
- Regular clean your hair by soap or shampoo.
- Always wear clean cloths. Change your cloths when you return from market or school.
- Always clean and cut your nails.
- Regular clean your year and eyes.
- Confirm that the shoes which you use outside your room can not use inside.

- Don't keep cloths and school bags at lunch table/place.
- Always wash your hands by soap when you take food, after taking food, cooking or serving.
- Wash your hands after handle money or coins or travelling from outside.

Need of sanitation for resistance of disease and infection

1. Different direction of disease and infection:

a. Infectious disease through hands: We do various types work through hands. Washing or sanitizing hands helps to prevent the spread of infections. Even though hands may look clean, they are always picking up germs, carrying them around and leaving them behind on the common things that you touch every day. Your hands pick up germs when you do everyday things like coughing or sneezing into hands, touching door handles and light switches, preparing food, changing diapers, and playing with toys, to name a few.

Germs like to enter your body through your eyes, nose, and mouth and 80% of common infections are caught when you touch your eyes, nose and mouth with hands that are loaded with germs. Other people can also get sick from the germs your unwashed hands leave behind on the common things you touch every day.

Washing your hands (or using alcohol based hand rub) is the best way to get rid of germs and protect yourself against many infections including the common cold and the flu. Cleaning your hands will help you stay healthy and will protect others from getting sick too.

b. Infectious disease through water: Another name of water is life. Because we did not alive without water. Water-borne diseases are any illness caused by drinking water contaminated by human or animal faces, which contain pathogenic microorganisms. Water, sanitation and hygiene have important impacts on both health and disease. The most frequent causes of food or water-borne illnesses are various bacteria, viruses and parasites. Water-borne diseases are thought to be the most common of all acute illnesses. Symptoms vary with the causative agent and range from slight abdominal pain and nausea to retching, vomiting, abdominal cramps, fever and diarrhoea. Fever, chills, headache, malaise and muscular pains may accompany gastrointestinal

symptoms. Vomiting, with or without diarrhoea, abdominal cramps and fever are common symptoms of viral disease or staphylococcal intoxication. Certain food-borne illnesses can present with meningitis or septicaemia or with neurological symptoms. Access to clean water is a key factor in reducing poverty, improving health and achieving sustainable development. Always disinfecttap, pipeline, tube-well, ponds, and any kind of sources of water and drink boil water for your good health.

c. Infectious disease through green fruits and vegetables: Fruits and vegetables provide vitamins, minerals, and fiber that your body needs. They're also packed with hundreds of disease-fighting phytochemicals - natural substances that work as a team to protect good health. While the exact mechanisms of specific phytochemicals are being studied, one thing is clear: the different colors of fruits and vegetables - green, yellow-orange, red, blue-purple, and white - all contain a unique array of disease-fighting phytochemicals that work together with vitamins and minerals to protect our health. But several times the fruits and vegetables are not fresh because maximum time they drop down in the market in open air condition or pesticide's makes it unhealthy for our life. So before prepare any food this should wash properly and then cook. Sometimes we eat some fruits and vegetables green, often they did not digest properly and at the result we suffer indigestion problem.

d. Infectious disease through insects: insects liken mosquitoes, lice, fleas, bed bugs and ticks are able to transmit a number of diseases caused by infectious agents: viruses (chikungunya virus, yellow fever, dengue fever, etc.), bacteria (Lyme disease, plague, etc.), parasites (malaria, sleeping sickness, leishmaniasis, filariasis, etc.).Of the many diseases spread by insects, very few are actually caused by the insects themselves but rather, by other organisms passed on when they feed or bite. Insects are capable of spreading diseases caused by many different types of micro-organisms including bacteria, viruses, protozoans, etc. In these instances it is the micro-organism that is the pathogen (disease causer) and the insect involved is known as the vector. Biting insects are active at all times of the day and night. However, some prefer different times of day eg.the mosquitoes that spread malaria are mainly active after dark but the mosquitoes that spread yellow fever and dengue fever are active during daylight hours. Infections may be transmitted through Lizards, rats, Cockroach, Bugs and other insects or animals.

Some precautions would be taken for this type of infections - Wear loose fitting, light coloured clothes (insects can reach skin through tight clothing), long trousers and long sleeves. Don't go barefoot, mosquitoes are most active, so it's important to cover up in the evenings in malaria risk regions. Clean surrounding regularly and use disinfection aids like phenyl, DDT Powder, Dettol, Naphthalene etc. use properly.

2. Cleanliness in Home: It is rightly said that cleanliness is next to godliness. Cleanliness is the finest human endeavor. It should become the way of our life and we should include the noble habit from the very early days. Cleanliness is an integral aspect of our sustenance and progress. As dirt is a blot in our living, we should give priority to eliminate it from our lives. As a rudimentary step, our environment must be cleaned in all aspects. We should not litter garbage here and there. We must always keep one thing in our mind that our actions should not be a hurdle for anyone's comfort. Healthy living denotes clean surrounding and purity in thoughts. Cleanliness is the stepping stone of progress.

Attention should be paid to cleanliness and length of nails. Long nails are the ideal home for bacteria. Toilet must have been always clean, and water pipes need to work perfectly without a dripping and the clogging. Wash hands with antibacterial soap and hot water. Walls, floors as every object in home need to be clean. In : lean objects, there should not be even minimum of dust or grease which can be good environment for germs .Raw rood, especially meat and greens should be adequately separated. Rooms should be well ventilated and any type smoke inside the room is harmful for all so, special attention should be taken for this matter.

3. Safe preservation of drinking water and use: Water is essential for life. The amount of drinking water required is variable. It depends on physical activity, age, other health problems, and environmental conditions.

Those working in a hot climate up to 16 liters a day may be required. Typically in developed countries, tap water meets drinking water quality standards, even though only a small proportion is actually consumed or d in food preparation. Other typical uses include washing, toilets, and irrigation. Reduction of waterborne leases and development of safe water resources is a major public health goal in developing countries. The Jinking water contribution to mineral nutrients intake is also unclear. Inorganic minerals generally enter surface water and ground water via storm water runoff or through the Earth's crust. Treatment processes also lead to re presence of some minerals. Examples include calcium, zinc, manganese, phosphate, fluoride and sodium compounds. Springs are often used as sources for bottled waters. Tap water, delivered by domestic water systems in developed nations, refers to water piped to homes and delivered to a tap or spigot. For these water sources to be consumed safely they must receive adequate treatment and meet drinking water regulations.

Access to safe drinking water is indicated by proper sanitary sources. These improved drinking water sources include household connection, public standpipe, borehole condition, protected dug well, protected spring, and rain water collection. Unprotected wells, unprotected springs, rivers, ponds or overhead water tank, and tanker truck water can be harmful for health. Access to sanitary water comes hand in hand with access to improved sanitation facilities for excreta. These facilities include connection to public sewer, connection to septic system, pour-flush latrine, and ventilated improved pit latrine. Unimproved sanitation facilities are: public or shared latrine, open pit latrine, or bucket latrine.

4. Safe drawing out of treated water: In today's home, we use water in lots of ways. We use water for various purposes for our daily life like bathing, washing cooking utensils, vegetables and fruits, garments, cleaning rooms, watering of houseplants etc. Women are forced to spend large parts of their day fetching water. For the purpose these works a large amount of water should be made refuse and so many germs can made through this dirty

water. Mosquito and flies are evolving through this stored dirty water and few area or wall should be affected by damp also. As a result of that every members of your family can suffer a lot of diseases. The water-related human health issues has become increasingly comprehensive, with the emergence of new water-related infection diseases spread through water, sanitation- and hygiene-related diseases which include salmonellosis, cholera, shigellosis, malaria. Poor sanitation, water and hygiene have many other serious repercussions. Children - and particularly girls - are denied their right to education because their schools lack private and decent sanitation facilities. So, for storage this treated water put off it to a particular soak pit or drawing out through drain. This treated water can be used for garden or kitchen garden through a suitable planning. If there is no proper drainage system a permanent water soaking dig can made for the house hold purpose.

5. Safe drawing out of litter: There are so many litters deposit in house every day for house hold purpose like vegetables peel of skin, scale offish, bones, paper bag, leafs etc. Lac of regular house cleaning and drawing out litters the environment of house may be polluted and disturbance of fly, mosquito various types of insects, rats, dogs, cats will be increased and also various types of disease should be formed.

For safe drawing of litters a pit can made on the soil, around 4 feet length and width and 3 feet depth and put all litters into this garbage and when it is totally loaded filling it by soil. Cow dung also put into this pit. After one year it would be putrefied it should be make compost fertilizer which very effective for garden. So, construction of this type of fertilizer pit is very easy and yours home will be became healthful.

6. Safe drawing out of excreta: Human excreta and the lack of adequate personal and domestic hygiene have been implicated in the transmission of many infectious diseases including cholera, diarrhea, typhoid, hepatitis, polio, cryptosporidiosis, ascariasis, and chistosomiasi. Proper excreta disposal and minimum levels of personal and domestichygiene are essential for protecting public and also child health. Once pathogens have been introduced into the environment they can be transmitted via either the mouth (e.g. through drinking contaminated water or eating contaminated vegetables/food) or the skin (as in the case of the hookworms and schistosomes), although in many cases adequate personal and domestic hygiene can reduce such transmission. Therefore for maximum health protection, it is important to treat and contain human excreta as close to the source as possible before it gets introduced into the environment

For practical purposes sanitation can be divided into on-site and off-site technologies. On-site systems (e.g. latrines) store and/or treat excreta at the point of generation. In off-site systems (e.g. sewerage), excreta is transported to another location for treatment, disposal or use. Corporation, municipality or panchyet can help for building healthful sanitary latrine through their financial or technical assistance.

7. Safe preservation of food and use: We live through eating food and also we suffer few diseases through intake food. So food protection and food preservation have one aim in common they are intended to prevent contamination and spoilage of foods. All food must be protected at all times during storage and preparation from the following contaminants: any water that is not known to be safe, including overhead leaks and drips, dirty hands, coughing and sneezing, dust and soot, flies, rodents and other vermin, insecticides and other chemicals, unclean utensils and work surfaces, cigarette smoke. Anyone handling food should avoid bad habits such as scratching, touching the hair, nose or mouth, having unclean hair, unclean and long fingernails, smoking, and coughing or sneezing in food handling and preparation areas. They should always wash their hands before starting to prepare food, and after every interruption, particularly after using the toilet. People who have skin infections, diarrhea or sore throats should avoid handling food.

There are other general principles for preventing food contamination:

- All water used in food preparation should be wholesome.
- All dishes, glasses and utensils must be kept clean by regular washing in clean water, and clean utensils should be kept covered.
- All surfaces that come into contact with food should be meticulously clean.
- Food storage, preparation and serving areas should be free of pets, rats, mice and insects.
- Food should be covered, and kept separate from chemicals and poisons (which should be clearly labeled).
- Cloths that come into contact with dishes and utensils, and that are used to cover food, need to be changed daily and boiled before use.

8. Clean hands by soap after latrine: One cannot deny that toilets are an important part of living. Substances that are not need or are harmful to the body are passed out. These wastes are harmful and poisonous and can be used as agents in disease spreading. It is thus important to dispose well of these wastes so that they do not pose a threat to human health. Toilets are visited by users to wash their hands or to check their appearances in the bathroom mirror. It is important that the toilet is maintained well with a high standard of hygiene so that germs are not easily spread. Always aware every member of your family to wash hands by soap or liquid soap for health and hygiene.

9. Clean hands by soap before and after serving or eating: Hand is a very important part of our body. We do maximum work by our hands and also touch or catch various things. Due to different types of work our hands become dirty and also may be affected by germs. If the germs enter into our body we should be suffer various types' of stomach disease at the same when we serve any food by dirty hand it may also affect same. Antiseptic hand wash

refers to washing hands with water and soap or other detergents containing an antiseptic agent. So, must clean your hands before and after eating by soap for protection your health.

10. Cutting nails regularly: Nails are made up of layers of protein called keratin and can be indicative of our general health. They grow on average 1 mm per week, unless there are dietary issues or medical conditions that prevent this. The purpose of nails is to protect the ends of our fingers and toes from trauma and to help pick things up. Taking good care of your nails and maintaining their cleanliness is very important. As many people talk with their hands they are often seen by many and can represent to others an overall picture of our personal hygiene. We should cut our nails regularly and keep them clean. The cleanliness of nails is including in the cleanness of hands. The germs hidden in nails enter the stomach along with food and cause many ailments.

Nails should not be bitten by teeth because dirt that creeps into them may cause several ailments. Nails can be kept clean by using a simple mild soap, warm water and a nail brush.

11. Regular brush teeth and bathing: Keeping your mouth healthy will help you to keep other parts of your body healthy as well. We should be brushing our teeth at least twice every day, once in the morning and once before bed. Be sure to brush all of your teeth, even the ones in the back that are hard to reach. If you can do it yourself, you should floss your teeth, too. Whenever we eat, food can be left behind between our teeth, and this can cause problems. Gently move the floss between each tooth in order to make sure your remove any food or plaque left behind after brushing. It is a good idea to brush your tongue in order to have fresh breath, too. Eating a healthy diet full of fruits and vegetables will help to keep your mouth and teeth clean.

Bathing cleans the skin. It also cleans the mucous mem-branes of the genital and anal areas. Complete or partial baths, tub baths, or showers are given. Most people like having their hair washed regularly. Many people enjoy the feeling of having their hair washed and feel better when it is done. The method depends on the person's condition, self-care abilities, and personal choice. Taking a bath or shower means washing your body with soap and washing your hair with shampoo. How often you take a bath or shower will depend on your activities.

12. Leave home with put on shoes: Shoes protect your feet from germs. Shoes can protect your feet from some acute injuries, but I've noticed that people step on nails with or without shoes. When your feet have a loss of protective sensation, the shoes (and socks) you wear can either help you to live a healthy and productive life, or can contribute to repeated open sores that may gradually lead to amputation. Many podiatrists believe that the number one issue with not wearing shoes is the lack of support offered to the foot and any damage that can occur as a result.

Without shoe walking has the possibility of picking up bacteria, fungal infections and viruses as a result of going barefoot Possibilities include plantar warts, a viral infection that can often be found on dirty surfaces, or athlete's foot, a fungal infection that is commonly found in locker rooms and other wet surfaces. Another concern is the possibility of stepping on a piece of glass or a rusty nail that can lead to a tetanus infection. Also of concern is the possibility of contracting hookworm. Hookworm is a parasite that is found in animal feces. It enters the skin by burrowing under the surface when it comes into contact with the feet. Children can step on hookworm on the sandbox, dirt or grass.

13. Covered your mouth or nose by handkerchief when sneezing or coughing: Illnesses such as the flu are caused by viruses that infect the nose, throat and lungs. They're usually spread from person to person when an infected person coughs or sneezes. This means that if a person coughs or sneezes into their hands, they spread their germs to everything they touch. keeping healthy and Preventing the spread of germs caused by coughing and sneezing:

- Cough or sneeze into handkerchief and say' Sorry' if anybody with you.
- Cover your cough or sneeze with your hand; if you don't have a tissue orhandkerchief, then immediately wash your hands.
- Cough or sneeze into the crook of your elbow.
- Keep frequently touched common surfaces clean, such as telephones, computer keyboards, doorknobs, etc.
- Wash your hands or use an alcohol-based hand sanitizer frequently. Avoid touching your nose, eyes or mouth to prevent germs from spreading.

14. Avoid coloured and aluminium coating food and sweet: Maximum foods are made by artificial colours which is very harmful for our health. Be it your favourite candy, tomato ketchup, jam, jelly, breakfast cereal, fruit juice, soft drink, sweet etc., all of these products are loaded with synthetic dyes. Synthetic dyes are coal or petroleum-based and at times are not even purified chemicals. These chemicals have a deleterious effect on your health and some of these chemicals are also carcinogenic in nature. Due to these colours we can suffer a lot of health problems like indigestion, stomach ache, head ache and also cancer.

A compendium is provided of aluminium compounds used in industrial settings, and as pharmaceuticals, food additives, cosmetics and as other household products. Most aluminium compounds are solids exhibiting high melting points. Asthma-like symptoms, known as potroom asthma, have been the most intensely investigated respiratory effect. Aluminium exposure from drinking water has been extensively investigated in relation to the development of neurological disorders.

15. Use ORS for treatment of stomach and diarrhea: Diarrhea describes bowel movements (stools) that are loose and watery. It is very common and usually not serious. Many people

will have diarrhea once or twice each year. It typically lasts two to three days and can be treated with over-the-counter (OTC) medicines.

Some people often have diarrhea as part of irritable bowel syndrome or other chronic diseases of the large intestine. The most common cause of diarrhea is a virus that infects the gut. The infection usually lasts for two days and is sometimes called "intestinal flu" or "stomach flu." Diarrhea may also be caused by infection by bacteria, eating foods that upset the digestive system, Medications, Radiation therapy, Diseases of the intestines etc. Symptoms of diarrhea can be broken down into uncomplicated (or non-serious) diarrhea and complicated diarrhea. Complicated diarrhea may be a sign of a more serious illness. Symptoms of uncomplicated diarrhea include: Abdominal bloating or cramps, Thin or loose stools, Watery stool, Sense of urgency to have a bowel movement, Nausea and vomiting and the symptoms of complicated diarrhea include: Blood, mucus, or undigested food in the stool, Weight loss, Fever.

Oral rehydration therapy (ORT) or oral rehydration salts or solutions (ORS) is a simple, cheap, and effective treatment for diarrhea-related dehydration, caused by e.g. cholera. It consists of a solution of salts and other substances such as glucose, sucrose, citrates or molasses, which is administered orally. It is used around the world, but is most important in the Third World, where it saves millions of children from diarrhea—stills their leading cause of death. Oral Rehydration Therapy is the giving of fluid by mouth to prevent and/or correct the dehydration that is a result of diarrhea. As soon as diarrhea begins, treatment using home remedies to prevent dehydration must be started. In the human body, water is absorbed and secreted passively; it follows the movement of salts, based on a principle called osmosis. So, in many cases, diarrhea is caused by intestine cells secreting salts (primarily sodium) and water following passively along. Oral rehydration does not stop diarrhea, but keeps the body hydrated and healthy until the diarrhea passes. Recipe There are several commercially available products but an inexpensive home-made solution consists of 8 level teaspoons of sugar and 1 level teaspoon of table salt mixed in 1 liter of water. A half cup of orange juice or half of a mashed banana can be added to each liter both to add potassium and to improve taste. If commercial solutions are used, true rehydration solutions should be used and sports drinks should be avoided (especially in younger children) as these solutions contain too much sugar and not enough electrolytes.

10.2.3 Awareness Campaign on Fever

Fever is a state of the body in which its temperature rises above the normal body temperature due to injury, infectious inflamation and swelling or due to some unknown internal or external reasons.

The normal temperature of human body is 90˚F; when it goes upto 100˚F or more, it is called fever. In the other scale the temperature of a normal human body ranges from 35.8˚C to 37.5˚C. If it crosses 37.5˚C, it is said that the person has an attack of fever.

Generally the rise in temperature may be feit by touching the forehead or skin but to know the temperature correctly a thermometer is used. Usually the thermometer is place in the arm-pit or under the tongue and it is kept in the arm-pit or under the tongue for to 2 minutes. The temperature under the tongue is generally 1°F higher than that in the arm-pit. Before using the thermometer for another person, it should be shaken will and kept in anti-septic lotion for harfan hour.

Causes (of Normal) Fever :

(1) Germs or virus infections lead to Influenza, malaria, kalajwar, Typhoid, Pneumonia, Meningilther, inflamation in the middle ear, abscess and Tuberculosis.

(2) Bleading due to brain injury.

(3) Side-effects of some medicines.

(4) Caugh and cold due to hot surrounding atmosphere

(5) Wrine infection, inflamation of Tonsil, Deptheria, measles, chicken pox, etc.

(6) Various types of Bacteria, virus, Fungi and cancerous cells & tissues cause fever.

Symptoms of fever :

(1) Flushed face

(2) Skin becomes hot and dry

(3) Loss of appetite

(4) Headache and vomitting tendency or even vomitting

(5) Muscle pain in hands and legs

(6) Dearcase in urine

(7) High fever may result in delirium convulsions panticularly in infants and children.

(8) Short-term fever may last for a few hours to a few days for example, fever from cough and cold, tonsilite fever, influenza, etc.

(9) Long-term fever may last for some days to some months for example —

Typhoid, Tuberculogis, cancer, etc.

Types of fever :

(1) If body temperature is 100°F or more, it is called fever or Pysexia.

(2) When body temperature is over 105°F, it is called hyper pysexia.

Fever caused by cough and cold, bleeding in the brain, malaria, kalajwar, Typhoid, Meningitis, etc. fall in this group.

(3) Continued Fever. Usually high temperature is continuous from the outset. Without great remission or interruption.

(4) Intermittent Fever : Intermitten or periodical fevers are those in which the discase is subject to periodical intermission or remission malaria, kalajwar, b-colai infection in urinary bladder leads to such fever.

(5) Fever with shrrering - This type of fever is caused with shivering cold. It may be caused by malaria, abscessin, fiver or lungs urene infection (infection of urinary bladder).

(6) Hectic fever : This type of fever comes with shrivering and having remissions with sweating within hours. For example — malaria, septicaemia.

(7) Tuberculosis of in the lung results in this type of fever having remissions with sweating at right.

Treatment of fever :

Fever is not a discase; it is a symptom of different discases. Its treatment should follow the causes of fever.

The general treatment of fever is given below -

(1) The patient should be kept in a clean, comfortable room with enough air and light. He should be in complete rest.

(2) Fine and loose clothes are advisable for the patrent. The children should better be kept bare, if possible.

(3) No part of the patient's body should be covered or put under a blanket.

(4) When the temperature goes up, covering may be harmful.

(5) Keep the windows open to let in cool fresh air.

(6) (a) Never allow the temperature to rise above 100°F. Steps should be taken to keep it below 100°F.

(b) Fan the head of the patient.

(c) Put wet-band on the forehead.

(d) Ice-bag may be placed on the head.

(e) Sponge the body frequently with towel.

10.2.4 Awareness Campaign on Road Safety

Rules of safe cycling/riding on motor bikes

- Learn riding a cycle or motor cycle properly.
- Learn riding it in a safe place.
- Check the vehicle before riding it to ensure if it is in proper shape.
- Follow traffic signals.
- Keep the hights of the vehicle bright.
- Keep safe distance from other moving vehicles.
- Never ride in a zig-zag way.
- Be tension free while riding.
- Never ride in an angry or depressed mood, non in a drunken state.
- Ride at a controlled and stipulated speed.
- Don't smoke while riding.
- Put on the helmet while riding.
- The number of rider should not be more the two.
- Don't compete with other vehicles while riding.
- Don't use a mobile phone while riding.

Rules of Bus/Motor Vehicles (Tax) driving/movement

- Use the stipulated/specified stoppages.
- Use the specified sheds.
- Collect tickets from the counters before waiting for the vehicle.
- Don't make haste while boarding a vehicle or getting down from it.
- Stop the vehicle at a safe place for the passengers to board or to get down.
- Never get on toa runningvehicle.
- For a safe and comfortable journey avoid carrying unnecessary luggage/goods.
- Don't over-crowd a vehicle.

- Don'throw anything from a running vehicle.
- Don't distrub the driver unnecessarily.
- Never stick your head or hand out of the window/door of the running vehicle.
- Don't ride on the roof or stand on the back of the vehicle.
- Help the old, the handicapped and the children to sit, to board or to get down and to cross the road.
- Never carry explosives or inflamable objects.
- Don't smake while driving or never drive in a drunken state. Passengers too should not smoke in the vehicle. Nor should he board a vehicle in a drunken state.
- Be aware of pick-pockets or unwanted people.
- Follow traffic signals while driving.
- Use the seat-belt.
- Check the vehicle minutely before driving it. See to it that the tights of the vehicles are bright.
- Drive patiently and skitfully.
- Keep the lisence and other documents with you while driving.
- Learn driving from anthorised Driving School.

Rules of safe movements for children

- The guardians should be alert about open draris bana skens, man hole, etc. while moving on roads.
- Keep your child on your left. Use Zebra Crossing to cross the roads with your child.
- Keep watch on both the sides, follow traffic signal and then cross the road.
- Children should not drive a vehicle.
- Don't board a high-speed vehicle or an over crowded vehicle with your child.
- Never allow your child to play on roads.
- Train your child to move safety on roads and make him aware of the rules of the road.

SAFE DRIVE SAVE LIFE

সাবধানে চালাও, জীবন বাঁচাও

SAFE DRIVE SAVE LIFE

আমরা প্রতিদিন সুস্থ দেহে, নিরাপদে অপেক্ষারত প্রিয়জনদের কাছে ঘরে ফিরে আসব। এই শপথ একদিন, দু' দিন বা একটি সপ্তাহের নয়; এ আমাদের আজীবনের অঙ্গীকার হোক। আসুন, আমরা সকলে মিলে মাননীয়া মুখ্যমন্ত্রী মমতা বন্দ্যোপাধ্যায়ের দীপ্ত কণ্ঠে উচ্চারিত Safe Drive Save Life-এর অঙ্গীকার দৃঢ় করবার শপথ নিই। শপথটি নীচে দেওয়া হলো—

আমাদের প্রতিজ্ঞা

পথ সংস্কৃতি জানব
ট্রাফিক নিয়ম মানব
আমি সতর্ক হয়ে চলব
সুস্থভাবে এগিয়ে যাব
পথকে জয় করব
শান্ত জীবন গড়ব
পথ শুধু আমার নয়
এ পথ মোদের সবার
তা সর্বদা মনে রাখব।

10.2.5 Awareness Campaign On Fire Safety

Fire is chemical reaction from which heat, light and smoke produced.

⇒ Three main elements of fire?

Three main elements of fire? are fuel, Oxygen, heat

Types of Fire

A-Class fire : The fire of solid flammable matirial, like-wood, coal, paper, plastic etc.

B-Class fire : The fire of liquid flammable material like-petrol, diesel, kerosene etc.

C-Class fire : The fire of gaseous, flammable material like- LPG gas, cooking gas etc.

D-Class fire : The fire of flammable metallic material like magnesium etc.

⇒ Suitability of fire Extinguishers on different types of fire :

	Classification of fire			
Types of Extinguishers	A	B	C	D
Water Type	Yes	No	No	No
Foam Type	Yes	Yes	No	No
Dry Chemical Powder	No	Yes	Yes	Yes
Dry Chemical Powder-ABC	Yes	Yes	Yes	No
Carbondioxide	No	Yes	Yes	No

A-Class fire

B-Class fire

C-Class fire

D-Class fire

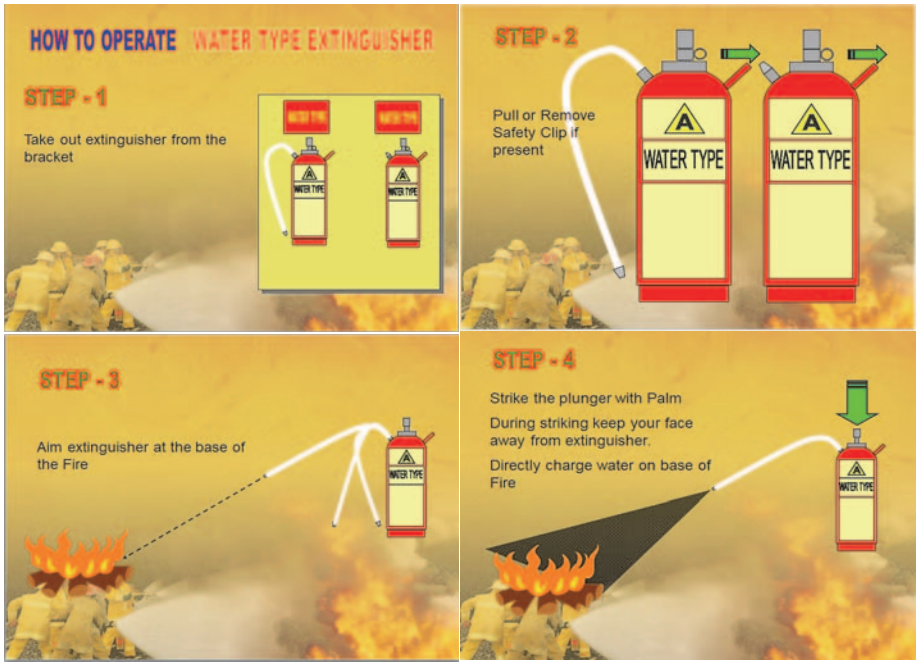
How to use different types of fire extinguishers?

Water type fire extinguisher :

How to operate **Water type** fire extinguisher?

Step-1	Step-2	Step-3	Step-4
Take out extinguisher from the bracket	Pull or Remove Safety Clip if present	Aim extinguisher at the base of the fire	Strike the plunger with Palm During Striking keep your face away from extinguisher.

* Directly charge water on base of Fire

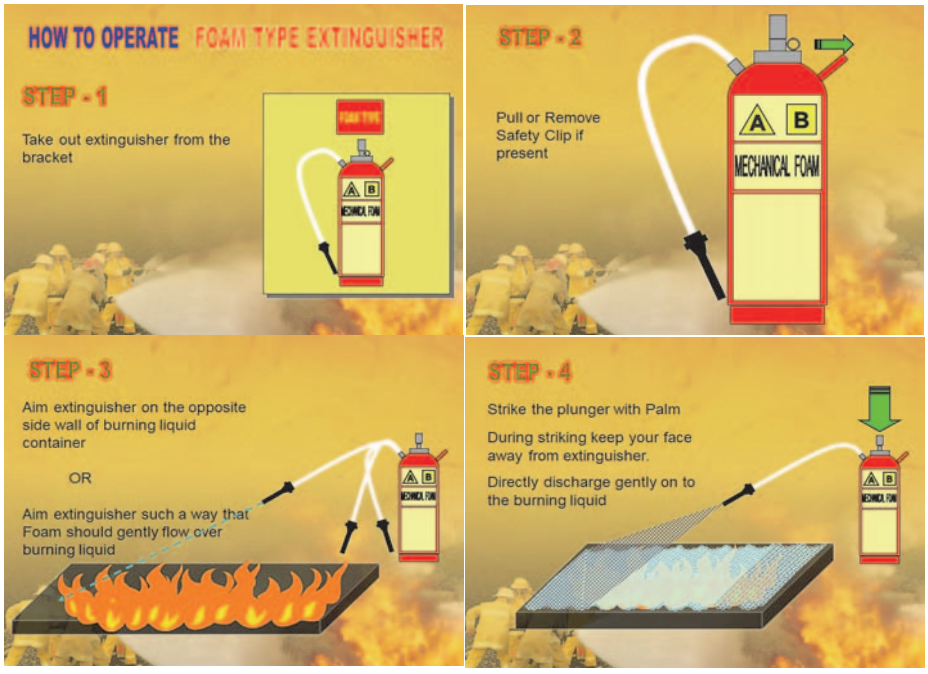


Mechanical foam extinguisher :

How to operate **Foam type** fire extinguisher?

Step-1	Step-2	Step-3	Step-4
Take out extinguisher from the bracket	Pull or Remove Safety Clip if present	Aim extinguisher on the opposite side wall of burning liquid container or Aim extinguisher such a way that Foam should gently flow over burning liquid.	Strike the plunger with Palm During Striking keep your face away from extinguisher.

* Directly discharge gently flow over burning liquid.



How to operate **dry chemical powder** extinguisher?

Step-1	Step-2	Step-3	Step-4
Take out extinguisher from the bracket.	Pull or Remove Safety Clip if present.	Aim extinguisher at the base of the Fire.	Strike the plunger with Palm During Striking keep your face away from extinguisher.

* Directly charge DCP on base of flame in sweeping action

Co_2 type fire extinguisher

How to operate carbondioxide extinguisher?

Step-1	Step-2	Step-3
Hold the handle firmly and transfer the extinguisher to fire spot	Pull or Remove Safety Clip if present	Hold the discharge horm firmly Open the Cylinder Valve in anticlockwise Directly charge CO_2 on base of flame

* Open the Cylinder Valve in anticlockwise
* Directly charge CO_2 on base of flame in sweeping action

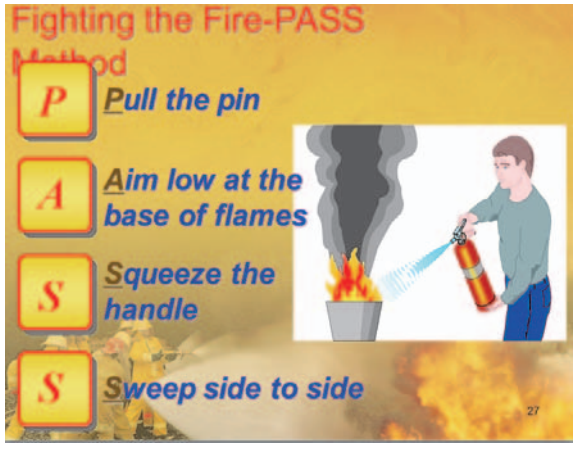
Fighting the fire-Pass Method :

P - Pull the pin

A - Aim low at the base of flames

S - Squeeze the handle

S - Sweep side to side



N: B

After usage of fire extinguisher it shoud be kept separately.

The use fire extinguisher should be refilled as early as possible.

10.2.6 Awareness Campaign On Electical Safety

We need to be more smart for safe use of electricity, should remain alert during usage of electrical appliances and that way we may avoid danger in electricity.

So, the following steps are to be always maintained :

A. Steps to be followed to avoid outdoor electrical accidents.

(1) Do not touch snapped current carrying conductor lying on the ground. Immediatelyinform the electricity office.

(2) Do not touch the person getting electrocuted with bare hands. Try to save that person with the help of dry bamboo poles or dry non conducting ropes, objects etc.

(3) Do not cut stay wires of electric poles. These results in electric over-head line getting lowered to the ground which may cause accident to general people.

(4) It is dangerous to cut the earthing wire attached to electric poles.

(5) Cutting or trimming of trees close to electric lines should be done after informing the nearest electricity office.

(6) Hooking or tapping of electricity is a punishable offence. Such illegal use of electricity may cause power interruption and death of human beings.

(7) Dwelling houses should be built, maintaining a safe distance from electric over-head line for the safety of dwellers.

(8) The generator or TV cable line should not be drawn on electric poles. It may cause accident to maintenance worker of Electricity Company.

(9) It is dangerous and illegal to electrify the metal wire of fence given for protection of crops in agricultural fields. Fatal accident may occur to human beings and animals by touching the electrified fence.

B. Steps to be followed to avoid electrical accident in domestic houses :

(1) To ensure safety, the main switch and electrical wiring are to be earthed properly.

(2) Fuse wire gets blown due to flow of excess current in electrical circuit. So, fuse wire with proper rating is to be used for safety in house wiring.

(3) The electrical wiring and appliances should be installed and kept out of reach of the children.

(4) The switch of the plug point should made ‘off during plugging or unplugging.

(5) Three pin plug is to be used for electrical appliances.

(6) Always use IS1 marked electrical appliances to avoid risk.

(7) It is dangerous to dry wet clothes near the electric lines. Accident may occur if the wet clothes come in contact with the live electrical lines.

10.2.7 Awareness Campaign On Thalassaemia

In 1925, Dr Thomas B Cooley gave the first description of severe Thalassaemia. He described series of cases with anaemia, enlarge spleen and liver in children. The disease was widely prevalent in countries adjoining the Mediterranean sea, named as Thalassaemia. The word 'Thalassaemia' is originated from Greek word; 'Thales' means sea and 'Haima' meaning blood . It was thought that to prevent malaria infection, red blood cell changes its hemoglobin gene. In that way Thalassaemic changes occurred in globin gene. In Cyprus a grave was found which was made in the year 7000 BC. Thalassaemia gene was detected in human particle obtain from it. The Thalassaemia is a congenital, hereditary recessive disorder caused by mutation of globin gene affecting the globin chain of hemoglobin molecule. There are two types of globin chain in hemoglobin. One hemoglobin molecule contains two alpha peptide chain and two Beta peptide chain attached with one hemo molecule. Gene for alpha globin chain is present in the chromosome 16, whereas gene for beta-globin is situated on chromosome 11. Thalassaemia is an inherited disorder which is caused due to the mutation of cither alpha or beta gene clusters. Each year about 400,000 infants are born with serious hemoglobinopathies and carrier frequency is about 270 million . Approximately 3-4% population of India are Thalassaemia carrier. In West Bengal approximately 10% population are Thalassaemia carrier. In India it is more prevalent in communities like Sindhis, Punjabis, Gujaratis, Marwaris, Bengalis. Both parents are thalassaemia carrier then there is a 25% chance of a thalassaemic child to be born. A thalassaemic child carry two defective globin gene . Thalassaemia disease can not be transmitted by mosquito bite. It is not a contagious disease, can not be sexually transmitted.

Thalassaemia carrier :

- A thalassaemia carrier carries one defected gene. They carry this gene from one generation to generation.
- Both sexes are equally affected.

Thalassaemia is mainly two type- Alpha Thalassaemia and Beta Thalassaemia

Symptoms of Thalassaemia :

- Irritability, unwillingness to feed, recurrent infection like cough, cold .
- Anaemia and weekness
- Facial bone deformity (Thalassaemic Facies)
- Enlarged liver and spleen.
- Liver disease , endocrine gland dysfunction, cardiac problem due to iron deposition
- Delayed pubertal changes

Treatment :

- Blood transfusion and monitoring- Generally one patient requires blood transfusion **at** 3 4 weeks interval when hemoglobin drops down below 7 gm%. Packed Red blood cell may be transfused for two to three consecutive days , it depends on hemoglobin level and symptoms of patient.
- They require regular Folic Acid and Calcium supplement. VitC and iron tonic should not be given.
- Iron chelation - Generally after 10-20 units blood transfusion , iron chelation required . There *are* three types of chelator - Deferipron, Deferasirox and Desferoxamine.
- Hormone Therapy- Thalassaemia patient required hormone supplement to maintain proper growth and pubertal development.
- Splenectomy- When it is hugely enlarged , splenectomy required.

- Bone marrow transplant and gene therapy- Thalassaemia is a life long condition . It can be cured only by bone marrow transplant and gene therapy or Stem Cell Therapy. These methods are very expensive and not readily available or are in the experimental stage.; patients survive only on supportive management. The average cost of treatment involving transfusions, chelation & other therapies is more than Rs.l,00,000/-peryear .

Thalassaemia patient should not eat any iron containing food.

Thalassaemia Impact on Children :

- Due to the nature of the disease a thalassaemic child miss classes and a large proportion may drop out eventually.
- A Child with Thalassaemia may have problems with growth & development and comparison with peers may cause mental distress .
- A Child with Thalassaemia may have a permanent intravenous injection (portacath, vascuport)site under the skin & should not participate in contact sports or swimming.
- " Teacher's insufficient knowledge on the nature of the disease & its impact on the child pose barriers to the integration of the chronically ill child into the classroom situation.

Carriers and their impact on society:-

- Thalassaemia carriers are healthy and they can not be differentiated from a normal person. Thalassaemia carrier can donate blood.
- So an apparently normal person may be a Thalassaemia carrier. A carrier marries another carrier unknowingly.
- Carriers form the potential channel of propagation of Thalassaemia to the next generation .
- Marriage between two carriers raises the risk of birth of a thalassaemic child.
- Extensive Pre marital & early pre natal screening of suspect/carrier couple could prevent such births.
- Regular counseling of carriers & their parents is an essential component of the campaign against the propagation of Thalassaemia

Thalassaemia prevention :

- To prevent birth of thalassaemia child the only way is to avoid marriage between two thalassaemia carrier.

If both parents are thalasasemia carrier, within 8-12 weeks of pregnancy Pre natal diagnosis is to be done to prevent birth of a Thalassaemia child.

Role of youth in restricting the disease:-

- Awareness among youth is the driving force behind the campaign for elimination of thalassaemia
- Conscientious young persons will proactively take part in screening programme and imbue others to follow suit.
- Conversant young persons are reliable vehicle for spreading the message and for generating enough peer pressure to bring about the much needed change in the prevailing mind set.
- It is expected that those young persons identified as carriers Realizing the gravity of the situation will choose their partners judiciously
- To aware students as well as Teacher
- Mandatory thalassaemia carrier detection before getting admission to school and college and before marriage.

10.3.1 Leadership Quality Development Programme

The routine activities at school may lead to boredom and monotony among the students. If this continues for a long time, the students may develop negative feeling against school atmosphere. So to provide the students mental sustenance and to develop the finer qualities in them, leadership qualities through social, patriotic, sports and cultural activities should be nurtured. According to modern educational philosophy, the subjects that were treated as extra-curricular activities have now become an integral part of the curriculum.

School is the first and foremost institution that develops and recognises the hidden talents of the students regarding sports, creative skills and other activities (Krityalies). The students take active part in different programmes of the school thereby developing social, patriotic, sports and cultural qualities as well as the leadership qualities. The parents expect their sons and daughters to become a social beings through education. The school helps the students adjust themselves to different atmospheres. At the same time it helps them become self conscious and humane while intermingling with different students. They learn through activities; they apply their knowledge at every stage of life. The school make them sociable through the rules and regulations of the institution, curricular activities and through pupil-pupil, teacher-pupil, pupil-non-teaching staff relationships and exchanges. It also happens during different programmes like Cultural function, games and sports, observation of the Republic Day and Independence Day, birth anniversary of great people, quiz, seminar, and training camps. The students develop values, morality, good taste, co-operation, sympathy, empathy, social bond, communal harmony, fraternity through these programmes. The teacher-student relation becomes easy and friendly. Students with particular skills can exhibit their skills before all. Though backward in studies, they may display their supremacy in their own field of excellence. They may get back their confidence and display their skills. They may overcome their frustration and this confidence may improve his/her performance in academic subjects also. The development of his leadership qualities help in all round development of his/her personality. The student will project himself/herself in the larger society and his leadership quality will also flourish.

10.3.2 Participation In Observation Days

Object: Participation of students in the programmes of the Observation Days that are observed at state, national and international levels has been included in school curriculum with a view to developing patriotism and leadership qualities among the students. The importance and significance of the day may be discussed in detail after the prayer on such occasion in order to develop awareness among them.

The birth days of the great people are included in the list of observation days. Moreover, a list of the observation days—both national and international — are given below. A school may observe the days as selected by the school management.

Date	Occasion	Date	Occasion
12 January	National Youth Day	20 August	Goodwill Day
23 January	Netaji Janma Jayanti	24 August	Raksha Bandhan
24 January	Girl Child Day	29 August	National Sports Day
25 January	National Voters' Day	01 September	International Peace Day
26 January	Republic Day	1-7 September	National nutrition Week
21 February	International Mother Language Day	05 September	National Teachers' Day
08 March	International Women's Day	08 September	Annual Blood Donation Day
21 March	Anti- Communalism Day	13 September	Positive Thinking Day
07 April	World Health Day	02 October	National Non-violence Day
14-20 April	Fire Protection Week	10 October	World Disaster Prevention
2nd Sunday of May	World Mothers' Day	11 October	National No Smoking Day
21 May	Anti Terrorist Day	14 October	World Human Day
26 May	National Integration Day	16 October	World Food Day
31 May	No Tobacco Day	01 November	Poverty Elimination Day
05 June	World Environment Day	07 November	National Cancer Awareness Day
14 November	Children's Day	11-17 November	International Science and Peace Week
14 June	World Child Labour Day	19 November	National Communal Harmony Day
21 June	International Yoga Day	01 December	World Aids day
26 June	Anti Drug Day	03 December	International Handicap Day
01 July	Treatment Day	05 December	International Volunteers' Day
12 August	International Youth Day	10 December	National Pulse Polio Day
14 August	Kanyashree Day	24 December	Consumers' Protection Day
15 August	Independence Day		

10.3.3 Particicipation in Physical Education Programmes

In the life of a student taking part in Physical Education programmes is as essential as the necessity of food, light, air and water in one's life. Children have a natural attraction towards games irrespective of time and space. Every child loves to play. Childhood is the time to play; it is the time to dream and to develop. A child is never tired of playing. He/She rejuvenates through games. Moreover, the finer qualities in a child develops through games. The child gets the opportunity to express himself/herself through games. The modern educational philosophy advocates — play while you read and read while you play. It will make the laying of the foundation of life easy.

Various play-way methods of learning have been devised. The word 'play' has a wider connotation. Play is a creative activity, which is integrated with joy, freedom and spontaneity. Play is a spontaneous behavior of a child. No pressure is created upon the children to participate in play. The learners enjoy freedom to choose a game and to participate in a game of his/her choice. It develops a spontaneous discipline among the children. Such qualities as interest, loyalty, sympathy, empathy, patriotism, leadership, personality, etc are developed during a play/game. It also expresses the creative self of the child. Each game has an objective; to realize that objective sportsmen behave in a disciplined manner. It enhances the knowledge and skills of the learner. The subdued emotions of the sportsman-learner come out through a game; so it helps in keeping the

mental balance of a learner. The unsocial instinct of a child may be corrected through a game thereby developing the finer qualities of the child. Play is a spontaneous outcome of the mental, physical and cognitive development of a child.

Considering the fact that children have spontaneous interest towards games and sports, play based learning at school has been given importance to. Play-based learning creates interest in the children towards the lessons. Now-a-days a new method of imparting education has been devised combining work, play and life together. It has created a new atmosphere in school. At the school level work, play and life will be integrated into an indivisible bond. The three elements will be present in a single subject and the same feature will be reflected in the three elements. Such an atmosphere is to be created in school where work will be game and game will be work. In other words, the difference that exists between game and work is to be eliminated. The school atmosphere will induce in the learners a spontaneous interest in works as they feel towards games. In that case, an integrated bond of work, games and life may be created.

Children's right to play is an important part of the Law of children right. Due importance has been given to children's right to play in the educational philosophy of the state and steps have been taken to implement them. Games and sports or Physical Education is no more a co-curricular activity; it is an equally important curricular subject. Steps have been taken to frame a sports policy in the state. The modern research has pointed out that to come out of motionlessness/lethargy a human being has to do physical activities or exercises for at least 40 minutes a day. The school routine is being devised in such a way as to provide sufficient time for games or Physical Education classes. A working Committee and some sub-committees will be formed to implement Physical Education programmes properly.

The Organisational Structure of the Physical Education Committee

President/Chairman	:	President/Secretary of the School Mangement Committee
Vice Chairman	:	President/Secretary/Vice President of the School Mangement Committee
Working President	:	The Headmaster/Headmistress/T-I-C
Secretary	:	Health or Physical Education Teacher of the school
Joint Secretary	:	Health or Physical Education Teacher of the school/any other teacher

Assistant secretary : Two students, including at least one girl student in case of Co-educational school

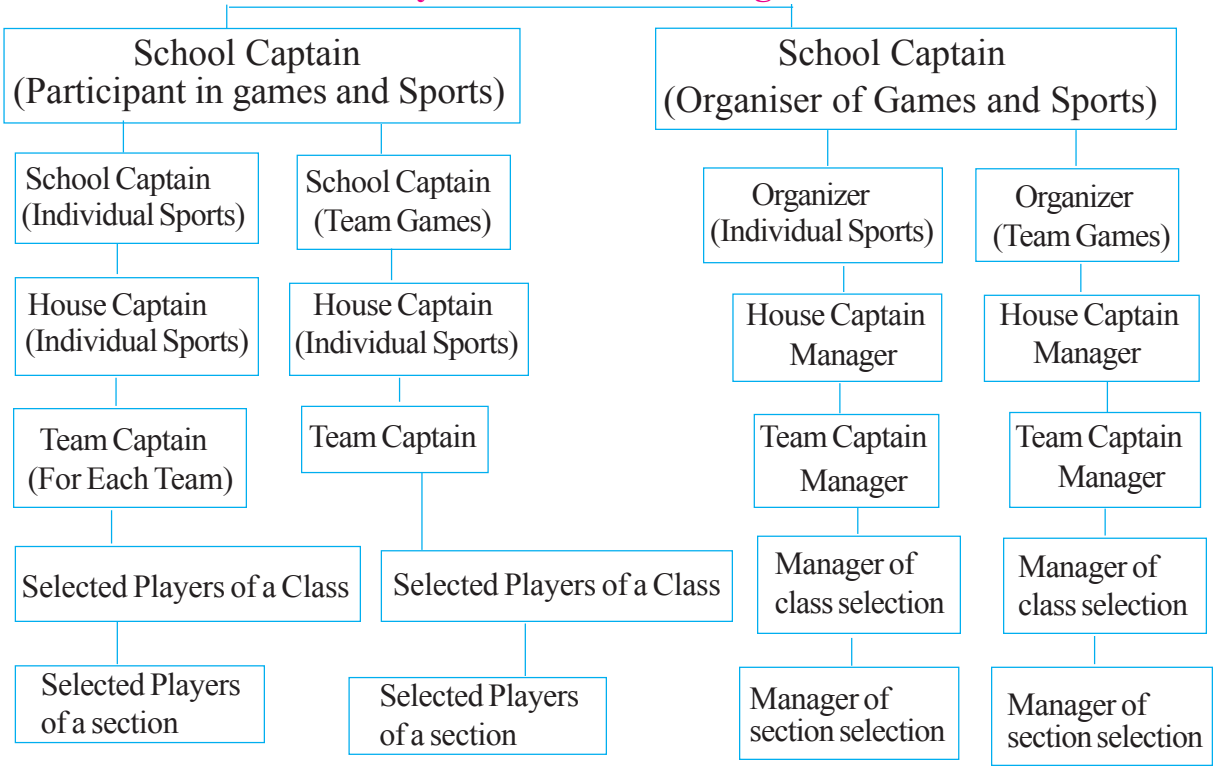
Members : Two guardian Representatives of the SMC, two representatives of the teaching and non-teaching staff and one representative each from all sections of all classes of the school.

Enough scope has been kept in the school curriculum so that maximum number of students can take part in games and sports. And the results and performance in games and sports will be reflected in the mark sheet and certificate of a student. Marks have been kept apart in Health and Physical Education for participations outdoor and indoor competitions. A school level working committee for proper conduct of the games and sports and physical education programmes is to be formed. It will help develop the students skills in games and sports and their leadership qualities. The different programmes of games and sports and physical education may be organized in two levels— (a) intra-school and (b) inter school.

Intra-school activities/programmes: At the school level the students of the same school may participate in individual as well as team games as per rules of the competitions. First, intra-section, then intra-class and then intra-school competition may be organized to select a school team for football, Kho-Kho, cricket, hand-ball, net-ball, through-ball, volley ball, table tennis, badminton, swimming, karate, chess, ball badminton, yogasanas, gymnastics, athletics, etc. Moreover, quiz, cultural programmes, youth parliaments may be organized; exhibitions on disaster management, Road-safety, first-aid etc may be organized in school. School level or Cluster-level educational or training camps on Banglar Bratachari, Sab Peyechhir Aasar, the Bharat Scout and Guide, and Indian Red Cross may also be organized. The skills have already been included for Formative assessment in or outside the classroom.

Inter-school Programmes: School Education Department (Physical Education), W.B., State School Sports Council, Indian School Sports Club, Indian Olympic Association, Department of Sports and Youth Affairs, W.B., Panchayat Youth Games and Sports Project Organize different state and centre sponsored competitions throughout the year. The school authorities encourage the participation of students in such competitions.

School-level Organisational Structure of Students for Physical Education Programmes



Each hose or team may be named after the great persons or sports persons. The school authority will decide which particular games/sports will be based on houses.

The Physical Education teacher (s) of a school will frame an annual calendar for Physical education at the start of a session. Following the curriculum he/she will impart lessons, make the students play and do Formative as well as Summative assessment of the subject. After imparting lessons on a topic, the teacher will take summative practical tests.

Stress should be given on the participation of the maximum number of students in games and sports. Records of a student participating in different events in different levels of sports should be kept by the teacher. Numbers in games and sports will be awarded on the basis of this record. Numbers will also be awarded for participation in Bratachari, Sab Peyechhir Aasar, Scout and Guide, Indian Red Cross Training, Sports Training Organized by School Sports Council and Nature Study and adventures.

Distribution of Marks in Different Levels Of Competitions

Inter-class	Sub-division level	District Level	State Level	National Level
01	02	03	04	05

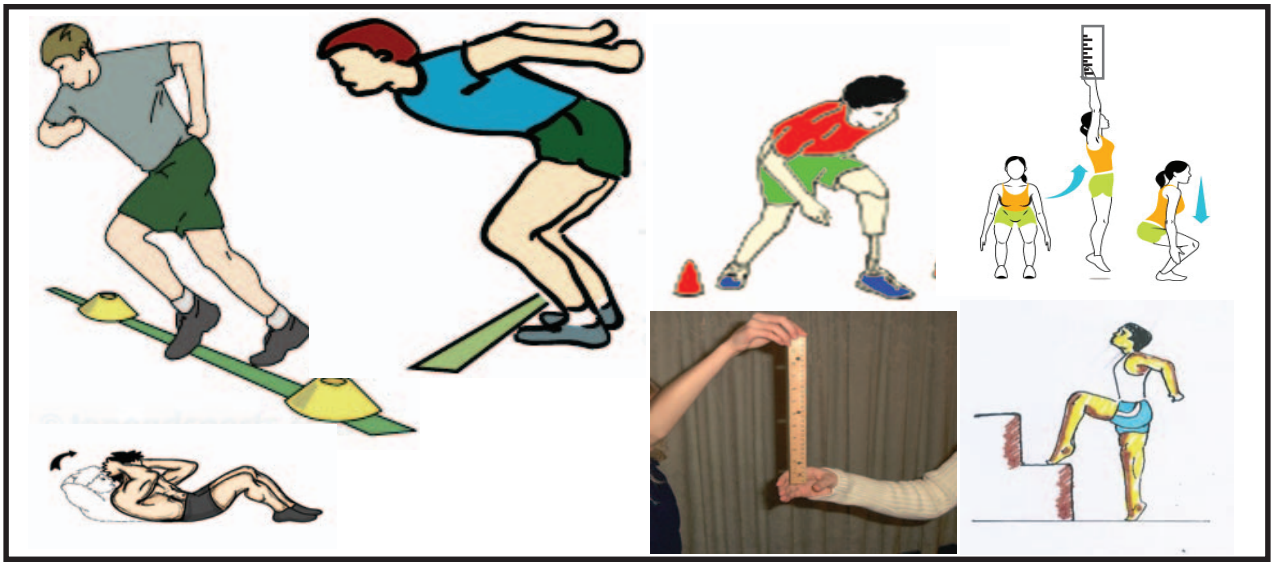
Or

Students may be awarded marks according to their skills if they participate in at least three day residential camps or seven-day non-residential camps of Bratachari, Sab Peyechhir Aasar, India scout and Guide organized by School Sports Council, N.C.C., Indian Red Cross or camps on Health and Physical Educational by School education department. In these cases students must participate in school level training camps. Students must have the permission from the school authority if they want to take part in training camps organized away from school.

Description of Different School Level Competitions:

Sl	Tournament/Sports	Age Level	Category:Boys/Girls
1	Subrata Mukherjee Cup Football	Under 14	Boys
2	Subrata Mukherjee Cup Football	Under 17	Boys and Girls
3	Jawharlal Nehru Hockey	Under 15	Boys
4	Jawharlal Nehru Hockey	Under 17	Boys
5	Kho-Kho	Under 14, 17, 19	Boys and Girls
6	Kabadi	Under 12, 14, 17, 19	Boys and Girls
7	Football	Under 12, 14, 17, 19	Boys and Girls
8	Badminton	Under 14, 17, 19	Boys and Girls
9	Archery (FITA and India)	Under 12, 14, 17, 19	Boys and Girls
10	Table Tennis	Under 14, 17, 19	Boys and Girls
11	Swimming	Under 14, 17, 19	Boys and Girls
12	Water Polo	Under 19	Boys
13	Diving	Under 14, 17, 19	Boys and Girls
14	Handball	Under 14, 17	Boys and Girls
15	Artistic Gymnastics	Under 14, 17, 19	Boys and Girls
16	Rhythmic Gymnastics	Under 14, 17, 19	Boys
17	Acrobatic Gymnastics	Under 19	Boys and Girls
18	Volley Ball	Under 14, 17, 19	Boys and Girls
19	Yogasanas	Under 12, 14, 17, 19	Boys and Girls
20	Hockey	Under 14, 17	Boys and Girls
21	Cricket	Under 14, 16, 19	Boys
22	Athletics	Under 12, 14, 17, 19	Boys and Girls
23	Acrobatic and Rhythmic Yoga	Under 12, 14, 17, 19	Boys and Girls
24	Boxing	Under 12, 14, 17, 19	Boys and Girls
25	Karate	Under 19	Boys and Girls
26	Kick Boxing	Under 19	Boys and Girls
• For details contact the Sub-division Council and District Sports Council.			

10.4.1 PHYSICAL FITNESS TEST



SPEED MEASUREMENT TEST (60ml dash)

Objective : To measure speed or velocity.

Requisites/equipment : Two 60 mts. Long parallel straigh lines and a stop watch.

Method : The assessee or examinee will stand behind the starting line. Following the successive commands 'on your mark', 'set' and then with the sound of firing or clapper the assessee will start running along the 60 mts. tarck. He will run up to the finishing line as fast as he can. Stop watch will start with the starting signal and will stop as soon as the assessee crosses the finishing line. Initially, an assessee may be given maximum three chances.

Score : Scoring time is to be recorded in fraction upto two decimal places of a second.

Special directives : (i) A time keeper shall stand in line with the finishing line to record the time. (ii) The starter shall give a signal with his hand at the time of firing or clapping for the convenience of the time-keeper.

score	Boys	Girls
	10 Years	10 Years
3 Points (Good) 2 Points (Average) 1 Points (Normal)	9.8 Sec. and less 9.9 Sec. to 10.1 Sec. 10.2 Sec. to 10.4 Sec.	10.2 Sec. and less 10.3 Sec. to 10.5 Sec. 10.6 Sec. to 10.8 Sec.
	11 Years	11Years
3 Points (Good) 2 Points (Average) 1 Points (Normal)	9.6 Sec. and less 9.7 Sec. to 10.1 Sec. 10.0 Sec. to 10.4 Sec.	10.0 Sec. and less 10.1 Sec. to 10.3 Sec. 10.4 Sec. to 10.6 Sec.
	12 Years	12 Years
3 Points (Good) 2 Points (Average) 1 Points (Normal)	9.2 Sec. and less 9.3 Sec. to 9.5 Sec. 9.6 Sec. to 9.9 Sec.	9.6 Sec. and less 9.7 Sec. to 10.0 Sec. 10.1 Sec. to 10.2 Sec.
	13 Years	13 Years
3 Points (Good) 2 Points (Average) 1 Points (Normal)	9.0 Sec. and less 9.1 Sec. to 9.4 Sec. 9.5 Sec. to 9.7 Sec.	9.4 Sec. and less 9.5 Sec. to 9.8 Sec. 9.9 Sec. to 10.1 Sec.
	14 Years	14 Years
3 Points (Good) 2 Points (Average) 1 Points (Normal)	8.8 Sec. and less 8.9 Sec. to 9.1 Sec. 9.2 Sec. to 9.3 Sec.	9.2 Sec. and less 9.3 Sec. to 9.6 Sec. 9.7 Sec. to 9.9 Sec.

(Explosive Strength)

STANDING BROAD/LONG JUMP

Objective : To measure explosive power of legs.

Requisites/Equipment : Jumping pit or Mat with measuring tape, (in case of jumping pit) a measuring tape and lime or chalk dust.

Age-group and sex : For the girls and boys of class-XI and XII.

Method : The assessee or the examinee will stand just behind the take-off line keeping the two feet conveniently apart and parallel. To jump forward he will bend down folding his knees and waist and taking the hands back with a swing. Then with a quick swing of the hands from back to the front and stretching the keens and the waist he will jump forward as far as he can. The examinee will be given three chances.

Score : The distance between the take-off line and the spot on the pit nearest to be the take-off line where any part of

the foot or body touches first will be recorded. The best of the three distances will be the assessee's final score. The distance will be measured in inch or centimeter.

Special Directives :

(i) The assessee will not be allowed to take any step or leap before the jump.

(ii) If the assessee after the take-off loses his balance and falls backward near the take-off line, he will be given one more chance.

Test (Age 10-12 years)

	10 years	**11 years**	**12 years**
Boys	Boys/Girls	Boys/Girls	Boys/Girls
Excelent	6'0"	6'2"	6'6"
Good	5'4"	5'7"	5'9"
Average	4'11"	5'2"	5'5"
poor	4'6"	4'8"	5'0"
Very Poor	3'10"	4'0"	4'2"
Girls	10 years	11 years	12 years
Excelent	5'10"	6'0"	6'2"
Good	5'2"	5'4"	5'6"
Average	4'8"	4'11"	5'0"
poor	4'1"	4'4"	4'6"
Very Poor	3'5"	3'8"	3'10"

Test (Age 13-15 years)

Boys	13 years	14 years	15 years
Excelent	7'1"	7'6"	8'0"
Good	6'3"	6'8"	7'2"
Average	5'9"	6'2"	6'8"
poor	5'0"	5'6"	6'1"
Very Poor	4'2"	4'8"	5'2"
Girls	13 years	14 years	15 years
Excelent	6'5"	6'8"	6'7"
Good	5'9"	5'11"	5'10"
Average	5'3"	5'4"	5'5"
poor	5'3"	5'4"	5'5"
Very Poor	4'9"	4'10"	4'11"

ENDURANCE OF MUSCLE MEASUREMENT SYSTEM

Name : Bend Knee Sit-ups

Objectives : To measure the endurance of the abdominal and thigh muscles.

Age-group and sex : Boys and girls of Higher Secondary level.

Equipment : Mat, Foot rule, chalk and a stop watch.

Method : The examinee will lie in supine position on a mat and folding the two knees and keeping both the feet flat-on the mat he will drag the heels near the hips (the distance between the hips and the heels will not be more than 12 inches). The knees are to be kept folded in an angle of less than 90º. For convenience of observation the line of the hips and the heels are to be marked by two straight lines with a chalk. The examinee will keep his two palms internally locked by fingers behind the head and the elbows are to be kept in line with the shoulder touching the mat. One assistant will hold the feet of the examinee tight on the mat so that they do not move. With the signal to start the examinee will lift the upper part of the body bending forward and touch the knees with the elbows. This completes one sit-up. Now, the examinee will return to his starting position and centinue sit-ups for 60 seconds.

Score : The number of sit-ups completed within 60 seconds abiding by the rules will be the score of the examinee.

Directives : During the test the fingers will not be unlocked, the elbows will not push the mat to gain any mechanical advantage, in every time the head, neck and elbow will keep in touch with the mat. The distance between the hips and the heels will remain the same till the end of the test. The distance between the two knees will not be very far.

Situp in a One minuit

Boys	10 years	11 years	12 years	13 years	14 years	15 years	16 years	17 years+
Excelent (A)	40	43	46	48	50	52	55	55
Good (B)	32	33	39	41	42	44	45	45
Average (C)	28	29	35	36	38	40	41	41
Poor (D)	12	15	18	21	24	24	24	24

Situp in a One minuit

Girls	10 years	11 years	12 years	13 years	14 years	15 years	16 years	17 years+
Excelent (A)	28	32	36	38	40	42	44	44
Good (B)	25	28	32	34	36	38	40	40
Average (C)	20	22	26	28	30	32	34	34
Poor (D)	12	15	18	18	18	18	18	18

AGILITY

6 × 10 Meters Shuttle Run.

Test Aim : To determine the agility of subject.

Equipment **:** Stop watch, lime powder.

Marking : 10 Meters of distance is marked by two parallel lines of 5 meters each.

Procedure : The subject stands behind the starting line. On getting starting signal "GO" he runs faster, goes nearest to the other line and line and touches it with the one hand (see figure), turns and comes back to starting line, touches it with hand, turns and repeats it for a total of 5 times and 6^{th} times runs over the line as fast as possible.

Scoring : The time taken by the performer to complete the course of 6 × 10 meters to the nearest 1/10th of a second is record as score of the test. Only one chance is given.

Note : participants are not allowed to use spikes and the area should be firm and non slippery.

20 mtr. Shartel Run Test (Level and Shartel)

Girls	10 years	11 years	12 years	13 years	14 years	15 years	16 years	17 years+
Excelent	3.8 cm	3.8 cm	4.9 cm	5.9 cm	5.9 cm	6.10 cm	7.10 cm	7.10 cm
Good	6.10 cm	6.10 cm	6.10 cm	7.10 cm	7.10 cm	8.11 cm	8.11 cm	8.11 cm
Average	7.10 cm	7.10 cm	8.11 cm	8.11 cm	8.11 cm	9.11 cm	9.11 cm	10.11 cm
Poor	8.11 cm	8.11 cm	8.11 cm	9.11 cm	9.11 cm	10.11 cm	10.11 cm	11.11 cm

20 mtr. Shartel Run Test (Level and Shartel)

Boys	10 years	11 years	12 years	13 years	14 years	15 years	16 years	17 years+
Excelent	2.8 cm	3.8 cm	3.8 cm	4.9 cm	4.9 cm	4.9 cm	5.9 cm	5.9 cm
Good	3.8 cm	4.9 cm	4.9 cm	5.9 cm	5.9 cm	6.10 cm	6.10 cm	6.10 cm
Average	4.9 cm	5.9 cm	5.9 cm	6.10 cm	6.10 cm	7.10 cm	7.10 cm	7.10 cm
Poor	5.9 cm	6.10 cm	6.10 cm	7.10 cm	7.10 cm	8.11 cm	8.11 cm	8.11 cm

HARVARD STEPPING TEST

Objective: To measure physical ability to work with maximum involvement of muscles and after the work to return in the former condition.

Equipment: One 20" high bench, a watch and a metronome (for counting rhythm)

Method: (i) To step on and step off the bench at the rate of 30 times per minute.

(ii) The body will remain straight while on the bench.

(iii) This stepping on and off action will continue for 5 minutes maintaining same rhythm.

(iv) First the left-foot will be lifted on the bench and then the right foot and during stepping off the left foot will come down first then the right.

(v) Just after the scheduled five minutes the examinee is to be seated, on an arm chair keeping both the hands on the arms of the chair.

(vi) He will remain seated until the counting of pulse rate completes. After the exercise the pulse rate is counted in 3 phases first phase from one minute to one and a half minute, second phase from 2 minute to 2-30 minutes and third phase from 3 minutes to 3-30 minutes.

Points or Score:

$$\text{Physical Efficiency Index} = \frac{\text{Duration of exercise (in seconds)} \times 100}{\text{(Total of 3 phase Pulse rate counts of 30 seconds)}}$$

STEP UP-UP, DOWN-DOWN, FOUR COUNTS

1. UP-First
2. UP-Another leg
3. DOWN- First leg

4. DOWN- Another leg

Harvard Step Test - Two Form are —

1. Long Form : Pulse count 1 to 1.30 minutes, 2 to 2.30 minutes 3 to 3.30 minutes.

Long Form PEI = (Duration of the Excercise × 100) ÷ (2× Previous total pulse count)

NORMS are—

Less 55 .....> poor
55 to 64 ..... > Low Average
65 to 79 ..... > High Average
80 to 89 ..... > Good
90 Up ..... > Excelent

2. Short Form : Pulse count 1 to 1.30 minutes after the Excercise Short Form

. P.E.L. = (Duration of the Excercise × 100) ÷ (5.5 × Pulse Rate) [1to1.30 minutes]।

Norms: Less 55 ..... > Poor
50 to 80 ..... > Low Average
90 Up ..... > Good

Example ः After full 5 minutes Working calculate the Physical fitness.

Time (minutes) Heart Beat (Pulse rate)

1 to 1.30 minutes 83

2 to 2.30 minutes 67

3 to 3.30 minutes 50

FLEXIBILITY TEST

Test of flexibility

Sit and reach test

Objective : To measure the flexibility of the lower back and posterior thight.

Age level : 5 Years to adulthood.

Equipment : 12 inches high bench should be used when administrating the test. It is crucial that 9 inches mark be exactly in line with vertical panel against which the test performer's feet will be placed.

Administration and directions : The test apparatus should be prevent from slipping (may be placed against the wall) and the test performer should not be wearing shoes.

The performer :

1. Sit at the test apparatus with the knees fully extended and the feet shoulder width apart, flat against the end of the board.

2. With the palm down and hands placed on top of each other, extend the arms forward and
3. Reaches directly forward four times and holds the position of the maximum reach on the fourth trail for one second.

The test administrator may place a hand on the knee of the performer to discover age knee flexion, but the knees should not be hyperextended.

Scoring :

The score is the most distant point reached on the fourth trail, measured to the nearest ¼ inch or the nearest centimeter. The test administrator should be in a position to note the most distant line touched by the fingertips of both hands. If the hands reach unevenly, the position is not held for 1 second, or the knees bend, the test should be re-administered.

Test of flexibility (Age 10 to 12 years)

Boys	**10 years**	**11 years**	**12 years**
Excelent	13 cm	13.5 cm	13.75 cm
Good	11 cm	11.5 cm	11.5 cm
Average	10 cm	10 cm	10.25 cm
poor	8 cm	8.25 cm	8.25 cm
Very poor	8.75 cm	5.25 cm	5.25 cm
Girls	**10 years**	**11 years**	**12 years**
Excelent	13.75 cm	14.5 cm	15.75 cm
good	12.25 cm	15.5 cm	13.5 cm
Average	11 cm	11.5 cm	12 cm
Poor	9.5 cm	9.5 cm	10 cm
Very poor	6.25 cm	6.25 cm	6 cm

Test of flexibility (Age 13 to 15 years)

Boys	**13 years**	**14 years**	**15 years**
Excelent	14.25 cm	15.5 cm	16.25 cm
Good	12 cm	13 cm	13.5 cm
Average	10.25 cm	11 cm	12 cm
Poor	8cm	9 cm	9.5 cm
Very poor	4.25 cm	6 cm	5.25 cm
Girls	**13 years**	**14 years**	**15 years**
Excelent	17 cm	17.5 cm	18.25 cm
Good	14.25 cm	15 cm	16.25 cm
Average	12.25 cm	13 cm	14.25 cm
Poor	9.5 cm	11 cm	12.25 cm
Very poor	6.75 cm	7 cm	7.5 cm

Vartical Jump

Test Aim : To Test the explosive strength of the Leg and extensibility of hip muscles.
Equipment: Duster, Chalk powder, measuring tape, chair and bench.
Marking : A vertical wall is prominently marked in Centimeters up to 3.25 meters.
Procedure : Tue performer dips his/her fingers in chalk powder and stands side wise against the wall keeping the arm raise above the head and clap the extended hand marked with chalk in fingers straight. Then jumps as high up as possible and touch the wall. The reading shall be noted by keeping eyes in level with the chalk mark on the graduated marking.
Scoring : The standing reach is subtracted from the jumping reach. Three chances are given. Best jump is considered for points.

	Boys			Girls		
Evaluation	Hight Cm.	Weight K.G.	Vertical Jump Cm.	Hight Cm.	Weight K.G.	Vertical Jump Cm.
	Age — 10 Years			Age — 10 Years		
Normal	135–142	28–32	36–38	133–188	26–32	32–35
Good	143–150	34–38	39–41	145–158	33–38	36–39
Excelent	150 and above	39 and above	42 and above	159 and above	39 and above	40 and above
Age — 11 Years						
Normal	140–149	31–36	39–41	144–153	33–39	35–38
Good	150–157	37–41	42–44	154–161	40–45	39–43
Excelent	158 and above	42 and above	45 and above	162 and above	46 and above	44 and above
Age — 12 Years						
Normal	142–153	35–40	42–45	150–157	36–42	39–42
Good	154–160	41–46	46–50	158–168	43–48	43–47
Excelent	161 and above	47 and above	51 and above	169 and above	49 and above	48 and above

GROUP - C : PHYSICAL FITNESS TEST (Class-VII)

800 metres run/walk (minute : Sec)

Boys	Girls
A - 3.00 minute; Sec	A - 3.15 minute; Sec
B - 3.43 ”	B - 3.40 ”
C - 3.29 ”	C - 3.50 ”
D - 3.55 ”	D - 4.10 ”
E - 4.40 ”	E - 4.30 ”

Standing Broad Jumps (Con)

Boys	Girls
A - 237 cm and above	A - 211 cm and above
B - 214 cm and above	B - 196 cm and above
C - 195 cm and above	C - 185 cm and above
D - 185 cm and above	D - 160 cm and above
E - 160 cm and above	E - 145 cm and above

Vertical Jump

Boys	Girls
A - 51 cm and above	A - 48 cm and above
B - 46 cm and above	B - 43 cm and above
C - 42 cm and above	C - 39 cm and above
D - 40 cm and above	D - 30 cm and above
E - 39 cm and above	E - 25 cm and above

60 metres Sprit

Boys	Girls
A - 9.2 Sec and less	A - 9.6 Sec and less
B - 9.3 ” ” ”	B - 3.40 ” ” ”
C - 9.5 ” ” ”	C - 3.50 ” ” ”
D - 9.7 ” ” ”	D - 4.10 ” ” ”
E - 9.9 ” ” ”	E - 4.30 ” ” ”

6×10 metres Shutfle Run

Boys	Girls
A - 16.6	A - 17.4
B - 17.3	B - 17.5
C - 17.4	C - 18.4
D - 18.4	D - 19.3
E - 19.1	E - 19.8

Sit UPS (Numbers Completed in 1 minute

Boys	Girls
A - 46	A - 36
B - 39	B - 32
C - 35	C - 26
D - 18	D - 18
E - 10	E - 10

Sit & Reach (in cm)

Boys	Girls
A - 31 cm	A - 36 cm
B - 29 cm	B - 32 cm
C - 26 cm	C - 29 cm
D - 21 cm	D - 25 cm
E - 10 cm	E - 15 cm

Scoring : BMI = Weight/(Height × Hight)					
Age	11	12	13	14	15
Boys	14.3-8.5	15-19	15.5-21	16-21.5	16.5-21.5
Girls	13.5-23.5	14-24	14.5-24.5	15-25	15.5-25.5

Sample Questions for Summative Assessment-VII
First Summative Assessment-2015
Full Marks-15
(Written-5; Oral/Practical-10)

1. Choose the correct alternatives: (any two) $\frac{1}{2}\times2=1$
   a) 'Gymnastics' is derived from the word 'Gymnas' which is a—
      i) Greek word [ ] ii) Roman word [ ] iii) English word [ ] iv) German word [ ]
   b) Amateur Athletic Federation of India was established in –
      i) 1987 [ ] ii) 1946 [ ] iii) 1964 [ ] iv) 1947 [ ]
   c) " We are two buds on a single twig called Hindu- Muslim"—this was said by—
      i) Rabindranath Tagore [ ] M K Gandhi [ ] iii) Kazi Nazrul Islam [ ] iv) Swami Vivekananda [ ]

2. Write T for the true and F for the false statements: (any two) $\frac{1}{2}\times2=1$
   a) The NCC was established under the recommendation of the Defence Kujara Committee. [ ]
   b) Marathon race is a combination of track and field event. [ ]
   c) Physical Education has nothing to do with democratic values. [ ]

3. Fill in the blanks with proper information (any two): $\frac{1}{2}\times2=2$
   a) The fourth Sunday of _____ is observed as the NCC Day.
   b) Recreation is always aimed towards _____.
   c) Unity and _____ are the main motto of NCC.

4. Write a sentence or two on any two of the following topics: $1\times2=2$
   a) Democratic value
   b) Good habits
   c) Physical exercise
   d) Recreation

Second Summative Assessment-2015
Full Marks-15
(Written-5; Oral/Practical-10)

1. Fill in the blanks (any two): $\frac{1}{2}\times2=1$
   a) Intake of _____ food keeps the physiological and metabolic functions healthy.
   b) School Health Programme has _____ divisions.
   c) The length and breadth of an ideal playground should be at least 130m. and _____ m.

2. Choose the correct alternatives (any two): $\frac{1}{2}\times2=1$
   a) In case of males—i) 9% [ ] ii) 7% [ ] iii) 12% [ ] iv) 10% of body fat may be cut down.
   b) After attaining 25 years of age one's weight may increase by – i) 5 kg/year [ ] ii) .5 kg./ year[ ] iii) 1 kg./ year [ ] iv) .25kg./ year [ ]
   c) Ill health due to lack of balanced food is called— i) obesity [ ] ii) nutrition [ ] malnutrition [ ] iv) disease [ ]

3. Write T for the true and F for the false statements: $\frac{1}{2}\times2=1$
   a) Environmental condition has nothing to do with malnutrition. [ ]
   b) Regular exercise improves the efficiency of the heart. [ ]
   c) Lack of physical exercise may lead to obesity. [ ]

4. Match the information in Column-A with those in Column-B: $\frac{1}{2}\times4=2$

A	B
i) Underwight	BMI between 25 and 29.9
ii) Normal weight	BMI less than 18.5
iii) Overweight	BMI over 30
iv) Obese	BMI between 18.5 and 24.9

Third Summative Assessment-2015
Full Marks-35
(Written-15; Oral/Practical-20)

1. Choose the correct alternatives: $\frac{1}{2}\times2=1$

   a) Frederick Edgemarc, the father of First Aid Treatment, belonged to –
   i) Germany [ ] ii) Britain [ ] iii) France [ ] iv) America [ ]

   b) Which disease affects the children most during or after flood?—
   i) Dengue [ ] ii) Diarrhoea [ ] iii) jaundice [ ] iv) malaria [ ]

   c) What should the driver of a vehicle do when the green signal turns yellow—
   i) Control the speed and stop behind the Stop- line [ ] ii) get ready to drive the car [ ] iii) Increase the speed of the car [ ] iv) None of the above [ ]

2. Fill in the blanks(any two) : $\frac{1}{2}\times2=1$

   a) Burn injuries are classified into _____ categories.

   b) When fire breaks out inside the house, pure air is available only in a layer close to the _____.

   c) The _____ light indicates that the signal will be changing from green to red.

3. Write T for the true and F for the false statements(any two): $\times2=1$

   a) According to shape, bandages are classified into three types. [ ]

   b) A first-aider should have courage and self- confidence. [ ]

   c) To avert flood houses should be constructed on elevated lands. [ ]

4. Answer in short: $1\times2=2$

   a) What food should be given to a patient affected with diarrhea?

   b) What is the function of a road-divider?

   c) What is flash flood?

   d) What should a first- aider do first if someone is burnt with acid?

5. Answer any two questions: $3\times2=6$

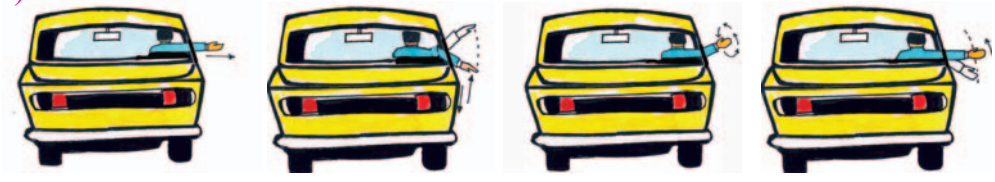
   a) What precautions should be taken prior to a flood?

   b) How to provide first-aid to a person having second degree burn injury?

   c) Write a short note on Zebra Crossing.

   d) How can students be prepared to mitigate flood hazards?

6. Study the pictures and describe the signals indicated by the hands of the driver (any two): $2\times2=4$



HEALTH & PHYSICAL EDUCATION

CLASS-VII

Full Marks-65

Practical Examination-40 Marks	Date	Written Examination-25 Marks
First Unit Test-10 Marks		First Unit Test- 05 Marks
Second Unit Test-10 Marks		Second Unit Test-05 Marks
Third Unit Test- 20 Marks		Third Unit Test -15 Marks

Each of the unit tests is to be taken according to the marks as indicated in the above chart. The assessment of each of the unit tests is to be done on the basis of both the practical and written examinations. The teachers may take practical unit tests after the practical classes. While assessing the students, children with special needs are to be given required liniency. Importance on short and objective type questions is to be given in written tests. The special information given in this book are only to give conception to the students. Reflection of critical topic in question paper is not at all desirable. In the successive unit tests there should be space for application of skills acquired in the previous unit test.

• **Distribution of Marks (Unit Testwise)** •

Practical Examination – 40 Marks	**Written examination -25 Marks**
First Unit test-10 Marks	**First Unit test-05 Marks**
Section-A: Physical Fitness Assessment-03 Marks **Section-B:** Athletics -07 Marks	**First chapter** Basic concept of physical Education
Second Unit test -10 Marks	**Second Unit test -05 Marks**
Section-C: Individual Sports – 04 Marks Chess / Aerobics / Badminton / Karate / Ridmic (any one) **Section-D: Team Game – 06 Marks** Football / Kabady / Netball / Bascatball/ Kho-kho (any one)	**Second chapter** Health Education

Third Unit Test -20 Marks	Third Unit Test -15 Marks
Section-E: Regulated Body Movements-04 Marks Bratachari / Marching / Callisthenics	**Third Chapter**- First-aid
Section –F: Individual Sports-06 Marks Yogasana / Gymnastics (any one)	**Fourth Chapter-** Consumer Protection
Section –G: Participation in Observance Day-05 Marks	**Fifth Chapter**- Disaster Management (training)
Section –H: Participation in Athletic Meet -05Marks Or Participation in residential/ non-residential camp Or Local Community Service Project	**Sixth Chapter-** Road Traffic Safety

Assessment of Different Competition as per Weightage:

Inter-class	sub-division Level	District Level	State Level	National Level
1	2	3	4	5

The students participating in Bratachari Samity, Sab peyechhir Asar, Bharat Scout & Guide, NCC, Indian Red Cross Society, School Sports Council and Education Department organised minimum 3 (three) day's residential or 7 (seven) day's non-residential camps, can be offered for achievement-based acknowledgement. Such camps may to be organised in school. But acknowledgement may also be given if a student takes part in such camps organised by others outside school provided the student takes prior permission from the school.

PHYSICAL FITNESS CARD

	Date	Date	Date		
Physical Fitness Tests				Grade/Marks	Remarks
	Score	Score	Score		
60 mt. Run					
Leg explosive power					
Sit-up					
Agility					
Harvert Stepping Test					
Flexibility Assessment Test					
Reaction Time Calculation					

UNITWISE ASSESSMENT FOR CLASS-VII

Full Marks	Total of written & practical	65											
Total of Written tests	Total of written tests	25											
Third Unit Written Test Assessment		15											
Second Unit Written Test Assessment		5											
First Unit Written Test Assessment		5											
Total of Practical Tests	Total of practical Tests	40											
Section-H: Human Resource Development Programmes	Sports competition/camps/Social service projects participation	5											
Section-G: - DO-	Participation in observance Days	5											
Section-F: Individual Sports (Activity)	Yogasona / Gymnastics	6											
Section –E: Regulated Body Movements	Bratachari / Marching / callisthenics	4											
Section-D: Team Games	Football / kabaddi /kho-kho etc.	6											
Section-C: Individual Sports (Activity)	Aerobic Exercise/ Badminton/ chess.	4											
Section-B: Individual Sports	Athletics	7											
Section -A: Physical Fitness Test		3											
Name of the Student		Marks											
Roll No. of the Student		Roll No.											

Signature of the Health & Physical Education Teacher

Signature of the Head of the Institution

ASSESSMENT DURING PRACTICE

Name & Roll No.	Name of Indicator		Date & Marks							
	PARTICIPATION	a : Actively participates and has leadership qualities. (75%-100%) b : Actively participates and exchanges views. (50%-74%) c : Participates but doesn't show interest in exchanging views. (25%-49%) d : Reluctant to participate. (Less than 25%)								
	QUESTIONING AND EXPERIMENTATION	a : Can ask learning -related questions and is interested in experimentation.(75%-100%) b : Can ask learning- related questions but is not interested in experimentation. (50%-74%) c : Asks few learning-related questions and isinterested in experimentation. (25%-49%) d : Asks very few learning-related questions and least interested in experimentation. (Less than 25%)								
	INTERPRETATION AND APPLICATION	a : Able to interpret, give example , and apply. (75%-100%) b : Able to interpret, give example but unable to apply. (50%-74%) c : Able to partially interpret but unable to apply. (25-49%) d : Only memorises. (Less than 25%)								
	EMPATHY AND COOPERATION	a : Actively empathetic to both known and unknown people. (75%-100%) b : Actively empathetic to known people, but for unknown people, only empathetic. (50%-74%) c : Empathetic to the known people. (25%-49%) d : Least empathetic. (Less than 25%)								
	CREATIVE AND AESTHETIC EXPRESSION	a : Aesthetic and creative (both inside and outside the lassroom). (75%-100%) b : Aesthetic and creative (only inside the classroom). (50%-74%) c : Aesthetic. Interested in creative activities. (25%-49%) d : Aesthetic. Least interested in creative activities. (less than 25%)								

No. WBTBCL/Health & Physical Education-VII(E)/December, 2016