Home Science

Class Six








National Curriculum and Textbook Board, Bangladesh

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Home Science

Class Six

Revised for the year 2026

National Curriculum and Textbook Board, Bangladesh

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First edition written, edited and translated by

Professor Laila Arjumand Banu
Professor Syeda Nasrin Banu
Professor Ismat Rumina
Gazi Hosne Ara
Soniya Begum
Shamsun Naher Bithi
Syeda Saliha Saliheen Sultana
Rehana Yeasmin
Professor Rehana Begum
Professor Golenoor Afrose Talukder

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Preface

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

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

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

Home Science is a life-oriented and career-oriented education. The skill-based knowledge acquired in this subject will enhance students' adaptability. Also, this experience will make students skilled in using limited resources to achieve desired goals, manage many unexpected events at home and outside, and overcome problems that arise in the home environment. The Home Science Textbook for grade VI students has been developed considering these issues and keeping in mind the needs of the times.

It may be mentioned here that due to the changing situation in 2024 and as per the needs, the textbook has been reviewed and revised for the academic year 2026. It is mentionable here that the last version of the textbook developed according to the curriculum 2012 has been taken as the basis. Meticulous attention has been paid to the textbook to make it more learner-friendly and error-free. However, any suggestions for further improvement of this book will be appreciated.

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

October 2025

Professor Robiul Kabir Chowdhury
Chairman (Additional Charge)
National Curriculum & Textbook Board, Bangladesh

Contents

Chapter	Section-A Home and Home Management (1-25)	Page
One	Preliminary Concept Of Home And Home Environment	2
Two	Cleanliness Of Home	13
Three	Home Management	19
	Section-B Child Development and Family Relationship (26-66)	
Four	Family and Child	27
Five	Learning of Etiquette by the Children	38
Six	Development during Adolescence	49
Seven	Changes During Adolescence and Maintaining Self- Security	60
	Section-C Food and Food Management (67-102)	
Eight	Food, Nutrition and Health	68
Nine	Nutritional Value of Food	78
Ten	Need of Food	87
Eleven	Food Habit	95
	Section-D Fibre and Clothing (103-136)	
Twelve	Basic Concept of Clothing and Textile	104
Thirteen	The Concept of Textile Fibre	112
Fourteen	Taking Care and Storage of Clothes	121
Fifteen	Sewing Equipment and Various Stitches	127

Section - A

Home and Home Management

Home is the first environment for human beings where they live in. To grow up a child as a healthy citizen this environment can be developed through home management. Here we perform many types of activities. Things become easier if we know what we will do and where. Keeping the environment clean both inside and outside of our home is our important duty. We need to keep things in their proper places to keep our home neat and tidy. Every work achieves success if it is done by a correct decision and an effective planning.



At the end of this section we will be able to –

- explain the concept of home and home environment;
- identify places in home where we have to work in;
- learn where we need to keep various things after their use;
- explain the importance of planting trees in home environment;
- explain the concept of keeping home and home environment clean;
- explain the concept of home management;
- evaluate the significance of planning for home management and;
- explain the significance of decision-making for home management.

CHAPTER I

Preliminary Concepts of Home and Home Environment

Lesson 1 –Home and Home Environment

Home – You have heard that human beings of the primitive ages would not live in homes like us. They only used to find out safe shelters to protect themselves from ferocious wild animals, storms rains, heat and cold. Such shelters where forests and bushes, large trees, caves, etc.

Thereafter, as human beings learnt agriculture, they began to live in groups as families. Gradually, they felt the necessity for home and learnt to build home. In this way the concept of 'Home' was initiated.

We may term 'Home' as a place where we live in a family. Home is one of our basic needs. We remain busy all day long in various activities for fulfilling our various needs. We come back home for rest and comfort after completion of our works. As a result, we get relieved of all tiredness. Thus our needs for food, textile and clothing, education, health, security, recreation, different expectation etc are fulfilled at home. Family bondage as well, gets stronger here as a result of mutual respect, love and cooperation among all members.

Home Environment – Home is the first environment of every child. It is comprised of everything within and around home. Home environment includes all the internal and external matters of the home. Happiness, peace and physical as well as mental health of the family members are dependent on home environment. Home environment includes –

- Various rooms
- Roof/Thatch
- Verandah
- Courtyard, compound, etc.

A good home environment is crucial for all-round development of its family members. Personal life is highly influenced by home environment as all of us live within a family from childhood to old age. It is our Home Environment from where we develop our habits, tastes, sense of responsibility and duty. We do various activities staying in home environment. In this way we develop our sense of responsibility and duty. For this reason home environment too needs to be neat and tidy, healthy and disciplined. This helps the family members to become healthy and disciplined so that they can build an ideal nation. So, home environment needs to be neat and clean and free from pollution. For this reason a home should ensure –

- entry of sunlight and air ventilation.
- supply of pure drinking water.
- regular cleaning of home both, inside and outside.
- safe disposal of waste water and human wastes.
- good provision for outlet of smoke generated from inside of home.
- planting various sizes of trees within the home courtyard, if there is sufficient space for such plantation and, if necessary, in tubs.



Neat and tidy home environment



Dirty and untidy home environment

Types of home in urban and rural areas are different. Homes of urban areas are constructed with bricks, sand, cement, steel rods, etc. Whereas, rural houses are made of tin, wood, bamboo, clay, etc.

Task 1 - Make a list of activities you can do to preserve your home environment.

Task 2 - Make a comparison between a rural home and an urban home.

Lesson 2 -Internal Space Arrangement at Home

We have already learnt that there are various types of spaces within our home. Starting from the entry doorway to verandah, various rooms, garden, portico, etc., all are there in a home. Various types of activities are performed in a home. Specific activities are done in specific spaces in a home depending upon the activity types. It is upon the basis of such various types of activities rooms or places of home are arranged. Examples of these various types of activities could be cooking, dining, bathing, cleansing, studying, dressing and making-up, taking rest, sleeping, guest entertainment, etc. Each of these types of activities is different from the rests and, as such, places or spaces for these activities are also different.

The internal spaces of a home can be classified into three groups which are as follows, -

1. Formal space/place;
2. Informal space/place
3. Working space/place.

Formal Space/Place - Spaces where formal activities are performed are known as formal spaces. In such places or spaces we maintain various formalities. We receive and entertain guests and friends visiting our home in such formal spaces or places. Sometimes we make arrangement for their stay as well.

Such spaces/places include –

- drawing room
- dining room
- guest room
- portico
- driveway (within the home premises)
- stairs and staircase

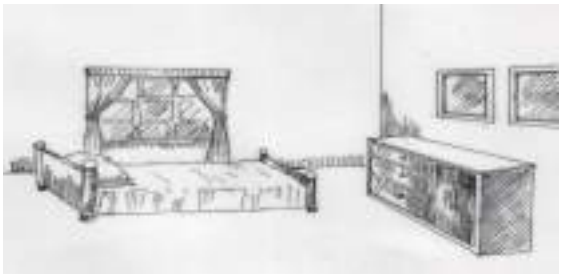


A Formal Space/Place

Informal Space/Place - Spaces where we perform personal or private activities are known as Informal spaces. We take rest, sleep, study, undergo dressing and making-up in such places. As a result, a kind of privacy is maintained in these areas.

Such informal spaces/places include-

- bed room
- study room
- dressing and make-up room.



An Informal Space/Place

Working Space - Various types of activities of home, such as, cooking, various types of cleansing and keeping and maintenance of various articles, etc., are done in these spaces or places.

Cooking process consists of preparation for cooking, i.e., activities starting with cutting fish, meat and vegetables, sorting, washing and cleansing, grinding or crushing of various spices, etc., to actual cooking. Besides, keeping utensils, drinking glasses, jugs, spoons, knives, forks, table-mats, etc., in appropriate places also are done here.

Cleansing process includes activities like cleansing of cooking equipment washing of clothing, ironing, floor mopping or wiping, cleansing of ceilings, grills and glasses of doors and windows, bathrooms, toilets, room courtyard, etc. The work spaces/places are –

- kitchen
- bathrooms and Toilets
- store or the place for preservation of rice, pulse crops etc.
- the place for keeping clothes, household things



working Space/place

Task 1 – How would you receive your friend visiting your home along with his/her family?

Task 2 –Identify the informal places of your home and write what activities are done in those places.

Lesson 3 –Keeping and Preserving Necessary Articles at Proper Places

Shahed makes his own bed after getting up from sleep everyday. After coming back from school, he keeps his school bag, textbooks, exercise book, shirt and trouser, shoes and socks, etc., in their appropriate places. He keeps his text books, exercise books, pencils, pens, etc. in an orderly manner after completion of his studies everyday. After the afternoon sports, he keeps his sports gears in proper places. For this reason, he gets everything at his fingers' end when necessity arises. Each article has its proper places for use and keeping. Hence, all the members of the family need to be habituated in keeping various articles in proper places in an orderly and disciplined manner after their use. Articles last long through their careful keeping in appropriate places and keep the home environment neat and tidy. Such a habit of family members enables the article to be easily available within their reach when necessary. As a result, there is no unnecessary wastage of time and energy in locating the articles. Besides, there are risks of various accidents arising out due to haphazardly kept articles.

We use various types of equipment and ingredients for doing different types of works at our home. Such as-

Cooking and Serving Equipment: These are cooking pots, frying pans, cooking spatula, spoons, boti, knives, pressure cooker, blender, oven, burners, etc. Among these appliances, the ones that are not for daily use are arranged in the kitchen shelves within easy reach. The appliances which are not for regular and daily use are kept in cabinets or in shelves above the ones where appliances of daily use are kept. We may arrange utencils that are used for serving meals, plates, drinking glasses, jugs, spoons, forks, trays, etc., in the shelves within the dining room.

Sewing Equipment : Sewing machine is the main equipment of this type, which we keep at any corner or location of our room. We keep the equipment like needles, scissors, measuring tape, buttons, threads etc together in a box near the machine.

Garden Appliances : Watering can, water pipe, crowbar, spade, chopper, scissors, etc. Such articles are made absolutely clean after their use and are kept in an particular corner or on a defined shelf or in the store room of the house.

Laundry Appliances : Buckets, mugs, washing machine etc., are kept in bathroom. Iron can be kept on the ironing board.

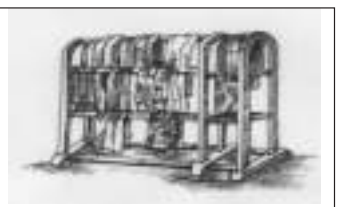
Cleaning Appliances : Hard brooms, soft brooms, ceiling web cleaning broom, floor-mopping tools, vacuum cleaner, etc., are kept at one corner of the store room.

Garments and Clothing : We keep the regularly and daily used garments and clothing on dress-stand or wardrobe while those to be worn during specific occasions or seasonal ones are kept in almirahs or in chest of drawers. Besides, it is necessary to develop the habit of keeping shoes, sandals, socks, etc., at definite places, e.g., on the lowest shelf of dress-stand or clothes-horse.

Stationeries : We keep stationeries, such as, textbooks, exercise books, pens, etc., in a shelf nearest to the study-table in an organized manner. Such items can also be kept on the table in case there is no shelf in the vicinity.


Book-shelf


Dressing Table


Dress-stand

Toiletries : We use various toiletries for our make-up. These include–shampoos, combs, face powders, cold cream, lipstick, perfumes, shaving brush, shaving razor, etc. These can conveniently be stored on the dressing table or in a suitable location in the dressing room.

First Aid Materials : Cotton, bandages, Dettol, hot or cold water bag, spirit, burnol, pain relievers, antiseptic powder or ointment, etc. These materials are kept inside an specific box, known as 'First Aid Box'. The First Aid Box needs to be kept on an upper place so that everyone can see and be aware of its presence.

Miscellaneous : Miscellaneous things innclude – old newspapers, magazines, toys, etc. These articles need to be brought together and kept inside a box so that these do not remain scattered in different places of the home.

Task 1 – Make a list of articles you use daily and places you keep them after use.

Task 2 – Write what materials you think should be kept inside the First Aid Box of your home.

Lesson 4 – Route of Trees in Protecting Home Environment and improving the Decoration

Shumi has made a garden of vegetables and fruits in the small courtyard of their home with the help of her father and planted flower-plants in tubs along the verandah. She waters the plants everyday and clears weeds from them. She picks the vegetables and fruits herself. Fresh vegetables and fruits help all the members of the family maintain a good health and a cheerful mind.

We can follow Shumi and plant various kinds of trees to improve our respective homes and home environment. If we live in urban areas, we may plant various kinds of plants in tubs and arrange these along the balconies and on the roof-tops of our apartment houses. We get quite a number of benefits from trees. These are –

- oxygen that we breathe-in;
- nutrition from vegetables and fruits;
- flower-plants for enhancing the beauty of our home;
- large trees providing shadows for our home and making the environment comfortable.

Many houses are found to have open courtyards. Such courtyards may be cleaned and used for making flower-garden in the one in front of the house and a vegetable and fruit garden behind.

Plantation in Tubs and along the Courtyards and Its Care

Plantation in tubs and along courtyards can be made in two ways –

- sowing seeds; and
- planting saplings.



Flower-plant in a tub



Vegetable-plant in a tub

Whichever of the above ways of plantation is chosen, the site is to be developed first. In case of courtyards, it should be made free from weeds and the land should be levelled. After that, the soil is to be made loose by means of spades. Cow-dung or organic manure is to be mixed with the soil to make it fertile. The next step is to sow seeds or to plant saplings. All types of trees, large or small, could be planted in the courtyard. We can make plantation of mango trees, jackfruit-trees, coconut-trees, betel-nut-trees, guava-trees, etc., in our home-courtyards. Besides, various seasonal vegetables can also be cultivated here.

In absence of courtyards, plantation could be made of various vegetables, grafted plants and various seasonal flowers in tubs of various sizes, big and small. At first we have to prepare the tub to plant a sapling. In this case, a piece of sapling should be placed straight up the surface of the tub. Then the brick-bats and dry leaves should be put on. Now the tub should be filled in such a way with manured soil so that the space of 2 inches remains empty at the upper portion of the tub.



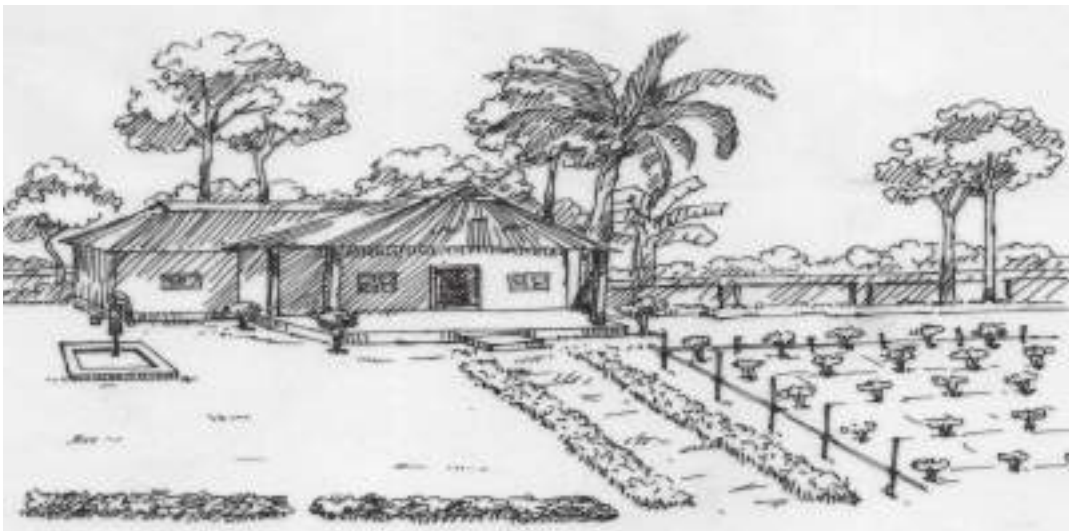
A creeper plant in a tub

After the sapling is planted in the tub, regular watering is needed, as seedlings or saplings come out. There should be arrangement of drainage of water, too. Sometimes the soil at the base of the saplings needs to be loosened with the help of some spoon or spatula-like appliances to help sun-rays and air get into the soil and retain its moisture.

Weeds, if found growing at the base of the plants, should be immediately removed, as it retards plant-growth. Various types of insects, more than often, invade and cause harm to the plants. During such occasions, insecticides could be applied.

Thus, you can, certainly, understand that a good and healthy plant or tree needs –

- lively sapling and well-bred seeds
- light, air and water
- manured and good soil
- regular care.



A beautiful garden in home courtyard

Task 1 – Describe procedure of planting a fruit-bearing tree in a tub.

Task 2 –What activities do you think need to be done in taking regular care of plants and trees?

Exercise

Multiple Choice Questions

1. Which of the following is a formal place?

a. Dining room
b. Bedroom
c. Study room
d. Dressing room

2. Causes that led primitive human beings to look for shelter.

i. Self defence from the attack of the violent wild animals.
ii. Saving life from the adverse weather condition.
iii. To from family.

Which of the following is correct?

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

Read the following paragraph and answer to questions 3 and 4

Anita bought a chilli sapling from a famous nursery. She planted the sapling on a soil-filled tub and kept it inside her study room. Simultaneously, she learnt what type of insecticide was needed to contain diseases of chilli plants. She watered the plant regularly. In spite of the above, the chilli plant did not grow properly and chillies, too, did not come out.

3. What had been the causes behind poor growth of the plant?

a. Lack of proper insecticide
b. Lack of adequate light and air
c. Planting ill-bred sapling
d. Planting sapling in a tub

4. Proper growth of Anita's plant needs

i. Use of adequate fertilizer
ii. Keeping the tub on the verandah
iii. Increasing the amount of water

Which of the following is correct?

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

Creative Questions

1. Rayan tends to leave his belongings scattered after completing any task, which often leads to damage around the house. His sister, Rupa, enjoys gardening and plants flowers in pots on the balcony. She waters the plants twice daily, but since the pots lack proper drainage, she notices the roots have rotted after a week.

a. Define the term “house.”

b. In what kind of environment does a person learn responsibility and a sense of duty? Explain.

c. What habit does Rayan lack? Give reasons for your answer.

d. Did Rupa take proper care of her plants? Share your opinion with justi fication.

Short Answer Questions

1. What is meant by the interior of a house?

2. How do you plant trees or flowers in your courtyard? Explain.

3. What essential items are usually found in a first aid box? Make a list of it.

CHAPTER II

Cleanliness of Home

Lesson 1 – Internal Cleanliness of Home

We all like to live in peace and happiness. To ensure it, we need a healthy home where we can keep our body and mind healthy and full of spirit. We need to pay our attention to cleanliness of the inside and outside of our home to make its environment beautiful, attractive and healthy. A clean home can give us comfort as well as sound body and mind. Every space and every nook and corner of the home needs to be regularly cleaned. A home with clean environment is free from disturbances caused by flies, mosquitoes and various other harmful insects and, hence, is free from any type of diseases. Living in pollution-free environment we can ensure for our sound body and mind.

Cleanliness of Internal Spaces: Internal spaces of the home, i.e., entire spaces within the rooms where we spend most of our time for work and rest need to be cleaned everyday. In this way, internal environment can be kept clean and healthy.

Work needed to be done in the internal spaces are

- brooming, mopping or wiping of room floors;
- cleaning doors, window-grills and glasses;
- cleaning walls, ceilings, electric fans, etc.;
- washing clothes, bed-sheets, curtains, etc.;
- cleaning sinks, wash-basins, water-tap base;
- dusting, wiping, painting of furniture;
- removing unwanted and unnecessary articles;
- cleaning bathrooms, toilets, etc.;
- repair and painting of the house.



Participation of family members in cleaning work.

Some of the cleaning activities are to be done everyday, some of them once in a week, some once in a month, or some once in a year. Like all other activities, home cleaning, too, needs prior planning.

Internal clearing activities may be divided into three groups.

1. Daily Cleaning : Daily Cleaning involves daily brooming, mopping or wiping, coating mud house of all the rooms, verandah, wiping of furniture surfaces, bed-making, arranging text books, exercise books, etc., cleansing of articles of everyday use of the kitchen and other rooms, washing of clothing that are used everyday. Besides, it is necessary to clean the water-tap bases, sinks, bathrooms, toilets, etc., everyday. Removal of filth, wastes and refuse materials that accumulate everyday, etc., are also within daily cleaning activities.

2. Weekly Cleaning : Dusting of and removal of soots from walls and ceilings, dusting and wiping of grills and glasses of doors and windows, cleaning of electric fans, washing of bed-sheets and pillow-covers, cleaning of kitchen racks and, if carpets is used in the rooms, its dusting and keeping in the sun, etc., are under weekly cleaning activities. Besides cleaning of inner and outer part of the fridge outside are among such activities.

3. Yearly Cleaning : Painting of furniture, cleaning of room floors after removing the furniture, home repair and white-wash, placing of the things under the sun which are, generally enclosed in almirah or trunks (such as seasonal clothes, quilts, mattresses, rugs, etc.), cleaning of plates, drinking glasses preserved in wooden almirah or show- cases for long periods, etc., are among the activities that are done on yearly basis.

Activities under the above three categories vary according to their types and are significantly labor-consuming. These hence, need to be distributed among the family members according to their respective age, energy, efficiency. Younger members will become conscious of their responsibilities and will be careful in performing their part of task through participating in the aforesaid cleaning activities. They will be aware of the quality of the home environment and come forward to take the responsibilities of upholding and enhancing it.

Tools Used in Home Cleaning: Tools used in various activities of home cleaning are -

Soft and hard brooms, mugs, earthen bowls, brush, ceiling web cleaning broom, ladder, coconut coir or nylon scrubber, soft cotton textile or towel, soaps, Vim or bleaching powder, old newspapers etc.



Various types of cleansing tools

Task 1 – Make a list of the activities you do for cleanliness of your home.

Task 2 – Show, by means of a chart, which tools are needed in cleaning activities.

Lesson 2 – Cleanliness of the Outer Premises

The outer premises of the house also needs to be kept clean like the internal premises for maintaining sound body and mental satisfaction of all the family- members.

The following need to be done for maintaining cleanliness throughout the outer, home premises –

- Removing fallen leaves, dry things from the courtyard ;
- Preventing growing-up of bushes around the house ;
- Mowing grass and removing weeds
- Keeping the roof or the thatch clean ;
- Keeping the drains or sewers clean.

Brunches of big and large trees should be sized once a year at the outside of the home. This will enhance their growth and let sun light come-in inside of the house. Roof-tops or thatches should be swept at least once a week. We need to ensure that water does not get logged on roof-tops, otherwise, logged water will make the room walls and ceilings damp and cause harm to our health.

Perforated tin-thatch should be immediately repaired. If necessary, should be replaced by new tins.

In the urban areas water and other liquid wastes of the house are drained to the underground main sewerage line outside the house. If drains are, generally, open and uncovered these need to be cleaned regularly. Solid wastes of the house, such as, gurbase, polythene bags, etc., may cause blockage in the drain and pollute environment creating unhealthy situations through overflow of liquid wastes. We need to be conscious of such situations. We need to ensure unrestricted flow along the drains by cleaning them by means of long-handled brushes, bamboo-sticks, etc. Phenyl, bleaching powder, etc., should be spread over the drains to make them free of bacteria and germs.

At the time of rains, drains need to be dug in the house- courtyard for free movement of rain water. Stagnant and logged rain water is the ideal breeding ground of aides mosquitoes which may cause dengue fever.

Anik does not go to school very often. He usually suffers from cold, cough, fever throughout the year. As a result, he always feels dejected. He does not find inspiration in any work. One day, his friends went to his house and found it extremely damp and full of darkness inside. Sunlight and air do not enter the house as the branches of the courtyard trees are not sized. Anik becomes sick as his house does not have a healthy home environment. We need to keep in mind that both internal and external home environment should be kept clean to be physically and mentally sound.



A clean outer courtyard

Task 1 – How can you help your family in keeping the outer courtyard spaces of your house clean?

Task 2 – You like to clean the outer spaces of your class-room together with two of your friends. Make a list of activities to be done by each of you.

Exercise

Multiple Choice Questions

1. Which of the following diseases may result from a damp home enviro ment?

a. Dengue
b. Cold and cough
c. Diarrhoea
d. Night blindness

2. What is one of your family's weekly cleaning tasks?

a. Organizing books
b. Sweeping the house
c. Repairing the house
d. Washing clothes

Read the following paragraph and answer 3 and 4

Shanta leveled the ground of her house courtyard and made flower and vegetable gardens. She makes the gardens free of weeds and keeps their surroundings clean.

3. Which type of cleaning activity does Shanta make for her gardens?

a. Weekly cleaning
b. Internal cleaning
c. Yearly cleaning
d. External cleaning

4. Advantages that Shanta can get from gardening are –

i. Sources of extra income

ii. Enhancing the beauty of the house.

iii. Fulfilling nutritional needs

Which is correct among the following?

a. i and ii

b. i and iii

c. ii and iii

d. i, ii and iii

Creative Questions

1. Shahana lives with her family in a semi-pucca house surrounded by multi-storey buildings. The house remains dark due to overgrown bushes. During the rainy season, wastewater from the nearby drain enters and accumulates inside, leading to an increase in mosquitoes. Shahana is concerned and wants to resolve the issue.

a. What is meant by annual cleaning?

b. What category of cleaning includes painting and repairing? Explain.

c. Which type of cleaning is missing in Shahana's home? Describe.

d. What can Shahana do to improve the condition of her home? Make your suggestions how to overcome this situation.

Short Answer Questions

1. What causes dengue fever? Explain briefly.

2. What does "cleanliness of the interior of the house" mean?

3. At which stage of home management is the effectiveness of the work evaluated? Explain.

CHAPTER III
HOME MANAGEMENT

Lesson 1 – The Concept of Home Management

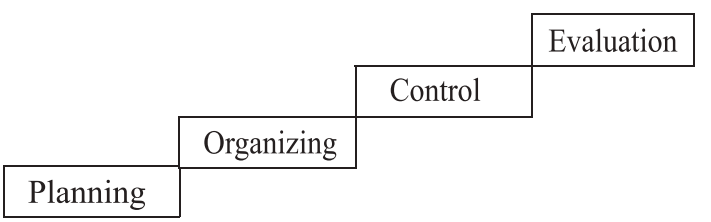
You have already learned about home management. We all like a peaceful and well-disciplined house. It is our home where all of our hopes and aspirations are fulfilled and for ensuring such fulfillment various activities are to be done at our home. Proper management is necessary for the activities to be done correctly. You might have certainly noticed that many types of activities are being done in your home. Have you ever thought about -

- Who are doing these activities?
- Why are these activities being done?
- How are these being done?

While trying to find out answers to these questions, you will come to know that these activities are being done collectively by all the members of the family. They work together for achieving the goal of the family using their time, intelligence, money, labour, etc. Each family has a number of goals or aims. To fulfill those aims they find out ways and means. Firstly, the family members select the family goals and plan to achieve the selected goals. They think how will they work. Thereafter, they complete the process together. Finally, they evaluate the results to see whether they are successful or not.

In other words, it can be said in one sentene that, Home management is planning, control and evaluation of the activities using resources for the achievement of family goals.

Home Management, hence, is a set of continuous activities with several steps involved in it . Home Management keeps all the activities of the house dynamic. The steps involved in Home Management, diagrammatically, are given below.



Planning: The first step in Home Management process is 'Planning'. Thinking about 'why' and 'how' a work will be done and 'who, will do the work, together, comprises the 'Planning Process'. Planning will make one easily understand which activity will be done.

Organizing : Establishing links between different activities is known as 'Organizing.' It is a coordination between work, workers and property, through organizing.

Control : Control is needed for implementation of plan. It helps to make different streams of the organisation effective.

Evaluation : The last step of 'Home Management' process is 'evaluation'. Evaluation is the verification of results of the accomplished work. Evaluation indicates whether the work has been a success or a failure. 'Evaluation', hence, helps to identify procedural mistakes and makes us cautious in undertaking future works properly.

Task 1 - One of the objectives of your family is to make you educated. What have you done to fulfill the objective?

Task 2 - Express in writing what activities of your family members do in a single day.

Lesson 2 – Importance of Planning in Home Management

Planning makes us decide the sequence of work and 'when and how' the work is to be done, etc. Planning makes accomplishment of the work easier. Planning of the work always needs to be done in writing, so that it can easily be referred to.

Planned Work: Work performed through Planning is known as 'planned work'. As a result, we can do the work with less error and the work is accomplished according to scheduled time.

Benefits of a planned work –

- We can have an idea of the next work after completion of a whole day work.
- The work can be accomplished in scheduled time.

- Discipline can be maintained.
- Proper use of recourses –time, energy, money, etc.
- Facilitates success in any type of future work.

Task 1 - Prepare a list of works you do while going to the school in the morning.

Unplanned Work: Work done without any pre-thinking is an 'unplanned work'. In other words, 'unplanned work' is just opposite to 'planned work'.

Kalpana is a student of Class VI. She has appeared for her Class Test on Mathematics. She back talked to her friend over phone after coming home from her school yesterday. She watched television for a pretty long time in the evening. She only drew picture at night after dinner. She thus wasted her time without any cause. As a result, she failed to get any preparation for the next examination. Consequently, she was unable to do well in the examination and could not obtain good marks as well.

We need to do a lot of work as we have numerous goals. For this reason, we will be unable to do our work in due course. Unplanned or undisciplined work never brings about any success.

Task-1 - Make a list of disadvantages of unplanned works.

Task 2 – Make a list of works you do with planning and of those without planning .

Lesson 3 – Decision-Making in Home Management

There may be several options of procedures for doing any type of work. We choose the best acceptable option among them through a process known as 'decision-making'. An appropriate decision is very important in any kind of work. This is the first step in initiating the work. Appropriate decision thus helps achieving the goal. If the decision is inappropriate, reaching the goal becomes impossible. At times we have to make new decisions according to requirement of time and nature of work.

Ramesh wished to go to Cox's Bazar along with his family during the winter vacation. All the members of his family, with prior discussion among themselves, decided to go Chittagong by train and then to Cox's bazar by bus instead of by air. They took into consideration the fare involved in both the routes and found plane fare to be very high. Moreover they found that they could be able to see quite a number of places and intimately enjoy the natural beauty along the way if they went by train and then by bus. As a result, their journey will be very much pleasant.

Appropriate decision taken in each step of Home Management and working in line with it, would ensure our success.

Decisions can be taken in two ways, such as

1) Individual Decision

2) Collective Decision

You, too, may make a decision to solve a minor problem while doing any work. Such decision is called an 'Individual Decision'.

Sometimes complex situation may come. In such cases, your mother or your father, or both of them together discuss with all the family members, irrespective of age, and arrive at a decision. The decision arrived at through such a process is known as 'collective decision'. Collective decision is based upon the views of several persons. Hence, several means are thought for solving complex issues and problems. From such several means, a decision could be made.

There are some systematic means to be followed in decision-making process. These are –

- Firstly, understand the issue or the problem and get a clear idea.
- Find out some procedures or means for solving the issues or problems.
- Accept the means that appears to be the best or through which the problem could be easily solved.
- Do the work according to the accepted means. In other words, you have to transform the decision into work, otherwise, the decision taken will be of no benefit.



Members taking a collective decision

Task 1 – How can you take an individual decision for getting good results in the examination?

Task 2 – Make a plan to make a flower garden in your school according to a collective dicision of your friends.

Exercise

Multiple Choice Questions

1. What is the last step of Home Management?

a. Planning
b. Control
c. Evaluation
d. Decision-making

Multiple Choice Questions

2. Which are the drawbacks of unplanned work?

i. Tasks remain incomplete
ii. Disorganization occurs
iii. Errors can be corrected

Select the correct option

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

Read the following paragraph and answer to questions 3 and 4

Laila plans her tasks before starting and reviews the outcomes after finishing.

3. Which step of management is reflected in Laila's second action?

a. Planning
b.Evaluation
c. Control
d. Decision-making

4. The benefits of Laila's first action include—

i. Increased chances of success
ii. Consistency in work
iii. Inefficient use of resources

Choose the correct option

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

Creative Questions

1. Lamiya and Latif are students of the same Class. Lamiya goes to school everyday with her textbooks and exercise books according to the day's

routine. On the other hand, Latif fails to follow his teachers' instructions for coming with textbooks and exercise book not according to the day's routine.

a. What is the first step of Home Management?

b. What is meant by Unplanned Work?

c. Which of the management steps is reflected in Lamiya's attitude? Explain.

d. Latif's attitude is an obstacle to his success. Explain.

2. Decision has been taken by the school of Dipa for having this year's Study Tour at the Sundarbans. Some of the students like to go there by bus and others by launch. Some of the students feel inconvenience in travelling by bus and some like to enjoy natural scene while travelling. The teacher advised them not to think about the time and financial matters and to arrive at a decision to make the tour enjoyable. Later, the students started for the Sundarbans along with their teachers.

a. Where do we get 'all of our hopes and aspirations' fulfilled?

b. What is meant by 'Planning'?

c. What type of decision did the students make? Explain.

d. Dipa and her class-mates correctly followed the steps in their decision-making. – Explain.

Short Answered Questions

1. What do you understand by the term "home management"?
2. Why is the third step of home management important? Explain.
3. What is meant by group decision-making?

Section-B

Child Development and Family Relationship

The first place of learning for a child is his or her home. Each of the members of a family plays an important role in the development of a child. Every child is different. But, there are some common characteristics among the children of the same age. Knowledge of such characteristics help each family member behaves properly with the child. Life becomes much easier if there is clear idea and prior preparation for changes that take place during adolescence. An adolescent boy or adolescent girl is loved by all if his or her behavior becomes acceptable in social environment.



After completion of this part of the book, we will be able to –

- describe what family is, family activities and types of families.
- learn the characteristics of children of various age-groups and behave with them in a proper way.
- demonstrate various strategies and techniques for learning how to behave with courtesy and etiquettes with the elders.
- behave properly with family members and teachers.
- support young children and the handicapped at times of their need.
- describe the physical, mental, emotional, social and moral development during adolescence.
- describe the nagative aspects of various types of emotions and the means of controlling emotion during adoloscence.

CHAPTER IV

Family and Child

Lesson 1 –Family and Types of Families

Each of us lives in a family. A family, generally, comprises parents, siblings, grandparents and many others. Members of various ages related by marriage and through births, live in a family. Family is the basic unit of a society.

Each of the family members has his or her own needs. For example, foods, housing, clothing and education etc. Besides, there are other needs like love, company, security and cooperation. The younger members of the family need proper care and direction. Above all, a safe environment is required. A family fulfills all the above needs.

Family Bondage – We get upset in absence of any one of our parents. We feel very lonely if any of our siblings goes out to visit other places. We all become nervous if any of our family members falls sick. Do you know why such things happen? These things happen because of deep relationships existing among all the family members. Such a deep relationship is known as Family Bondage. Such bondages are evolved through marriage, blood relations, love and affection and mutual cooperation. Family bondages get strengthened as we discharge our duties and responsibilities sincerely among ourselves, exchange our love and affection and mutual sense of respect, mutual company with one another among the siblings, mutual exchange of various experiences and ideas, etc.

Types of Families – Families, according to the formation and shapes, are of two types : 1) Single Family and 2) Joint Family.

1. Nuclear Family - A nuclear family is a small family. It is made only of parents and their unmarried children. Currently most of the families are nuclear families.

2. Extended Family - Families in which grandparents, uncles, and aunts, parents and children live together, are extended families. Extended families are larger in size. When such families have strong family bondages, mutual cooperation exists.

The problems which the members of the nuclear families of modern society are facing presently are-

- Children in single families grow-up without the help of grandparents and other aged members of the family.
- Both grandparents and grandchildren are deprived of the company of one another.
- Children are looked after by someone who is not a relative as working parents go out for work.

Sometimes any aged grandparents stay with some of the single families. In such cases the single family enjoys elderly advice, company, love and affection, etc.



Joint Family



Single Family

Task 1 – What is the type of your family? Describe your relationship with the other members of the family.

Task 2 – Make a list of the activities you can do to strengthen the family bondage.

Lesson 2 – Characteristics of a Child at Various Ages

The United Nations Charter for Child Rights, 1989 identifies everyone below 18 years of age as a child. Now, a question may arise whether the characteristics of a new born are the same as those of a five-year old. The answer is 'no'. They are never the same. Based on characteristics of children of various age-groups, hence, the childhood periods have been given various names.

- From birth up to 2 weeks – Neonatal Period
- 2 weeks to 2 years – Babyhood
- 2 years to 6 years – Early childhood
- 6 years to 10/11 years – Middle childhood

So we need to understand the characteristics of the child at various ages, because –

- we can behave appropriately with the child
- we can fulfill his or her needs of that particular age.
- we can make the new parents aware of creating suitable environment for his or her growing up.
- we can arrange timely treatment for any type of abnormality if found in him or her.
- we can give company to him or her as elder siblings.

Neonatal Period

It is the children who are of reddish or pink color at the time of birth, who cry at the moment of birth and who can suck mother's breast normally, are healthy neonatals. A neonatal sleeps for at least 18-20 hours – wakes up after each 2-3 hours, takes food, releases excreta and sleeps again.

The charactersticks which prove the healthiness of a new born baby are –

- After birth, the first language of a neonatal is crying. Crying activates the lungs of the child.

- The child likes to suck if its lips are touched by a finger.
- The child holds firmly if a finger or a pencil is put in its palm
- Sudden sounds make the child suddenly come to senses.

Task 1 – What type of behaviour you will practice with your younger brothers and sisters – write about this.

Lesson 3- Babyhood

Period extending from 2 weeks to 2.5 years after neonatal period is called Babyhood. Besides, an eighteen month old child starting to walk swinging sideways, is also known as a 'toddler'. Development of the child during this period is so fast that after several lapses of some days, the child appears much larger and seems unknown to even known persons. The child who was much helpless during the time of birth, can now walk, jump, talk and can perform many other activities as well.

Various children have various extent of development in size depending upon food, nutrition, care, physical structure of parents etc. However, still, development of a child in weight and height has its normal sequence. Weight at birth is doubled in six months, becomes three times in one year, four times in 2 years, five times in 3 years. Height of a child becomes twice the height or length he or she had during birth. The rate of increase of weight decrease gradually in the following years. We need to call a child healthy and normal if he or she is of normal weight and height according to his or her age, with transparent and bright eyes, glazy and smooth skin and hair and shows signs of happiness and contentment in his or her appearance.

Hence, we need to do the following for taking care of the little baby:

- providing him or her food whenever he or she is hungry.
- cleaning him or her immediately as he or she releases his or her excreata we should not keep him or her wet.
- making him or her get rid of the inconveniences as early as possible when he or she begins to cry.
- to ensure that the child does not suffer in excessive heat or in excessive cold.

- to take the child on our lap as he or she gets scared of anything.
- making arrangement for the child to have sound sleep.

The appropriate and adequate food facilitates physical and mental growth of a child. However, most of us do not know that, besides food, love and affection as well as providing enthusiasm for doing something good, act as significant ingredients for a child's development.

Mother has the maximum responsibility for taking care of the child. A child, of course, having his or her father, siblings and other near and dear ones of the family participating in child rearing, games, exchange of ideas, etc., is more healthy and intelligent than other children. Such a child grows up in stronger security as well.



Sharing feelings with family members

Task 1 –Design a poster mentioning the activities which are important for the development of babies.

Lesson 4 – Early Childhood

Period extending from 2 years to 6 years of age is known as Early Childhood or first step of childhood. Another name of this age is pre-school child or child prior to school age. It is such an age when the child does not begin to participate in informal education in a school, but gets prepared for going to school. Some children, of course, begin to go to school at this age and takes preparation for participating in informal education there. This period is also called as the age when a child spends his or her time in playing.

This period is full of joy and happiness for a child. The world is a great wonder to him/her. He/ She has thousands of queries regarding himself/ herself, others and everything near about. He/ She asks questions contentiously on each subject. He/ She likes to learn everything. This is an age of eagerness and curiosity. One should not resist such a behavior of a child. All his/her questions should be satisfied with easily understandable answers for making him/her interested in further learning. His/ Her intelligence will gradually be developed in this process.

Dialogue

Asif –I can count one hundred. Raiyan- I can count one hundred thousand.

Asif –I can count two hundred thousand Raiyan- I can count more than anyone in the world.

The above dialogue is between two pre-school children. They can talk much during this age. They remain self-centred during this period and, so talk much about themselves. They get interested in saying everything about the topics they like. Such as about the members of their families, about the things that are in their possession, etc.

They start competition with their equal age counterparts. Their social development takes place in this way. Children of this age- group liked to imitate others. They like to play and act as the type of work performed in front of them. Such as, reading newspaper as is done by father, advising everyone as mother does, etc. At this age, expensive toys and other ingredients are not necessary for bringing about appropriate changes in children's lives.



Learning through playing. Some pre-school children

The duties of the members of the family –

- Talking with them politely, beautifully inside and outside the house.
- To be attentive to what they like to say.
- Without getting annoyed, one needs to satisfy their questions with easily understandable answers.
- Entertaining them with rhymes, songs and story- telling.
- To give them time and playing with them.
- Making them acquainted with new topics providing ideas.
- Encourage them to see, do and get taste new things.

The more such works are done properly, the more these will be beneficial for appropriate development of children.

Task 1– Make a list of the characteristics of a pre-school child with examples.

Lesson 5 – Middle Childhood

Period extending from 6 to 10/11 years of age is referred to as Middle Childhood. A child's physical development takes place at a low pace in this period. But the social life experiences changes amazingly. Most of the children of this age group start going to schools. This is one of the major changes in their

regular lives. At this age the children are getting involved in games in groups. Boys and girls begin to play in their respective groups. Schooling and games make them interact within the respective groups of contemporaries.

At this age necessary skills develop among the children. They are able to do their work themselves. They can take their meals, put on dresses etc., in a short time with less effort. They are able to do various works inside and outside their house side by side those of their own. Such works include – gardening, room-making and cleaning etc.

At this age children perform various works, such as - story and poetry writing and drawing pictures in schools, biking, swimming, etc. Through such participation in various works, they become active and industrious. Successes in new tasks enhance their self-confidence. They compete with their contemporaries in various ways. Successes achieved by them during this period of their age open up doors to future successes. Failures, on the other hand, create disappointment in them. These failures lead leading to their excessive anger, habits of throwing out or breaking various articles, hitting someone etc., dejection, crying due to minor reasons, disinterest in going to school, etc.



Children become skilled and hardworking in Middle Childhood

Elders' appreciation helps children grow a sense of security. This leads them to develop within themselves an eagerness for behaving still more nicely and also doing more good works. Children like appreciation and love. On the other hand,

punishment from elders for any reason, hurts their self-respect and lead to dejection in them. They lose incentive to do new works.

It is not wise to get disheartened at the results of examinations for any reason. This causes obstacle to success in future. Parents, too, become disappointed and angry under such circumstances and continue to rebuke their children. Negative utterances of the eider harm the children's self-confidence and cause obstacle to their success in future. In such a way you, need to be conscious of your younger's failures. The youngers should be encouraged for regaining their self-confidence.

Task 1 –Write some ways how to encourage younger brother or younger sister for his or her success.

Task 2 –List with examples, of characteristics of Middle Childhood.

Exercise

Multiple Choice Questions

1. Which of the following range of age is called 'childhood' according to United Nations Charter?

a. 6 b. 10

c. 14 d. 18

2. How many hours does a two-week-old baby typically sleep per day?

a. 6–7 hours b. 8–10 hours

c. 12–14 hours d. 18–20 hours

Read the following paragraph and answer to questions 3 and 4

Saleha Banu's son, Ratul, is one and a half years old. He can walk and talk.

3. What stage of childhood is Ratul in?

a. Neonatal stage b. Infant stage

c. Early childhood d. Middle childhood

4. How does Saleha Banu take care of Ratul?

i. Feeds him when he's hungry

ii. Maintains his hygiene

iii. Teaches him new thing

Choose the correct option

a. i and ii b. i and iii

c. ii and iii d. i, ii, and iii

Creative Questions

1. Abid is 3 years of age. His working mother stays with her parents-in-law in spite of her office being at a distant location. Abid's aunt (wife of paternal uncle) helps him to take bathe, have meals, etc. Abid spends his day happily with his grandparents in spite of day long absence of his parents.

   a. What is the basic unit of a society?

   b. What is a nuclear family?

   c. In which type of family does Abid grow-up? – Explain.

   d. Explain the role of the family in the process of the growth of the children having the same age of abid.

2. Saiyara will get herself admitted into a school next year. She speaks throughout the day. She keeps her mother busy throughout the day with thousands of questions about the world surrounding her. Although her mother remains busy in various works, she does not feel disturbed and answers to the various questions asked by Saiyara.

   a. What is the first language of a neonatal after birth?

   b. What do you mean by a healthy and normal child?

   c. Which stage of childhood is Saiyara in? – Explain.

   d. Role played by Saiyara's mother helps appropriate development of children like Saiyara – Explain.

Short Answer Questions

1. How can family bonds be strengthened?

2. Who is considered a toddler?

3. Why is it important to understand the characteristics of children at different ages?

CHAPTER V
Learning of Etiquette by the Children

Lesson 1 – Human Qualities

Everyday we need to exchange ideas and communicate with our parents, siblings, relatives, teachers, neighbors and several other persons elder or younger to us and, through such a process, our human qualities become apparent to all whom we communicate with. Taking care of others' conveniences and inconveniences, appreciation of others' views and feelings, decent behavior, etc., together, are called as 'etiquette'. Etiquette is the outcome of civilized behavior and inner beauty of human beings. Beautiful aspects of one's inner self become apparent through etiquette that come out of one's behavior.

It needs to be nourished and cultured within oneself. You need to be courteous and full of etiquette in order to make your life beautiful with success and to establish yourselves as members of a developed nation. Etiquette will be reflected in your polite, respectful, well-mannered, modest behaviour in the society. You are the future citizens of the country. So in your growing-up as civilized, appropriate and well-behaved beings, lies the welfare of our country and also that of our nation.

The behaviour which everyone of us expects from others are human qualities. Such behaviours are - cooperation, sympathy, patience, modesty, politeness, decency, etc. Human qualities are earned from the family. These qualities become apparent in the family through interactions with neighbours, relatives and friends.

Playing in groups helps human qualities grow more easily. While you play games in a group, you need to cooperate with the fellow group¬ members. You need to obey the rules of the games and show your integrity and righteousness. You need to be modest, sympathetic, patient and friendly to your group. You need to sympathise and come to be of assistance to your fellow group members as any of them gets injured during the game. You need to be above self-interest and to come to be of assistance and helpful to others in the group in order to have your generosity well-reflected. Thus, the human qualities within yourself help develop your individual character.

Let us come to know about light on Sadia. Sadia is a student of Class VI. Her relatives, teachers, class-mates and others in the school are very much impressed of her politeness, modesty, righteousness, sense of respect, cooperation, generosity and friendly behaviours. She always says 'salaam' and shows her respect to elders and entertains guests. She is very much sympathetic and polite to her poor relatives, poor neighbours and assistant. She is affectionate to and full of love for children, too.



Expression of sympathy (donating warm clothing to the poor).

She always cooperates her fellow class-mates. She does not tell lies and behave in improper ways. She keeps her word. She admits her offences and shortfalls easily. For this reason, she is liked by everyone – younger and elder. Sadia respects her parents very much and follows them as ideals for her.

By now you are quite aware that Sadia is liked by all for her human qualities. None would have certainly liked her, if she malice, envy, vanity, arrogance, etc., in her behaviour or she was used to telling lies or did not keep her word. So, you need to try for attaining human qualities in order to be acceptable and liked by the creator and also by all persons.

Task 1 – Enlist the behaviour that are liked and disliked by all.

Lesson 2 – Respect for Elders and Teachers

Elders deserve your respect. Among your relatives, your parents, elder siblings, grandparents, uncles and aunts - all are elders of your family. Besides, it is your moral responsibility to show respect to your teachers and elderly neighbours irrespective of their professions. This is an example of polite behaviour. Obeying elders is a means of showing respect to them. Elders will like and love you if you, too, are respectful to them. Love is created out of respect.



Nursing old grandfather



Listening to grandfather about the War of Liberation

You may, at this point, ask how to show respect to elders.

Means of showing respect to elders

- Say 'salaam' or vow to greet elders and exchange well-wishes.
- Be attentive to what elders say. Do not interrupt while they talk to you.
- Obey elders and cooperate with them when they need it.
- Express your views with due respect in case you do not agree to what an elderly person says or does.
- Nurse old grandparents in your house, give them company and talk to them as they are unable to do their own work due to their old age and are lonely. Besides, you can learn much through talking to them, too.

Your grandparents had brought up your parents in the same way your parents brought you up. They love you very much. They have been loving you much since the period of your early childhood and praying for you as well. Hence, you ought to be careful otherwise they get pain due to anything or any kind of behaviour from anybody. Your courteous behaviour and sense of honour for the elders will help you earn their love and affection and make your social life well-coordinated and disciplined.

Task 1 Write what you need to do toward your old grandparents.

Respect for Teachers – Teachers are the ones who shape human minds to be perfect human beings. Teachers provide you knowledge with which you shape your present and future. Teachers are next to your parents. You need to learn your lessons from your teachers with due sense of honour for them. Teachers try to rear their students up in the same way they do for their own children. You ought to follow the ideals set out by your teachers. Be attentive to the lessons your teacher teaches. It is your responsibility to be modest and gentle towards them.



Students show honour to the teacher in his presence in the class.



Fahim's sense of respect for the teacher outside the school.

Fahim, a student of Class VI does not hesitate to stand up and show respect to the teacher in his presence in the class-room. He is very much attentive to what the teacher teaches. He accomplishes the class-work and the home-work in time assigned by the teacher. Besides, he shows respect and honour to the teachers outside the class-room and outside the school, too, in the same way he is used to do inside the class. Everyone praises him for his such a good behaviour. Relationship that you need to have with your teachers should be

intimate and based on honour and respect. This will help create better and desired environment for learning.

Task 2 – Describe how you will show repect and honour to your teacher outside the class-room and outside the school.

Lesson 3 – Behaviour with Peers and Responsibilities and Affection toward Youngsters.

We all like company. Our lives become full of comfort through living along with mutual company among us. This type of mutual attraction exists more among contemporaries. Contemporaries have, among themselves, similarities in thinking in the same way as they are similar in their ages. Friendship is created among those contemporaries, who have more similarities in thinking. We exchange feelings with our friends. Those who are well-behaved, do not cause harm to others, obey rules and regulations and are polite and sympathetic to others are the best. Besides, an important point for selection of friends is mutual trust.



Playing with peers



Studying together

Russel and Milon are class-mates and good friends. All other class-mates like them. They perform as top both in studies and in games. They compete with one another in studies but are not envious to themselves rather, each of them has his own self-confidence. They play football in the school in two separate groups. Both of them have their own ideals. They have patience and they show

sympathy to others in hours of pains and hardships and help others according to their capacities. They are capable of making appropriate decisions. All the class-mates and the members of various groups are very much glad and impressed by their qualities. One day, Milan's team was defeated in the game. Many in the team could not accept it. Such an affair led Milon to have discussion within the group-members about their weaknesses and rules of the game. As a result everybody accepted the defeat. It was Milon’s consideration which controlled all the aggressive attitude of all. There were some boys in the class who like to quarrel and fighting. Russel and Milon sat together and decided to include these boys in their groups for playing the game. They divided these naughty boys between the two groups of them. Strict orders were given to both the groups to obey the rules of the game and maintain discipline and appropriate environment all throughout. After some days of playing, significant improvement was noticed in the attitude of those boys.

Now you can easily understand the extent of influence of friends at your age. So, there are some needs in ‘socialization process’ which parents or teachers are unable to fulfill. In such cases, friends of the same age can play a significant role.

Task-1- Write your own opinion about behaviour with peers.

Responsibilities toward Youngsters – You are students of Class VI. There are many others in the school who are among your relatives and neighbours and are younger than you. You have significant number of responsibilities toward them. These are –

- Give them your love and affection.
- Advise and encourage them to good work.
- Refrain them from doing evil work and explain the ill effects of evil work to them.
- Try to imbibe them with the sense of righteousness and injustice and self-confidence.
- Cooperate with them, if needed. But you need to set examples of good work in front of them so that they can follow you. Remember, the youngsters always learn through following their elders.

Nipa, a student of Class II got her feet injured while playing in the playground and started crying. Malati of Class VI and her friends took up Nipa onto their laps and took her to the Teachers' Room, applied ice to her feet, tried to make her cool through fanning and wiped her face with handkerchief wet with fresh water. This made Nipa gradually come round. Nipa was charmed at the affection, love and sympathy of these elder sisters.



Malati saw a tiny boy eating banana. She saw that the boy threw the banana skin on the road. Malati called the boy and asked his name and advised him to collect the banana skin from the road and throw it inside the dust-bin. Malati said that people may get their feet slipped due to banana skins and get injured. Besides, throwing garbage here and there makes the environment dirty. The boy understood what Malati had said and promised not to repeat such things in future.

Task 2 –Write what you have learnt from Nipa and Malati.

Lesson 4 - Behavior towards the Special Need People and Maintaining Family Secrets

We find around us various persons who are physically impaired, visually impaired, hearing impaired, dumb, having irregular body structures, with intelligence much less than normal level, etc. They live with much hardship. But, they are not responsible for such states they have been in. Everyone wants to live a normal life. You have significant number of responsibilities towards such special need children, too.

Your kind and good behavior will inspire them to go forward. We all have our responsibilities toward them so that they are not neglected, they can be among us in the society, they can work according to their abilities and they can get educated. So, we all have responsibilities towards them.



A handicapped child in the school on a wheel-chair



A blind child holding a white stick

There is a handicapped student in the school where Ratan and his friends read in. The boy, named Milon, is physically handicapped and comes to the school on a wheel-chair. Ratan and his class-mates push the wheel-chair, lifts him onto the verandah and takes him inside the class-room with much labour. Ratan thought of a ramp as the means of relieving them of the labour they have to undertake everyday. He discussed it with the class teacher and later, along with his friends and made a slope at one side of the steps leading to the verandah by means of clay. Afterwards, the school authorities laid bricks and cement on the mud-slope and converted it to a complete 'ramp'. This has helped Ratan and his class-mates in taking Milon to the class-room at ease. Sincerity among the class-mates, teachers and school authorities, thus, showed Milon the way to move forward. Besides, there is quite a number of children in the society who are handicapped in vision, hearing, speaking and intelligence. Make good gesture with these children, cooperate them at times of need, play with them, give them your company and assist them while crossing the roads. Behave with them in such a way so that they do not think themselves helpless.

Task 1 – How will you behave towards a person who is visually impaired?

Maintaining Family Secrets - All of you live in a family along with your parents and siblings. Relatives are also there in a number of families. You have among yourselves intimate connection and strong bond of affection and love within the family. However living closely together inside a family sometimes, misunderstanding and conflicting ideas may arise. Such happenings need to be kept concealed within the family members only. Besides, if matters related to financial affairs and valuable assets, is disclosed, keep it secret. Such affairs, if become public, may jeopardise the family security and cause uncalled-for troubles. Hence, the matters or the affairs, which when let known to outsiders, may harm honour, status and respect of the family. These matters are 'family secrets'. You will be able to understand clearly if you go through the following story.

One day, there arose some conflicting ideas between the parents of Promi. Promi informed her neighboring friend of such happenings. Her friend, while talking to her mother told about the afare said incidence between Promi's parents. After some days,

1. Promi's mother met Promi's friend's mother.
2. Promi's mother was asked about the conflicting matter between her and her husband.
3. Promi's mother felt very embarrassed.

You can now understand through such happenings that there are such matters in the family which should not be discussed with outsiders. Matters that are absolutely private should be kept confined within the family. Often you discuss on something related to your families with your friends. During such occasions, you need to be careful so that the image, status and respect of any of your family members do not get harmed or tarnished. But, if you think that some of the absolutely private affairs of the family which may cause degradation of relationship among the family-members, you may discuss those issues openly with your parents or with elderly or dependable members of the family. This is advised because the issues that may degrade relationships, could be discussed openly among family-members for developing relationships and bringing peace, harmony and discipline within the family. You, too, have a significant role to play for upholding peace and discipline in the family as well as solving various problems.

Exercise

Multiple Choice Questions

1. Which aspects are exposed through etiquettes?

a. Creativity b. Physical beauty

c. Intelligence d. Inner beauty

2. Which among the following is the greatest features of friendship?

a. Sympathy b. Cooperation

c. Good behaviour d. Mutual trust

Read the following paragraph and anwer to questions 3 and 4.

Himel is considered naughty by his classmates, so they avoid playing with him. During tiffin time, when Himel asked to join Ronnie's group, the others refused. But Ronnie invited Himel to play instead of joining himself.

3. What quality is shown in Ronnie's behavior?

a. Selflessness b. Compassion

c. Fairness d. Idealism

4. Possible changes in Himel's mindset due to Ronnie's behavior

i. Removal of jealousy and hatred

ii. Development of moral values

iii. Encouragement of a cooperative spirit

Select the correct option

a. i and ii b. i and iii

c. ii and iii d. i, ii, and iii

Creative Questions

1. Konok is a student of Class VI. She comes to the class every day in time. One day, as the class started, she took her seat in the front row. After sometime, Shahida entered the class and found all the seats on the front row occupied. She kept Konok's bag on the second row bench and asked her to move there. Konok, at first, got displeased at such type of behaviour of Shahida, but sensing unpleasant circumstances, she moved to the second row.

The class teacher noticed what had happened and said that each of the students needed to acquire good human qualities side by side with formal learning process.

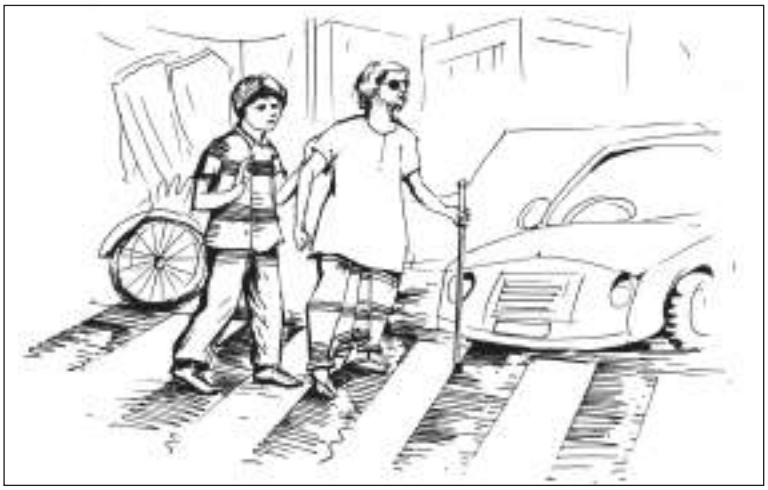
a. What are human behaviours?

b. Why do human qualities get developed through playing in groups?

c. Explain what type of learning has influenced Konok's behaviour.

d. Evaluate Shahida's behaviour in the light of comments made by the class teacher.

2. See the picture below and answer to the questions:



a. Who shapes human beings?

b. Explain how one becomes respectful to elders.

c. Explain what type of etiquette is reflected from the behaviour of the boy in the above picture.

d. Such behaviour of the boy helps create good relationship among all the members of the society. – Discuss.

Short Answer Questions

1. What is meant by etiquette?
2. Why is it important to keep family matters private?
3. How should one behave with peers?
4. Which games help in developing human values? Explain.

CHAPTER VI

Development during Adolescence

Lesson 1 – Physical Development

The period extending from 10/11 years of age, i.e., from the end of the last stage of childhood to the beginning of adult-hood, i.e., the age of 18/19 years is called adolescence. Such a period of age is frequently referred to as puberty.

Physical Development – Boys and girls undergo some specific kind of physical changes as they get transformed from childhood to puberty. Such changes are of short duration and rapid. Physical development means changes brought about inside the body and its increase in structure and size. Physical changes have some common characteristics for all. During this period, the height increases by 7 cm - 14/15 cm (3 inch to 5/6 inch) in a year. Generally, girls continue to grow in height up to the age of 18/19 years while the boys do it till attaining 20/21 years of age. During this age period, in spite of gaining weight they appear as thin due to attaining increased height. They attain the size of full-grown human beings with gradual changes and incensement of organs of their body. During puberty, specific changes that take place throughout the body, help distinguish between a boy and a girl. Boys start having moustaches and beards and their voice changes. Initially the pitches changes and turns into a manly voice.

Girls, on the other hand, have their menstruation after each 28 days. It continues for 3 to 5 days and for some girls, 7 days or more. Such a change can, naturally, be a cause for the respective girl becoming concerned of, if it is not previously known to her. In some cases, such types of physical transformation may start one year or a couple of years prior to or after the beginning of adolescence. There is nothing to be concerned of, as it is a very much normal process. Changes that come suddenly during this period is of normal human life cycle.



Pubescent boys



Some pubescent girls

Task 1 – Arrange the physical changes that you have undergone during the past one year according to the following table.

Period	Bodyweight	Height	Appearance	Others
Previous 1 year				
Current year				

Lesson 2 – Mental Development during Adolescence

The word, 'mental' has come from the word, 'mind'. Children grow in height simultaneously with weight. They learn how to speak and memorize things as they grow-up in age. Gradually they can understand the difference between day and night and, also, the distance between one place and another. It is due to the presence of intelligence among us that we are able to work and adjust ourselves with environment we live and work in. All such abilities are mental efficiencies or mental development. Mental development of a child means how and to what extent the child gradually attains the capability of using his or her body-organs, expressing himself or herself in languages, utilizing his or her intelligence, understanding anything, etc.

An adolescent can solve problems with their thinking and sense of judgment. They can think by applying logic. Such aspect of thinking is the outcome of matured stage of mental development which takes place during adolescence. At this period of their age, they can grasp abstract ideas (i.e., matters that are hidden inside an object or behavior and not seen such as –

honesty, bravery, affection and compassion, etc.). They can also solve problems in black and white which are beyond their actual visual area. Such as problems and theories of geometry. They can express their opinion logically. They can think deeply become and attentive. The adolescent having the ability to memorize, ability to think and understand logically will succeed in life. They can adjust with the environment easily.

Some ways to develop our mental capabilities at adolescence

- Reading more various types of helpful books besides textbooks.
- Looking for answers to various questions to satisfy curiosity.
- Listening and understanding things attentively.
- Watching clearly and listening attentively.
- Understanding things prior to memorizing them.
- Seeking help of teachers or the aged for understanding content clearly.
- Mixing with other children and exchanging ideas with them.
- Participating in various works.
- Testing of content, if possible.
- Understanding own responsibilities through group discussions.
- Taking interest in what is happening around us.



Clear ideas on subjects are generated through group discussions.



Attention in classroom is an easy means for enhancing mental capability.

You can develop your mental faculties if you pursue the means as listed above. It should be kept in mind that an all-round development of a child or that of a human being is not impossible without physical and mental development.

Task 1 – Enlist some of your skills that indicate your mental development.

Lesson 3 – Emotions of Adolescence

Happiness, anger, fear, love, smiles and tears, etc., are our everyday companion what are known as 'emotions'. Human beings without emotions cannot be thought of. Here lies the difference between a robot and a human being. It can do everything a human being can do. But it cannot smile, it cannot run away out of fear, it cannot shout out of anger. When an external event makes us agitated, we smile, we are in tears, we get scared, feel jealous, get angry. These are the expressions known as emotions.

Types of Emotions –Emotions cause our physical, mental and behavioural changes. When we get afraid of something our hairs get bristle, hands and feet become cold, our heartbeat increases in tension, eyes redden up in anger, we laugh in joy and feel crying at the news of sad happenings – all these are expression of emotions. Emotions are of two types : positive emotion and negative emotion. Positive emotions create joyfull environment for e.g., happiness, joy, smiles, love and affection, etc. Such type of environment is liked by all. Examples of negative emotions are-, fear, sorrow, envy or jealousy, etc. These make an environment sad and are not liked by anyone.

Negative Aspects of Emotions – Excess of emotions causes much harm to us. Changes occur in our mode of expression, appearance, etc., due to emotions. Eyes get enlarged during anger, appearance gets distorted and we begin to look like a ferocious animal. Our behavior, too, changes due to excess of emotion. There is a number of persons who throw out and damage things and hit others out of anger. We feel aggrieved due to sad happenings, we cannot be attentive

to our studies, we cry and stop eating. Fear of anything increases our uneasiness, we cannot do normal works, we stammer while speaking, we sweat, our hands and feet tremble. All such happenings are harmful to our body and mind. Excess of emotions creates complications in our lives and make our behavior illogical and awful.

Adolescence is characterized by excess of emotions. Inequalities of emotions are observed due to occurrence of physical changes. Various types of anxiety and uneasiness work within the adolescent boys and girls. Behaviors of your family members often create offended state of mind and anger within yourself. These, although, are the normal characteristics of this age, can cause much harm to us.

Anxieties, more than often, cause our distracted attention to our studies, make us suffer from sleeplessness, nausea, abdominal pains and cause obstacles in our daily work. For such reasons, emotions need to be kept within control.

Means of Controlling Emotions – Anik was watching TV in the evening. His father suddenly switched it off. He said angrily "You do not need to carry on your studies". Anik got very much offended at the words of his father. He wished to throw out his textbooks and exercise books but controlled himself from doing so. He thought applying some logic – father might have used those words for Anik's betterment. Anik should not have watched TV during his study hours in the evening.

Anik controlled his emotions arising out of the above circumstances and tried to sort out the better aspects of it. In this way you, too, can make a habit of controlling the negative emotions.

Measures to be done for controlling emotions are –

- learning to sort out the positive aspects of any event,
- building up a habit of facing complicated situation,
- avoiding situations of disappointment,
- participating in works and games in groups,
- trying to avoid events which may cause anger, fear, etc.,
- discussing openly with parents and friends about their problems.



Sad events cause anxiety among us

Task 1 – Describe an event which occurred during the past few days due to emotional reasons. What was your reaction?

Task 2 – Write with logic whether your reaction were appropriate.

Lesson 4 – Social Development during Adolescence

Our behaviour changes with the growth of age. People around us expect appropriate behaviour from us according to our age. Learning to behave according to age is, in other words, social development. An example of social

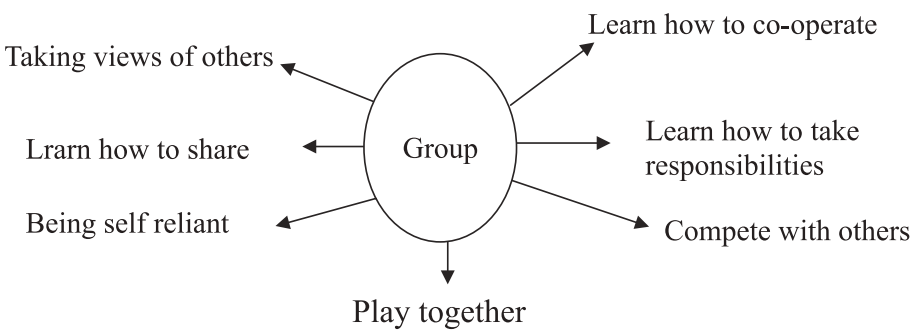




School class-mates and groups of neighbouring friends comprise social environment beside the family for the adolescence.

development is keeping company with everyone, e.g., playing with contemporaries, showing respect to elderly persons, being affectionate to youngsters, etc. helping, sympathizing and sharing things with each other, participating in good activities, learning to obey rules and regulations, etc., are within acceptable social behaviour. On the other hand, quarrelling, fighting or showing aggressive behaviours, using abusive languages, self-centeredness are the ones which are beyond 'acceptable social behaviour'.

Behavior of the contemporary adolescent groups significantly impacts upon the children belonging to that age-group. During this period school class-mates and neighboring children comprise a social environment which is outside the family environment. During adolescence, children try to be devoted to their respective groups and like to do the same behavior as those of the members of the group. He/she expresses himself or herself to the group he/she belongs. They like to discuss their personal secrecies with their friends rather than their families. In this way, a group of close friends is created. Being closed with friends during adolescence, they can develop quite a good number of acceptable behaviors among themselves. They are willing to behave as their respective friends-groups. Example could be – competing in studies, obeying teachers' directions, playing games together, etc.



What do children learn being within an acceptable group?

On the contrary, while following inspirations of their friend-groups, they do not get afraid of doing various risk-involved works, such as - experimental smoking, taking drugs, fleeing from schools, posing resistance to elders, etc. Anyone not doing such behaviors becomes subject to taunting and is made bound to get used to those behaviors if he/she wishes to be within the group. For such reasons, everyone needs to be cautious in selecting friends during adolescence.

The things to do for becoming social during our adolescence –

- exchanging greetings with all,
- not keeping ourselves withdrawn and concealed within us,
- participating in various works and games,
- building up habits of continuing discussions with all,
- showing respects to elderly persons, obeying their directions,
- showing affection and love to youngsters.

Task 1 – Can the friend - group be taken as acceptable with whom you are closely associated? Show logic behind your comments. Write what you have learnt from such friend-group.

Task 2 –Write something about an 'unacceptable group' you are acquainted with. What type of work do they do? Write your suggestions for them.

Lesson 5 –Moral Development during Adolescence

Morality means following of social and religious rules and regulations. Here, a person himself is responsible for his good or evil deeds. As virtuous deeds brings satisfaction of mind, and evil deeds regrets. A person feels good to speak the truth and telling lies brings guilty feelings. That means, morality is to control one's own behaviour himself or herself.

Human beings do not attain morality all of a sudden. The process of moral development is spread over a long period of time. Sense of doing right or wrong behaviors comes from the family and develops during childhood. A child learns about good or bad activities following his/her parents, elder siblings and other members of the family. During the early stages of moral development, a child refrains himself or herself from wrong behaviors out of fear of punishment. Hence, morality during childhood is often, told as 'compulsory morality'. But, as a child attains adolescence, he/she builds up his/her own idea about what is good and what is wrong. He or she does not perform good work out of fear at this age, rather does it out of his or her own will. He or she applies logic in justifying which work is good and which work is wrong.

Discipline plays significant roles in moral development. Following of such quality from the very childhood helps behave in a good and an acceptable manner. Parents within the house and teachers in schools help you to follow regularity and rule. Development of habit of making acceptable behaviours becomes easier if the teacher make you understand right and wrong activities. Physical punishment arouses hostility in adolescents and causes them willing to go against rules. They will feel encouraged if they are appreciated for good works.

Adolescents get their behaviour influenced by the company of friends they keep. Wrong behaviour, sometimes, are greeted by friends. Moreover, they learn wrong behaviour following those of their group members. Hence at this age, too, children should be cautious of the company they need to keep.

Now, let us get acquainted with the wrong behaviour during adolescence and be careful of such behaviour.

Wrong behaviours at home	Wrong behaviours in schools
• Quarrelling and fighting among siblings • Talking arrogantly with elders • Negligence in doing everyday work • Avoidance of duty • Telling lies • Blaming others • Spoiling or stealing others' properties	• Stealing something belonging to class-mates. • Telling lies • Cheating • Irritating others by making fun of them • Fighting with class-mates using bad language • Spoiling school properties • Fleeing school • Smoking or taking drugs

Task 1- Make a list of behavior you consider as good inside the house.

Exercise

Multiple Choice Questions

1. Up to which age do girls grow in height?

a. 18-19 b. 20-21

c. 22-23 d. 24-25

2. Which of the following is a negative emotion?

a. Love b. Smile

c. Sorrow d. Affection

Read the following paragraph and answer to question 3 and 4.

Abir is 13 years of age. His mother noticed that Abir, while at shopping has neither able to keep account of the money nor can understand the weight of things being purchased. He cannot logically understand the contents of study. He cannot well memorize the contents that has already studied.

3. Which aspect of Abir has not developed properly?

a. Physical b. Mental

c. Social d. Moral

4. For doing well in studies, Abir needs –

i. Understanding the topic well before memorizing it.

ii. Reading various books side by side with textbooks

iii. Visualizing clearly and hearing attentively.

Which of the following is correct?

a. i and ii b. ii and iii

c. ii and iii d. i, ii and iii

Creative questions

Ragib, a student of Grade 6, is always eager to help in class—whether it's explaining homework, working in groups, or assisting friends in need. His helpful nature makes him well-liked among his peers.

a. Define adolescence

b. What do you mean by mental development?

c. Explain what kind of development can be noticed in Ragib's behavior.

d. Do you agree to the fact that one can attain the nature like that of Ragib thorough working intimately with various groups? Justify your answer.

Short Answer Questions

1. What are some key features of physical development in boys during adolescence?
2. Which emotion is considered most harmful? Explain your answer.
3. How can adolescents manage and control their emotions effectively?
4. What does moral development mean?

Chapter VII
Changes During Adolescence and Maintaining Self- Security

Lesson 1 – Personal Awareness of Changes and Cleanliness during Adolescence

The period of puberty is limited within a very short span of years. During this period changes take place in the state of mind as well as in behavior simultaneously with rapid physical changes. Adequate food and energy, is needed for rapid physical development at this stage. Due to lack of food of requisite nutritional value may lead to malnutrition. They become easy victims of fatigue. Hence, they need to take all types of food in sufficient quantities. Girls may be subject to anaemia at this stage. Food, containing iron, help remove anemia at this stage.

Quite a good numbers of girls suffer from physical inconveniences due to abdominal pain, headache, back-ache, etc., during the early stage of physical changes or during the period when menstruation begins. Such inconveniences are normal. However, consulting physicians is necessary if such inconveniences become unbearable. All types of work along with playing games can be done during menstruation, except lifting or carrying heavy articles or doing excessive work need to be forbidden during this period.

The children sometimes do not feel comfortable in moving due to physical. In this regards teachers, parents elder sibling or elder members of the family can give correct information about physical change of the children before hand and can prepare them mentally. In this way the children can adapt with these changes easily.

Shupti has been promoted to class VI this year. She studies staying in her aunt's house. She wants to know from her aunt about some problems she confronts at this age. But she cannot do it with an open mind due to some sort of hesitation and timidity working within her. Such type of affair is common experience during the adolescent period. There are many of such girls who, like Shupti, cannot open-up themselves to their parents or elders. You should, certainly, need to bear in mind that any or all the problems of this age should be discussed with parents, elder siblings, teachers or with any dependable person and their views should be sought in order to get rid of the anxieties of this age.

Cleanliness

Cleanliness is of specific importance for us to be healthy. Physical cleanliness keeps us cheerful, too. Sweat is secreted from subcutaneous glands from the armpits more during adolescence. Hence, regular bathing and putting on clean clothing is very much necessary. Girls, during menstruation, need to do the following:

- Use napkins or pads made of clean cotton textiles.
- If textiles are used, they should be washed absolutely clean and dried in the sun.
- Textiles and clothing should not be kept in dark, moist and damp places as contamination of diseases are apprehended.
- As the pads and textiles become wet, they should immediately be replaced with clean and dry ones. Contentious use of wet pads and textiles for a long time may result in various contaminations.
- Used textiles and pads should be wrapped with paper and disposed in dustbins, buried underground or burnt.

Task 1 – Make a list of activities for ensuring personal cleanliness during adolescence.

Lesson 2 –Learning to Maintain Self-security

Safe environment is essential for healthy growth of children. Lack of such environment often leads children to encounter troubles. We can get rid of such troubles if we develop some consciousness among ourselves.

More than often, we come to know about missing children, tortures done to them in various ways and kinds of troubles or dangers they are in, through newspapers. Trafficking of children of various ages to various countries outside Bangladesh is one among such news items. These children are made to work in illegal activities and also in those full of risks and danger. Such activities range from house hold works to acting as jockeys of camels, shepherds, etc. Some groups of criminals sell out the children they smuggle out to other countries and earn illegal money. We all need to be careful of them.



Mother is being allured with a view to trafficking the child.

Sometimes some persons unknown to you may pretend to be among your relations and may talk to you and allure you in such a way that you may commit blunder and fall within their trap. For such reasons, you need to maintain utmost caution on your way and from schools and other movements here and there. You need to remember the following for your own safety.

- not to move alone to far and distant places.
- not to move alone with anyone who is unknown to you.
- not to take food offered by unknown persons.
- not to take anything from unknown persons.
- not to respond to any allurement from unknown persons.

Adolescents, more than often, are taken out enticing parents of lucrative jobs or handsome amount of money in a foreign country. In this way, they are smuggled out and get detached from the family forever. This is highly dangerous. You need to be cautious and to ensure that your parents, neighbors, younger siblings and friends are aware of such situation. We, very often, go to the market for shopping. There is tremendous rush of people in the market on occasions prior to Eid, Puja or various religious festivals. We may encounter various types of uneasy and embarrassing situations in such rush hours. Touching various parts of girls with bad motives is not an uncommon situation. You need to be cautious so that you do not have to encounter such unwanted situation. Following are some ways to protect oneself.

- Conscious and careful to go excessive rush.
- Avoiding going alone to known as well as unknown places.
- Careful to be alone in the house.
- Maintain safe distance to be call anyone.
- Protecting oneself from ill- motivated touch by anyone by all means.
- Avoiding friends who talks ill and obscene.

If you are a boy, you need to avoid or reject friendship with contemporaries who like to embarrass you by touching the various organs of your body. You may inform your parents, elder members of your family and, if needed, your teacher, too. You should consider such persons as your closest friends in all respects and, thus, you will easily be free from your mental uneasiness and pains.

Task 1 –Write an instance of abduction which is known to you from media. Read it out in the class under your teacher's supervision.

Exercise

Multiple Choice Questions

1. What is the type of food that helps remove anaemia?

a. Mineral salt
b. Iron
c. Iodine
d. Thiamine or B-1

2. Which of the following is a common event of adolescence?

a. Talking openly
b. Hesitation, timidity
b. Showing normal behavior
d. Taking normal food

Read the following paragraph and anwer to questions 3 and 4.

12 year Ruthi does not want to go to the market in rush due to Eid and various festivals. She is shy and afraid of going to such places.

3. Reasons of Ruthi's not liking to go to the rush borne various festivals are—

a. Assuming them as troublesome
b. Bad touches
c. She Dislikes rush of people
b. Avoiding companionship of known persons

4. Under the above circumstances, Ruthi needs to

i. Discuss with persons who are close to her.
ii. Ensure her own safety
iii. Become calm and quiet.

Which of the following is correct?

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

Creative Questions

1. Ever smiling and happy Neela has suddenly become calm and quiet; she keeps confined within her room and barely talks to others. She does not feel interested in taking food, too. Seeing such a condition in which Neela is, currently, in, her mother tries to talk openly with her. She asked Neela to tell about her physical state. Neela, though feeling constrained at first, became gradually normal with her mother.

a. When does the body need excess food and energy during its rapid development?

b. Lack of adequate nutritious food causes malnutrition – Explain.

c. Explain the type of physical change which makes Neela behave as above.

d. 'Role of Neela's mother will make Neela used to making normal behaviors' – show logic in support of this sentence.

2. Quddus Mia had sent Binu and Minu, the destitute and poor of village Rasulpur saying that they will be employed in lucrative jobs abroad. He, later, tried to inspire Shanta and Shimu of 12-14 age to accompany him to Dhaka alluring them of jobs in a foreign country. One day Shanta saw pictures of Binu and Minu in the newspaper and came to know through it that Binu and Minu had been arrested for going abroad illegally. She then went to Quddus Mia and wanted to see the papers related to their prospective jobs and informed their family about the affair.

a. What is needed for healthy growth?

b. Write clearly what is meant by personal cleanliness during adolescence.

c. Lack of what type of knowledge is responsible for such a condition that Binu and Minu are in? – Explain.

d. To what extend was this decision of Shanta and Shimu logical? – Analyze.

Short Answer Questions

1. Why is puberty considered a significant stage in life? Explain.
2. Are behavioral changes normal during adolescence? What should one do during this time?
3. What essential safety precautions should adolescents remember to protect themselves?

Section-C
Food and Food Management

Food, nutrition and health are interrelated. We can keep in good health by being informed about different functions of food and the elements as well as the source of food. We have to ensure taking food in a clean environment. Besides, we have to be refrain from adulterated and harmful chemically coloured food. As such, it is essential to know about food and food management to keep in good health.





By studying this section we will be able to:

- explain the concept of food, nutrition and health
- explain the correlation between food, nutrition, health and cleanliness
- describe functions, elements and sources of food
- explain the importance of food nutrition and balanced food
- be interested in selecting the right type of food
- understand the wrong conception about taking food and its bad effects
- explain bad effects of using chemical colour in food, adulterated food and first food.
- explain concept of alternative food
- understand the necessity of exercise and physical work to maintain good health

Chapter VIII
Food, Nutrition and Health

Lesson 1-Food, Nutrition and Health

Food: All living beings need food to survive in the world. We eat different types of food every day. Human beings cannot eat everything as food. Things which are digestible and do different functions for body, taken as food by people, the things that give nutrition for body are known as food. Food is the raw material of our body.

• Satisfies hunger • Fulfills the decay and ensures growth	• By controlling the internal functions of body it keeps the body healthy, strong and active • Produce temperature in the body

Nutrition : After consumption, food does different functions for body. Such as produces temperature and energy, makes new cells for the growth of the body, rebuild the lost cells, prevent the diseases and keep body healthy, strong and active. This process is called nutrition. In short nutrition is a physical process.

Health: We all know that "Health is wealth." Sometimes, we think that fat body evidences health and slim body indicates ill health. Actually by visualizing the fat or slim it is very hard to know the physical condition. Sometimes the large people can do a very little work. They become tired very easily and do not get interest in work. They look pale, have sleeping difficulties, often suffers from diseases. They can not mix with others and does not find interest in anything. So, it is clear that several things are related to health, such as physical condition, ability to work, mental condition, immunity etc. According to World Health Organization the definition "Health is the satisfactory physical, mental and social condition which is free from sickness or weakness."

Following characteristics are noticeable in a healthy person-

1. Body will be well structured and capable to do work with sufficient energy
2. Body weight will be normal
3. Will be in happy mood and have interest to work
4. Have resistance power and will not be sick frequently
5. Have smooth skin. Hair will be shiny and glossy
6. Have regular sleep and urine and bowel's clearance

Task 1 – Write about the characteristics of a healthy person which you have.

Lesson 2- Relation of Food, Nutrition and Health

Relation between food and nutrition: Relation between taking food and nutrition is very close. If people can't take food on regular basis for few days then body becomes weak, resistance power reduces, people suffers from different diseases, affects intelligence level. In short, malnutrition occurs and if this situation continues for a long time, man dies. On the other hand, by taking more food people get over nutrition which lead to overweight. This increases the chances of several diseases like high blood pressure, heart diseases, diabetics etc. Therefore balanced nutritious food ensures good health.

When nutritious food is taken according to the need of the body, body gets energy to do work, resistance power increases, people do not become sick frequently, proper development of intelligence and natural healthy condition will be visible, long life can be gained and natural nutrition condition prevails in the body.



Various nutritious food help body stay healthy

Task 1 – Write about the problems which you may face due to taking over or less eating.

Lesson 3 - Relation between Food, Nutrition and Cleanliness

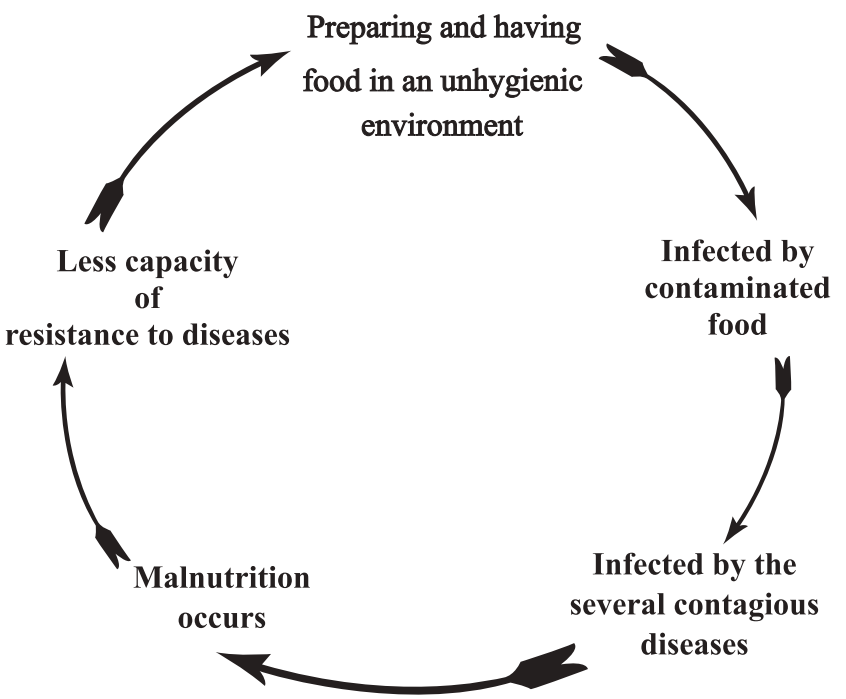
To maintain good health it is essential to ensure neat and clean environment with balanced nutritious food. Cleanliness in closely related to nutrition. Through the following table we can understand the impact of cleanliness on health.

Cooking and eating in an unclean environment	→ Food is infected with germs	→ Taking infected food	→ Body becomes sick and getting nutrition is affected
Cooking and eating in a neat and clean environment	→ Food is safe	→ Taking safe food	→ Body gets proper nutrition

Here neat and clean environment refers all the hygienic conditions, such as, place of the cutting and chopping, use of water to clean food and the place for cleaning, the utensils for cooking and food serving, the place for keeping the food after cooking, eating place, personal cleanliness of the cook and server, covering food till it is takens, etc.

Unhygienic environment is the source of different germs of the diseases. So this kind of unhygienic condition carries different germs which infects the food as well. When this food is taken the body becomes sick. Such as, a mother has given nutritious food for her child but the child has taken the food with dirty hand and he or she is caught by diarrhoea. As a result he or she loses the essential nutrition from body and becomes weak. In this condition, due to the less resistance power, the child may be infected by the other germs or diseases. So it is clear that if the nutritious food and hygienic environment is not maintained, the chance of becoming sick increases. This is called the awful cycle of malnutrition and unhygienic environment.

Diagram – The Vicious Cycle of malnutrition and unhygienic environment



It can be concluded that, by maintaining hygienic condition during preparation, cooking, serving and eating of food, risk of spreading the germs and the chance of attacking the diseases will be minimized. To ensure these conditions it is essential to wash hands properly with soap before each activity. This will reduce the apprehension of diseases caused by germs.

Task 1 – Write about the problems which you may face due to taking food in unhygienic environment on a poster paper and present infront of the class.

Lesson 4- Function of Food

The nutritious elements which persist in food do several functions for our body. Such as:

1. Building the Body and Ensuring Growth: The main function of food is to build the body and ensure growth. The nutritious elements of food ensure the growth and the building of the child's body.

2. Repairing the Loss: Always our body is experiencing decay. To repair this loss body needs food. Old cells die and new cells are formed in the body continuously. Nutrition from food helps to rebuild the cells. If our hand cut, disease occurs or body gets hurt, then these are recovered through nutritious food. There are several nutritional elements in food which repair this loss.

3. Producing Temperature and Providing Energy: As fuel like gas or patrol is needed to run a car, food is needed to run different activities like blood circulation, respiration. digestion of the food and to pass urine and stool etc. Even when we sleep, energy is needed. Temperature and energy is produced from food. For this, energy is essential to stay alive.

4. Control of Internal Functions: Internally several functions are happening in our body. Such as, digestion of food, production of energy, movements of muscles, formation of cells etc. The role of food is very important for the internal function of our body.

5. Develops Resistance Power: Everyday our body is getting infected with many germs. To prevent these germs we need to develop body's natural resistance power. When we eat different types of nutritious food we can prevent the diseases and stay fit. Due to the lack of nutrition, our body losses the resistance power. It create tendency of becoming sick.

Through the above discussion we can tell that, food does not only satisfy our hunger, it performs several functions in our body. So, we need to eat enough quantity of essential food to keep the body healthy.

Task 1- Show on a posterpaper what are the functions food do for your health?

Task 2- What are the problems you may face if you do not eat properly?

Lesson 5- Elements of Food and Source

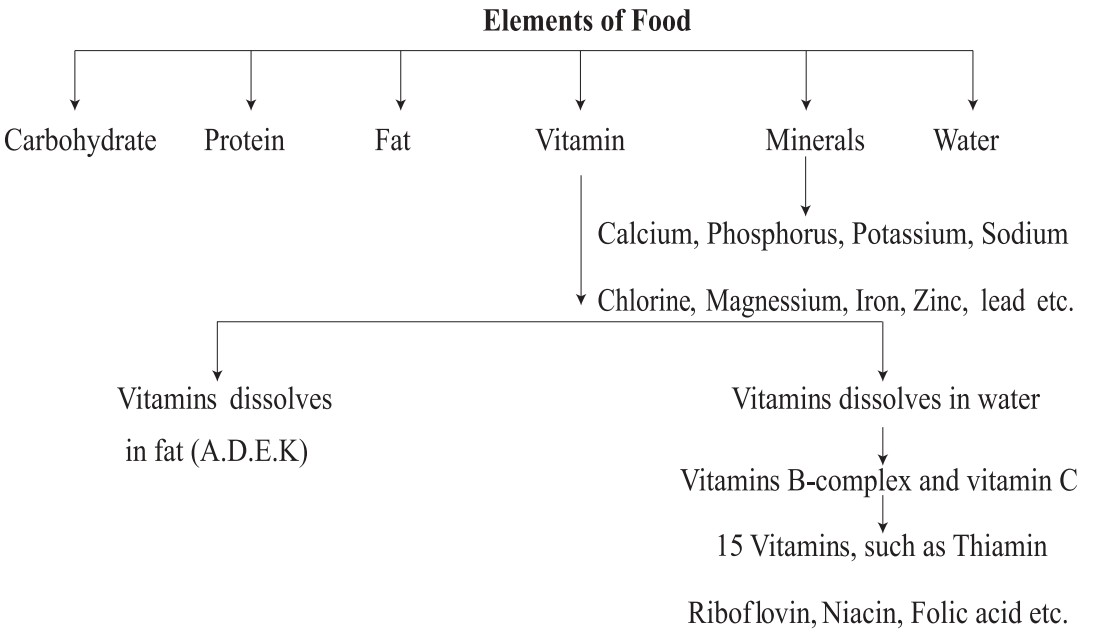
When a food is broken, the elements we get are known as food element. These elements are mainly organic chemical substances. These elements do several functions in our body, means give nutrition, so these are also known as nutritional elements. Nutritional elements are mainly of six types. These are **1. carbohydrate 2. protein 3. fat 4. vitamin 5. minerals and 6. water.**

The source and functions of food are shown in the grid here under –

Pictures of the Nutritious Food	Main Food Sources and function of six Nutritional Elements
 (Pictures of carbohydrate food)	**Carbohydrate-** Source – Rice, corn, oat, wheat, sago, potato, sweet potato, sugar, sugar cube, molasses, candy, chocolate etc. **Functions-** produces heat and energy in body.
 (Pictures of protein food)	**Protein-** **Animal protein-** fish, meat, egg, milk, cheese, cottage cheese etc. **Vegetable protein-** different types of pulse, soya bean, nut, rice, wheat, seed type food etc. **Functions-** cell formation, growth and prevention of decay.
 (Pictures of fatty food)	**Fat-** **Vegetable Fat-** soya bean oil, mustard oil, different types of nuts' oil, coconut oil etc. **Animal fat:** Ghee, butter, cod-liver oil, shark's oil, fat of the animal and bird etc. **Functions-** supplying heat and energy to body.
 (Pictures of food containing vitamins and minerals)	**Vitamins and Minerals-** **Animal Sources-** sea fish, egg yolk, leaver, cheese, milk and milk product **Vegetable Sources-** Pedally husked rice different types of pulses, sweet potato, different types of vegetable such as okra, papaya, snake gourd, gourd, egg plant, tomato, pumpkin, carrot etc. Different types of fruit such as emblica, guava, hog-plum, custard apple, sapodilla, mangosteen, jujube, grape fruit, wood apple, lemon, ripe papaya, mango, ripe jackfruit etc. **Functions-** keeping body healthy and strong by increasing disease resistant power of the body.
 (Pictures of the sources of water)	**Water-** All kind of liquid drink, green coconut water, juicy fruit etc. **Functions-** Helps in digestion and absorbtion of food. It also helps to drain out waste materials from the body.

From the above table we could know about the source of the elements of nutrition. Each and every nutrition element has important function. If we include different types of food then we can meet the need of the nutritional elements.

Task 1 – Write the name and draw the pictures of 3 sources of each of the 6 elements of food.



Exercise

Multiple Choice Questions

1. How many nutritional elements are essential to keep human body healthy -

a. 4 b. 5
c. 6 d. 7

2. Health is related to—

i. Physicalcondition
ii. Mental condition
iii. Immunity

Which of the following is correct?

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

Read the following paragraph and answer questions 3 and 4

Rumana studies in class six. She feels very weak and often wants to sleep. Her class-mates are taller than her and healthy.

3. The reason for Rumana's condition is she –

a. does not take nutritious food b. does not sleep adequately
c. does not do adequate exercise d. does not play on time

4. Solutions for Rumana's problem include—

i. Eating more than needed
ii. Consuming balanced, nutritious meals
iii. Getting enough rest

Which one of the following is correct?

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

Creative Question

1. Look at the following pictures and answer the questions:



Picture-1



Picture-2

a. What is nutrition?

b. What is the relation between food and nutrition? Explain.

c. Explain the advantages of having food in picture-2?

d. As picture -1 what are the long-term problems that can arise according to the "Vicious Cycle" if someone takes food in that environment ? – Explain clearly.

Short Answer Questions

1. Define food.
2. What problems can arise from overeating?
3. What is meant by the vicious cycle of malnutrition and poor hygiene?
4. What role do rice and wheat play in our bodies? Explain.
5. In what ways does food help replenish the body?

Chapter IX
Nutritional Value of Food

Lesson 1- Rice and Wheat

Food Value of Rice: Rice is the main grain type food of Bangladesh. Basically there are two types of rice available here, these are boiled rice and not boiled rice. In addition there are pedally husked rice and rice husked in mills. In any kind of rice, there is almost same quantity of food energy. Rice is the main source of carbohydrate.



Pedally husked rice



Rice husked in mills

Food value of rice at a glance

Main Food element	Other mentionable Food elements
Carbohydrate	Protein, thiamin, riboflavin, niacin,

Protein is somewhat more in quantity in boiled pedally husked rice than in other rice varieties. If we drain the water from the cooked rice then many essential nutritious elements goes off. So, rice should be cooke without draining the water. Other than rice, fried rice (muri), chira and puffed rice can also be made from paddy. The food value of these food is almost same as rice.

Task 1 – In which way do you need to cook rice to keep the nutritional value intact?

Nutritional Value of Wheat- Wheat is the second food-crop of Bangladesh. We get coarse flour, flour and semolina from wheat. Nutritional values of coarse flour and semolina are more than that in fine flour. When wheat is ground to coarse flour, bran comes out.



Wheat

Almost the same amount of food energy can be obtained from wheat compared to rice. Nearly equal amount of food energy is available in all kinds of food prepared from coarse flour. It carries little more protein than wheat bran and fine flour.

Food value of Wheat at a Glance

Main Food element	Other mentionable Food elements
Carbohydrate	Protein, thiamin, riboflavin, niacin, vitamin-E

There are two kinds of coarse flours available in market now – white flour and brown flour. White flour does not include the coverings of wheat. On the contrary, brown flour include the coverings. Brown flour is beneficial to health.

Task 2 – Write the names of various food made of wheat and describe their respective nutritional values.

Lesson 2- Fish and Meat

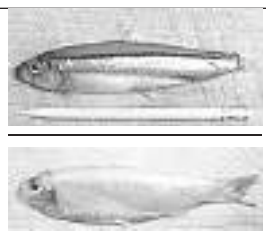
Food value of fish: Fish is a very good source of animal protein. There are fat and minerals in fish, too. Among the less fat fish, taki, ruhi, bele, foli, katla, bata, bairn, mrigel, cat fish, mola and dhela are mentionable. In kholse, chela, puti, kajoli, boal, and shol contain medium type of fat. Hilsha, shing, pangas, koi, shorputi etc have more fat. Fishes with more fat are tastier as well as good in food energy.

Food value of Fish at a Glance

Main Food element	Other mentionable Food elements
Protein	Fat, vitamin-A, D and E, calcium, phosphorus and iron

Dried fish is very popular in some regions of Bangladesh. Dried fish contain protein 2 – 3 times more than that in fresh fish. Besides, calcium and phosphorus are also much higher in quantities in dried fish.


Fresh big fish


Fresh small fish


Dried small fish


Dried big fish

Among fried fishes, those with bones contain calcium. Fish-bones contain calcium. As such, fish consumed along with bones is more nutritious, such as small fish. Sea fishes have iodine. From the oil extracted of livers of cod fish and shark we get enough vitamin A and D.

Task 1 – What are the fishes do you eat? Make a list of such fishes and write the nutrition you get out of those.

Nutritional Value of Meat- We take the fleshy portions of cow, bull, goat, sheep, duck, hen and other animal or birds as meat. In our country, chicken is also as popular as beef and mutton. Except these, we also eat the meat of duck and birds. Meat is a very good source of protein.


Pic. 50: Beef


Mutton


Duck meat


Chicken meat

The food energy of meat depends on its quantity of fat. Meat is a good source of iron and phosphorus. Liver is a good source of iron and vitamin A. Calcium is mainly obtained from bone. Calcium is very less in boneless meat. Meat and liver are the good sources of thiamine, riboflavin, niacin, B12 and other B vitamins.

Food value of Meat at a Glance

Principal nutritional element	Significant other nutritional elements
Protein	Fat, thiamine, riboflavin, niacin, B12 , vitamin-A, D and E, calcium, phosphorus and iron

There is less fat in native chicken and birds' meat than other animals' meat. Broiler chicken and duck are fatter. In duck and chickens' liver there is iron and this is good source of vitamin A, D and B too.

Task 2 – Make a list of the food which you have are made of fish and meat.
Task 3 – Explain the nutrition you will get from these food.

Lesson 3- Pulse, Milk and Egg



Various kinds of pulses



Sprout of Pulses

Nutritional Value of Pulses - Mung, lentil, chana, khesari, mashkolai, arhor are pulse type of food. Presence of significant quantities of protein in pulses make them included in protein foods. Pulses contain fats significantly less with more of carbohydrates. To meet the need of protein, pulses can be taken instead of fish and meat.

Food value of Pulses at a Glance

Principal nutritional element	Significant other nutritional elements
Protein	Carbohydrate, thiamine, riboflavin, niacin, calcium, phosphorus and iron

Pulses are very good sources of thiamine, riboflavin and niacin. Whereas, calcium, phosphorus and iron are present in them as minerals in small quantities. Sprouts come out as chana, mung, maskalai, etc., are submerged in water for 3 or 4 days. Almost all the vitamins are available in quite more quantity in sprouted pulse more than almost all dry pulses.

Task 1 – Write which pulses between dry pulses and sprouted pulses you think is more nutritious than the other and why.

Nutritional Value of Eggs - Among the protein type food egg is the best. All the elements necessary for adequate and all-round development of a human body are present in eggs. Eggs contain significant quantities of proteins, fats, vitamins and minerals. There is difference between the elements of white (egg white) and yellow portion (egg yolk) of eggs. Egg white is fully protein. Fat is almost absent here. Egg yolk contains iron and phosphorous in good quantities. Besides, there are good quantities of thiamine and riboflavin, too, in eggs.



Egg

Nutritional values of Eggs at a Glance

Principal nutritional element	Significant other nutritional elements
Protein	Vitamin- A, D, thiamine, riboflavin, niacin, phosphorus and iron

Egg protein is of good quality and 100% of it is beneficial for health. Duck eggs are also available in Bangladesh. As eggs of ducks are little larger in size than those of chickens, they contain more food energy. Vitamin A is available more in duck ¬eggs than the chicken-eggs. Moreover, because of size duck eggs have more nutritional elements than chicken eggs. The eggs of hen, duck, goose and quail birds are commonly consumed as food in our country. According to the size of the eggs, the nutritional value varies.

Nutritional Value of Milk-



Comparison between a goose egg and a hen's egg.

Milk is an ideal food which is naturally produced. Milk contains all the nutrients. It contains 90% water. Quality of milk protein is very high. The quantity of riboflavin is much in vitamins of milk. Milk contains calcium, phosphorus, in a large scale, which help the formation of bones. It tastes good and is easily digestable. Milk is the only food for the babies immediate after birth upto six months. The milk of cow, goat and buffalo is consumed by people in our country. Cottage cheese (posset), cheese, curd and various types of sweet dishes are prepared from milk.

Lesson 4 - Vegetable and Fruit

Food values of Vegetables and Fruits - Vegetables and fruits comprise an essential part of daily diet. Vegetables and fruits contain, mainly, carbohydrates, vitamins, minerals and water. As fruits and vegetables contain abundant vitamins and minerals, these cater to the need of natural nutrition of the body, resist the body from diseases and malnutrition. To stay healthy it is essential to keep fruit and vegetable in our daily diet.

Nutritional values of Vegetables and Fruits at a Glance

Principal nutritional elements	Significant other nutritional elements
Vitamins, minerals and water	Carbohydrates

Iodine is available in those vegetables which grow in the coastal areas. Cauliflower, green chili, capsicum, cabbage, broccoli and tomato are the good sources of vitamin-C. Broccoli provides a good source of calcium. Beans and seed-type vegetables are good sources of proteins and vitamins. Vegetables contain fibrous carbohydrates which is much beneficial for health.

Sweet fruits contain more carbohydrates than green fruits. Fresh fruits contain phosphorus and iron and small quantities of calcium. Lemon and berry-type fruits could be cited as rich sources of vitamin-C. Fruits having yellow and orange colours, such as, ripe mango, ripe papayas etc. contain vitamin and carotenes. Fresh fruits contain more vitamins. Juicy fruits meet the need of water. In our country fruits of various tastes are available during various seasons. These seasonal fruits are tastier and more nutritious in their respective seasons . For good health, hence, it is necessary to have the seasonal fruits regularly.

Lesson 5- Nuts, oils and Ghee





Peanuts

Nutritional Values of Nuts - Peanut is the most common nut which grows in significant quantities in Bangladesh.

Nutritional Values of Nuts at a Glance

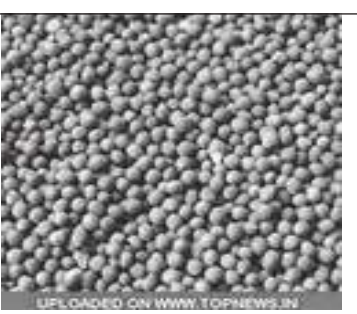
Principal nutritional element	Other important nutritional elements
Proteins and fats	carbohydrate, thiamine, riboflavin, calcium, phosphorus, zinc and iron

Peanuts comprise a good source of phosphorus. Iron and calcium are there in little amount. Besides, manganese, potassium, copper and zinc, among other minerals, are also in peanuts. These are tasty as well as very nutritious and, hence, are liked by all.

Task 1 – Of which nutritional element do nuts comprise?
Write which food will you take instead of nuts?

Nutritional Values of Oil - Edible oils are available from plants. Edible oil are mainly used in cooking. In mustard, sesame, sunflower, peanut, soybean, cotton seed and in corns there is enough fat. So, oil can be produced from these seeds. Among all the food, most of the heat energy is available in oils.


Seeds of sunflower


Mustard


Soyabean

Nutritional Values of Ghee- Ghee is available from animal sources. From the cream of milk at first butter is made and ghee is obtained from the butter. Ghee contains mainly fat along with vitamins A,D,E and K. oil and ghee enhance the taste of cooking.

Nutritional values of Oil and Ghee at a Glance

Principal nutritional element	Significant other nutritional elements
Fats	Vitamins A, D and E

Task 1 – Make a list of the functions of oil and ghee and present in front of the class.

Exercise

Multiple Choice Questions

1. Which of the following nutritional elements does have rice as its source?

a. Vitamin b. Protein
c. Carbohydrate d. None is correct

2. One of the functions of bean seed is to

i. repair the decay of the body

ii. ensure growth

iii. produce heat and energy

Which one correct among following answers?

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

Read the following paragraph and answer the questions 3 and 4

Ratan is 13 years old and his father is 45. Both of them often take ghee and sugar with rice along with other food.

3. Due to this food habit Ratan's-

a. energy will be increased to do work

b. resistance power will increase

c. body will be protected from decay.

d. digestion power will increase

4. Due to having ghee Ratan's father will

a. get more energy to do work b. gain weight

c. reduce the decay of bone d. increase the resistance power

Creative Questions

1. During summer vacation Rahela has gone to sea beach and seen the fishes are being hanged for drying. Fishes are caught from the rivers and ponds and being sold in the market. They often consume this type of fishes. Rahela wanted to know from her grandfather about the reason for drying fish and he told that after certain time fishes would be dried up and then would be packed and sold in market. The demand of this fish is very high in home and abroad.

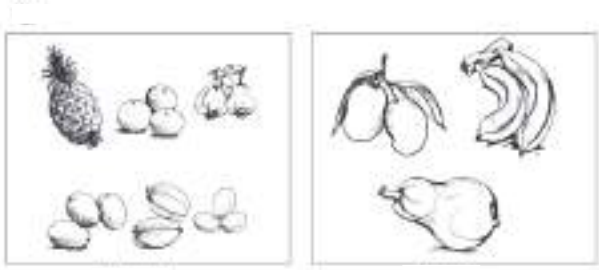
a. Which one is the second grain/food crop in Bangladesh?

b. Describe the food value of egg.

c. In the above example, which food element of the body will be met by the fishes Rahela saw in the sea beach?

d. Discuss comparatively the differences between the fishes Rahela takes regularly and the fishes she saw on the sea beach.

2.



Picture-1 Picture-2

a. What is there more in quantity in wheat than in rice?

b. Explain clearly that the food element is more in pedally husked brown flour.

c. Explain what kind of need of the vitamins in our body is fulfilled by these fruits shown in pictures?

d. Explain why it is essential to keep the fruits shown in pictures 1 and 2 in our daily menu.

Short Answer Questions

1. Why is the duck egg considered highly nutritious?
2. Describe the nutritional benefits of meat.
3. Why is milk referred to as an ideal food?
4. Which region produces vegetables rich in iodine, and why?

Chapter X

Need of Food

Lesson 1- Food Energy (Kilocalorie)

Every day we take various types of food. In these food, there are some nutritional elements which produce energy within our body. Energy is essential for doing any kind of work like playing, doing any work, studying, etc. We cannot visualize this energy but we can feel and measure it. We use the certain units of measurement while buying various food items. To measure liquid food we use the unit 'litre' and to measure other food items, we use the unit 'kilogram'. In the same way, the unit of measurement of the energy content in food is known as kilocalorie.

Everybody needs energy to survive. To do more physical work more energy i.e. more kilocalories are needed and to do less physical work less kilocalorie is required. That means, kilocalorie is the unit which is used to measure energy in food items.

Sources of Energy- We get energy from food. The more kilocalories is there in any food, the more is its energy content. Examples may be cited of oils, ghee, fried food, sugar, molasses, sweets, etc., which have more kilocalories or these food contain more energy. On the other hand, vegetables, cucumber, lettuce, grapefruit, guava, etc. have less kilocalories or less energy.

Energy from the Nutritional Elements
4 kilocalories are obtained from 1 gram of carbohydrate
4 kilocalories are derived from 1 gram of protein
9 kilocalories are obtained from 1 gram of fat

Need of this energy for any person depends on that person's nature of work, physical condition, age etc. If someone does much hard working jobs, such as a rickshaw-puller, he or she will need more kilocalories. On the other hand, persons doing less laborious jobs, such as, desk work in an office, will need less kilocalories.

Children, in comparison with elders, need more kilocalorie because of their rapid growth they go through during their development process. Moreover,

when someone suffers from fever, he/she needs more kilocalories than he/she would have needed being in the normal state of health.

If someone takes kilocalories more than his/her normal requirement for long time, he/she will gain weight. On the other hand if someone takes kilocalorie less than his/her normal requirement for long time, his/her weight will become less than normal. In order to maintain normal body weight, one needs to avoid taking kilocalories both more and less than what one would have normally taken.

Task 1 – For whom are more kilocalories needed? What type of problems will you face if you take kilocalories more or less than your normal requirement?

Lesson 2- Balanced Diet

Balanced Diet- Minu and Antara are of the same age, study in same class and stay in adjacent houses. Everyday Minu takes meat and fish as well as enough vegetables and seasonal fruits along with rice and bread. But, Antara does not like fruits and vegetables, she takes rice only with meat. Minu is always in good health and she does not become sick easily, goes to school regularly, she is attentive in the class and performs well in examinations. But often Antara becomes sick very often. As such, she is unable to go to school regularly, she is less attentive in the class and cannot do well in examinations.



Balanced Diet is made by a diet chart comprising various types of food items.



Diet chart comprising one or two types of food items does not make a Balanced Diet.

Minu's everyday nutritional needs get fulfilled as she takes various types of food in sufficient quantities. On the other hand, Antara, being very much choosy in her food, does not get the required nutrition for every day.

So, in order to ensure ourselves healthy every day we need to take all the six types of nutritional

elements as required. When the food contains adequate nutritional element according to the body's need, it is known as Balanced Diet. Balanced diet supplies all the essential carbohydrates, proteins, fats, vitamins, minerals, water and calories to the body. Taking only one or two food items does not make a balanced diet.

Ways to make balanced diets –

- To include different food like fish, meat, pulse, rice, bread, vegetable, fruit, oil and milk in every meal.
- To take the required quantity of various types of food.
- To keep the seasonal vegetables and fruits in every meal.
- To drink 6-8 glasses of water.
- To ensure the daily intake of 50%-60% of the required total kilocalories from carbohydrates, 20%-30% from fats and 20%-25% from proteins.

In everyday meals, an adult person needs to have at least 30 gm oil, 20 gm molasses or sugar. Otherwise, deficiency of calories will occur. For such a reason, meals should be inclusive of oils and molasses or sugar. Use of spices is customary for making balanced diets tasty.

Importance of Balanced Food

- Importance of balanced diet is needed to supply all the nutritional elements in sufficient quantities according to the needs of our body.
- Balanced food is important for ensuring proper supply of sufficient food-energy for meeting the requirement of the body.
- Body gains weight if food is taken more than necessity, diseasas will attack. Body looses weight if less food is taken, the growth of the children will be hampered, the immunity power will be decreased. As such, balance diet is mandatory to keep in good health.
- Balanced diet helps to protect malnutrition.

Task 1 – Make a list of your daily diet and check whether it is balanced or not. In case it is not balanced, what will you do to take balanced food?

Lesson 3- Food Pyramid

Food pyramid is a kind of guideline which indicates, through pictures, the type and quantity of food to be taken. In short, the food pyramid provides an idea of the food along with its type and quantity to be taken in order to make it a balanced diet.

The food pyramid shows the meals we need to take daily in 5 (five) groups. From the bottom these steps are-

First Step- Water: It is very much essential for survival. Every day we need to drink 6-8 glasses of water.

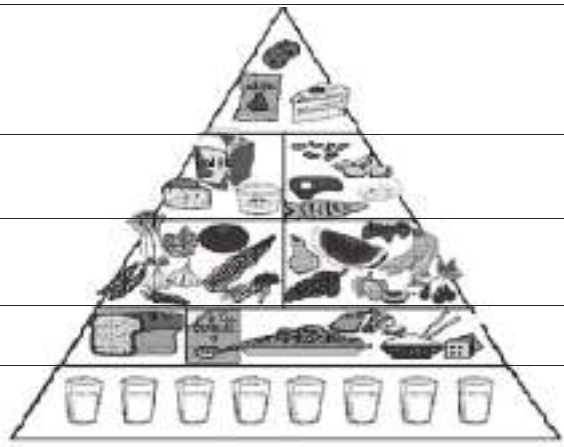
Oil, ghee, fatty food and sugar, molasse and sweet food (in very small quantities)		
Milk, yoghurt, posset, cheese, etc.		Meat, fish, egg, nuts, pulses, etc.
Various types of leaves and vegetables		Various types of fruits
Rice, bread, noodles, muri and chira		
Water		

Diagram-Food Pyramid

Second Step- Grain and Grain Food. These are rice, bread, noodles, fried rice, chira etc. From this type of food we get energy.

Third Step- Different types of fruit and vegetable. From these types of food, we get different types of vitamin and minerals.

Fourth Step- Meat, fish, egg, nut, pulse, milk, yoghurt, cottage cheese, cheese, etc. are included in one food group. Other than protein different vitamins and minerals are also available in these food.

Fifth step- In this step there are oil, ghee, fat type food, sugar, molasses and sweet type food. From this type of food we can get sufficient energy. So it is required to take this type of food in small quantity otherwise body will become overweight.

If we take food from the different steps of food pyramid according to the daily requirement of the body then we will get the essential nutritional elements and diet will be balanced.

Task-1 Mention the type of food you take every day and show it through a food pyramid.

Lesson 4- Nutritional Need during Adolescence

Nutrition requirement is very high during adolescence due to several changes in body. For boys during 12-15 years of age and for girls during 10-13 years of age, more nutrition is required. Due to physical growth, need for food is more during adolescence.



Playing games and physical labour cause increased nutritional needs during adolescence

Energy- Due to the physical growth and increased loss of energy, need of energy increases. Need of energy varies depending on age, type of labour and gender. Up to the age of 9 the need is almost same for boys and girls. From the age of 10 the need changes remarkably. From this age, boys need more energy than girls. From the beginning to the end of adolescence, need for the energy increases gradually by age. And the children who do more hard work and play a lot, need more energy.

Carbohydrate – In every day's menu, it is essential to keep carbohydrate diet to fulfill the increased need.

Protein- During adolescence need for protein is more because of the rapid growth of the body. At this age meat, fish, egg, nut, pulse, milk and other protein type food is very much essential. Due to the lack of protein, growth hampers in adolescence.

Fat- During adolescence more energy is needed; So presence of fat in the food is important. However food with excessive fat like fast food leads to overweight. That is why it is better to avoid food with fat and fast food.

Mineral – At this age different types of minerals like calcium, iron, zinc are important. For the growth of bone, calcium is required. Zinc is required for the growth of different parts of the body. For blood growth iron is required. Boys need more iron than girls. Plenty of mineral can be found in different types of fruits and vegetables.

Vitamin - During adolescence, among the different types of vitamins, requirement of Thiamin, Riboflavin and Niacin increases. These vitamins increase the body growth very fast. For blood formation, need for folic acid, vitamin B12 and vitamin B6 increases. In addition, for the well being of different body cells vitamin A, vitamin C and vitamin E should be taken according to need. For the development of bone vitamin D is essential. Vitamin could be found in different types of seasonal vegetable and fruits.

Water - For healthy body, like other elements of nutrition, water is also a very important element. Through sweat, stool and urine everyday water is drained out from the body. To recover the loss of water, one should drink 6 to 8 glasses of water every day.

Therefore, in short, we can say that during adolescence, requirement of all the elements of nutrition increases. If this need of the body is not met, body growth will be hampered and different types of malnutrition problems like, blood deficiency, night blindness, weak bone construction, short height, physical weakness could be seen. As such, to meet the required nutrition, boys and girls of this age, during their adolescence should take adequate quantity of balanced diet.

Task 1 – During adolescence, which nutrition element will a girl need for her blood formation? Explain how this need will be met.

Task 2 – Prepare a food chart of balanced diet to meet up the need of nutrition at adolescent period.

Exercise

Multiple Choice Questions

1. How much kilocalories can we get from 1 gram protein how?

a. 4 Kilocalories b. 6 Kilocalories

c. 8 Kilocalories d. 9 Kilocalories

2. From the yolk of the egg children can:

i. get body heat and energy

ii. resist anaemia

iii. have growth of bones

Which of the following is correct?

a. i b. ii

c. ii & iii d. i , ii and iii

Read the paragraph below and answer to questions 3 and 4.

Karim and Rahim are two brothers. Karim is a rickshaw puller, Rahim does a salesman's job. At meal time, both Karim and Rahim take equal quantities of fish, rice and vegetables. Rahim is working in the shop in good health.

3. Reasons for good health of Salesman Rahim is :

a. avoiding those food having fat b. balance between calories and need

c. regular exercise d. balance between rest and work

4. If Karim takes the food in the same manner:

i. his weight will begin to be reduced

ii. working capacity will reduce

iii. recalling power will decrease

Which is correct below?

a. i b. ii

c. i & ii d. i, ii & iii

Creative Question

1. Shuma and Kona of class VI are friends. Their body structure is different. Their daily food list is given bellow:

	Shuma	Kona
Morning	Home made bread – 3 pieces Egg – 1 piece Banana – 1 piece Milk – 1 cup	Home made bread – 2 pieces Egg – half a piece Banana – 1 piece
Noon	Rice – 2 cups Fish/meat – 1 piece medium size Vegetable – half a cup Salad - 1 cup	Rice – one cup and a half Fish/Meat – two pieces Vegetable – half a cup Salad – half a cup
Evening	Rice – 2 cups Fish/Meat – 2 pieces Milk – 1 cup	Rice – 1 cup Fish/Meat – 1 piece

a. What is balanced diet?

b. What do you understand by food pyramid?

c. From the daily food habit of Shuma, what idea could we get about her physical condition?

d. Explain with judgment how the food habit of Kona helps her to keep in good health.

Short Answer Questions

1. What is food energy?
2. How much energy is obtained from different nutrients?
3. Explain how a person's energy requirement depends on the type of physical activity, age and physical condition.
4. What is meant by a balanced diet?
5. Why does the need for protein increase during adolescence? Explain.

Chapter XI

Food Habit

Lesson 1 – Wrong Idea about Taking Food and Its Bad Effect

Very often, we say that we are Bangalis with fish and rice. It reflects the food habits of Bangalis. Food habit comes from taking food over a long period of time by several generations. Generally food habit is related to culture of a particular place. Food habit of the people living in the hilly areas is different from that in other places. Food habit also depends on and influenced by the geographical location, weather, culture, availability of food element, economic and social condition of the people, transportation and communication system in that area. Our food habit also has changed over time. For instance, instead of home made drinks, now we are habituated in drinking soft drinks. Fast food and bakery food is replacing the homemade food. This gradually changes the food habit. The practice of this food habit regularly is harmful for our health. From the childhood one should be careful in choosing food and should take healthy food. Personal awareness is important for following a good food habit: Such as –

- To make habit of taking suitable food to keep the body healthy, active and free from diseases
- Everyday food should be taken timely and in fixed amount
- On the daily food menu meat, fish, milk, pulses, vegetable and fruit should be included in order to make the habit of taking balanced diet
- To ensure the neatness of the environment in cooking and serving of food.

Task 1 – How can the correct food habit be determined?

Taposhi is from a well-off family. She won't eat properly if she does not get her favorite fish or meat in her meal. Her mother thinks expensive food are healthy food. As she remains choosy all the time she suffers from malnutrition. On the other hand, Shuman is a good student. He is going to appear in examination. His Grandmother feels that if he takes egg before examination, he will not have good result. So she does not allow him to take eggs.

Every day we experience such false beliefs or ideas like the above mentioned event. These do not have any scientific values. This happens due to having wrong idea about food. We become deprived of balanced diet due to having wrong idea about food. This ultimately leads to malnutrition.

In our country, we have different types of wrong ideas and superstitions about food. For example:

a. If you eat egg before exam you will get an egg or zero
b. If you eat banana you will catch cold
c. Taking sugar, sweet and molasses will create worms in stomach
d. If the expecting mother eats Mrigel fish her child will have epilepsy, taking joint banana will make her give birth to twins and taking duck egg will cause her husky voice.

In addition to above if someone has diarrhoea and fever, he cannot take normal food. He has to take expensive food for quick recovery. This view is totally wrong. If someone has diarrhoea or fever, besides medicine as prescribed by the physician, he must take normal food. To keep healthy one should take balanced diet in combination of small fish, pulse, vegetable, seasonal fruits grown in our country etc. every day.

Task 2 – Write three wrong assumptions/beliefs about food in different areas.

Lesson 2 – Avoiding Unhealthy Food, Negative Effects of Using Artificial Colours in Food

Food keeps the body healthy, strong, hardworking and free from disease. However, for any reason if the food is harmful to health and life, it becomes an unhealthy food.

Food becomes unhealthy for the following reasons:

a. If food is affected by germ
b. If harmful elements or chemicals are mixed with food
c. If food is mixed with certain elements like dust, sand, brick or stone
d. Use of impure water, oil, spices and other essential elements for preparation of food.
e. If the person who prepares food is not neat and clean and healthy.

f. if food is affected during cooking, preservation and served in dirty places with dirty utensils.

Name of Some of the Unhealthy Food

1. Food sold in the open spaces, in front of school, along the roadsides, in the vans, such as, ice-cream, pickles, chatpati, fuchka and jhalmuri etc.

2. Food served in dirty environment and temporary restaurant along the roadsides, such as, parata, singara, samosa, dalpuri etc.

3. Food mixed with artificial colors and preservatives like: juice, drinks, chocolate, cake, biscuit etc.

It can be noticed that unhealthy food has some relation with different types of diseases like diarrhoea, stomach problems hepatitis, typhoid, skin disease, kidney problem etc. For healthy food habit one should know about the unhealthy food.

Task 1 – Explain four reasons of food becoming unhealthy.

Bad Effect of Using Food Color

For better food presentation sometimes food grade colour is used. Cost of this food colour is high. But some of the businessmen use artificial food colours and chemicals to make the food more attractive. These are bad for health. They use artificial colour like leather dye, textile dye which is injurious to health instead of actual food grade colour.

Nutrition expert feels that to make the food bright a very small amount of food grade food colour can be used. Like lemon squash, pineapple squash and in green mango squash by using a small food grade food colour can make the squash look better. Less costly artificial food colour and chemical element should not be used in food. Because these are severely harmful for health.

In reality original food colour that we could find in the food is naturally good for our health. Artificial coloured cream and fruit are not good for health. It is better for good health to avoid taking food that is prepared in unhealthy condition in the restaurant, hotel, bakery and shops.

Artificial food colour can cause one to have digestion problem, diarrhoea, skin problem, long-term health problem for example, liver/kidney problems and cancer.

Task 2 – Write the names of a few food items in which food color is used.

Lesson -3 Negative Sides of Taking Adulterated Food and Bad Effect of Fast Food

We buy raw or cooked food from the market. Sometimes these food items are mixed with certain impure elements which are not food, bad for health. For example - artificial color, preservative chemicals, part of brick, stone or sand to increase weight. In addition to that, to make the food more attractive and to ripen the green food quickly chemical substances are used. Substances which are not food are actually mixed with food and the food becomes an 'adulterated' or 'contaminated' food. For personal gain and profit, some people are involved in contaminating food and selling in the market. Ordinary people are purchasing these unhealthy and impure food from the market and getting sick.

- Formalin is used to keep fish and ripe fruits fresh
- Hydrose is used in sugar and milk to make them appear white
- Carbide is used to ripen fruit
- Urea is used to make the size of fried rice larger and white
- In powdered spices artificial color, brick powder etc. are used
- Palm oil, fat etc. are used in frying
- Dead or sick chicken is used in making chicken fry
- Instead of butter and mayonnaise low cost fat is used
- DDT is used in dry fish
- Intestine and some other unused part of beef and mutton are used for mince

Although people are attracted to these adulterated foods but in reality these are not good for health. By taking these food people get diarrhoea, indigestion, skin disease, problem in liver and kidney and also leads to the risk of cancer. By taking the contaminated food resistence power of the body declines and people become weak. It ultimately affects the mental health.

Harmfulness of Fast Food

The ingredients for preparing the fast food are made ready boforehand. At the time of taking, it is prepared and served very quickly. Such as, to prepare burger the stuffing of meat made ready beforehand. At the time of having

it, burger is prepared by frying the stuffing of meat. Fast food is also called 'hot food' or 'junk food'. Some of the fast food are burger, sharma, fried chicken, french fry, pizza, hot dog, kabaab, faluda, futchka, ice cream, soft drinks, lassi etc.

The Reasons Why the Fast Food is Unhealthy

- When the same oil is used for frying again and again it becomes toxic (poison)
- When the raw materials like flour, spices, color etc are not pure and without nutritious value
- If the unconsumed elements are used again and again
- If proper cleanliness is not ensured where the food is prepared or if the cook is not clean
- When all the utensils used for food serving are not germ free
- If the drainage system in the kitchen is not proper

Normally along with fast food ice cream, cold drinks, lassi etc are supplied. In cold drinks level of carbohydrate is high. In many cases milk, food colour and essence used for ice cream is not pure which lead to health risk.

Taking Fast Food Regularly Causes Certain Health Problems

- Causes weight gain
- Causes heart burn
- Leads to indigestion
- Leads to malnutrition for a long time
- May cause different types of water and air borne diseases

Task 1 –Write the harmful aspects of fast food.

Lesson 4- Alternative Food, Physical Work and Exercise to Stay Fit

We eat different types of food everyday to satisfy our hunger. In many cases we had to avoid those food which we take normally due to change in circumstances . For example while traveling we take dry food instead of rice. These are alternative food. Also during natural calamities like cyclone, tornado or earthquake when we do not have normal activities in life, people take shelter for safety, normal cooking of food is not possible. In those situations, we take alternative food like, chira, muri, moa, molasses, biscuit, chal vhaja, dates etc.

In any situation, we cannot live without drinking water. So bottle water and coconut water are the alternate food. During cyclone and flood, water is purified through purifying tablet and by using alum.

Task 1 –Why do we need to know about alternative food?

Physical Exercise and Work for Good Health

We get energy from food. We also lose energy by doing different activities. If we work more we lose more energy. For instance, playing football, running etc. causes loss of more energy. When we do light works or activities like reading books, watching T.V or cleaning room or shelf we lose less energy. When the loss of energy is less than what we gain from food, we become overweight. Again when energy gained from food is less than what is lost through work and physical activities, we become underweight. Those who do not do physical work and activities must do exercise and involve in playing game.

The benefits of work/exercise/sports are:

- Have good sleep
- Adequate appetite for food
- The body cannot store extra energy and does not gain weight
- Body muscles increases its movements
- Blood circulation get increased
- Ensures physical fitness of the child
- Creates mental happiness

- Have stamina to work
- Reduces risk for diseases created from over weight

A Few Physical Exercise and Work

- Going to school on foot
- Swimming/other exercise
- Use the staircase
- Doing gardening
- Playing football, cricket, badminton etc.
- Doing the household works on our own

Task 2 – Mention three physical exercises and work suitable for you.

Excersise

Multiple Choice Questions

1. What is used to purify water?

a. Alum b. carbohydrate

c. hydroge d. urea

2. Which is alternative food?

a. Rice, mashed food b. khichuri, egg omlet,

c. milk, bread d. muri, molasses

Read the following paragraph and answer questions 3 and 4

Shunanda's brother is 9 months old. Presently he is not growing well. Till six months his growth was good. After six months Shunanda's mother wanted to feed him khichuri, but her grandmother told "Her tummy will be big if she is fed with khichuri."

3. The comment Shunanda's grandmother made was from-

a. experience b. usual superstition

c. scientific belief d. experienced and unconventional idea

4. The reasons of slow growth of the brother of Shunanda are –

i. lack of essential nutritional elements

ii. lack of sufficient food

iii. lack of balanced food

Which answer is correct among the following answers?

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

Creative Question

1. Tropa is 14 years old. Every day she goes to school without having breakfast. She takes shawrma, burger, cold drink, ice-cream etc., during the tiffin hours. She eats lunch in the evening. She is suffering from heart burn.

a. What kind of work require lots of energy?

b. What do you mean by 'alternative food'?

c. Explain the reasons of Tropa's physical problem.

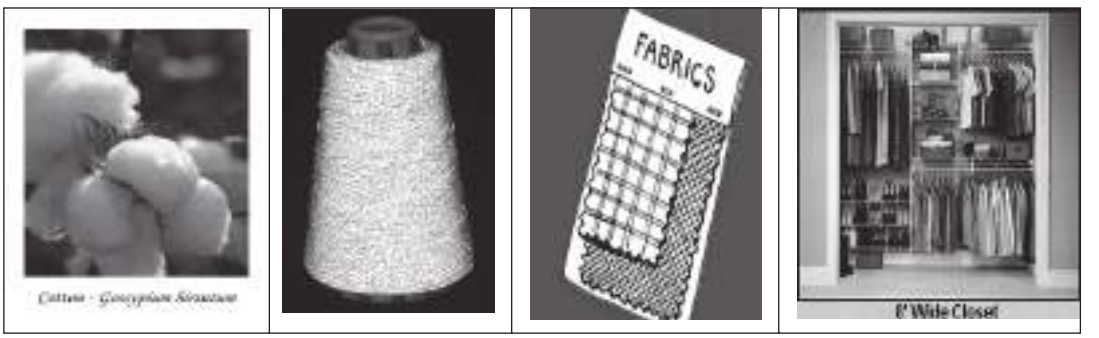
d. Tropa's food habit is responsible for her physical problems, explain clearly.

Short Answer Questions

1. What is meant by healthy food?
2. Why should we not consume excessive amounts of food like burgers, sand wiches and pizza?
3. What types of food are considered adulterated? Explain.
4. Mension the necessity of physical exercise.
5. What is meant by alternative food?

Section -D
Clothing

Clothing is one of the five basic needs– food, clothing, housing, medical facilities and education. Fabric is made from different fibres. Depending on the sources of different fibres, the quality of fabric varies. Different fibres are suitable for different weather and environment. The importance of cloth is immense in our life. So it is essential to keep knowledge about clothing.



At the end of this section we will be able to:

- explain the concept of textile and clothing
- explain the necessity of clothing
- describe the evoluation of the history of clothing
- explain the qualities of different fibre
- explain the different characteristles of fibre
- classily the types of fibres.
- take care of the clothes on daily, weekly and seasonal basis
- keep the clothes in specific place according to modern system and technology
- know the use of different sewing equipment
- apply different types of stitch, according to the size of the clothes such as patching, running stitch, hemline and back stitch

CHAPTER XII

Basic Concept of Clothing and Textile

Lesson 1- Clothing and Textile

The dress we put on is made of the material known as fabric. The clothes we wear are generally of two types. These are woven fabric and knitted fabric.

Woven Fabric : This fabric is manufactured in handloom. In this process on the handloom one set of yarn is kept horizontally and other set is kept vertically to manufacture the fabric. Long cloth, voile, polyester, organdy, jeans, gabardine etc. are the example of woven fabric.

Knited Fabric : This fabric is manufactured by machine or hand through knitting process. In this process one loop of a thread is created from another loop of thread to manufacture the fabric. The cloth of T-shirt and undergarments are the knitted fabrics.



Clothes of woven fabrics



Clothes of knited fabrics

Whatever the process is followed to manufacture the fabric, there are some qualities to be ensured to make the clothes or dresses. Can you tell what are the qualities needed to make the dress with the fabric?

These types of some qualities are mentioned bellow:

1. specific length and width
2. different types according to the nature of the structure
3. well-built and strong
4. comfortable to wear
5. long lasting
6. bright and smooth
7. capability to absorb the humidity
8. ability to resist heat
9. can be hung nicely

The fabric manufactured through different processes and cut to make it useable, are called textile. That means what you are wearing from your hair ribbon to the shoe lace, everything is textile.



Clothing



Textile

Different fabrics are needed to make different types of textile. Such as selwar-kamiz, shirts are mainly made by the handloom made fabric and the hosiery, socks etc. are made by the knitting manufactured fabric.

Task 1 – In groups collect different types of fabric and identify which one belongs to which type.

Task 2 – Identify which fabrics are there in your dresses and make a list of those fabrics.

Lesson 2- The Necessity of Clothes or Dresses

From the story or pictures you have come to know that the objective of wearing dress has been changed with the development of civilization. The essential reasons to wear the dress are following-

1. Maintaining Decency: In civilized society people wear dresses to maintain decency and to avoid embarrassment. People have been wearing different dresses to maintain this decency according to the rules of the society, culture and religious obligations. Due to this reasons, there is differences between Islamic dress and Japanese dress or other countries' dresses.



Islamic dresses



Buddhist dresses



Japanese dress

2. Maintaining Health: There is no alternative to dress to maintain health. We wear dresses to prevent ourselves from the dust, poisonous gases and diseases or germs. Other than these to maintain health, we use handkerchief, cap, gloves, apron etc. along with regular dresses.

3. Giving Comfort: You know that nature takes different look in different seasons. To get comfort according to the need of the season we wear different types of clothes, such as, during winter we wear warm clothes, in summer we wear loose dresses, and during rain we wear special kind of dresses.

		
Summer dress	Clothes for rain	Silk dress

4. Identification and Social Reputation: To represent someone's professional identity and reputation people wear different type of dresses. Like doctors wear apron, the dresses of soldier or nurses are also different which represent their profession. By looking at the jersey of players, it is identifiable in which groups they do belong to. If we look at the dresses of the different countries of the world we can get idea about that country.

		
Dress of Nurse	Dress of soldier	Dress of Doctor

5. Self Protection: In ancient time, people used to cover their body to protect them from the adverse situations and animals. Later people started wearing clothes to be safe from the outside hazard. Such as, the workers of the industry wear special kind of dress, helmet and boot; nurse, doctor and chemists wear apron, mask, gloves for being safe from germs and chemical elements. Fire fighters wear the dress which is made of the fabric named asbestos to be safe from fire; soldiers wear bullet proof jackets; hunters wear tight trousers, full-shirts, boots and hats; divers use floating life guard jackets. Players wear protective dresses and relevant gears.



Dress of diver



Dress of firefighter



Dress of hunter

6. To Express Beauty: Dress is a kind of element through which people can express his/her beauty easily. But the selection should be appropriate. Beauty enhances if the person wears the suitable dress in right place properly.

Task 1 – Present a chart in groups on what are the suitable dresses in a particular situation, for self-protection.

Task 2 – Show in a table which dresses should be worn in which season.

Lesson 3- History of Evolution of Clothes or Dresses

Can you say since when were dresses or clothes created? Actually from when the dress was created, is not known. According to the historians, from the ancient time people are covering body. In ancient era, people used to cover the body with the bark from tree, leaves, skin of animals, feather, ornament etc. During that time, people used to tie the hoof of the skin at the backside of neck to cover shoulder and chest. If the skin was larger, they used to tie it on neck as well as on waist. But that system was not convenient. Often it became loose.



History of Evolution of Clothes or Dresses

Gradually people invented the system of sewing. They made thread from the vein of dead animals and invented needle from the thin bone and sewed the skin to wear. That type of cloth was secured. After that people made tent with the sewed skin to be safe from cold, heat and rain. Later they processed leather more and manufactured comfortable, updated and long lasting clothes.

From the specimen of the anthropologist it is found that in ancient time there was spinning machine. That means, at that time people used to make clothes by cutting thread. But at that time people depended on nature for clothes. Later on people manufactured cloth from the thread which is made of the natural vegetable fibre, hair or fur of the animal, saliva of cocoon etc. and cut the clothes and start making dresses.

You will notice that, with the development of civilization, several machineries, factories were invented. As a result, people, for not being dependent only on nature, invented artificial fibre by mixing chemical elements with natural elements or individually from chemical elements and thus preparing textile from those fibres; and was able to make dresses with those textiles. As people like good looks, demand of dresses are increasing. So, the diversity has come in manufacturing fabric as well as design of dresses. But it varies depending on the country, time and religion.

Task 1 – Present before the class, on what were people dependent in ancient period for making dresses.

Exercise

Multiple Choice Questions

1. What were used in ancient time to make needle and thread?

a. Iron and cotton
b. iron and vein
c. bone and vein
d. branches and leaves

2. What kind of fabric can absorb the water most?

a. Woven fabric
b. knit fabric
c. netting fabric
d. felting fabric

Read the following paragraph and answer the questions 3 and 4

Two friends, Molly and Jolly, went to the death anniversary of their friend on a mid-day of summer. Molly wore a light brown sharee and Jolly wore bright orange silk sharee.

3. Molly was conscious to select the dress-

i. according to the timing

ii. regarding beauty

iii. nature of the program

Which answer is correct among the following answers?

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

4. The dress which Jolly selected-

a. was not suitable for the program
b. comparatively comfortable
c. representing the right taste
d. representing the right color

Creative Questions

1. 7 years old Rahat is watching T.V. at home. Rahat told to his father that, this is my favourite football team. Rahat's father asked him how could he understand. He said that the jersey made him understand. Rahat's father asked how would he identify Bangladeshi players. Rahat answered that the green and red jersey would make it clear. Then Rahat's father told that is the culture and civilization is identifiable through that country's dress?

a. What is knitted fabric?

b. What is self protection?

c. What feature of clothing enabled Rahat to identify the football team.

d. " The dress of our players portrays our tradition." – analyze this statement.

Short Answer Questions

1. How are longcloth voil fabric oven?
2. What is meant by attire?
3. Mention the necessity ofclothing.
4. Explain how clothing conveys identity and social status?

CHAPTER XIII

The Concept of Textile Fibre

Lesson 1-Fibres Suitable for Making Yarn or Qualities of Fibres

We know that the dresses we wear are made of fabrics. For the time being, it may seem that the fabric is made of yarn. It is right but the yarn is made of some fibres. Sometimes with these small fibres, through different processes fabric can be manufactured. There are some known fibres which are used to make fabric, these are – cotton fibre, jute fibre, silk fibre, rayon fibre, nylon, etc.



Cotton fibre



Jute fibre



Nylon fibre

So you can tell that the fibres suitable for making dress, fabric or the yarn are known as textile fibres.









Fibre or textile fibre ⇨ Yarn ⇨ Fabric ⇨ Textile or Dress

Task 1 – Make a chart of the different consecutive phases of textile fibre to make fabric.

Qualities of Textile Fibre

1. The length of the textile fibre will be more than its width. As much as the fibre is thin, the fabric will be smooth and soft.
2. The textile fibre should have strength. If it is not enough strong, the yarn or fabric can't be made from it.
3. As the yarn or fabric needs to be twisted or folded, the fibre used to make the fabric should be soft. Because of this characteristic, the textile fibre can be twisted to make yarn.
4. The small fibres should have the tendency to stay twisted together.
5. After folding or twisting, the fibre should have the ability to come back to the previous condition.
6. The textile fibre should have its own brightness.
7. Capable of absorbing moisture.
8. The textile fibre should have elasticity, that means when it will be stretched, it will be long and come back to its previous condition when let it go back.

Task 1 – Mention why we can't call any kind of fibre as 'textile fibre'.

Lesson 2- Classification of Fibres

From the previous lesson you have come to know that the fabric is made of fibres. The fibres worthy of making fabrics are abundant in nature. With the development of science, many fibres have been invented. The characteristics of different fibres vary, for that it is essential to classify the fibre. Due to that, we will get idea how to take care, ensure quality and use according to their belongingness of the same category. According to the source of fibre, it can be divided into two types. These are natural fibre and artificial fibre.

1. Natural Fibre: The textile fibres you will see in nature are natural fibres. There are categories among these-

a. Plant Fibre: Plant fibre is available from plant's seed, bark, stem, leaf etc. Such as cotton fibre is the outer side fibre of the seed of the carpas tree, jute fibre is obtained from the bark of the jute plant, flax fibre is made from the stem of the flax plant, pina fibre is extracted from pineapple leaf.

			
Cotton seed	Flax plant	Jute plant	Pineapple leaves

b. Animal Fibre: We get animal fibre from the hair, fur or saliva of the animal. Such as, from the hair of the sheep we get wool or fur fibre and from the saliva of the cocoon we get silk fibre.

	
Fur fibre from the sheep's fur	Silk fibre from the saliva of cocoon

c. Mineral Fibre: This fibre is available under the soil in different steps of the hard rock. The yarn is made after refining the mineral fibre. The asbestos yarn is made from the fibre of the asbestos.



Asbestos Fibre



Asbestos Thread

d. Rubber Fibre: Different types of fibres and threads are made from the concentrated natural rubber through a special processes

2. Artificial Fibre: You need to know that there are several fibres which doesn't grow naturally. People makes fibres by mixing chemicals with the natural fibres or just with the chemicals which are called artificial fibres. Such as nylon, rayon etc.



Nylon Fibre



Rayon Fibre

Task 1- In the following table's left side column, the names of different fibres are given. Fill in the right side table with the appropriate example of the specific category.

Categories of Fibre	Example
Plant Fibre	
Animal Fibre	
Mineral Fibre	
Artificial Fibre	

Lesson 3- Physical and Functional Characteristic of Fibre

As clothes are very essential in our life, we need to know which cloth is made of which fibre and the characteristics of that fibre. You may think what are the physical and functional characteristics? The physical characteristics are the fibre's size, strength, stretchability, capability of absorbing moisture etc. On the other side, the actual function of a fibre depends on its usefulness in practical life.

The Physical and Functional Characteristics of Cotton Fibre- The cotton fibre is being collected from the seed of cotton plants. Their brightness is low, not stretchable, strong enough, become stronger in wet condition. Temperature can be transmitted through this fibre and it can absorb moisture well. The cotton fabric is made from cotton fibre. This cotton fabric is being used to make casual dress as well as formal dresses, jersey, curtain, table cloth etc.



use of cotton fabric for curtain and pillow cover

The Physical and Functional Characteristics of Flax Fibre- Flax fibre is obtained from the stems of the flax plant. When the bark is removed from the flax plant, this fibre is visible from the top to the roots of this plant. Linen fabric is made

from this fibre which is bright, strong and becomes stronger when gets wet. This fabric is suitable to wear during summer because through this fibre temperature can pass easily. Other than the cloth for wearing, this fibre also can be used to produce the cloth to wipe the table and towels etc.

The Physical and Functional Characteristics of Silk Fibre- Among the natural fibres, silk fibre is the longest and brightest. It is made from the saliva of cocoon. Silk is a very soft and strong fibre. It is used to make the luxurious silk clothing because of its own brightness



Towel made of flax fibre



Bright silk fabric

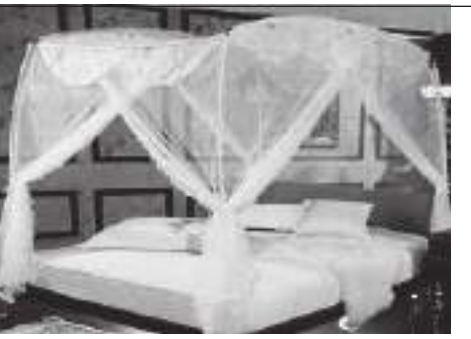


The Physical and Functional Characteristics of Fur Fibre- Fur is an animal fibre. Fur or hair from the different hairy animals' body is used to make worm clothes. Among the animals the fur of sheep is mostly used in fur clothes. It has got very good water absorption power, though, when it gets wet its shape changes and strength reduces. It is being used to make warm clothes such as muffler, sweater, shawl etc. As the temperature can't pass through easily these are made of fur.

The Physical and Functional Characteristics of Artificial Fibre- The length of artificial fibre is manageabele as it is man made. Its brightness can be enhanced or reduced. Rayon, nylon, polyester etc. are the examples of this fibre. The main sources of nylon fibre are coal, air, water etc. As the clothes made by artificial fibre are light, strong, flexible and long lasting these are used as the fabric of curtain, carpet, mosquito net, bed sheet etc.



Carpet from the artificial fibre



Mosquito net from the artificial fibre

Task-1 Look at the table below. It has two columns. The left column has names of different fabrics and the right column shows their sources in jumbled order. Mark the names of fabrics with their source.

Cotton fabric	coal, air, water
Fur fabric	cotton fibre
Linen fabric	saliva of the cocoon
Silk fabric	fur form sheep
Nylon fabric	Fibre form the cotton and chemical things
Rayon fabric	Flax fibre

Exercise

Multiple Choice Questions

1. How many types of textile fibres are there according to their sources?

a. Two types b. Three types
c. Four types d. Five types

2. Which of the following is the fibre used in making socks?

a. polyester b. nylon
c. cotton d. flax

Read the following paragraph and answer questions 3 and 4

One textile engineer was interested in using artificial fibre instead of animal fibre to make winter clothes. He used the fibre which was derived from the saliva of cocoon to make luxurious dresses.

3. The textile engineer selected the animal fibre because of

a. Its shape remain unchanged though it is wet

b. Through the fibre it is hard to pass the temperature

c. The fibre is made of chemical elements

d. As this fibre is the longest among all the fibres

4. The reason for selecting that fibre to make luxurious clothes was-

i. because of the fine thread the fibre is soft

ii. it is suitable for all the seasons

iii. it has its own brightness

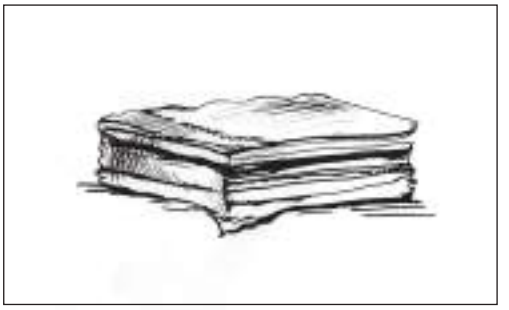
Which answer is correct among the following answers?

a. i b. ii

c. iii d. i, ii, and iii

Creative Questions

1.



Picture –a (cotton)



Picture-b (Flax fibre)

a. How many types of textile fibres are there according to their sources?

b. What do you mean by artificial fibre?

c. Explain why people mostly use the fibre shown at picture –'a'.

d. Write the similarities you can find in the fibres at pictures 'a' and 'b'.

Short Answer Questions

1. Mension the classification of fibre.
2. What is meant by the physical properties of fibre?
3. Which fibre based clothing is suitable for summer? explain.

Chapter XIV
Taking Care and Storage of Clothes

Lesson 1- Taking Care of Clothes

In civilized world, we all wear dresses. But everyone cannot take care of the clothing properly. Do you take care of your clothes? How do you think clothes should be taken care of.

It is natural that wearing of clothes make them dirty. Taking care of clothes include washing dirty clothes properly, folding accurately and keeping them in the right place. It is not always necessary to wash the cloth after use. In that case after using it should not be left here and there without any reason. Rather it should be folded properly and kept in the right place. If the dress tears after use or get any spots then mending them properly or removing of the spots are also needed to take care of the clothes.

Maintaining the beauty of the cloth and its longivity depend on you. If you do not take care of your cloth then an expensive dress can be unusable and create unhygienic condition. So taking care of the cloth can be divided into three types-

1. Daily Care of the Clothes- The care that dresses needs everyday is known as daily care of the clothes. The dress you use everyday should be washed with soap during taking shower. The dress you wear outside doesn't require washing, dry under sunlight and keep in right place. Otherwise it will not be available while needed.



Washing clothes daily



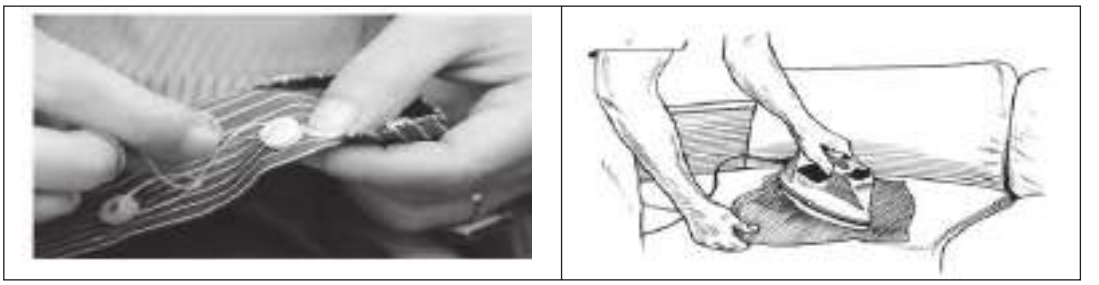
Drying of clothes



Keeping in right place

Task-1 Write the steps of the daily care of your clothes.

2. Weekly Care of Clothes: In weekly holidays fix button, men dresses and wash and iron clothes. Clean the shoes, bag etc. on the same day. It works better if you can arrange some entertainment while taking care of the clothes during weekend. You can listen music at that time to avoid monotony. If the weekly care of the cloth is ensured, you will not have any tension for the following week.



Weekly care of the clothes

Task-2 Make a list of work you have to do to take weekly care of your clothes.

3. Seasonal Care- Ours is the country of six seasons, though, taking care of the clothes in three seasons is called seasonal care of the clothes. You can take seasonal care of your own clothes yourself. In this case at the end of summer, wash and iron the thin cotton clothes and keep them in specific place. After rainy season, just wash dresses and fold them and keep the clothes in the right place these donot need iron. At the end of winter, it is essential to wash or dry the sweater, socks, muffler, jacket, cap etc. under the sunlight and remove the dirt if washing is not needed and keep in proper place. By doing this, on th next year there is no need to buy new clothes and get the things near at hand when needed.



Seasonal care of the clothes- winter clothes and folded blanket

Task-3 One of your friends often comes to class by wearing dirty clothes. Sometimes it is noticed that the button or the zipper is torn. What advice will you give him/her?

Lesson 2- Safe Keeping of Clothes

In the previous lesson you came to know the necessity of taking care of clothes and its ways. Another thing is included in taking care of clothes which is proper preservation of clothes. The unused clothes will be damaged by the pests or insects, dust and moisture, if these are kept here and there. As the dress is an expensive thing it needs to preserve properly, otherwise it will not last long and money will be wasted. So, to keep the clothes nice and neat, you have to keep in mind the following things-

1. After washing and drying, clothes should be kept properly. While washing it is needed to keep in mind what is the fibre of the cloth. Depending on fibre the system of washing clothes will be different. Like-

a. Cotton and linen clothes can be washed together. To clean up soap, soda, chlorine, detergent etc. can be used. For the fine cotton, linen clothes use light detergent. To make the white cloth more white, indigo can be used. Starch can be used too if needed. There is no problem with warm water with these clothes. Better if dried under the sunlight. But the coloured clothes should be dried in shaded place.

b. Silk cloth should be washed in lukewarm water with light soap or shampoo. This kind of fabric should not be pressed hard, needs to wash lightly and dry in shaded place. Washing can be done for the fur clothes as silk clothes. It is better to keep flat rather than hanged for drying. Otherwise, the shape will be changed. It should not be twisted hardly for spinning the silk and fur clothes.



Folded cloth after ironing

2. For keeping for a long time in the cotton clothes starch should not be used, otherwise, it will increase the attack of insects.

3. Silk clothes should be hanged after washing and ironing. You have to be conscious about certain things while ironing the clothes. Such as-

a. Cotton and linen clothes should be ironed when it is little wet. If it is fully dried, spread little water to make the fibre soft then iron it.

b. Silk and fur clothes should be covered with a thin wet cloth and be pressed lightly for ironing.

c. Whenever ironing any cloth you have to be conscious about the system of folding. The beauty of the cloth will be spoilt if the fold of the sleeve or the final fold is not correct.

d. After ironing it is needed to hang the cloth in open air for a while. Otherwise there is a chance to get spot.

Task 1- Each of you iron your one set of cloth which is folded properly and present in class.

4. If the fur cloth doesn't need washing then dry under sunlight and keep as folded.

5. The place of keeping the clothes should be well ventilated. If the clothes are kept in dark and wet place then pests or insects and fungus can be caught.

6. The place should be cleaned well and insecticides should be applied before keeping the clothes.

7. For keeping long time naphthalene, black seeds, dry neem leaf etc. should be kept in the folds of clothes.

8. It is good to dry the kept clothes under sunlight before and after rainy season so that the clothes stay in good condition.

Task-2 Group work : Present a chart on how to take care of different fabrics in different seasons.

Task-3 Present the techniques of folding clothes by ironing in the class room.

Exercise

Multiple Choice Questions

1. In how many groups can clothes-care be divided?

a. one b. two
c. three d. four

2. What kinds of fibres' clothes can together be washed?

a. cotton and linen b. linen and silk
c. cotton and fur d. silk and fur

Read the following paragraph and answer questions 3 and 4

Zeba has ironed her cotton sarees without using starch when these are in little wet condition, for preserving it in the cupboard.

3. Why has Zeba ironed the sarees in little wet condition?

a. to save electricity

b. to keep the shape of the cloth proper

c. to keep the fibre soft

d. to get rid of the heat of the cloth

4. Jeba has not used starch because of-

i. for keeping long time

ii. for saving from the attack of the pests or insects

iii. for saving time

Which answer is correct among the following answers?

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

Creative Questions

1. At the end of the winter Labonno, kept her sweater, jacket, muffler, socks in the cupboard. One day when she took out her silk cloth from the cupboard, she noticed that her silk dress was cut by the insects.

a. Where should be the colored clothes dried?

b. What do you understand about the care of the clothes?

c. What kind of cares Labonno has taken for her winter clothes? Explain.

d. Labonno's dress has been spoiled because of the problem in preserving. Explain.

Short Answer Questions

1. Why is it necessary to take care of clothing?
2. Mension how cotton and linen fabrics should be preserved?
3. Explain when seasonal care of clothing is needed?

CHAPTER XV

Sewing Equipment and Various Stitches

Lesson 1- Introduction to Various Sewing Machines

Lima studies in class six, her elder sister studies in college. Lima's sister makes her own clothes besides her studies. Their parents are very happy with her efficiency. Friends also praise her dresses. Lima also wants to work like her sister. But mother told that first she needs to know about the equipment of sewing. To make the clothes it is essential to use different small and big equipment. Without these equipment sewing is not possible. If the sewing equipment are within reach then it is easy to sew, save time and irritation doesn't occur.

Machine is the main among the equipment of sewing. Sewing machine is one of the equipment invented till the date, for the welfare of human being. Compare to other sewing equipment, this machine is larger and more expensive. There are three types of sewing machines available in the market such as hand machine, foot machine and electric machine. By these machines various types of dresses and home decorative materials can be sewed.

1. Hand Machine- To use the hand machine electricity is not required. Sewing is done by holding the cloth with left hand and spinning the handle with right hand. Compare to other machines, this machine is inexpensive and easy to take care.



Hand machine



Foot machine

2. Foot Machine- This machine also doesn't need electricity. With the pressure of foot or leg and by moving the paddle this machine is used. It can be controlled by both the hands while sewing. It is also easy to take care of like the foot machine.

3. Electric Machine: Many clothes can be sewed with little labor by this machine with electricity. If the adequate knowledge of operation of this machine is ensured then different types of sewing can be done by this machine though it is more expensive than other machines. It should be taken care of, so that no accidents happen during the operation of the machine.



Electric machine

Task-1 Mention the differences of different types of sewing machines.

Other than the sewing machine there are many other relevant sewing equipment needed to sew. According to the use, these are divided into several types.

Lesson 2- Equipment of Measuring, Cutting and Line-drawing

a. Materials of Measurement: For any nice fitting cloth or dress, the prerequisite is to take accurate measurement of the wearer of that dress. According to this measurement the design of the dress is drawn. There are some equipment such as measuring tape, ruler, yard stick etc to take the measurement of body and drawing the design.



Measuring tape



Ruler

b. Cutting Equipment

Without appropriate equipment no cloth can be cut nicely. If the cut is not okay then the design of the cloth doesn't appear nicely. Medium sized sharp scissors are used to cut cloth, small scissors are used for cutting thread and pinking shears are used to cut the edges after sewing is done. Other than these, for unstitching bodkin and for cutting the button hole a special kind of machine is used.

			
Cloth cutting scissors	Thread cutting scissors	Pinking shears	Bodkin

c. Equipment of Drawing Line

There are some essential equipment for drawing the design of the dress and to draw the mark of measurement on the cloth. Such as pencil, tailoring chalk, carbon paper, different colored threads, eraser for erasing the line etc.

		
Tailoring chalk	Tailoring pencil	Different colored thread

Lesson 3- Equipment for Pressing and Hand Sewing

a. Materials of pressing- Before cutting the dress and after sewing to bring the accurate shape it is needed to iron or press the cloth. If different parts of dress like collar, cuff, pocket, button patch, pleat etc. are ironed then the shape will be smart. After that these should be attached to the other parts of the dress. The essential equipment for pressing are proper weighted iron and exact heighted iron board or table.



Iron



Iron board

b. Equipment of hand sewing

While making a dress though most of the parts are sewn by the machine some parts need to be sewn by hand for bringing smart look. For sewing by hand there are some essential equipment like different sized needles, thimble, instrument for inserting the thread, different colored threads, pins and cushion, frame, small scissors etc.



Frame



Needle and thread

If the sewing equipment are kept in box with care these will be easily found out when needed and hand sewing with these equipment will be nice.

Task-1 Prepare a list of the equipment which are needed to make dresses.

Lesson 4- Introduction to Various Stitches (Run Stitch and Back Stitch)

In previous lesson, you came to know about the equipment needed for sewing. In this lesson, you will come to know the technique of making a cloth very nicely just with the needle and thread. You will be skilled in embroidery through this lesson. You have to be conscious about some matters while doing this work. Such as-

a. Have to select the cloth on which the design will be prominent.

b. Suitable colored thread should be used in correct place.

c. Using thin needle while doing embroidery.

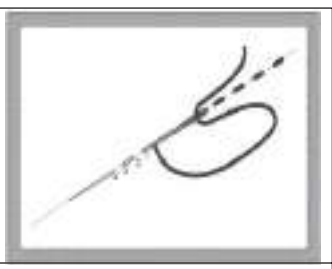
d. Need to be careful for avoiding shrinking the cloth while pulling the thread.

e. Appropriate stitches should be used according to the design.

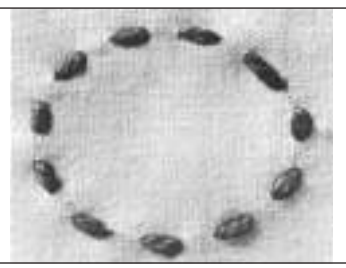
f. Practise is needed for creating fine stiches.

Using hand with the needle and thread different stitches can be made on cloth. This is discussed below-

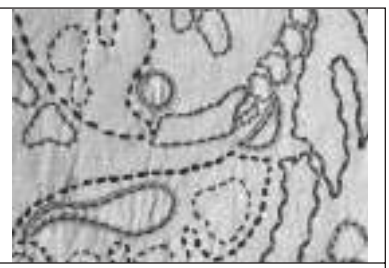
Run stitch- When the threaded needle is entered into the cloth and the small stitches go up and down, this stich is known as run stitch. The stitches should be almost same in size. This is the easiest stitch. With this stitch rather than usual dress nokshi katha, cushion cover, sofa back etc. embroidery can be done.



Run stitch



Embroidery with run stitch

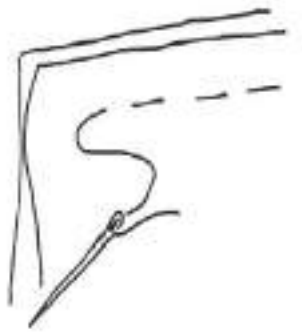


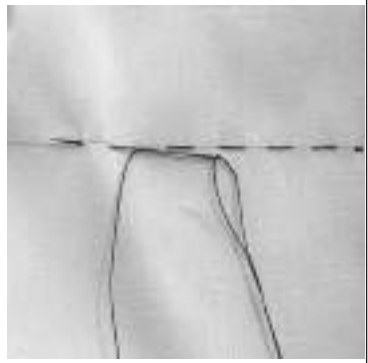
Embroidery with run stitch

Task-1 Insert the thread in the needle then knot its edge and do embroidery with the run stitch.

Patching

When two or more clothes are stitched together for joining temporarily, with larger stitch than run stitch, then it is known as patching. After sewing in machine finally it needs to be removed.

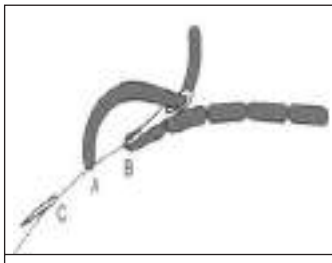




Patching

Task 2- Insert the thread in the needle then knot its edge and practice patching.

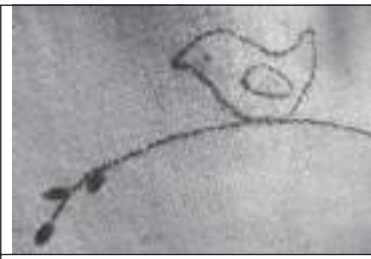
Back Stitch (Bokhea)- While doing back stitch first the needle to be inserted in the cloth and then the needle should be brought little back and stitch should be given. In the second stitch, the front side of the needle will come little forward than the first stitch. In this case all the stitches stay side by side. This stitch is very strong and from the front side it looks like sewn by the machine. The other side looks like stem stitch. This stitch is used to make the edge of the embroidery, branch of the tree, leaf etc.



Back stitch



Back stitch

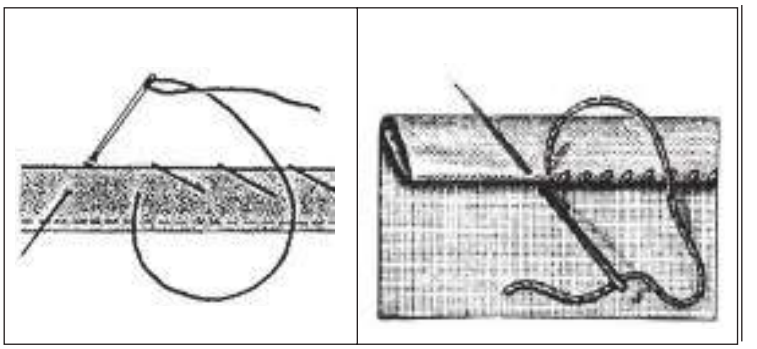


Embroidery with back stitch

Task- 3 With the back stitches complete embroidery on cloth.

Lesson-5 Hemline, Chain, Lazy Daisy and Stem Stitch

Hemline: This stitch is used on the neck, bottom edge of the dress or blouse, tray cloth, table cloth and at the edge of handkerchief by folding the cloth. To do this stitch insert the needle in slanting position as shown in the following pictures.



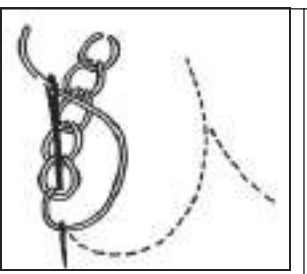
Different types of hemline

Task 1- Use the hemline by folding the edge of a tray cloth.

Chain stitch: As it looks like chain, it is known as chain stitch. To sew this stitch first, the needled thread comes from the back of the cloth then from the left side the stitch is given and with the thread a loop or slip-knot should be made on the top of the thread. Then the needle should be pulled out. The next stitch comes from the first one. This stitch is used to make the edge of the embroidery, branch of the tree, leaf etc.



Chain stitch

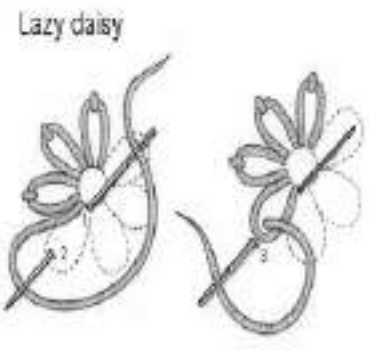


Embroidery with the chain stitch



Embroidery with the chain stitch

Task- 2 Enhance the beauty of the embroidery's edge with chain stitch.

Lazy Daisy Stitch At first a large chain stitch is made and then another small stitch is given to attach it with the cloth. This is called lazy daisy stitch. This stitch is used for different designs of small petals of flower and leaf	 Lazy daisy stitch

Task-3 Make a design of a flower with lazy daisy stitch.

Stem stitch: To make this stitch the needle comes from the back side to the front side. From the place where the top of the needle of the first stitch comes out, the second stitch is given slantingly by giving two or three threads' gap. Next stitches will go forward like this. This stitch is used to make the design of branch or stem and as it looks like stem, it is known as stem stitch.

	
Stem stitch	Embroidery with the stem stitch

Task 4- Draw stem or branch and leaves on a cloth and apply stem stitch.

Exercise

Multiple Choice Questions

1. Which equipment is being used to take measurement of the body?

a. tracing wheel b. seam ripper
c. measuring tape d. tailoring chalk

2. Which stitch is used to sew the bottom part of the frock?

a. Run stitch b. hemline
c. back stitch d. patching

Read the following paragraph and answer questions 3 and 4

Julia makes clothes for her children. While making dress before final sewing she uses another stitch.

3. Which stitch does Julia use?

a. Run stitch b. Patching
c. Hemline d. Chain stitch

4. Julia uses different stitches while sewing -

i. to determine the measurement of the cloth

ii. to make the dress attractive

iii. to save money

Which answer is correct among the following answers?

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

Creative Question

1. Ruma runs her family by sewing clothes. She uses one hand machine, scissors and measuring tape to do this work. From the boutique shop, they rejected her clothes due to the problems in finishing of the dresses' collar, cuff, pocket, pleat, button, patching etc. Ruma becomes worried as she can't give delivery of the clothes to her neighbors on time as well.

a. What is the function of pinking shears?

b. What do 'the equipment for drawing lines on the cloth' mean?

c. Is the machine the right selection for sewing which Ruma is using? Explain.

d. Due to the lack of the appropriate equipment Ruma can't earn enough money. Give your opinions according to this content.

2. Nirupoma has learned about embroidery just a few days ago. So she has decided to do embroidery on a handkerchief. She has drawn one design of flower and branches and used run stitch and hemline to do the embroidery. After finishing the embroidery, it is seen that the design has shrunk. There is a hole in the handkerchief too.

a. What is the function of bodkin?

b. What is the meaning of taking measurement of the wearer?

c. Has Nirupoma used the right stitch while embroidering in the handkerchief? Explain.

d. What are the important matters not followed which spoilt the design while Nirupoma was embroidering in the handkerchief? Illustrate your ideas with reasons

Short Answer Questions

1. Which machine can sew many clothes in a short amount of time? Explain.
2. Why is pressing needed in garment sewing?
3. Draw a picture for a cushion cover using run stich.

The End

2026 Academic Year

Class Six : Home Science

মায়ের পদতলে সন্তানের বেহেশত।



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