



SUPPORT MATERIAL

CLASS-X
SUBJECT - HOME SCIENCE
(English Medium)

**An Educational Support Initiative by:
NIOS Project, DoE, GNCTD**

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(MESSAGE)

"The highest education is that which does not merely give us information but makes our life in harmony with all existence." - Rabindranath Tagore

In the pursuit of equitable and quality education, the NIOS Project team of DoE has undertaken the initiative to develop this specially designed Support Material for the learners who require additional guidance. This comprehensive resource has been thoughtfully designed to bridge learning gaps, cater to the diverse needs of our students and foster academic excellence. By providing a structured framework for learning, this material aims to empower students to take ownership of their educational journey and achieve their full potential.

A lot of hand work has gone into the preparation of this material. I would like to express my sincere appreciation to all the teachers and the Subject Experts of CAU for writing and editing this material. I encourage all students and teachers to utilize this resource effectively.

I wish all the students of this project success, happiness and fulfilment.


(Pandurang K. Pole)



1580/Nios/P
dated - 23.12.2025

MESSAGE

“Education is the most powerful weapon which you can use to change the world.” - **Nelson Mandela.**

It gives me immense pleasure to introduce this Support Material developed by the NIOS Project Branch of DoE in collaboration with a selected team of NIOS teachers and meticulously reviewed by the subject teams of CAU, DoE for the students of Class X of NIOS Project of DoE.

This comprehensive resource is a testimony of our commitment to providing quality education and ensuring that every student has access to the resources they need to succeed.

The Directorate of Education has always strived to create an environment that fosters academic excellence, creativity, and innovation. This Support Material is a significant step towards achieving this goal, as it provides students with a structured framework for learning and assessment.

Our teachers play a pivotal role in guiding and supporting students and I urge them to use this material to provide targeted support to NIOS students.

Let us work together to create a supportive learning environment and I am confident that this support material will play a significant role in achieving this goal.

(VEDITHA REDDY, IAS)

NIOS Project
Directorate of Education
Govt. of NCT, Delhi

Support Material
Class-X
Subject- Home Science

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Lesson -1

What is Home Science

Home science is such a practical science that not only focuses on home and family but also on improving life both inside and outside the home. It includes scientific knowledge that helps us live a better and more organized life. Through this subject we can develop the ability to deal with the challenges of daily life.

Meaning of Home Science

Home science also referred to as the science of managing a home, encompasses all aspects related to oneself, the home, family members, and resources. Its primary objective is to achieve maximum satisfaction for individuals and their families through the efficient and scientific utilization of resources. Essentially Home science is defined as:

- The art of managing your resources efficiently
- The science of achieving a healthy and happy home
- The science of achieving a successful career

Relevance of Home Science

- Traditionally gender roles in Indian society have changed, and home management now requires the effort of all family members, as more women are working.
- Home Science helps individuals manage their resources effectively and provides tools to solve problems, leading to increased organization and efficiency.
- Home Science offers a wide range of job opportunities for both men and women.

Home Science is for both Boys and Girls

- Both have to succeed in an increasingly competitive world.
- Both have to share house hold responsibilities and tasks.
- Both need to manager sources.
- In case of a problem, they have to solve it together with other family members.
- Home Science offers varied vocational and professional avenues for both boys and girls.
- Joint knowledge and skills help to improve the standard of living.

Branches of Home Science

- | | |
|----------------------------------|----------------------------------|
| (i) Food and Nutrition Science | (ii) Communication and extension |
| (iii) Fabric and Apparel Science | (iv) Human Development |
| (v) Clothing and Textile Science | (vi) Resource Management |

Areas of Specialization in Clothing and Textile Science

- | | |
|-------------------------|---------------------------------------|
| (i) Textile Science | (ii) Fashion Design |
| (iii) Textile Designing | (iv) Dress Selection and Presentation |

Areas of Specialization in Resource Management

- | | |
|-------------------------|--------------------------|
| (i) Resource Management | (ii) Interior Decoration |
| (iii) Budgeting Skills | (iv) Event Management |

Human Development

- | | |
|------------------------|--|
| (i) Child - Welfare | (ii) Adolescence Problems |
| (iii) Old Age Problems | (iv) Personality, Behavior and Environmental influence |

Areas of Specialization in Communication and Extension

- | | |
|----------------------------|---------------------------|
| (i) Media of Communication | (ii) Mass Communication |
| (iii) Print Media | (iv) Communication Skills |

By acquiring knowledge of this subject, we can contribute in various fields. This subject helps us choose the right path and utilize our skills effectively in the right direction. Through deep study and practical experience, it helps us develop the skills and efficiency to work well and it also creates self-reliance. This subject emphasizes selecting areas according to one's interest and achieving personal goals and demands attention towards upcoming employment opportunities.

Career Opportunities in Home Science

Career opportunities in Home science can be understood by distinguishing between two key concepts:

1. Wage – employment

2. Self – employment

- **Wage - employment** - Working for another person or organization and receiving a salary or wages for your services (e.g. - working in a garment factory)
- **Self – employment** - Owning and running your own enterprise, including managing its finances (e.g. - a tailor setting up their own shop)

Lesson -1 **What is Home Science**

Objective Type Question Answers:

Q1. What is the meaning of Home Science?

- | | |
|--|--|
| a) Science of managing a home and career | b) learning to build interpersonal communication |
| c) Proper management of resources | d) All of the above |

Ans. d) All of the above.

Q2. Which of the following is an example of self - employment?

- | | |
|------------------------|----------------------------------|
| a) Staff in a hotel | b) In Charge of community center |
| c) Staff in a showroom | d) Owner of a production unit |

Ans. d) Owner of a production unit

Q3. How many areas are there in the subject of home science?

- | | | | |
|--------|---------|----------|---------|
| a) Six | b) Five | c) Three | d) Four |
|--------|---------|----------|---------|

Ans. b) Five

Q4. Which of the following is not an area of home science?
 a) Food Nutrition b) Human Development
 c) Clothing and textiles d) Agricultural science

Ans. d) Agricultural science.

Q5. Fill in the Blanks:

Ans. i) Health and happiness ii) Responsibilities iii) Employment.

- i) The term self-employment refers to working for someone else and receiving a salary. (True/False.)
- ii) Home Science is only for women. (True/False)
- iii) Home Science prepares both boys and girls to participate in household task. (True/False)

Ans. i) False ii) False iii) True

Q1. What is Home science?

Q2. What is the meaning of home science?

O3. What is Home Science related to?

Q4. How many employment opportunities are there in Home Science?

1. Salaried employment 2. Self – employment.

Q1. What is salaried employment?

Q2. What is self-employment?

Examples: - Owner of a boutique, Food service from home

Ans. The different branches of home science are:

Q4. In which areas can you get employment after studying home science?

1. Institution
2. Media production and management
3. Teaching in schools
4. Boutique
5. Home food service

Long Answer Type Questions:

Q1. Explain the difference between wage employment and self - employment.

Ans.

Wage employment	Self-employment
1. In wage employment we work under someone else.	1. Self-employment is a job where we are our own masters.
2. In this, profit and loss are not our own responsibility	2. Profit and loss in this are our own
3. We can leave one job and join another	3. We cannot change businesses quickly in this.
4. For example, hospital staff, school staff	4. For example - boutique, owner, running, hobby classes.

Q2. Why is the subject of home science essential for boys and girls?

Ans. i) Enables both to share household responsibilities and tasks.
ii) Through Home Science we can manage our resources well.
iii) Home Science enables both boys and girls to solve problems
iv) After studying Home Science various professional opportunities are available for boys and girls.

Model Question Paper**Lesson – 1****What is Home Science**

Q1. Give four reasons and motivate your friend to study home science.

Q2. Name any four areas of Home Science.

Q3. Besides salary mention any two sources of family income.

Q4. Give any four examples of self-employment

Q5. Give any four examples of wage employment.

Q6. Why is it important to study Home Science?

Lesson – 2

Food and Its Nutrients

Eating Food is an essential process carried out to keeps the body alive, facilitates proper development, and provide energy. Through food, nutrients provide the body with energy and disease-fighting power. Food Satisfies our hunger.

Nutrients

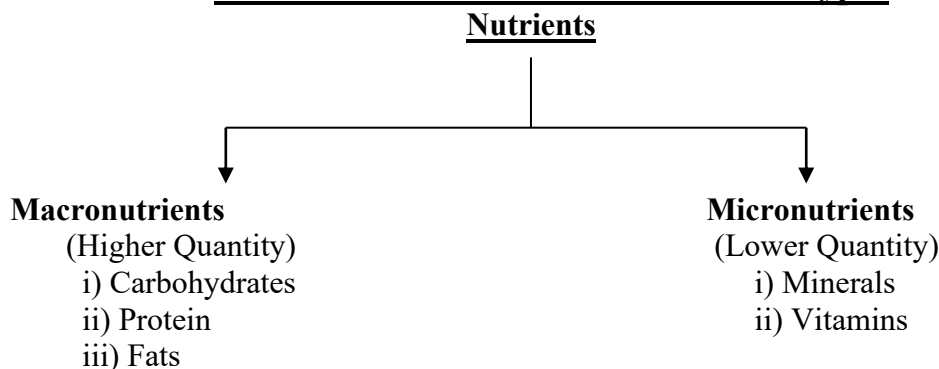
Nutrients are invisible compounds present in food, which are essential for keeping our body healthy.

or

Nutrients aid in the growth of our body, protect against disease and help maintain body temperature and energy levels. Nutrients obtained from food are:

7 Nutrients: - 1) Carbohydrates 2) Protein 3) Fat 4) Minerals
 5) Vitamins 6) Fibre 7) Water

These Nutrients are divided into two types



Macronutrients: These are found in large quantities in food and the body requires these in higher amounts.

Micronutrients: These are found in smaller quantities in food and some are already stored in our body. However, it is still essential to obtain them through food. A deficiency of micronutrients increases the risk of disease.

Carbohydrates

Carbon + Hydrogen + Oxygen = Carbohydrates

Carbohydrates provide energy to our body. Just as a car needs fuel to run, the body needs energy to perform its functions properly.

Carbohydrates are of two types:- i) Sugar ii) Starch

- **Sugar:** Sugar is called simple carbohydrates e.g. Sweet, Fruit, Honey, Sugar, Jaggery, Jam, Jelly etc.
- **Starch:** Starch is called complex carbohydrates. (SUGAR). When starch containing foods are consumed, our digestive system breaks down starch into glucose. Glucose mixes with blood and provides energy. For e.g.: Grains, Potatoes, Lady Finger etc.

- **1g of Carbohydrates provides 4 kilocalories.**
- The daily diet of an adult individual should contain **400-420 grams** of carbohydrates.

Disadvantages of Carbohydrate Deficiency:

- i) Lack of energy in the body. Causing the person to feel tired and lethargic all the time.
- ii) Weight loss occurs. Which is why people who are dieting may avoid it for some time.

Protein

"Protein is the most essential nutrient for our body." It is necessary for the formation, growth and repair of the body. The unit that forms the human body is called a cell.

- **1g of protein provides 4 Kilocalories of energy.**
- An adult requires 1 gram of protein per kilogram of body weight daily. (per body weight)
Example: - if Shivani's weight is 60 kg. her protein requirement will be 60 grams.

Functions of Protein:

- Essential for the formation of new tissues in the body.
- Helps in the repair and regeneration of damaged cells.
- Maintains stable body temperature.
- Helps in healing wounds.
- Needed for making blood, enzymes and hormones.

Sources of Protein:

i) Animal Sources ii) Plant Sources

- **Animal Sources:** - Protein obtained from animals are called animal-derived protein. For example: - Meat, Chicken, milk, curd, paneer, egg, fish non-vegetarian of items etc.
- **Plant Sources:** - Proteins obtained from plants are called plant-based proteins.
For example: - Soybean, almond, groundnut, grains, pulses, maize etc.

Harmful effects of protein deficiency

The most significant impact of protein deficiency is on children.

1. Due to protein deficiency, the physical development of children stops. Weight starts decreasing and bones become weak, increasing the possibility of fractures.
2. In young children, lack of protein and energy in diet lead Protein Energy Malnutrition (PEM). Increasing the likelihood of developing Kwashiorkor and Marasmus. PEM generally affects infants and children below 5 years.

Protein Energy Malnutrition is of two types:- i) Marasmus ii) Kwashiorkor

Marasmus:- This disease is mostly found in children up to 15 months of age. Its main cause is the mother stopping breastfeeding prematurely and above provide a diet that may be deficient in protein and nutrients.

Symptoms:-

- The child's weight remains very low.
- The child's face becomes like that of a monkey or an old man.
- The child becomes irritable and even the sound of their crying is not heard.
- Hair becomes dry and dull.
- No water retention (edema) is observed in the body.

Kwashiorkor:- When there is a deficiency of calories in a child's diet. The protein present in the body starts providing energy. Subsequently, the child gradually suffers from kwashiorkor. This disease is more common in children aged 1-5 years. Protein deficiency is the main cause of the disease.

Symptoms

- Children's faces appear round like the moon.
- The abdomen becomes distended like a pot.
- The child has no appetite, leading to slow development.
- The skin becomes discolored and peels off.
- The stomach gets upset and stools are watery.

Fat

Like proteins and carbohydrates, fat is an important part of our diet. Compared to carbohydrates, fats provide us with more energy. Foods containing large amount of fat can cause obesity.

1g of fat provides 9 kilo calories.
An adult requires only 30 grams (2 small spoons) of fat daily.

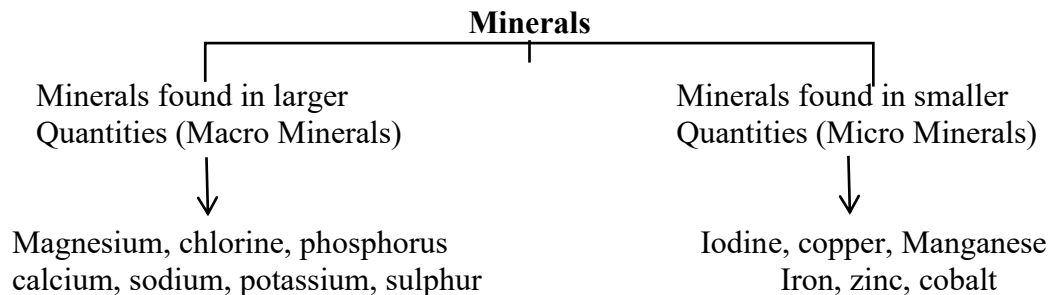
Functions of fats:

- Fats provide energy to the body.
- They keep our body warm.
- They protect delicate organs of our body like the heart, liver and also the skeletal system and muscles.
- Help in utilization of fat-soluble vitamins like – A, D, E, K.
- Make food tasty.

Sources of fats: Butter, ghee, groundnut oil, coconut oil, vegetable oil etc.

Minerals

Minerals are essential elements found in small quantities in our body. Mineral are present in all bodily tissues and fluids. Some minerals are naturally present in our body, while others are obtained through diet.



- Mineral like calcium and phosphorus are found in bones and teeth.
- Iron is a mineral found in the red pigment of blood i.e. hemoglobin
- Iron and Iodine are found in smaller quantities in the body.

Functions of Minerals:

- Iron is essential for blood formation.
- Iodine is required for the proper functioning of the thyroid gland.
- Calcium aids in blood clotting.
- An adequate amount of fluoride protects teeth and bones from fluorosis.

Sources: - Milk, Green vegetables etc.

Calcium

Calcium is present in the highest amount in the body compared to any other mineral element. Approximately 50% of all mineral elements found in the body are calcium.

Functions of Calcium

- It helps in the development of our bones.
- It makes teeth healthy and strong.
- It helps in clotting of blood.
- It also helps in the movement of muscles.

Sources of Calcium:

- Soybean, Curd, Khoya, Paneer, Meat, Fish, Eggs, Some nuts.
- Green leafy vegetables like- Radish leave, Cabbage, Fenugreek, Coriander, Carrot, Turnip leaves or their Salad.

Harms due to calcium deficiency

- Due to weakening of the mother's bones, there is a risk of fractures from even minor impacts. Fractured bones do not heal easily. This condition of bones is called Osteomalacia. This disease is mostly found in adults. Elderly people also require more calcium because their bones lose calcium and become porous. This is called osteoporosis.
- Children's growth is stunted due to calcium deficiency, in childhood due to calcium deficiency legs become weak or crooked. This disease is called Rickets.

Iron

Iron is one of the most important trace minerals found in the body. It is essential for the formation of a compound called hemoglobin in our blood, which helps in carrying oxygen to all parts of the body. Approximately 10% of the total iron in the body is found in hemoglobin. The remaining portion is found in bone marrow, liver, kidneys, spleen and myoglobin in muscles.

Functions of Iron

- Hemoglobin present in red blood cells is formed from iron. It carries oxygen to all parts of body.
- Iron protects the body from infections and anemia.

Sources of Iron

- Dark green leafy vegetables like Amaranth, Radish leaves, Mint, Spinach and Fenugreek contain significant amount of iron.
- Raisins and Jaggery (Gur) are also sources of iron.
- Egg yolk, liver, heart and kidneys from animals are excellent sources.
- Beans, peas, soybeans, pearl millet, wheat and polished Rice are other sources of Iron.

Causes Of Iron Deficiency Anemia

- Incomplete absorption of iron consumed through diet.
- Iron deficiency in the diet.
- Due to intestinal worms (hookworms) or diarrhea.
- Excessive blood loss due to accident or excessive blood donation.

Symptoms of Anemia

- Feel tired, Shortness of breath or minimal exertion, headache, dizziness and weakness.
- Impaired vision.
- Insomnia, reduced appetite.
- Patients suffering from severe anemia often develop mental disorders.

Iodine

Iodine is a trace mineral found in very small quantities in our body. This mineral is essential for the proper functioning of the thyroid gland, and most of its quantity is located in the thyroid gland itself.

Functions of Iodine:

- Iodine is essential for the proper functioning of the brain and for the development of the body.
- Iodine accelerates the rate of physical development and metabolic activities.
- It aids in energy production.
- Iodine is a main component of the thyroxine hormone secreted by the thyroid gland.

Harmful Effects of Iodine Deficiency:

- Its deficiency hinders the growth of children's bodies.
- Its deficiency commonly leads to goiter in adolescents' young adults and school Children.
- If a mother does not receive iodine during pregnancy, she may develop goiter and her child born may suffer from cretinism (severe mental retardation.)

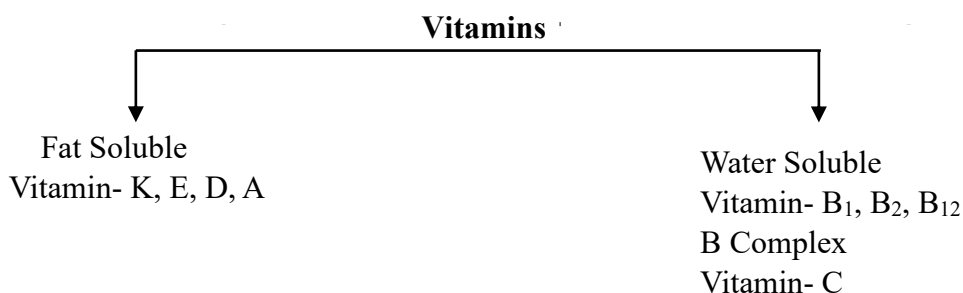
Sources of Iodine

- Sea foods like fish and sea weeds.
- Plants which grow in iodine rich soil.
- Salt fortified with Iodine.

Vitamins

We require vitamins in our diet in very small quantities but they are essential for the proper functioning of

our body. Vitamins cannot be produced by the body. therefore, must be present in our diet. Vitamins are soluble in water and fat. Hence, based on solubility they are divided in to two categories.



Fat Soluble: - Fat-soluble vitamins are those that dissolve in fat. Such as vitamins K, E, D, A.

Water Soluble: - Water soluble vitamins are those that dissolve in water such as Vitamin- B₁, B₂, B₁₂, B Complex and Vitamin- C.

Vitamin - A

Vitamin A is a light-yellow granular substance that is not destroyed at normal temperature but is destroyed by sunlight.

Functions of Vitamin A

- For better vision especially in dim light.
- Necessary for normal growth and development.
- Keeps the skin soft and smooth.
- Increases immunity (disease resistance) with its use.

Sources of Vitamin-A

- **Animal based foods:-** Obtained from butter egg yolk and fish oil. Milk is also an excellent source.
- **Plant Based foods:-** Green leafy vegetables such as Spinach, fenugreek, radish, amaranth etc.
- Vitamin A is found in the form of carotene in dark yellow fruits and vegetables such as mango, papaya, beetroot, tomato, carrot etc. **Carrot is one of the best sources of Vitamin-A**

Deficiencies due to Vitamin A

- Night blindness or inability to see clearly in the dark
- Dryness of conjunctiva (white part of eye) and its wrinkling.
- Cornia (black part) around the eyes dries up and cloudiness appears.
- Stunted growth.

Vitamin-D

Vitamin D is a white crystalline substance that is fat-soluble. Our body can make vitamin D when skin is exposed to sunlight.

Functions of Vitamin D

- Vitamin D along with phosphorus and calcium helps in the formation of teeth and bones.
- Pregnant ladies require a higher amount of Vitamin-D for the complete development of the fetus and for bone formation.

Sources of Vitamin D

- Vitamin D is produced when skin is exposed to sunlight.
- Vitamin D is found in animal fats like such as fish, egg yolk, butter, cheese etc.

Deficiencies due to Vitamin-D

- Children become susceptible to rickets due to Vitamin-D deficiency.
- Adults develop a disease called Osteomalacia and osteoporosis due to Vitamin-D deficiency.
- Vitamin D deficiency leads to a decrease in calcium levels in the blood, causing tremors in the fingers. This disease is called Tetany

Water Soluble Vitamins

Water-Soluble Vitamin:- Vitamins soluble in water are called water soluble vitamins. These include vitamin B (B1, B2, B12, B complex) and Vitamin-C.

Vitamin 'B' Complex

Vitamin 'B' Complex:- Vitamin B complex is a group of B Vitamins that are very essential for the body. It is water soluble and does not accumulate in the body. Therefore, it should be consumed daily.

Symptoms of Vitamin 'B' Deficiency: -

- Cracking at the corners of the mouth.
- Tongue sores
- Redness of the tongue
- Fatigue, Diarrhea and Dysentery.
- Beri-Beri. Where polished rice was eaten.

Sources: - Pulses, whole Grain like brown rice, fruits with peels.

Vitamin - C

Vitamin C is also known as ascorbic acid it is a water-soluble vitamin that acts as an antioxidant and a crucial for various bodily functions.

Functions of Vitamin C

- Enhances the body's immunity against disease.
- Maintains healthy skin, gums and teeth.
- Helps in quick wound healing.
- Aids in iron absorption.

Sources- Amla, lemon, orange, sweet lime, Guava, Tomato, papaya.

Deficiency of Vitamin C

- Severe Vitamin C deficiency can lead to a disease called Scurvy.
- Swelling occurs in the body.
- The person always feels tired and lethargic.

Dietary Fibre (Roughage)

Dietary Fibre also known as Roughage, is an indigestible carbohydrate present in food. These foods contain elements that are not digested by the body but aid in the cleansing of the intestine and digestion.

Sources of Fiber-Rich Food.

- Whole wheat flour, Dalia (broken wheat)
- Fruits: Guava, Apple, Pineapple, Banana, Orange.
- Whole pulses: Lobia (Black-eyed peas). Rajma (kidney beans), Black Chickpeas
- Rajma (kidney beans), Black Chickpeas.

Benefits of Fiber:

- Makes stool soft and easy to pass.
- Fiber-rich food fills you up quickly, reducing the need to overeating.

Diseases Caused by Fiber Deficiency:

- i) Constipation ii) Cancer iii) Diabetes iv) Obesity

Nutrients Deficiency Diseases

- Deficiency of nutrients is also called Nutritional Deficiency Disease.
- **Nutrients Deficiency Disease:** It is a condition that occurs in our body when there is a prolonged lack of a specific type of nutrients in our daily diet.

Water

Water is not a nutrient, yet it is very important for our body because:

- It is a constituent of all body fluids.
- It helps to remove the waste products from your body in the form of urine.
- It helps to digest food and takes the nutrients from the food to the different cells of your body.

Lesson – 2

Food and Its Nutrients

Objective Type Question Answers:

Q1. In Which food item is iron found in abundance?

- a) Milk b) Ghee c) Green leafy vegetables d) Cheese

Ans. c) Green Leafy Vegetables

Q2. How many Calories of energy are obtained from one gram of protein?

- a) 4 calories b) 6 calories c) 8 calories d) 9 calories

Ans. a) 4 calories

Q3. Which disease is caused by the deficiency of Vitamin A?

- a) Rickets b) Scurvy c) Dwarfism d) Night blindness

Ans. d) Night Blindness

Q4. Which disease is caused by the deficiency of iron?

- a) Fever b) Scurvy c) Malaria d) Anemia

Ans. d) Anemia

Q5. Which vitamin is required to make our bones and teeth?

- a) Vitamin-C b) Vitamin-D c) Vitamin-A d) Vitamin-K

Ans. b) Vitamin-D

Q6. **Fill in the blanks**

1. Vitamin D can be produced by the _____ in the presence of _____.

2. One function of vitamin A is to keep our _____ healthy.

3. To keep our gums and teeth healthy we must take _____.

Ans: (1) Body, Sunlight (2) Eyes (3) Calcium

Q7. **State true or false**

1. Fiber is not essential in the diet. (true / false)

2. We must remove the outer skin of apples before eating. (true / false)

3. Hemoglobin formation is reduced in anemia. (true / false).

Ans: (1) false (2) false (3) true

Very Short Answer type Questions

Q1. Which disease are caused by iodine deficiency?

Ans. Goiter, Cretinism

Q2. What food should be given to a person with iodine deficiency?

Ans. Sea Food, Iodine fortified salt (Iodised salt).

Q3. In which disease does the hemoglobin level decrease?

Ans. Anemia

Q4. How many Kilocalories of energy does one gram of carbohydrate provide?

Ans. 4 Kilocalories

Q5. How many Kilocalories of energy does one gram of fat provide?

Ans. 9 Kilocalories

Q6. How many Kilocalories of energy does one gram of protein provide?

Ans. 4 Kilocalories

Q7. Which disease is found in adults due to vitamin 'D' deficiency?

Ans. Osteomalacia/Osteoporosis.

Short Answer type Questions:

Q1. What are the two functions of food?

Ans. i) Provides energy to our body.

ii) Provides us the strength to fight disease.

iii) promote growth and repairs for new cells and tissues.

iv) Food satisfies our hunger.

Q2. What are nutrients and list their names?

Ans. i) The invisible components present in food that keep our body healthy are called nutrients.

ii) Nutrients: Carbohydrates, Protein, Fat, Vitamins, minerals, Fiber.

Q3. State the functions and sources of Carbohydrates?

Ans. i) Provides energy and satisfy hunger.

ii) Increase the quantity of our food.

iii) Allows proteins to be used for other functions.

iv) Makes food delicious.

Sources of Carbohydrates:- Grains like wheat, Millet and rice and starchy vegetable:- Potato, Sweet tapioca as well as Jaggery, Jam Jelly.

Q4. What is the most important function of fat?

Ans. It keeps our body warm, we get fat from butter, ghee, oil etc.

Q5. What are Macro and major minerals?

Ans. Those minerals that are present in our body in large quantities are called Major minerals. for example: - Calcium, Potassium are called Major minerals.

Q6. What are trace minerals?

Ans. Iron and iodine are found in small quantities in our body. These are called trace minerals.

Q7. Name the disorder caused by Vitamin-A deficiency.

Ans. A night blindness is a disease caused by vitamin 'A' deficiency. In this the eyesight in the dark becomes weak. We get vitamin A from pulses. Carrots green vegetables etc.

Q8. Name the disease caused by vitamin 'C' deficiency?

Ans. Scurvy is disease caused by vitamin 'C' deficiency.

i) In this blood starts coming from both teeth and gums.

ii) Sources of vitamin 'C' Citrus fruits, Pomegranate, Dates, Amla, Sprouted grains.

Long Answer Type Questions.

Q1. What is protein energy malnutrition and what are the diseases caused by its deficiency?

Ans. A Protein energy malnutrition is the absence of protein in the diet for a long time. The condition mainly occurs in children under 5 years of age. Diseases caused by its deficiency.

- i) **Kwashiorkor:** It occurs when the diet lacks protein but has sufficient energy from carbohydrates. In this, the child's stomach becomes swollen like a pot.

- ii) **Marasmus:** It occurs when there is a long-term deficiency of both protein and energy in the diet. In this the child's development stops.

Q2. What is the disease caused by iron deficiency and what are the source of iron?

Ans. **Anemia:** It is a disease caused by iron deficiency.

Cause of Anemia:

- i) Not consuming iron-rich food.
- ii) Presence of intestinal worms in children and adults.

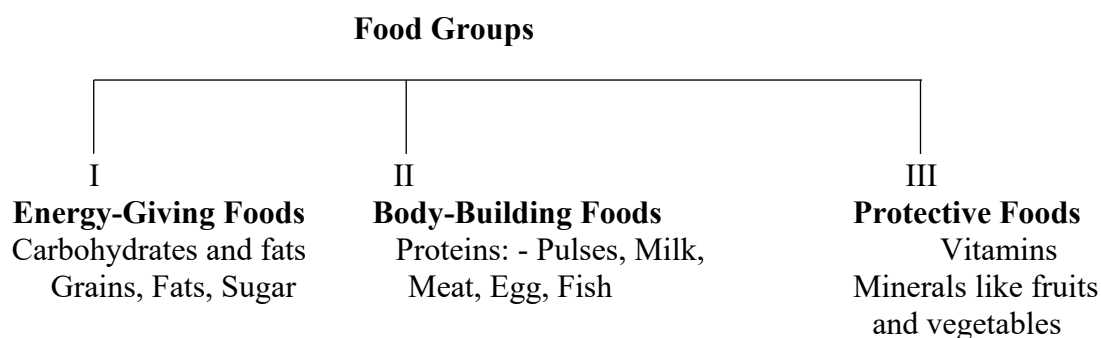
Sources: Pomegranate, jaggery, green leafy vegetable, dates etc.

Lesson – 3

Food Groups

We eat different types of food items every day, such as rice, lentils, fruits etc. All these foods provide our body nutrients and the power to fight against diseases. Food contains different nutrients like- Carbohydrates, fats, proteins, vitamins and minerals. Choosing the right food is essential so that our diet will be balanced and we remain healthy.

Food Groups:- Food Groups have been divided into three main groups based on their functions and the nutrients they provide



Five Food Group System

- | | | |
|---------------------------|--------------------|----------------------|
| i) Grains, Cereals | ii) Pulses | iii) Milk, Meat, Egg |
| iv) Fruits and vegetables | v) Fats and Sugars | |

1) Grains

- Food items:- Rice, Wheat, Ragi, Bajra, Maize, Wheat flour etc.
- Main Nutrients: Carbohydrates, Protein, Fiber.

2) Pulses and Legumes

- Food items: Arhar (Pigeon pea), Masoor (Red lentil), Matar (pea), Rajma (Kidney beans), Green moong dal, Soybean etc.
- Main Nutrients:- Protein, Carbohydrates, Iron, Fiber, Vitamin-B.

3) Milk, Egg, Meat and Their Products

- Food Items:- Milk, Curd, Paneer, Egg, liver, Fish, chicken, Mutton etc.
- Main Nutrients:- Protein, Fat, Calcium, Vitamin-B, Vitamin-A.

4) Fruits and Vegetables

- Food Items: Banana, Mango, Orange, Lemon, Tomato, Watermelon, Apple, Carrot, Spinach etc.
- Main Nutrients: Vitamins, Minerals, Fiber.

5) Fat and Sugar

- Food Items: Oil, Butter, Ghee, Sugar, Jaggery, Honey etc.
- Main Nutrients: Carbohydrates.

Characteristics of Food Groups

1) Cereals:

- i) Grains like Rice, Wheat, Maize, Ragi, Barley etc. are main part of our diet.
- ii) These food items provide us energy.
- iii) Eating whole grains keeps our digestion good.
- iv) Eating whole grains protects us against various diseases.
- v) If grains are consumed with pulses, they become more nutritious.

Note: Brown Rice or unpolished rice is more beneficial than polished rice because it has B-vitamins

2) Pulses and Legumes: Example:- Arhar, Urad, Rajma, Moong, soyabeans

- i) These are major sources of protein.
- ii) They contain vitamin B, Calcium and iron in abundance.
- iii) Eating them mixed with vegetables increases their nutritional value, e.g. Dal palak, Spinach dal.

3) Milk, Eggs and Meat Products: -These food items are obtained from animals.

Milk

- i) It is the best and complete food for small children.
- ii) It contains protein, Calcium, fat and vitamins.
- iii) Skimmed milk has less fat but the same amount of calcium.

Egg

- i) Eggs contains all nutrients except vitamin-C.
- ii) They are considered as an excellent source of protein.
- iii) They are beneficial for pregnant and lactating women.

Non-Vegetarian Food Items:

- i) These are rich sources of protein and Vitamin A and B.
- ii) These are more beneficial for those whose diet is limited or lacks in nutrients.

4) Fruits and Vegetables:-

A) Fruits:-

- i) Juicy fruits like oranges, seasonal fruits like Amla etc. contain Vitamin C and other nutrients. Pomegranate is rich in iron.
- ii) Yellow fruits like mango contains carotene which is converted to Vitamin A which is good for one eyes.
- iii) They give us the strength to fight against disease
- iv) Fruits and vegetables are good source of fibres.

B) Green Leafy Vegetables

- i) Green leafy vegetables like spinach, mustard green, Fenugreek etc. contain iron, calcium and vitamin K and carotene.
- ii) These vegetables are essential for a healthy body.
- iii) Root vegetables like potato, sweet potato, turnip are good source of energy.

Note: Eating fruits and vegetables provides vitamins and minerals that help us to stay healthy strong and protects us from diseases. We should include them in our diet.

C) Other Vegetables (Root Vegetables):- Eg.: - Potato, Carrot, Sweet Potato, Beet root, Radish etc.

- i) These vegetables are rich in carbohydrates.
- ii) They also contain some vitamins and minerals like iron, calcium and Zinc.
- iii) These vegetables are easily available.

5) Fats and Sugars:-

Fats:- Ghee, Oil, Butter, groundnut, sesame etc.

- i) They provide warmth and energy to the body.
- ii) They are helpful in the development of the body.
- iii) Fat soluble vitamins: -A, D, E, K work in the body.

Sugar:- Sugar, Jaggery, Honey etc.

- i) They give quick energy to the body but excessive consumption leads to obesity.
- ii) Jaggery is better than sugar because it has iron so one can easily consume jaggery.

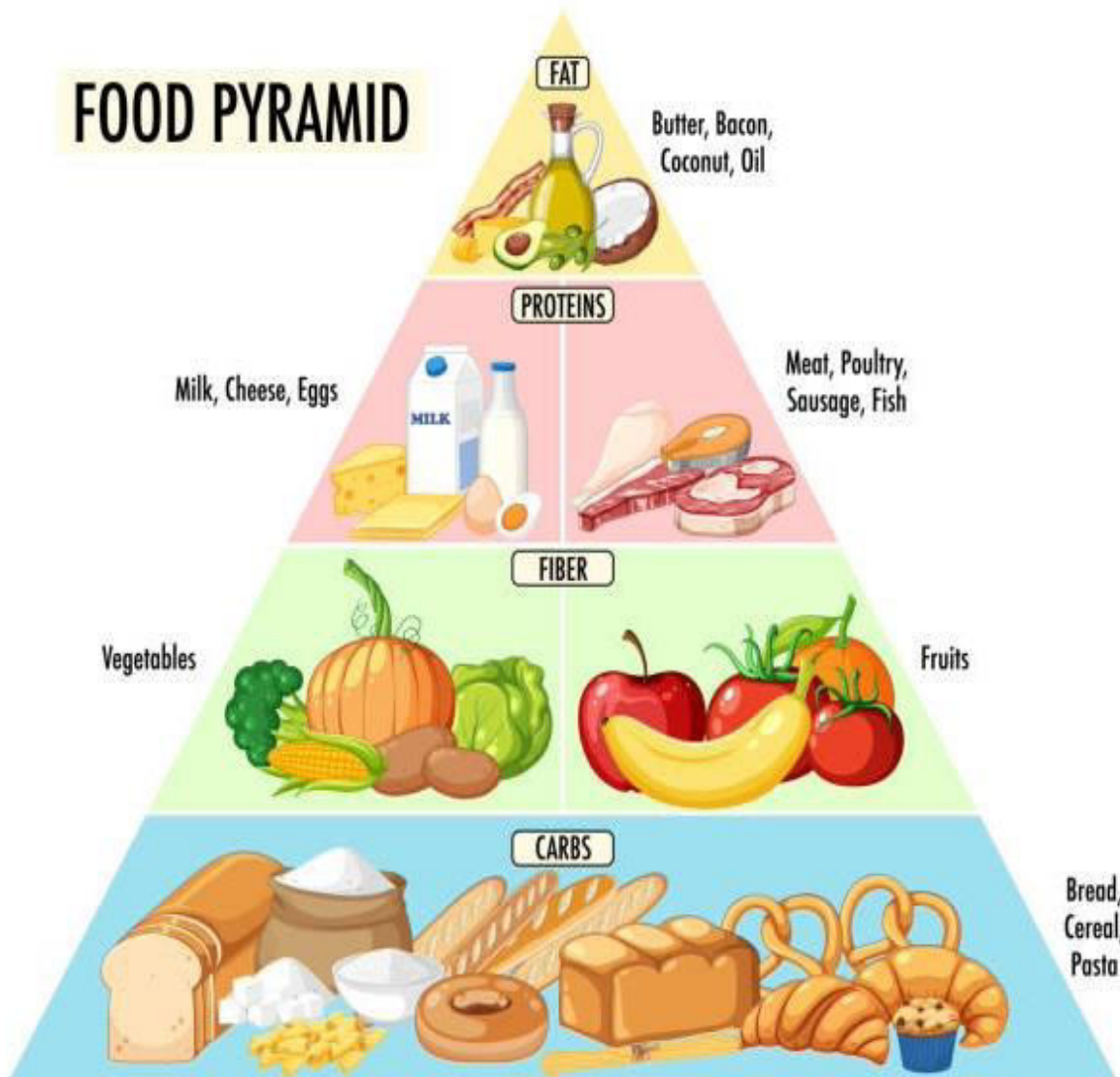
Food Exchange

When food items with similar nutrients can be substituted for each other, it is called food exchange. In other words, we can say that substituting one food item in a food group for another food item is called food exchange.

Pyramid of Food Groups

This pyramid shows how much of which food items from which food group we should eat.

- i) From the Bottom, grains and bread, we should eat more of these foods.
- ii) In the Middle, vegetables, fruits, milk etc. should be consumed in balanced quantities.
- iii) Towards the Top are fats, sweet etc. and these should be consumed in smaller quantities.
- iv) This pyramid helps in choosing a healthy diet.



Balanced Diet:- A balanced diet is one in which all types of nutrients are available in appropriate quantities. This provides the body with all necessary nutrients and we remain healthy.

Meal Planning:- Meal planning is the process in which we plan each meal to be consumed daily.

Importance of Meal Planning

The nutrients for our body depend on our meal planning. We mainly eat three meals in a day.

- 1) Breakfast
 - 2) Lunch
 - 3) Dinner
- These three meals provide essential nutrients to our body.
 - It is necessary to include food from all five food groups in meal planning.

Meal Planning Requires

- Nutrients and healthy food items should be chosen.
- Fulfill the nutritional needs of all family members.
- Use root vegetables like carrot, radishes, sweet potatoes etc. in diet.
- Creatively use leftover food.
- Meals should be according to the family's preferences and needs.
- While preparing food health, cost and saving money should be kept in mind.

Factors Affecting Meal Planning

- 1) **Age**: The needs of people of every age are different therefore, meal planning is necessary for everyone, from children to adults and adolescents.
- 2) **Gender/Sex**: Men need more energy and protein as compared to Women. Women need more iron, so this should be kept in mind while preparing food.
- 3) **Seasonal Availability**: Seasonal fruits and vegetables are fresh, nutrients and inexpensive. Thus, they should be included in the diet.
- 4) **Weather**: We eat more in winters as compared to summers. In winter, we need more energy to maintain body temperature.
- 5) **Occupation**: People who do strenuous work, like laborers, farmers and athletes, needs more energy. Therefore, their diet should contain more carbohydrates and proteins.
- 6) **Physiological Needs**: Pregnant and lactating mothers have specific nutritional requirements, so their diet needs special attention.
- 7) **Economic Factors**:- When planning meals, the economic situation of the family, should be kept in mind and the diet should be planned in such a way that the family does not suffer financial loss.

Family Meals

Every family needs a balanced diet, which contains all types of nutrients. Therefore, when planning meals for all members of the family ensure that all essential nutrients are present in every meal. To fulfill the needs of every member of the family, it is better to make some changes in the family's diet.

Lesson – 3 **Food Groups**

Objective Type Question Answers:

- Q1. Which plays an important role in the preventing of lifestyle- related disease?
a) Water b) Minerals c) Fiber d) None of these
Ans. c) Fiber
- Q2. Which are concentrated sources of energy?
a) Protein b) Fats c) Carbohydrates d) Vitamin
Ans. b) Fats

- Q3. Which food group is essential for body growth and repair?
 a) Protein b) Fat c) Minerals d) Water
 Ans. a) Protein
- Q4. To which food group does milk belong?
 a) Energy-giving b) Body-Building c) Body-Protecting d) All of these
 Ans. d) All of these
- Q5. Which of the following food items is a good source of fiber.
 a) Banana b) Ghee c) Rice d) Whole grains
 Ans. d) Whole grains

Q6. Fill in the Blanks-

1. Mary can eat _____ instead of an orange to get vitamin C.
2. Nagma can prepare stuffed _____ paratha instead of stuffed potato paratha.
3. Instead of cashew nut ladoos, Rita can prepare ladoos using _____ nuts.
4. Jaspreet can use _____ instead of sugar while making chikki.
5. Meera can prepare _____ curry instead of paneer curry for getting protein.

Ans. (1) Guava (2) Gobi (3) Groundnuts (4) Jaggery (5) Dal

Q7. State True or False

- i) Cereals are the main source of energy in our body. (True/False)
- ii) We should eat cereals in refined form. (True/False)
- iii) Milk is considered the best food for small children. (True/False)

Ans. (1) True (2) False (3) True

Very Short Answer Type Questions

- Q1. Which element is found in abundance in whole grains and pulses?
 Ans. Fiber
- Q2. Which vitamins is found in abundance in grains?
 Ans. Vitamin 'B' Complex
- Q3. Which nutrients is not available in eggs?
 Ans. Vitamin C
- Q4. What is found in yellow fruits?
 Ans. Carotene
- Q5. Into What is Carotene convert into after entering the body?
 Ans. Vitamin A
- Q6. Which are the fat-soluble vitamins?
 Ans. Vitamin A, D, E, K
- Q7. Which food source provides protein cheaply and in large quantities.
 Ans. Soybean.
- Q8. Which element is found in abundance in pomegranates?
 Ans. Iron is found in pomegranates.

Short Answer Type Questions

- Q1. What do you understand by food exchange? Give an example.
 Ans. Exchange of one food items for another food item in place of another such that the nutrition value obtained from it is similar. For example- Wheat, Rice.
- Q2. What do you understand by balanced diet?
 Ans. A balanced diet is one that provides various types of food items in appropriate quantities, from which the body receives all essential nutrients.
- Q3. What are five factors that Influence meal planning?
 Ans. i) Economic Factors ii) Weather iii) Age
 iv) Occupation v) Seasonal availability

Lesson - 4

Methods of Cooking Food

In earlier times, food was primarily cooked over wood fires. Gradually with the introduction of coal, Kerosene and gas cooking methods evolved such as:

- Boiling • Steaming • Frying • Roasting • Baking

We prepare different types of food using these methods.

For example- Chapati, Rice, Dal, Vegetables, Salad and Chutney.

Although certain foods can be eaten raw, they often lack desired taste and flavour. Some vegetables such as tomatoes, cucumbers, carrots and fruits are consumed raw because they are beneficial. However, vegetables such as potatoes, Brinjal (eggplant) and Ladyfinger (okra) must be cooked before eating.

Importance Of Cooking Food Before Consumption:

- i) Cooking makes food easier to digest.
- ii) Cooking enhances the appearance, color, taste, aroma and texture of food.
- iii) Cooking allows us to add a variety flavors and ingredients as desired.
- iv) Cooking helps food stay fresh for a longer period.
- v) Cooking makes food safe for consumption by killing germs.

Pasteurization

Pasteurization is a process in which milk is heated at a moderately high temperature for a short duration and then, cooled immediately. This process destroys harmful microorganisms present in the milk, helping it stays fresh for a longer time without spoiling.

Classification of Cooking Methods:

1. Cooking by Moist Heat Method:

In this method, food is cooked using water or steam.

- (A) Boiling:-** Method in which food is cooked in adequate quantity of water e.g. Boiled potatoes, eggs, rice and vegetables.

Advantages:-

- i) Safe and simple method of cooking ii) Food does not get burnt easily.
- iii) Suitable for large scale cooking iv) Boiled food is digested easily.

Disadvantages:-

- i) Loss of water-soluble vitamins may occur when water in which food is boiled is discarded.
- ii) Some people find boiled food bland.

- (B) Simmering or Stewing:-** Food is cooked in small quantity of water kept below boiling point at slow heat. The food and liquid are served together.

Advantages:- i) Juices of food are steamed. ii) Food tastes better. iii) Nutrients are conserved

Disadvantages:- More time and fuel is spent in cooking.

- (C) Steaming:-** When food is cooked with the heat from water vapors, it is called steaming eg:- idli, dhokla, momos.

Advantages

- i) Cooking time is less. ii) Nutrients in food are conserved.
- iii) Steamed food is light, nutritious and easy to digest especially by small children and elderly.

Disadvantages:-

- i) Steam can cause burns. ii) Food is not crisp.
- iii) Vegetable may turn soggy and mushy when over cooked.

- D) Pressure Cooking**:- Food is cooked with water in a special utensil called pressure cooker which is made of steel or mixture of aluminum and other metals which can withstand high pressure and temperature above 100⁰ C

Advantages:-

- i) Makes food safe as all bacteria is killed in pressure cooker.
- ii) Saves fuel and time.
- iii) Several foods can be cooked together using separators.
- iv) No need to keep food fully immersed in water.
- v) Water soluble vitamins and minerals are not lost.

Disadvantages:- Over cooking can cause food to loose texture and get burnt.

2. Cooking by Dry Heat Method:

There are three ways of cooking food by dry heat.

- i) Baking ii) Roasting iii) Grilling

- A) Baking**:- Food is cooked by placing it inside a heated closed box called oven e.g.:- Tandoori roti, Naan, Biscuit, Bread, Pastry.

Advantages:-

- i) Less oil used. ii) Food develops a delicious crust and is light brown in color.

Disadvantages :- Since more fat and sugar are used in some baked product Calorie intake may increase.

- B) Roasting**:- Food is put directly on a hot tava or grill or sand or fire and cooked. eg:- Brinjal, Sweet potato, Corn, Papad, Peanuts. You have to keep turning the food like brinjal while roasting it so that all sides get roasted properly.

Advantages:-

- i) Food is tastier when cooked this way. ii) Adds variety to food.

Disadvantages:

- i) It is a slow method of cooking.
- ii) Food cooked this way is sometimes dry so may be served with chutney or sauce.

- C) Grilling**:- Food is cooked over glowing fire and uses more indirect heat and is slower than roasting eg:- Paneer tikka, Chicken tikka, Dal Batti, Litti Chokha

Advantages:-

- i) Adds nice flavor to food ii) Gives variety.

Disadvantages:-

- i) Slow method of cooking
- ii) May produce lot of smoke during cooking and one may get burnt while using grill.

3. Frying

The process of cooking food in hot ghee or oil is called frying. It is of two types

- a) Deep frying b) Shallow frying

- a) Deep Frying**:- In this method food is fully immersed in lot of oil for cooking eg:- Poori, Pakoda.

- b) Shallow Frying**:- In this method food is cooked on a pan with less oil and controlled heat. Nonstick pans are usually used.

Advantages:- food lasts longer in comparison to foods cooked using other methods.

Disadvantages:- i) Fried food is difficult to digest and has many calories.

- ii) Excessive consumption of fried food can be bad for health.

Other Methods of Cooking Food:

- 1) Microwave Cooking**- In this method food is cooked by microwave radiation. It is a modern method cooking and is gaining popularity in urban areas. Heat generated by vibration of water molecules cooks the food.

Advantages:- i) It is quick method of cooking. ii) It saves both time and effort.

- Disadvantages:-** i) Using a microwave require electricity.
ii) Uses electrical energy and therefore expensive.

2) **Cooking in a Solar Cooking:-** Solar cooker uses sunlight as its source of energy.

Advantages

- i) A solar cooker does not produce smoke, making it easy to and clean.
- i) Environment Friendly
- iii) Suitable for many Regions in India- In many parts of India with year-round sunlight the Solar cooker can be used effectively and efficiently.

Disadvantages:- Outdoor Dependency- The solar cooker must be used in open outdoor spaces. It functions only when there is sufficient sunlight, limiting its use in cloudy or shaded areas.

Loss of Nutrients During Cooking

Vitamin - A

- When vitamin A come in contact with oxygen present in the air it gets destroyed.
- Cooking food at high temperature in open utensils coming in contact with oxygen for a long period of time.

Vitamin - B Complex

- This group includes water soluble vitamins.
- When food is washed, soaked or cooked in water, if this water is discarded it result in the loss of vitamin B.

Vitamin C

- When you cut vegetables and fruits are chopped into very small pieces and washed Vitamin C gets destroyed because it dissolves in water.

Protein

- All protein present in the food items absorb water and gets coagulated by heat.

Fat or Oil

- When oil or ghee are heated for a long time over and over again quality becomes poor and it can harm us if used.

Minerals

- Minerals such as sodium and potassium dissolve in water.
- We should not throw away water in which food has been cooked.

Conservation of Nutritional Value

- Vegetables should be washed before cutting to prevent the waste of vitamins and minerals.
- Peel vegetables as thin as possible because vitamins and minerals are found just below the peel.
- Vegetables should be cut into large pieces.
- When cooking use only the necessary amount of water.
- Avoid using baking soda while cooking as it destroys vitamin B.

Enhancing Nutritive Value of Food Items

Increasing nutritional content of Food (Enhancement)

- It provides food according to the body's nutritional requirement.
- It provides a balanced diet.

Methods of Food Enrichment

- i) **Combination:-** No single food provides us all the nutrients. We eat variety of food.
For Eg. We eat chapati with vegetables and rice with dal as in khichdi.
- ii) **Fermentation:** Fermentation is the process in which a substance breaks down into simpler substance. Micro-organism like yeast and bacteria usually play a role in the fermentation process, creating beer, wine, bread, yogurt, kimchi, idli and other food.
- iii) **Germination:-** Take some whole moong or Channa and soak it overnight in a sufficient quantity of water. Now you will notice that small white shoots have started growing from these grains. This process is called germination or sprouting.

Lesson – 4

Methods of Cooking Food

Objective Type Question Answers:

Q1. What is the main objective of cooking food?

- a) To enhance taste
b) To decorate
c) To serve Food
d) To make food digestible and safe

Ans. d) To make food digestible and safe.

Q2. By which method does the taste, color, and texture of food remain intact?

- a) Steaming b) Boiling c) Frying d) Roasting

Ans. a) Steaming

Q3. Which nutrients are lost during cooking?

- a) Protein b) Carbohydrates c) Vitamins d) Fats

Ans. c) Vitamins

Q4. Which of the following is an example of a nutritious food combination?

- a) Rice b) Rice + Pulses c) Milk d) Rice + Tomato

Ans. b) Rice + Pulses

Q5. What is the method of adding iodine to salt called?

- a) Pasteurization b) Cooking c) Fortification d) Preservation

Ans. c)Fortification

Q6. Fill in the Blanks:-

- The method of cooking food in an oven is called
- When sunshine is used for cooking it is called.....
- The process of cooking food in hot sand is called
- is a method of cooking where food is cooked in a closed box which is heated on gas or coal or using electricity

Ans. (1) Baking (2) Solar cooking (3) Roasting (4) Baking

Q7. State True or False -

- i) Cooking soda has no harmful effect on nutrients present in food that is being cooked. (true/false)
- ii) Minerals are lost when the water in which the foods are cooked is thrown away. (true/false)
- iii) Maximum loss of nutrients occurs when food is pressure-cooked. (true/false)
- iv) Vitamin C gets easily destroyed during cooking. (true/false)

Ans. (i) false (ii) true (iii) false (iv) true

Very Short Answer type Questions:

Q1. When the water is thrown away after boiling vegetable, which nutrient is lost?

Ans. Vitamin

Q2. The process which is characterized by cooking on low flame.

Ans. Low Temperature, less water

Q3. What should be the temperature while cooking in a pressure cooker?

Ans. More than 100 degrees.

Q4. One of the four methods of cooking food through moist heat process which preserves maximum amount of nutrients?

Ans. Cook in pressure cooker.

Q5. What is the method of cooking in oven called?

Ans. Baking

Q6. In which method we require adequate sunlight for cooking?

Ans. Cooking in solar cooker.

Q7. What is the process of cooking food in hot sand called?

Ans. Roasting

Q8. What is the method of cooking using a nonstick pan called?

Ans. Shallow frying

Q9. When the food is cooked directly on fire then this method is called?

Ans. Grilling

Short Answer Type Questions:

Q1. What do you understand by the process of Pasteurization?

Ans. In this process, milk is heated at high temperature and then cooled down rapidly. The microbes present in the milk cannot tolerate this sudden change in temperature and destroyed

Q2. Write one benefit of Boiled food.

Ans. Boiling is the safe way to cook food. This is a simple method and it is suitable for cooking food in large quantities. Boiled food is also easily digestible.

Q3. What are the benefits of cooking food in low flame?

Ans. By cooking on low flame, the juice of the food remains intact and the food tastes delicious. By this method the nutrients in the food also remain intact.

Q4. Which method of cooking food is best and give reasons.

Ans. The best way to cook food is STEAM.

- It makes the food light and easily digestible.
- Cooked with steam is safe and more digestible.

Q5. Dolma has prepared mixed vegetable salad for herself while Mohan has cooked mixed vegetable curry for her. Which dish will provide most vitamins to her?

Ans. Dolma will get more vitamins from mixed vegetable salads. This is because the vitamins in cooked vegetables are destroyed compared to salad.

Q6. Saraswati is cooking spinach in her kitchen. She finely chopped the spinach washed it thoroughly, and lightly fried it in an open vessel. Do you think she cooked the food correctly?

Ans. Saraswati's method of cooking spinach is not correct because she chopped the spinach before Washing it and cooked it in an open vessel due to which all its vitamins will get lost.

Q7. What are the benefits of combining methods for nutrient enrichment in food?

Ans. Without increasing the cost of food, the quality of the diet can be improved by mixing two dishes from the same food group or different types. This is a common technique that can be easily used by every family.

Q8. How do fermentation and germination improve the nutritional value of food or what are their names?

Ans. i) These methods make food moist and Spongy.

ii) Germination increases the digestibility of food.

These methods increase the vitamins and minerals in food.

Long Answer Type Questions:

Q1. Describe four benefits of cooking food?

Ans. i) Cooking food makes dishes more delicious and fragrant.

ii) Cooked food can be preserved safely for a longer time.

iii) Cooked food is easily digestible.

iv) Cooked food changes its color, appearance, taste etc.

Q2. How do the following processes improve the nutritional value of food?

Ans. **Fermentation:** This is a food preparation process in which microorganisms already present in food or added in the form of curd etc. produce essential nutrients like Vitamin C and Vitamin B. for example, making bhature (a mixture of flour and curd), Idli.

Germination: Soak whole moong or Chick peas in water overnight or for 8-10 hours. Then remove them from the water, tie them in a muslin or thin cotton cloth for 12-14 hours and then small sprouts will energy from them.

Q3. Which nutrients are destroyed during cooking and why? Explain with reasons.

- Ans. i) Cooking food in an open vessel destroys vitamin C.
ii) Using baking soda while cooking food destroys vitamin B and vitamin C.
iii) Vegetables and fruits should be washed before cutting, otherwise vitamins will be destroyed.
iv) While cooking food, use water as required and drain out excess water.

Q4. Describe the precautions to be taken while frying food.

- Ans. i) Cut the food items into pieces of equal size so that they cook evenly.
ii) Heat the ghee or oil well and then reduce the flame or temperature.
iii) Do not put too many pieces for frying at one time, otherwise the oil will Cool down quickly and soak into the food and remain under cook.
iv) Place the fried pieces on a clean kitchen napkin or brown paper.
v) Do not leave the fried food items in the kadhai (Wok) after frying otherwise the oil or ghee will spoil.

Lesson - 5

Preservation of Food

Due to changes in weather, some food items are not available throughout the year. We know that we all want vegetables and fruits all year round. In such a situation, if we want to use all vegetables throughout the year, it is necessary to preserve them. for example, dehydration of peas, dehydration of fenugreek etc. Through food preservation, we can use food items for a long time, such as items form pickles, chutney, juice, jam etc.

FOOD + PRESERVATION (Edible and Safe to keep)

Spoilage of Food Items

Changes in the color, taste, smell and size of food items which make it unfit for eating.

Reasons for Food Spoilage

i) Presence of micro-organisms. ii) Enzymes presence. iii) Insects, worms and rats

Presence of Microorganisms: -

When dough is kept outside for a long time, it starts turning black. This is due to the rapid growth of microorganisms. The activity of microorganisms increases when the moisture content in the food is high.

Presence of Enzymes: -

- If raw fruits are kept outside for a few days, they will ripen and if ripe fruits are kept, outside, they will become even sweeter. This happens because of enzymes.
- Dairy products like milk, will also spoil over time period due to enzymes activity.
- Enzymes found in plants and animals help in the ripening of fruits and vegetables.

Insects, Worms, Rats

- Food items are contaminated by insects, worms, rats and flies.
- Grains can become infested with weevils
- Small insects can make pulses and cereals unsuitable for consumption.

Food Storage

The general meaning of food storage is to keep food in a specific safe place and preserve it until it is needed for use. Eg.- Keeping biscuits or snacks in airtight containers.

Classification of Food Items According to Shelf Life

The duration for which various food items remain fresh or spoil varies. The period during which food remains fresh is called its Shelf life.

<u>Non- Perishable Food Items</u>	<u>Perishable Food Items</u>	<u>Semi Perishable Food Items</u>
These are food items that do not spoil for a long time. such as whole grains, pulses, dried fruits, oilseeds, sugar and jaggery.	These are food items that spoil quickly and are called perishable food items. Such as peas, tomatoes, apples, bananas, bread, butter and cream.	These are food items that spoil after some time, such as flour, eggs, potatoes, onions and biscuits.

Food Preservation

It is a process by which food items are prevented from spoilage for short or long period of time. Through this, the color, taste and nutritional value of the food are also preserved as much as possible.

- Some food items spoil faster than others.
- The colour, taste and nutritional value of food should also be preserved as much as possible through preservation.

Importance of Food Preservation

- 1) **To Save Surplus production:-** Fruits and vegetables grow in abundance during the season and cannot be consumed immediately. Therefore, they are preserved by making purees, jams, pickles etc. and can be used for a long time.
- 2) **Preservation brings variety to our food:-** We can bring variety or change to our meals by preserving certain food items. For example: - we can preserve peas and use them when peas are not available. Other examples are: • Drying Cabbage. • Drying fenugreek.
- 3) **Preserved food is sent to places where it is not grown:-**
In some areas of Rajasthan, where there is a desert and in areas of the Himalayas which are always covered with snow (ice), there is very little availability of certain foods. Therefore, preserved food is sent to such places
- 4) **Preservation of food Items also makes the transportation and storage easier:-**
Preserved food items become lighter in weight. for example, green leafy vegetables like mint, fenugreek lose weight and quantity after preservation, making storage and transportation easier.

Principles of Food Preservation

- 1) **Prevent or delay action of microorganisms:** Packing food items in airtight containers like cellophane paper, airless boxes etc to prevent contact with other substances like insects. Lowering temperature or freezing also delays the action of micro-organisms and preserves food.
- 2) **Removing bacteria from food items:-** This method is used to make fruit, juices, beer, wine, light beverages, bacteria - free by using filters.
- 3) **Destroying bacteria (Microorganisms):-** Microorganisms should be destroyed at high temperatures. To keep food safe for a long time. This can be done using following methods:
i) Cooking food ii) Fermentation iii) Pasteurization iv) Deworming (removing insects)
- 4) **Stopping the action of enzymes:-** The effect of enzymes can be slowed or stopped by using a salt solution or giving a mild heat treatment. Before canning or freezing vegetables are dipped in hot water for a few minutes this is called blanching.
- 5) **Protecting food items from insects:-** Food items should be well-packed and kept dry away from moisture, to protect them from insects.

Methods of Preserving Food at Home

- 1) Dehydration
- 2) Low temperature (cold method)
- 3) High temperature
- 4) Pasteurization
- 5) Sterilization
- 6) Use of preservatives: Natural preservatives like salt, sugar, acid, oil etc.

1) Dehydration (Drying)

Removing water or moisture from any food substance is called dehydration. This allows food or food items to remain safe for a longer time, such as dried fruits, dry mango powder (amchur) dried fenugreek leaves (Kasuri methi) etc.

There are four types of dehydration

- i) **Drying naturally:** Drying food items in the heat of the sun, such as pulses, grains, dried fruits.

ii) Drying in the Sun: Drying fruits and vegetables in the sun, such as cauliflower, Fenugreek,

Red chili, mint, papad, chips and Vadis are used only after drying in the sun.

While Drying food items in the sun, keep the following things in mind:

- Wash vegetables and fruits thoroughly before drying.
- Cut into pieces and peel as needed.
- Fruits and vegetables should be dried on a clean cloth, covered, so that no dust falls on them.
- After drying completely, store in air tight containers.

iii) Drying by Machines: - Many food items are preserved by drying them using machines.

examples include milk powder, pickles etc.

iv) Freeze Drying: - In this method food items are kept in a freeze and then dried using a vacuum. (airless pressure) by machines.

2) Preservation by Low temperature (Cold Method):

In this method, food items are kept in a cold place, such as ice boxes, Cold storage, Wet sand, Wet cloth, or by making small rooms underground. The temperature is significantly reduced in this method. Food items are preserved for a long time by doing this. At home, we use refrigerators to preserve food items.

3) Preservation by Higher temperature:

At high temperature microorganisms and enzymes are destroyed.

i) Pasteurization: In this method, food items are heated to a high temperature and then cooled immediately. The microorganisms cannot tolerate the changes in temperature and are destroyed. When thinking of pasteurization most people think of a milk pouch; as milk is commonly pasteurized.

ii) Disinfection: - This is a process in which food is treated with the help of chemicals, heat or radiation so that all microorganisms' bacteria, viruses, fungi etc. present in it are destroyed, and the food can be preserved for a long time. Disinfection is a process of protecting against bacteria or fungal infections.

Preservatives

They are substances that when added to food items allow them to be preserved for a longer time. Examples: - Adding oil, salt and spices to preserve pickles.

- For jelly, jam- sugar is added as preservative.

Two Sources of preservatives:

i) Natural preservatives- Salt, sugar, oil, lemon juice, vinegar Spices etc.

- **Salt:** It is used for preserving pickles, Papad, salted meat or murabba, tomato or lemon, pickles etc. Salt water is also used to preserve fish and tamarind.
- **Sugar:** Murabba, jam, jelly, sweet chutney sharbat etc. can be preserved by adding sugar, sugar creates an environment around the food where bacteria cannot survive.
- **ACIDS:** Vinegar is used to preserve onion tomatoes, and ketchup and lemon juice is used in pickles. Citric acid is used to preserve squashes.
- **Oils and Spices:**
 - (i) Prevents contact of micro-organisms with food, hence they cannot spoil the food.
 - (ii) Prevents contact of air with food, hence the microorganisms cannot grow and spoil the food.

Some Useful Tips:

- While using the preserved food items, take care to use clean spoons. Close the lid immediately after removing the required quantity.
- Take care of hygiene while preparing the food and storing it.

Lesson – 5

Food Preservation

Objective Type Question Answers:

- Q1. Which of the following is a Perishable food item?
a) Wheat b) Rice c) Milk d) Lentils
Ans. c) Milk
- Q2. Which among these is a non-perishable food item.
a) Wheat b) Milk c) Tomato d) Spinach
Ans. a) Wheat
- Q3. Which preserved products can be made from mango?
a) Chocolate (b) Guava c) Juice, Murabba, Pickle (d) Potato
Ans. c) Juice, Murabba, Pickle
- Q4. Which of the following processes comes under food preservation?
a) Mining b) Fermentation c) Painting d) Inactivity
Ans. b) Fermentation
- Q5. Which is an example of natural food preservative?
a) citric acid b) Potassium meta bisulphite c) Salt d) Sodium Benzoate
Ans. c) Salt
- Q6. **Fill in the blanks: -**
(i) Papad is an example of preservation by.....
(ii) Refrigeration reduces the activity of and.....
(iii) Dehydration is based on the principle of removal of.....
Ans. (i) Dehydration (ii) enzymes and microorganisms (iii) moisture
- Q7. **State true or false: -**
i) Addition of spices to pickles allows the microorganisms to grow quickly. (True/ False)
ii) When making squashes, we make use of an acid and a lot of sugar for preservation.
(True / false)
iii) Sterilization increases the activity of enzymes and micro-organisms.(True/ False)
Ans. (i) False (ii) True (iii) False

Very Short Answer Type Questions.

- Q1. What causes food spoilage?
Ans. Microorganisms
- Q2. What are non-perishable food items?
Ans. Those food items which take a long time to spoil.
- Q3. What is the meaning of food preservation?
Ans. To protect food from spoilage.
- Q4. Whose activity is reduced by refrigeration (cooling).
Ans. Enzymes and microorganisms.
- Q5. Name any two chemicals which are used as food preservatives.
Ans. Sodium Benzoate and Potassium meta bisulphate.
- Q6. What are the reasons for food spoilage?
Ans. i) Microorganisms ii) Enzymes
 iii) Insects iv) Spoils due to the presence of worms and rats.

Short Answer Type Questions.

- Q1. What is food preservation called?
Ans. It is the process by which food is protected from spoilage for a short or long period thereby preserving its color and taste as much as possible.

Model Test Paper

Lesson - 2, 3, 4, 5

Objective Type Questions

- Q1. The process of digestion begins when:-
a) Food enters the stomach b) Food enters the small intestine
c) Food reaches the liver d) Food enters the mouth
- Q2. Which of the following is a source of fat?
a) Fruit b) Paneer (cottage cheese) c) Milk d) All of the above
- Q3. What is the role of nutrients in food?
a) To clean the body b) To provide energy, protection and growth to the body
c) To heat the body d) To provide sleep to the body
- Q4. What is the main function of fiber present in food?
a) To maintain body temperature b) To aid in the digestion process
c) To make the body strong d) To provide energy to the body
- Q5. Which of the following helps in the movement of food through the intestines?
a) Fibre b) Protein c) Starch d) Enzymes
- Q6. Which of the following foods contains both protein and fat?
a) Rice b) Cheese c) Pulses d) Butter
- Q7. When Ruksana used ghee and mustard oil for mungfali (peanuts) and moong (green gram), which cooking method was she using?
a) Deep Frying b) shallow frying c) Grilling d) Boiling
- Q8. Which method is used in cooking to prepare samosas?
a) Deep frying b) Shallow frying c) Grilling d) Boiling
- Q9. In which method is food exposed to direct heat, affecting its surface temperature?
a) Steaming b) Grilling c) Boiling d) frying
- Q10. Which of the following is a good source of protein for good quality protein.
a) Lentils b) Curd c) Eggs d) Meat
- Q11. The cooking method where heat is generated in the food by rapid vibrations of water molecules.
a) Shallow frying b) Deep frying c) Roasting d) Microwave cooking
- Q12. Mira wants to get protein. Suggest a good source of protein to Mira who is a vegetarian?
a) Guava b) Radish c) Banana d) Soya nuggets
- Q13. Which of these is a water-soluble vitamin?
a) Vitamin A b) Vitamin B c) Vitamin D d) Iron

Very Short Questions:

- Q1. State two main functions performed by vitamin C.
- Q2. What are nutrients?
- Q3. Write two benefits of including fibrous foods in the diet.
- Q4. Write the definition of a balanced diet.
- Q5. State two benefits of cooking food with steam.
- Q6. Write two advantages and disadvantages of cooking food with a solar cooker.

Short Questions:

- Q1. Mention four important functions of food.
- Q2. Write the names of four diseases caused by nutrient deficiency and briefly explain the causes and symptoms of any two.
- Q3. State the benefits of meal planning.
- Q4. State two reasons for including green leafy vegetables in our daily meals.
- Q5. What are the benefits of sprouting?

Long Questions:

- Q1. What precautions should be taken while boiling food?
- Q2. Write three ways to prevent the loss of nutrients while cooking green vegetables.
- Q3. What are carbohydrates? Write their sources and functions.
- Q4. Your friend asks you to prepare a diet plan for her before her wedding. Explain it to her in detail.
- Q5. State four reasons for the loss of nutrients in pulses while cooking.
- Q6. State two reasons for including sprouted food items in our diet.
- Q7. State the importance of fruits in food.
- Q8. How does the digestion and absorption of fat happen?
- Q9. What are the benefits of cooking food on a low flame?
- Q10. What do you understand by food fortification?
- Q11. How does salt acts as a preservative?
- Q12. Write three energy providing food items for an active school going child.

Lesson - 6

Environment

The word 'Paryavaran' (environment) is made up of two words: Pari+ Avaran

Pari= surrounding, Avaran = atmosphere

The atmosphere around us is called the environment.

Definition - The environment is formed by the combination of air, water, land, flora, tress, animals and humans.

What is pollution?

When the quantity of a substance exceeds the normal limits in the environment and contaminates it, this is called pollution.

Examples - smoke from factories, animal waste etc.

What are pollutants?

Pollutants are the substance that cause pollution, for example: waste flowing into rivers, toxic smoke from factories, sewage water is all considered pollutants.

Classification of pollution

- Air pollution •water pollution •Soil pollution •Noise pollution

Air Pollution

- Air pollution is the contamination of the atmosphere by harmful substances such as dust, soil, gases etc. which mix with the air.
- Harmful Substances like smoke, dust and toxic gases mixing with the air pollute the atmosphere. The mixing of this harmful substance with the air is called air pollution.

"Polluted air affects the various parts of our body and causes damage to our health. As a result, many different diseases like cancer, skin diseases, asthma etc. spread in our body."

Sources of Air pollution

- Factories and vehicles smoke.
- Particles of dust and dirt
- Decomposing garbage
- Chemical pesticides and spray

Effects of Air pollution

Eyes - Itchy eyes, watery eyes, burning sensation.

Lungs - Respiratory tract allergies.

Agriculture- Reduce crop yields.

Skin - Rashes.

Other - Damage to building and monuments.

Measures to control Air pollution

- Instead of burning garbage, it should be used to make compost.
- More tress should be planted to protect the environment.
- The use of private vehicles should be reduced and public transport should be used instead.
- Factories should be established away from populated areas.
- New technologies and techniques should be developed to minimize pollution.
- The use of renewable energy sources such as solar and wind power should be promoted.

Water Pollution

The mixing of harmful substance with water and the deterioration of water quality due to this harmful substance is called pollution. Water pollution is a serious problem for all living being, including humans. Polluted water is a major cause of diseases in aquatic life because the amount of oxygen in polluted water gets reduced, causing aquatic animals to die.

Sources of water Pollution

- Domestic waste • Industrial waste • Agricultural waste • Oil spills

Effects of Water Pollution

- Skin diseases
- Growth of algae
- Negative effect on fish farming
- Diseases caused by polluted water

Ways to Control Water Pollution

- Do not dump household waste into river.
- Untreated sewage water and industrial waste should not be allowed to go into rivers and lakes.
- Keep the utensils used for bathing and washing clean.
- Do not wash clothes or animals in river and streams.
- Do not throw waste in public places

Soil Pollution

The mixing of unwanted substances in the soil is called soil pollution.

For example: adding plastic, factory waste, garbage, and other harmful substance in the soil causes soil pollution.

Sources of Soil Pollution

- Chemical from factories
- Garbage from homes
- DDT and pesticides
- Agricultural waste

Effects of Soil Pollution

- Loss of soil fertility
- Disruption of the food chain
- Harmful effect on living organisms
- Decrease in crop productivity
- Water contamination
- Desertification

Ways to Control Soil Pollution

- **Compost making**- convert garbage and other waste into composting pit.
- **Disposal** - The use of incinerators for waste disposal is a good option.
- **Plastic**- Reduce the use of plastic
- Harmful substances from factories should not be disposed into the soil
- One should not disposed garbage from homes into the soil.
- Limit use of fertilizers and pesticides.

Noise Pollution

When the sound level exceeds above a predetermined limit and it adversely affects a person's health and mental peace, it is called noise pollution.

Sources of Noise Pollution

- **Construction work:** Heavy machinery and tools used in construction.
- **Loudspeakers:** Loud music from loud speakers and DJs.
- **Vehicles and traffic:** Horn of engines and vehicles.
- **Household appliances:** Loud noise from appliances like grinders and vacuum cleaners

Harmful Effects of Noise Pollution

- **Headaches and stress:** Prolonged exposure can lead to severe headaches and increased stress level.
- **Hearing loss:** Damage to the eardrums can cause temporary or permanent hearing loss.
- **Mental and psychological Problem:** It can lead to irritation, aggression and lack of concentration.
- **Sleep disorder:** Difficulty in sleeping.

Ways to Control Noise Pollution:

- Reduce the use of loudspeakers.
- Honk vehicles when necessary do not misuse horn.
- Install noise reducing equipment in factories.
- Watch radio, T.V etc. at low volumes.
- Get regular servicing for vehicles that make excessive noise.
- Build factories away from residential areas.

Lesson - 6

Environment

Objective Type Question Answers:

- Q1. Which is the latest technology for waste disposal?
a) Composting b) Incineration c) Vermicomposting d) None of these
Ans. b) Incineration
- Q2. On which day is world environment day celebrated?
a) 5th December b) 5th July c) 5th June d) 24th October
Ans. c) 5th June
- Q3. When was the first world environment day celebrated?
a) 1983 b) 1985 c) 1973 d) 1993
Ans. c) 1973
- Q4. Soil is mainly affected by chemicals from which of the following reasons?
a) Domestic waste b) Industrial waste c) Defecation d) Desiccation
Ans. b) Industrial waste
- Q5. The ozone layer is affected by which type of pollution?
a) Water Pollution b) Air Pollution c) Noise Pollution d) Soil Pollution
Ans. b) Air Pollution
- Q6. **State True or False**
i) Wind decreases the amount of dust particles in the air. (True/False)
ii) Tall chimneys fitted with filters help to reduce air pollution. (True/False)
iii) Location of factories near residential areas reduces air pollution in cities.
(True/False)
Ans. i) false (ii) true (iii) false

Very Short Answer Type Questions:

- Q1. What are the main components (parts) of the environment?
Ans. Water, Air, Soil, Plants, Animals
- Q2. Which is the most important component of air?
Ans. Oxygen
- Q3. Dust, soil, garbage, chemical, and industrial waste, are example of?
Ans. Pollutants.
- Q4. What is needed when humans and animals breathe?
Ans. Oxygen
- Q5. What do plants absorb?
Ans. Carbon dioxide

Short Answer Type Questions:

- Q1. How many types of pollution are there?
Ans. There are four types of Pollution:
1. Water pollution 2. Air pollution 3. Noise pollution 4. Soil pollution
- Q2. Which diseases can be caused by air pollution?
Ans. • Asthma • Difficulty in breathing • Allergies from dust
• Lungs and Eyes cancer • Heart Diseases
- Q3. What should be done at personal level to reduce the effect of air pollution?
Ans. 1) Ride bicycle 2) Do not smoke 3) Do not burn garbage and crackers
- Q4. Which diseases are caused by water pollution?
Ans. 1) Typhoid 2) Jaundice 3) Polio 4) Hepatitis - A 5) Diarrhea
- Q5. What measure should be taken to control and prevent water pollution?
Ans. 1. Waste water from factories should be treated at a chemical plant before being discharged into rivers.
2. Garbage and waste should not be thrown directly into the river and ponds.

3. Segregate and recycle waste.
 4. Run campaign in school and colleges.
- Q6. What should be done to reduce and control soil pollution?
 Ans. 1. Plant as many trees and plants as possible
 2. Use less harmful chemicals.
 3. Prevent Land from becoming barren.
 4. Chemical fertilizers should be used in less amount.
 5. By promoting Afforestation
- Q7. What are the harms caused by Noise Pollution?
 Ans. i) Hearing loss ii) Stress and Irritability iii) Lack of sleep iv) Headache
- Q8. What should be done for environment conservation?
 Ans. • Protecting water, air and soil. • Planting more trees
- Q9. What is incineration?
 Ans. Incineration is a process in which solid waste is burned at high temperature to convert it into ash, gas and heat.
- Q10. What are the benefits of incineration?
 Ans. • It reduces the amount of waste by approximately 90%.
 • It can be used for the generation of electricity or heat.
- Q11. Define the Bio-diversity.
 Ans. Biodiversity refers to all living organisms on Earth including their ecosystem and genetic variation.
- Q12. Full form of LPG and CNG.
 Ans. LPG = Liquefied petroleum gas CNG = Compressed natural gas

Long Answer Type Questions.

- Q1. List six solutions to keep the environment free from all types of pollution?
 Ans. The following are solutions to keep the environment free from Pollution: -
 1. Chimneys should be located significantly far from residential areas.
 2. Waste material should be properly disposed of in designated dustbin and away from water sources.
 3. Bathing and washing clothes near or in water sources should be strictly avoided.
 4. Utilize silencers in vehicles engine to reduce noise levels.
 5. Refrain from blowing horns excessively or inappropriately.
 6. Plant more trees.

Lesson 7

Health

We are well acquainted with the word. 'Health' Since times immemorial humans have known the importance of good health.

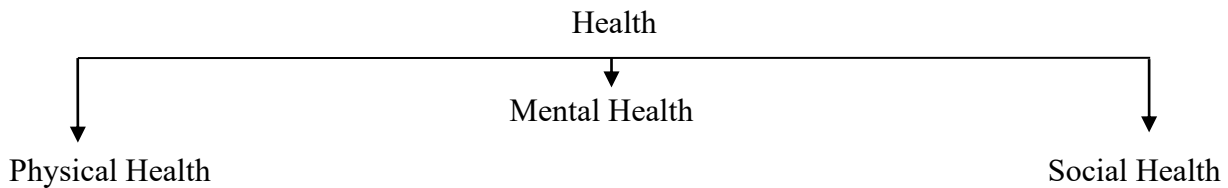
WHO: - World Health Organization.

According to the world health organization (WHO) Health is a state," Where the body is not only free from diseases but also feels physically, mentally, socially secure and health and free from any disease or ailment is called health.

Meaning: The real meaning of being healthy is to adopt a way of living life by focusing on one self.

For good health there are three dimensions: -

- Physical
- Mental
- social



- **Physical Health:** - We are well acquainted with the physical aspect of health, The ability of the human body's organs to function or perform all physical tasks actively and diligently without feeling tired is considered physically healthy.
- **Mental Health:** - It is believed that a healthy mind resides in a healthy body Mental alertness and stress-free behavior are signs of good mental health.
- **Social Health:** - The development of any society depends on the social level, mutual cooperation, good thoughts and tolerance towards others among its members. A healthy individual is aware and can support everyone.

Factors Affecting Personal Health:

A) Balanced Diet: A balanced diet is one that provides all essential nutrients. It ensures that a person of a specific age receives the correct amount of carbohydrates, Protein, fats, vitamins, Minerals and water to meet their nutritional needs.

B) Personal Hygiene: - Personal hygiene means keeping oneself clean and healthy and free from diseases. Adoption of hygiene practices prevents many diseases such as; Diarrhea, Cholera, Typhoid, Worm infections and many more. These activities are.

- Regular toilet habits
- Washing hands before eating
- Cleaning the teeth

C) Domestic Hygiene:

- Regular dusting and mopping to keep the house clean and free from germs.
- Proper disposal of garbage in bins to prevent breeding grounds for disease-causing organisms
- Safe and hygienic disposal of used sanitary napkins by wrapping them in a dustbin

D) Food Hygiene:

- Ensuring food safety by washing fruits and vegetables, using clean water sources for drinking and cooking.
- Food should be prepared in clean kitchen and in a clean manner.

E) Exercise:

- Regular walking and physical exercising have good effect on health. Outdoor games and sports keep the heart and circulatory system in good condition.

F) Regular Sleep and Relaxation:

- Emphasizing the importance of rest, naps and adequate sleep for mental and physical rejuvenation.

Community Health: -

Community health involves efforts by private organizations communities and individuals to protect people from diseases and improve the health of the entire population, focusing more on disease preventing than treatment.

Community Activities and Programs

- Health Education
- Disease Prevention
- Health Programs
- Mid-Day Meal
- Vaccination

Protection from some infectious diseases

Nowadays the number of diseases is increasing daily. Humans come into contact with diseases in large numbers. To avoid infectious diseases having strong immunity is essential. immunity is obtained by two ways: -

- i) Natural Immunity
- ii) Acquired Immunity

Immunity:

Natural immunity: - The immune system helps fight diseases. The function of immunity in the body is carried out by white blood cells (WBC). These Cells act like soldiers in our body. Natural immunity is obtained by us from birth.

Acquired Immunity: - This immunity is not obtained from nature but is developed during a person's lifetime through vaccination and medicines.

Acquired immunity can be gained in two main ways:

- i) Naturally through exposure to a disease. Which leads to lifelong immunity
Ex: after measles or artificially through vaccination.
- ii) By Vaccines introduce weekend or inactivated pathogens (antigens) to stimulate the immune system. Booster doses are recommended for certain vaccines to reinforce immunity.

Immunisation Schedule **Primary Immunisation**

Vaccine	Age / Stage	Prevention of Disease
1. B.C.G	Immediately after birth within 24 hours.	To prevent Tuberculosis (T.B)
2. Polio	Immediately after birth up to 1 year of age.(6 week, 10 week,14 week)	To prevent Polio.
3. Hepatitis B	(6 week, 10 week,14 week)	To prevent Liver infection
4. Measles	At 9 Months	To prevent Measles
5. D.P.T / MR / Vit-A	16-24 months (Booster Dose)	_____
6. D.P.T.	5-6 years (Second Booster Dose)	_____

Pregnant women

Tetanus Toxoid 1 st Dose 2 nd Dose Booster	As Early as possible during pregnancy 1month after 1 st Dose within 3 months	Prevent Tetanus
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Lesson 7

Health

Objective Type Question Answers

- Q1. When was the World Health Organization (WHO) established?
a) 1948 b) 1860 c) 1950 d) 1941
Ans. (a) 1948
- Q2. Which day was chosen for Pulse Polio?
a) Sunday b) Wednesday c) Friday d) Monday
Ans. (a) Sunday
- Q3. The immunity received by a newborn from mother's milk is:-
a) Natural Immunity b) Acquired c) Both d) None
Ans. b) Acquired
- Q4. When was the National Immunization program launched?
a) 1948 b) 1985 c) 1978 d) 1980
Ans. (c) 1978
- Q5. What is the theme of World Health Organization Day in year 2024?
a) Universal Human Right b) Our Planet Our Health
c) Equality For Human Right d) My Health My Right
Ans. (d) My Health My Right
- Q6. **Fill in the Blanks: -**
(i) Type of immunity provided to a newly born child by mother's milk _____
(ii) Vaccine against TB _____
(iii) Polio vaccine is first given at the age of _____
(iv) Day of week chosen for Pulse Polio _____
Ans. (i) Acquired (ii) BCG (iii) 6 weeks (iv) Sunday

Very Short Answer Type Questions

- Q1. How many calories of energy does an adolescent girl need daily?
Ans. 2400 to 2600 calories.
- Q2. BCG vaccine provides protection against which infectious disease?
Ans. Tuberculosis (T.B. Tuberculosis)
- Q3. Booster dose provide immunity against the infection of which diseases?
Ans. Provide immunity against diseases like Diphtheria, Whooping cough and Tetanus.
- Q4. What is the full form of B.C.G?
Ans. B.C.G= Bacillus Calmette Guerin
- Q5. What is the full name of W.H.O?
Ans. W.H.O= World Health Organization.
- Q6. Define Health?
Ans. A healthy mind resides in a healthy body. Only a healthy person can fully enjoy life.
- Q7. What is Immunity?
Ans. Immunity is the power and ability of the human body to protect against fatal diseases and fight against diseases. This immunity is natural, meaning it is present by birth, or acquired during the lifespan.

Short Answer Type Questions

- Q1. Name few health programs launched by the government.
Ans. i) National Malaria Eradication Program. ii) Tuberculosis (TB) Eradication program
iii) National Immunization program. iv) National Polio Program.

- Q2. What is a balanced diet?
 Ans. A balanced diet is one in which all nutrients (Carbohydrates, fats, proteins, vitamins, minerals, salts, water) are obtained in appropriate quantity according to our needs.
- Q3. What is a Food Pyramid?
 OR
 How can the quality of a food pyramid be shown?
 Ans. The food pyramid shows the different categories of foods included in our diet and their quality. It represents the optional number of serving of food to be eaten daily and indicates which food items should be consumed in what quantity.
- Q4. What are the dimensions of good health?
 Ans. i) Physical Health ii) Mental Health iii) Social Health
- Q5. What are the signs of good physical health?
 Ans. Signs of good Physical Health:
 i) The person is active, agile, efficient and happy.
 ii) The person is energetic and alert.
 iii) Body weight and height are normal.
 iv) The person's eyes are clean and bright.
 v) The person's skin is smooth, clean, shiny and pinkish.
 vi) Can sleep easily.
- Q6. What are the symptoms of good mental health?
 Ans. i) Control over emotions. ii) Freedom from stress and anxiety.
 iii) Having a feeling of warmth and Co-operation towards others.
 iv) Freedom from mental illness. v) Mentally alert and active.
- Q7. What are the symptoms of social health?
 Ans. i) Feel responsible towards other people in society.
 ii) Lives with cooperation and tolerance towards everyone.
 iii) Behaves with love towards people around.
 iv) Has a positive outlook towards life.
- Q8. What daily habits can help us to prevent infectious diseases and stay healthy?
 Ans. i) Regular habit of defecation. ii) Washing hands before eating. iii) Regular bathing.
 iv) Cleaning teeth. v) Wearing clean and tidy clothes.

Long Answer Type Questions

- Q1. What is the main difference between Biodegradable and non-biodegradable waste?
 Ans.

Biodegradable waste	Non-biodegradable waste
i) Substances that decompose naturally.	i) Substances that do not decompose and are not destroyed naturally.
ii) Does not harm the environment.	ii) Harms and pollutes the environment.
iii) They mix with soil to form manure.	iii) They pollute water, land and air.
iv) For example: Food, scrapes, fruit and vegetable peels, tree, leaves, paper, cow dung, wood etc.	iv) For example: Plastic, glass, metallic pots, polythene etc.

Q2 Write down the differences between natural immunity and acquired immunity.

Ans.

Natural Immunity	Acquired Immunity
i) This immunity is acquired by a person by birth.	i) This immunity develops a person's life.
ii) Natural immunity is obtained from WBC.	ii) This immunity is obtained when we survive a disease or through vaccination.
iii) It involves the skin and mucous membranes which block the entry of external pathogens into the body.	iii) It works on the general principle of producing anti bodies in response to antigens.

Q3 What role does vaccination play in controlling diseases?

Ans. Vaccination plays a unique role in controlling diseases and eradicating them from their roots. Vaccination acts as an external agent. It activates the immune system against specific pathogens so that we can be protected from diseases and infection.

Q4. Why is rest necessary for us?

Ans. Rest is extremely necessary for us. Because it refreshes the body and mind. The body regains energy. It plays an important role in maintaining health.

Q5. Why do we need regular exercise?

Ans. Regular physical exercising has a good effect on health. Outdoor sports and walking keep heart and circulatory system functioning smoothly and the body's joints and bones remains healthy.

Lesson-8

Communicable And Life Style Diseases

We all know that good health is essential for a fulfilling life if our way of living is correct and healthy. We can lead a happy life. Disease weakens an individual and cause them to face many problems. If a disease persists for a long time, it can even lead to death. By disease we mean any kind of disorder occurring in any part of the body.

Diseases are of two types:

i) Communicable Diseases

ii) Life style Diseases / Non-Communicable Diseases

Communicable Diseases:

Infectious or Communicable disease are illnesses caused by harmful microorganism entering our body. These diseases spread from an infected person to another. There are two modes of transmission for infectious diseases. eg: Polio, Measles, T.B., AIDS.

i) **Direct Contact:** Direct contact involves transmission through physical touch with an infected person or through sexual relations with them.

ii) **Indirect Contact:** Indirect contact involves transmission through contact with the patient's belongings or environment.

Life style Diseases

These diseases do not spread from an infected person to another. They are often associated with an unhealthy lifestyle. Lifestyle diseases spread due to eating habits and bad habits like alcohol consumption. e.g.:- Obesity, Diabetes and Hypertension

Lifestyle diseases are of two types:

1. **Changeable (Modifiable)**

2. **Unchangeable (non-modifiable)**

1) **Changeable lifestyle:** These are diseases that can be changed (modified)

For example: improving dietary habits. Improving bad daily habits etc.

2) **Unchangeable Lifestyle:** These are diseases that cannot be changed. These diseases are genetic and related to age and time and some are associated with illnesses.

Immunity

To prevent and stay healthy from diseases, a strong immune system is essential in our lives. The immune system helps fight disease. The function of immunity in the body is carried out by white blood cells which act like soldiers in our body. We receive the immune system from birth.

Immunity is of two types: 1. Natural Immunity 2. Artificial/Acquired Immunity

1. **Natural Immunity:** We naturally receive this after birth from the mother's thick yellow milk, which is called colostrum. This increases the ability to fight diseases.

2. **Acquired Immunity:** This immunity is not naturally acquired but is developed during a person's life time through vaccination and medicines.

Communicable or Infectious Diseases

How do communicable diseases spread?

a) Food & water b) Air c) Contact d) Insects

Measures For Prevention of Infectious Diseases:

1. Keep the patient's room separate.
2. Items used by the patient - clothes, utensils should be kept separately
3. Do not consume cut fruits and vegetables from the market.
4. Do not spit here and there.
5. Avoid going to crowded places.
6. Ensure all vaccinations administered from birth to 5 years of age are completed.

Prevention of Life style Diseases:

1. Exercise daily, practice yoga, cycle etc.
2. Consume a balanced diet. Avoid processed foods.
3. Drink plenty of water.

4. Use stairs instead of elevators.
5. Avoid smoking and alcohol consumption.

Life Style Diseases or Non-Communicable Disease

Some diseases do not get spread from one person to another through touch, air, food, water or sexual contacts. These diseases may develop in a person due to faulty eating and living habits e.g.: obesity, diabetes and hypertension. These diseases are called life style diseases.

Caring For the Sick at Home

- 1) Consult the doctor immediately.
- 2) Follow the doctor's advice
- 3) Give the patient a proper & balanced diet.
- 4) See that the patient takes adequate rest.
- 5) Keep the patient's room clean.

HIV (AIDS) - HUMAN IMMUNO DEFICIENCY VIRUS.

AIDS - ACQUIRED IMMUNO DEFICIENCY SYNDROME.

This is caused by a virus that attacks the body's immune system weakening its ability to fight off diseases. This disease is a serious illness prevalent among today's youth. This disease spreads through the use of infected needles and through sexual contact with an infected person.

Duration and cause of a disease

S.no	Disease Name	Cause	Symptoms	Incubation period
1.	Cholera	Food and Water	<ul style="list-style-type: none"> • Sudden severe diarrhea • Vomiting • Cramps occur in legs. 	1-5 days
2.	Typhoid	Food and water	<ul style="list-style-type: none"> • Severe headache • Tongue dries and white 	14-21 days
3.	Hepatitis (Jaundice)	Food and water	<ul style="list-style-type: none"> • Dark Yellow urine. • Yellow eyes. • Abnormal restlessness 	20-35 days
4.	Influenza (Flu)	Air	<ul style="list-style-type: none"> • Fever • Cold • Headache and body 	1-3 days
5	Cough/ T.B (chronic)	Air	<ul style="list-style-type: none"> • Extreme weakness • weight loss and loss of appetite 	4-6 days
6.	Malaria	Mosquito bite	<ul style="list-style-type: none"> • headache and Fever(chills) 	10-14 days
7.	Tetanus	infection from wound contact with dust or rusty objects	<ul style="list-style-type: none"> • Stiff neck • Severe pain • Bending of back in shape of bow 	4 days to 2 weeks
8.	Whooping Cough (kali Khansi)	Air (Vayu)	<ul style="list-style-type: none"> • Inflammation and swelling of mucous membranes • continuous cough with a deep sound. 	7-12 days

Lesson-8

Communicable and Life Style Diseases

Objective Answer Type Questions:

- Q1. Which of the following is a non-communicable disease?
a) Common cold b) Measles c) Tuberculosis d) Cancer
Ans. Cancer
- Q2. Louis Pasteur identified the cause of which disease and helped recognize the importance of sanitation?
a) Typhoid b) Cholera c) Plague and Anthrax d) None of these
Ans. c) Plague and Anthrax
- Q3. Which of the following is used for the production of vaccines?
a) Antibiotics b) Bacteria c) Microorganisms d) Vaccines
Ans. c) Microorganisms
- Q4. Which of the following is not a symptom of any communicable disease?
a) Cough b) Cold c) Joint pain d) High fever
Ans. d) High fever
- Q5. By what name is sweet fluid in the body known?
a) Pus b) Cancer c) Typhoid d) Plasma
Ans. d) Plasma
- Q6. Chickenpox is a communicable disease. It is caused by which of the following
a) Virus b) Bacteria c) Fungi d) Protozoa
Ans. a) virus
- Q7. **Fill in the Blanks**
(i) Diseases spread through infected food and water are..... and.....
(ii) Malaria is spread through
(iii) If a patient suffers from dehydration, he/she should be given plenty of.....
(iv) A person suffering from tuberculosis should while coughing or sneezing.
Ans. (i) Typhoid, Hepatitis (ii) mosquito
(iii) Plenty of fluids and oral rehydration solution (iv) Cover his mouth

Very short Answer Type Questions:

- Q1. What is a virus?
Ans. A virus is a type of microbe that enters the host body and utilizes its machinery to reproduce itself and produce disease.
- Q2. How many types of diseases are there?
Ans. There are two types of diseases.
i) Communicable Diseases. ii) Non-Communicable Diseases.
- Q3. Define Communicable diseases?
Ans. Communicable disease is illness that spread from an infected person to a healthy person through air, water or physical Contact.
- Q4. What are the means of transmission of communicable diseases?
Ans. i) Through air ii) Through water and food
iii) Through insects iv) Through contact with a infected person.
- Q5. Give the names of any three communicable diseases?
Ans. i) Tuberculosis ii) Jaundice iii) Influenza iv) Typhoid
v) Sexually transmitted infection (AIDS)
- Q6. Which diseases are spread through air name them?
Ans. The disease that spread through air are:-
i) Influenza ii) Pneumonia iii) Tuberculosis iv) Measles
v) Mumps (pertussis) vi) Whooping cough vii) Chickenpox
- Q7. Name the diseases spread through insects?

Ans. Hepatitis B is also known as Kala Pilia (Jaundice - hepatitis B)

- Q7. What is the method of preparing O.R.S. (Oral Rehydration Solution).
 Ans. The ORS preparation method involves the following steps-
 The process of preparing ORS is as follows-
 i) ORS Packets are available at health centers or chemist shops.
 ii) Take one ORS packet and dissolve it in the prescribed quantity of boiled and cooled water.
 iii) Mix it thoroughly in cases of diarrhea, this solution helps greatly.
 iv) Pour it into clean glass and serve.
 v) ORS can also be made by adding 8 teaspoons of sugar and 1 teaspoon of salt to 1 Liter of clean water.

Model Test Paper

Lesson - 6, 7, 8

Objective Type Questions:

- Q1. BCG vaccine provides protection against which infectious diseases?
 a) Typhoid b) AIDS c) Diphtheria d) Tuberculosis
- Q2. AIDS is not spread by:-
 a) Sexual contact b) Infected needles
 c) Shaking hands d) Blood from an infected person
- Q3. What are the modes of spread for typhoid?
 a) Contaminated food and water b) Sneezing and Coughing
 c) Mosquito bites d) Physical contact with an infected person
- Q4. What is the period between the entry of pathogens into our body and the appearance of disease symptoms called?
 a) Immunity b) Incubation period
 c) Infectious period d) Life span of the disease
- Q5. If a patient's body is experiencing water deficiency, what should be given to them in this situation?
 a) Fruits b) Vegetables
 c) Oral Rehydration solution (ORS) d) None of these
- Q6. At what age is the BCG vaccine administered?
 a) At birth b) 3 months c) 6 months d) 9 months
- Q7. Your friend is making posters to raise awareness among neighbors about air pollution. Choose the most suitable slogan for this.
 a) Turn down the radio volume b) stop water leakage from taps
 c) Ensure safe disposal of waste d) Keep vehicles pollution-free
- Q8. Which of following is not a non-biodegradable waste material?
 a) Plastic bags b) glass bottles c) Vegetable peels d) Aluminum can
- Q9. Which of the following is not a biodegradable waste material?
 a) Fruit peels b) Tea leaves c) Egg shells d) Glass
- Q10. Stiffness in the neck and difficulty in swallowing can be symptoms of which disease?
 a) Typhoid b) Hepatitis c) Tetanus d) Tuberculosis
- Q11. Life Style related diseases cannot be prevented by which of the following-
 a) Drinking plenty of water
 b) Eating seasonal fruits and vegetables
 c) Practicing meditation and yoga
 d) Consuming food products made from refined flour.

- Q12. What is the mode of transmission for tetanus?
a) Air b) Food and water c) Mosquito bite d) Rusty objects
- Q13. Consuming which of these can help prevent lifestyle-related diseases?
a) Processed food products b) Whole grains
c) Refined food d) Packaged food products

Short Questions:

- Q14. State any four causes of the spread of HIV / AIDS.
- Q15. Write four reasons for the increases in lifestyle-related diseases.
- Q16. Suggest any six ways to prevent air pollution.
- Q17. Clarify the difference between natural immunity and acquired immunity with one example each.
- Q18. State at least four essential measure to stay healthy.

Long Questions:

- Q19. Explain the symptoms of malaria disease and how you would care for a patient suffering from it.
- Q20. What are infectious diseases? Name three infectious and non-infectious diseases.
- Q21. Describe the measures for prevention of disease.
- Q22. Explain the difference between heredity and environment.
- Q23. What is the effect of air pollution on humans and the environment?
- Q24. "A tree plantation drive" plan has been made in your colony / community. Write any three ways to contribute to this activity?
- Q25. Write five symptoms of Tuberculosis (TB).

Lesson- 9

Care And Maintenance of Fabrics

Clothes (garments) are very important to us. They have been used to cover our bodies protect them and adorn ourselves. They also protect us from weather conditions like heat, rain and cold. If these garments are not properly cared for, they quickly lose their quality and appeal. Proper care of clothes can make them wearable for a longer time. If we do not care for and maintain our clothes properly, we may face many problems such as.

1. Clothes lose their shine and color
2. They start to smell bad
3. Clothes get damaged quickly
4. Germs can lead to skin related diseases

Clothing care (Before washing)

- i) Shaking off dust ii) Brushing iii) Keeping in sunlight

(i) Shaking: Dust accumulates on clothes due to storage.

(ii) Brushing: Especially used for expensive and delicate clothes, it is used to remove superficial dust for fabrics like- velvet, corduroy, chenille, blankets

(iii) Airing out: This is used to dry clothes and remove odors from them. This process done outdoors in the sun or in a well-ventilated room.

Washing / Laundering

According to the nature of the clothes they are washed by different methods so that their color and fabric are not damaged. Although most clothes like silk and zari garments, woolen clothes etc. cannot be washed at home and it is advisable to get them dry -cleaned. Before washing all clothes, it is important to pay attention to the following things.

- **Preparing clothes for home laundering (washing)**

- a) Collect clothes
- b) Repair torn and frayed clothes
- c) Sort clothes
- d) Read the labels on the garments

- **Things to remember before washing**

- 1) Keep dirty clothes in a separate clean place
- 2) Before washing check if the clothes are torn or if buttons are loose otherwise button might come off during washing therefore sew them first.
- 3) Separate colored and color-bleeding clothes.

Laundry / Preparing clothes for washing

a) Gathering clothes: Collect dirty and soiled clothes together and keep them in one place.

Also, check for water availability, this will save your energy.

b) Repairing torn or worn- out clothes (Repairing): If an item is worn out or torn sew it before washing to prevent further tearing.

c) Sorting: Separate clothes before washing. Do not wash all clothes together. Separate clothes based on their type.

- i) Color
- ii) Size and weight
- iii) Amount of Dust
- iv) Soaking duration (Time)

- **Read the labels on clothes:** All clothes and textile products we buy have labels attached. With its help we get general information about the product such as

- a) Which type of fabric it is
- b) How to wash it
- c) How to iron it
- d) Brand

- **Through symbols: -**

Wash in 30° water



Wash in 40° water



Use bleach



Iron at low temperature



Iron at medium temperature



Iron at high temperature

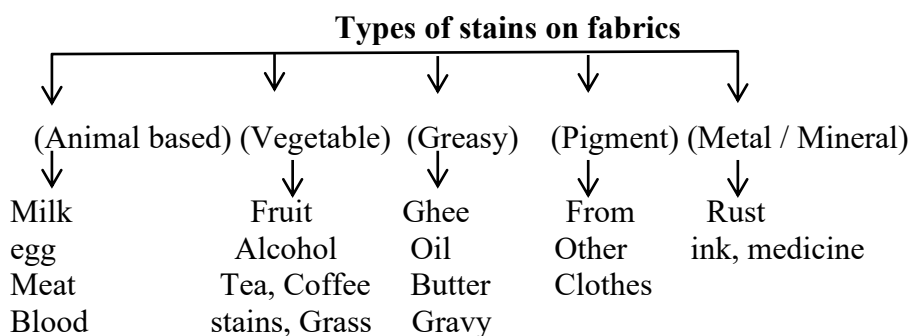


Drying by machine



- **Removing stains from fabrics:** Stains often appear on fabrics due to food beverages and other substances. If a fresh stain is removed promptly, it will not leave a mark otherwise it becomes difficult to remove.

Stains are of various types such as:



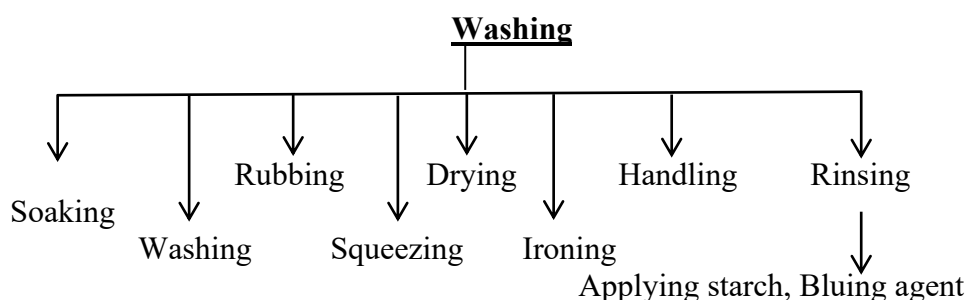
1. **Animal Based Stain:** These include stains from milk, egg, meat, blood, etc. These stains contain protein, so cold water is used to remove them. Hot water makes these stains more stubborn.
2. **Vegetable Based Stains:** These stains are acidic in nature; therefore, alkali is used to remove these stains. Example of alkalis include borax, sodium hydroxide.
3. **Greasy Stains:** - To remove greasy stains absorbent or solvent methods are used.
4. **Grass Stains:-** These stains fall into a different category due to the presence of chlorophyll.

Methods for Removing Stains:

1) Sponging (Absorption)

2) Dipping (Soaking)

- **The following steps are involved in Laundry / Washing clothes.**



- i) **Soaking:** Clothes are soaked in warm water and detergent for some time before washing to loosen dirt. Do not put too many clothes in a vessel where you are washing them. Soaking easily removes dirt, grease and odor.
- ii) **Washing:** After soaking, clothes should be washed thoroughly.

Methods of washing

- **Rubbing by hand** - Used for normal clothes like handkerchiefs, shirt cuffs
- **Rubbing with a brush:** For clothes with deep stubborn stains.
- iii) **Beating with a mallet:** Used for washing large, heavy and thick clothes (e.g. blankets, sheets) using a wooden mallet. This makes the clothes clean and soft.

- iv) **Massaging and wringing:** - This process is used for delicate and formula clothes, such as silk, wool and rayon in this, dirt is removed by gently massaging the clothes with hands repeated wringing also removes excess water.
- v) **Machine washing:** - This is an easy method that requires less effort and time. This operates based on the type of fabric and the level of dirt
Machines are of two types i) Automatic ii) Semi - Automatic
This is particularly useful for heavy fabrics (blankets, curtains)
- vi) **Rinsing:** - Washed clothes should be rinsed 2-3 times in clean water to ensure all soap is completely removed Residual soap can damage clothes.
- vii) **Finishing:** - Finishing is done to make clothes beautiful, soft and durable. It involves the use of starch for stiffening and bluing agent for whitening. This makes clothes look new and adds shine.
- viii) **Drying:** - Clothes should be dried in open air and sunlight as sunlight disinfects and whitens cloths. Colored clothes should be dried inside out in the shade to prevent color fading. Spread clothes properly on the clothesline for drying.
- ix) **Ironing / Pressing:** - This is a process that corrects wrinkles that appear on clothes during wear or washing. To perform this task an electric or coal iron is used. Steam is released however using a steam press which straightens clothes more quickly and easily. An iron is good for all type of fabrics like cotton, linen. However a steam press is better for delicate fabric. Irons are cheaper machines. Steam presses are slightly more expensive.
- x) **Careful storage:** - Clothes should only be stored in the wardrobe when they are completely dry. Any dampness in clothes can be removed by ironing.

Specialized washing of clothes.

1) Washing cotton clothes:

- **Preparation:** Cotton clothes should be sorted separately before washing. If required clothes should be repaired, stained clothes should be separated and stains removed.
- **Soaking:** Clothes should be soaked in soap or detergent for some time to effectively remove dirt. Clothes should be soaked in sufficiently warm water.
- **Washing:** Clothes should be rubbed thoroughly while washing for heavily soiled area like collars or cuffs, rub with a brush.
- **Rinsing:** Clothes should be rinsed in water until all soap is completely removed
- **Bluing:** Apply bluing agent according to the fabric type.
- **Starching:** Apply starch as required by the fabric for stiffness.
- **Wringing:** Clothes should be thoroughly wrung out
- **Drying:** White clothes should be dried in the sun, and colored clothed in the shade
- **Finishing:** - For cotton clothes use a hot iron for finishing and for synthetics, use a lightly warm iron

2) Washing of silk clothes

- There is no need to soak silk / satin clothes.
- They should be washed with light pressure and gentle rubbing with a soft hand. Use mild detergent.
- Rinse thoroughly to completely remove soap.
- After drying completely, hang them neatly on a hanger.

3) Washing of woolen clothes

- Before washing woolen clothes trace their outline on paper.
- Use mild soap and detergent
- Rinse them well
- If necessary, steam press them

4) Washing of synthetic clothes

These clothes are easy to wash

- They should be repaired before washing
- Use a good detergent for washing
- Rinse them 2-3 times with water

Lesson- 9

Care and Maintenance of Fabrics

Objective Type Question Answers:

- Q1. To which category does a tea stain belong?
a) Metal stains b) Mineral stains c) Vegetable stains d) Grease stains
Ans. c) vegetable stains
- Q2. In which method is the entire fabric immersed in a stain removal substance?
a) Dipping method b) Spray method c) Brushing method d) Screen printing
Ans. a) Dipping method
- Q3. Which solution is used to remove ink stains from fabrics?
a) Vinegar and salt b) Ammonia and water
c) Ethanol and benzene d) Molding powder and water
Ans. c) Ethanol and benzene
- Q4. What should be checked before removing a stain?
a) Whether the fabric is new or old b) The cost of the fabric
c) Where the stain is on the fabric d) Whether the chemical will affect the fabric
Ans. d) Whether the chemical will affect the fabric
- Q5. **Fill in the Blanks:**
i) Soaking clothes for some time helps to _____ dirt. (Loosen, fix, settle)
ii) Starching is done to give cotton clothes a _____ look. (Dull, crisp, shining)
iii) _____ should not be starched. (Table linen, saris, undergarments)
iv) Colored cotton articles should be dried in the _____. (Sun, shade, daylight)
v) Long exposure to sunlight makes fabrics _____. (Bright, weak, dull).
Ans. i) loosen ii) shining iii) under garments iv) shade v) weak
- Q6. **State True or False**
i) Neutral liquid soaps should be used for washing silks. (True/ False)
ii) Cold water should be used while washing woolen articles. (True/False)
iii) Wool articles should be soaked in water. (True/False)
iv) Wool articles can be cleaned with any detergent solution. (True/False)
v) Friction cannot be applied to clean woolen articles. (True/False)
Ans. i) True ii) True iii) False iv) False v) True

Very Short Answer Type Questions:

- Q1. Name two chemicals used to absorb grease stain from clothes.
Ans. Petrol, Kerosene oil
- Q2. Explain one reason why, when removing stains from clothes one should move from the outer edge of the stain towards the center.
Ans. So that the stain does not spread around the fabric
- Q3. Why is the substance used to remove stain rubbed in a circular motion when removing a stain?
Ans. So that the stain particles and chemicals do not spread around the fabric and damage it.
- Q4. What substance is used on silk?
Ans. This stiffening agent is called Gum Arabic which gives weight and firmness to silk.
- Q5. How would you remove an ink stain from a white cotton shirt?
Ans. Clean with salt, lemon and curd
- Q6. How would you remove a coffee stain from a plain (white) garment?
Ans. By pouring hot water
- Q7. How would you remove a curry stain from colored cotton fabric?
Ans. Wash with hot water and soap
- Q8. How would you remove a blood stain from white cotton fabric?
Ans. Wash with cold water and soap
- Q9. How would you remove an ink stain?
Ans. Clean with soap and cold water

Short Answer Type Questions: -

Q1. What is laundering / washing?

Ans. Soap, detergent and water are used to remove dust etc. from clothes.

Q2. What is dry cleaning?

Ans. To remove fuel, etc. from clothes grease absorbents and solvent are used

Q3. What are the methods of stain removal?

Ans. i) Sponging ii) Dipping

Q4. What are labels?

Ans. Labels are attached to all garments and textile products providing general information about the product such as

i) Washing ii) Ironing iii) Drying

Q5. What is Rinsing?

Ans. Washed clothes should be rinsed at least three times or until clean water comes out of them.

Q6. What is finishing?

Ans. Finishing agents are used to add more shine to clothes, stiffen them and give them a shiny and new appearance ex- starching, bluing.

Q7. Explain the methods of stain removed.

Ans. **a) Sponging:** - Use a soft cloth dipped in a stain - removing substance, start from the outer edge of the stain and move towards the center, clean in a circular motion.

b) Dipping: - The entire garments is immersed in a stain removing substance. This method is important for situations where the garment has multiple stains.

Long Answer Type Questions:

Q1. What are stains? How would you classify them?

Ans. Stains are unwanted marks on clothes caused by contact with other substances. Stains are classified based on their origin

1) Vegetable stains	-	Tea, coffee, fruit
2) Greasy stains	-	Butter, ghee, oil, paint polish
3) Animal stains	-	Blood, milk, Egg
4) Mineral stains	-	Rust
5) Miscellaneous stains	-	Dye. Ink, sweat

Q2. Explain the steps to remove the following stains from cotton clothes?

Ans. **Tea:** Wash with hot water and soap if the stain is old, make a paste of soap and water apply into the stains and keep it moist in the sun until the stain disappears.

Nail Polish: Gently clean the stain with a spurge using methylated spirit or kerosene oil.

Red Ink: Clean with soap and cold water. If the stain is old apply a mixture of lemon juice and salt and place it in the sun.

Grass: Wash with soap and water.

Paan: Apply an onion paste to the stain and place it in the sun.

Q3. A white shirt from your school uniform has a cooking oil stain from Tiffin. How will you remove this stain?

Ans. i) Use an absorbent material such as blotting paper, chalk or talcum powder.

ii) Place blotting paper underneath the stain and apply the absorbent material on top of the stain.

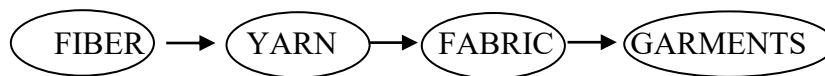
iii) Brush off any excess powder.

iv) Soak the stained area in a good detergent for 15 minutes. Then wash it with warm water and dry it in the sun.

Lesson - 10

Fiber and Fabric

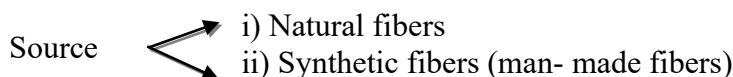
The smallest unit used to make a fabric is called fiber. "Fabric is made from various yarns". Fabric is the basic unit of a material that can be obtained in many ways.



Usually, fibers are known based on their nature and characteristics.

Function of Clothing and House Hold Uses of Fabrics:

- i) Clothes act as our second skin
 - ii) Fabric plays an important role at every place in life.
 - iii) Clothes cover us and provide us protection
 - iv) They enhance our taste, social status, behavior and other qualities.
- In our country, the choice of clothes is based on weather, climate, age, marital status, occasion, situation, gender, community and happiness or sorrow.
 - Clothes also reveal a person's religion and profession, such as doctor, lawyer, police etc.
 - Fabrics are also used in making bed sheets, curtains, sofa cover, cushions etc. **Fibers and Their Sources**



I) Natural Fibers: - Fibers obtained from nature are called natural fibers

- a) Fibers obtained from plants are called cellulosic fibers. e.g. cotton, linen
- b) Fibers obtained from animals are called protein fibers e.g. Wool, silk.

II) Man - Made Fibers: - Fibers that are made in laboratories using chemicals are man-made fibers. They are of two types: a) Regenerated fibers b) Synthetic fibers

a) Regenerated Fibers: - These fibers are made from wood pulp, milk protein etc. Example - Rayon, viscose etc.

b) Synthetic Fibers: - These are made from various petro chemical product of chemicals. Examples: Nylon, Acrylic, Polyester etc.

Note: - Clothes made from natural fibers do not cause any harm to the environment

Mixed Fiber: - These are fabrics made by mixing natural and / or artificial fibers. Example: - Teri cot, Teri silk, Teriwool, cots wool etc.

Characteristics of Fibers

Basically, characteristics of fiber can be classified by two types;

- i) Primary characteristics and
- ii) Secondary characteristics

Primary Characteristics: - These are the qualities or characteristics that are essential for fibers used in making fabric. Without these primary characteristics a fabric cannot be made from the fiber. The composition, length, strength, elasticity etc. are the primary characteristic of a fiber.

Primary Characteristics of Fiber

Ratio of Length to Width

- i) Short fibers are called staple fibers.
- ii) Long fibers are called filaments.
- iii) Long filaments are considered good for making fabric.
- iv) Clothes made from long fiber are strong and filaments fibers make a better kind of fabric.

Classification According to the Length of Fibers

a) Short fibers [Staple Fibers]

Such fibers are typically 1 to 5 inches long. All cultivated fibers can be shortened as needed e.g. Cotton.

b) Long fibers [Filament]

Such fibers are long fibers whose length is measured in meters e.g. Silk, Wool.

Long fibers are two types; i) Monofilament fiber ii) Multifilament fiber

Common Characteristics of different Fibers

i) Cotton

- i) It is a natural fiber.
- ii) Cotton fibers are shorter than other textile fibers.
- iii) They are white, cream or light brown in colour.
- iv) These fibers are fine (thin) and strong.
- v) Clothes made from these fibers are used in summers.
- vi) Cotton fibers do not have a natural shine.

ii) Flax / Linen: It is a bast fiber and fabric made from it is called linen.

• Characteristics of linen

- i) It is a straight fiber; its length is more than other raw fibers
- ii) It is shiny, smooth and economical
- iii) It is cool, hence it is used more in summer.

iii) Jute: -Like flax, jute is a bast fiber.

• Characteristics of Jute

- i) Jute fibers are weak and rough.
- ii) These fibers are fibrous and strong.
- iii) They are used extensively for making sacks and ropes.
- iv) The demand for jute bags and slippers is increasing now a days.

iv) Wool: -Wool is obtained from the hair of domestic animals like goats, sheep, rabbits etc.

• Characteristics of Wool:

- i) Clothes made from wool are soft and smooth.
- ii) These clothes do not wrinkle easily.
- iii) These do not allow body heat to escape, that is why we wear woollen clothes in winters.

v) Silk: - Silk is a natural and protein filament (fiber) produced by silkworms. Silk is also known as the **Queen of fibers**. Silkworms feed on mulberry leaves and are also reared on this tree.

Silk worm has four stages:

Egg - Larva - pupa - moth (Adult)

• Characteristics of silk:

- i) Clothes made from silk are smooth, fine (thin), shiny and warm.
- ii) Its fibers are stronger than wool fibers.
- iii) It is used to make formal clothes.
- iv) Due to the long length of silk fibers, they do not shrink
- v) Silk fibers absorb moisture

vi) Rayon: - This is a man - made filament fiber. It is also called artificial silk or art silk.

• Characteristics of Rayon

- i) It is shiny, smooth and cool.
- ii) It is weak in nature.
- iii) It is used to make summer clothes.
- iv) It melts easily when exposed to heat.
- iv) These clothes get damaged quickly with excessive rubbing.

Artificial Fibers:

They are made from petroleum products. For example - Nylon, polyester, acrylic etc.

- **Characteristics**

- i) The fabrics made by artificial fibers so do not get weak easily.
- ii) These fibers are quite strong.
- iii) They are easy to wash and dry quickly.
- iv) Their care and maintenance are easy.
- v) These fibers catch fire easily.

Identification Of Fibre Through Non-Technical Test

Fibre	Near flame	Type of burning/flame	Odour of burning	Residue
cellulosic fibres –cotton, linen, jute, rayon etc.	catches fire easily	continue to burn with a bright flame; have an after glow	burning paper like smell	light, feathery, grayish/black smooth ash
protein fibres – wool, silk	smolder and burn	slow flickering flame; sizzle and curl	Burning hair or feathers like smell	silk-crisp dark ash; wool - dark, irregular, crushable bead
synthetic fibres– nylon, polyester, acrylic, etc.	Shrink on approaching flame	soften, melt and burn	Mixed smell of chemicals	hard, black uncrushable bead

1) Cotton: -

- Fabric Cotton
- Touch Soft and smooth
- Fiber Natural
- Feel Cool / cold
- Burning Smells like burning paper
- Ash Light, powdery, grey/ black, soft ash.

2) Silk: -

- Fabric Silk
- Touch soft, smooth and light
- Fiber Natural (fiber obtained from animals)
- Feel Soft to touch / warm to feel
- Burning Smells like burning hair or feathers
- Ash Shiny black ash

3) Wool: -

- Fabric Woolen
- Touch Soft, smooth and warm to touch
- Fiber Natural (obtained from animal)
- Feeling Warm
- Smell on burning - Smells like burning hair or feathers
- Ash Crumbly black ash, like ash from a line

4) Artificial Fiber: -

Fiber	-	Mixed
Touch	-	Smooth
Fiber	-	Man-made fiber
Feeling	-	Most clothes given a warm feeling
Smell on burning	-	Mixed smell of chemicals
Ash	-	Hard ash

Yarn, Yarn Making and Fabric Construction

Yarn is a continuous long strand of twisted fibers, spun on a spinning wheel.

Process of Yarn Making

- **Spinning of yarn:** Yarn is spun from a spinning wheel or a simple wheel. By spun on a spinning wheel yarn can be of different thicknesses. To make yarn, the fibers of the thread are either twisted into a 'S' shape or twisted into a 'Z' shape. The quality and strength of the yarn depend on the number of twists per inch.
- **Spinning by Machine:** Both fiber and filament are twisted into a yarn. Filaments are twisted into small sizes and then yarn is produced from them.

Different stages of yarn weaving

Cleaning: Separating dry leaves, twigs, seeds, dust etc. from naturally obtained fibers.

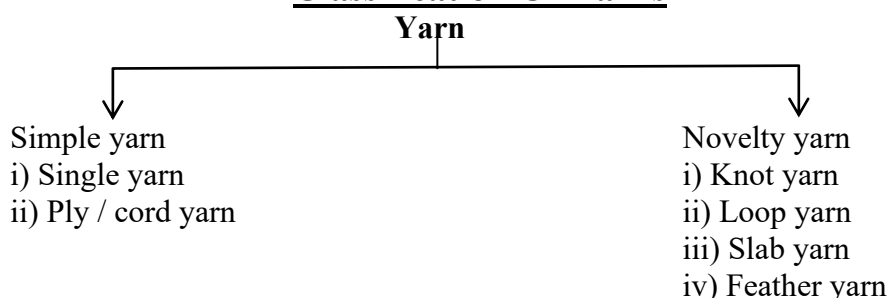
Carding: The process of separating one fiber from another.

Combing: Separating long and short fibers with help of various tools

Spinning: Drawing out the twisted fibers or in other words we can say that selected fiber are drawn and spun to prepare yarn.

Winding: - Yarn is prepared in various packages based on its use.

Classification Of Yarns



1) **Simple Yarn:** A thread made from fiber of the same type and size is called ordinary yarn.

- Single yarn:** - In its, a thread of one type is prepared by twisting. The twist in this is in one direction and this thread is used for weaving fabric.
- Two-ply / cord yarn:** - When two single threads are used to prepare a yarn, it is called two-ply yarn. These threads are also called multiple threads. They are more economical than ordinary threads.

2) **Novelty Yarn:** Fabrics made from this yarn feel soft and have an unusual texture, looking beautiful, but they are more economical than fabrics made from ordinary yarn.

Fabric

- **Weaving:** -Weaving is interlacing of two sets of yarns - warp and weft at 90-degree angle at each other. In the fabric the threads placed length wise are called Warp, and the threads placed horizontally (across) are called Weft.

Qualities of Weaving

- Weaving leads to the formation of solid fabrics
- Woven fabrics do not stretch, so their maintenance is easy
- Printing and embroidery can be easily done on woven fabrics.
- Weaving is the most common method of fabric production.

Basic Weaves: - It is of three types;

1) Plain Weave

- i) The largest production of fabric is done through the plain weave process.
- ii) It is the easiest to weave.
- iii) In plain weave, warp threads are passed over one weft thread and under the next and soon to create the fabric.

2) Twill Weave

- i) This is done in three or four harness loom.
- ii) Twill weave is woven tightly.
- iii) Therefore, this fabric is useful for work clothes and men's clothes.

3) Satin Weave

- i) This is woven on five to twelve harness loom.
- ii) Satin fabric is example of satin weave.
- iii) Fabric made with this weave is used to make clothes worn in wedding ceremonies.

- **Knitting:** - The process of interlacing loops of yarn with needles is called knitting. This is done by hand or by machine. Vests, socks, and sweaters etc. are made by using this method.

Lesson - 10

Fiber And Fabric

Objective Type Question Answers:

- Q1. Which of the following is not a natural fiber?
a) Cotton b) Jute c) Nylon d) Silk
Ans. c) Nylon
- Q2. Which of the following is a man- made fiber
a) Linen b) Rayon c) Jute d) None of these
Ans. b) Rayon
- Q3. Denim is an example of which weave?
a) Plain b) Twill c) Satin d) Knitting
Ans. b) Twill
- Q4. In which category do cellulose-based fibers fall?
a) Natural fiber b) Man-made fiber c) Synthetic fiber d) Mineral fiber
Ans. a) Natural fiber
- Q5. Wool is obtained from which animal?
a) Sheep b) Goat c) Camel d) All of the above
Ans. a) Sheep
- Q6. Which of the following fiber is made of protein?
a) Cotton b) Linen c) Silk d) Rayon
Ans. c) Silk
- Q7. What type of fiber is Rayon?
a) Natural b) Synthetic c) Regenerated d) Mineral
Ans. c) Regenerated
- Q8. What type of fiber is Jute?
a) Protein b) Cellulosic c) Synthetic d) Mineral
Ans. b) Cellulosic
- Q9. Which of the following is a natural fiber?
a) Nylon b) Rayon c) Polyester d) Cotton
Ans. d) Cotton

- Q10. In the process of spinning, fibers are converted into?
 a) Cloth b) Thread c) Seed d) Leaves
 Ans. b) Thread
- Q11. Jute is obtained from?
 a) Coconut fibers b) Cotton seeds c) Plant stem d) Silk cocoons
 Ans. c) Plant stem
- Q12. The process of removing lint (seeds) from cotton is called:
 a) Weaving b) Spinning c) Ginning d) Dyeing
 Ans. c) Ginning
- Q13. Clothes are made from:-
 a) Yarn b) Fibers c) Seeds d) Leaves
 Ans. a) Yarn
- Q14. Silk is obtained from:
 a) Sheep b) Goat c) Silkworms d) Cotton plant
 Ans. c) Silkworms
- Q15. **Fill in the Blanks**
 i) If wool: winter, then _____ : summer
 ii) If bark: flax, then _____ : wool
 iii) If cotton: king of fibres, then silk : _____
 iv) If regenerated fibres: wood pulp, then synthetic fibres: _____
 v) If linen: cotton, then acrylic: _____
 Ans. i) Cotton ii) Fleece
 iii) Queen of fibres iv) Petroleum products v) Wool.
- Q16. **State True or False**
 a) Cotton is a filament fibre. (True/False)
 b) Length of staple fibres is measured in inches. (True/False)
 c) Acetate is a man-made fibre. (True/False)
 d) Natural fibres can be made from chemicals. (True/False)
 e) Wool is a plant fibre. (True/False)
 Ans. a) False b) True c) False d) False e) False

Very Short Answer Type Questions

- Q17. Which fibers are not affected by fungus and insects?
 Ans. Nylon fabrics are not affected by fungus and insects
- Q18. Which is the strongest natural fiber?
 Ans. Silk
- Q19. Which is the strongest artificial fiber?
 Ans. Nylon
- Q20. Which fabric is most suitable for use in summers?
 Ans. Cotton
- Q21. Classify fibers based on their origin.
 Ans. Based on their origin, fibers are of two types;
 i) Natural fibers ii) Man-made fibers

Short Answer Type Questions:

- Q22. What are man-made fibers?
 Ans. Fibers manufactured in laboratories using chemicals are called man-made fibers.
- Q23. Why do we need clothes?
 Ans. Clothes are known as a second skin and play an important role at every stage of life. They cover and protect our bodies from adverse climatic conditions.
- Q24. What are artificial fibers called?

- Ans. The fibers whose production involves various types of chemical products are called artificial fibers. Nylon, Acrylic, and polyester are artificial fibers.
- Q25. Based on origin, which are natural and man-made fibers?
- Ans. i) Natural fibers: - Wool, cotton, jute, silk
ii) Man-made fibers: - Nylon, polyester, Nylon, Acrylic.
- Q26. What are filament and staple fibers?
- Ans. Filament fiber: - are those fibers whose threads are long
Staple fibers: are those fibers whose threads are short, like cotton.
- Q27. State the general characteristics of silk fiber.
- Ans. i) Silk is a natural and protein filament produced by the silkworm.
ii) Clothes made from silk are smooth, soft, shiny warm and stronger than wool.
- Q28. What do you understand by the term weaving?
- Ans. When fabric is created by interlacing two sets of yarns at right angles, that process is called weaving.
- Q29. What is knitting? Describe.
- Ans. Knitting is the process of forming loops of yarn and creating new loops from previously made loops. The most common example of hand knitting is hand weaving.
- Q30. What is yarn called?
- Ans. Yarn is a continuous strand of twisted fibers. The fibers are twisted together to dioxide strength to the threads.
- Q31. How is cloth made?
- Ans. Cloth is manufactured through various techniques, such as weaving, knitting, felting and bonding.
- Q32. What is ply yarn called?
- Ans. When two or more ordinary yarns are twisted together, it is called ply yarn. These yarns are also called multi-ply yarns.

- Q33.** Write down general characteristics of the following fibers:-
i) Cotton ii) Jute iii) Wool
- Ans.**
- i) Cotton:** - Cotton fibers are the shortest of all textile fibers. They are white, creamy or light brown in color.
- ii) Jute:** - Jute is a bast fiber. The highest production of jute occurs in Bangladesh. Jute fibers are short, coarse and shiny, but weaker than flax. They are used for making sacks and ropes.
- iii) Wool:** - Wool is obtained from the hair of domesticated animals like goat, sheep and rabbit. Clothes made from wool are soft and warm.
- Q34.** How will identify Rayon?
- Ans.** To perform the flame test for rayon, take a 2x2 cm piece of rayon and bring it near the flame. The following situations will occur;
- i) Near the flame, rayon does not shrink and catches fire
ii) It burns quickly in the flame
iii) Rayon continues to burn even after being removed from the flame and then glows.
iv) Smell: - Burning rayon produces a smell like burning paper
v) Residue: - After burning, a very small amount of right, huffy ash remains from rayon cloth.

Chapter -11

Fabric Finishes

A finish is a treatment given to a fabric to improve their utility, touch performance and appearance.

Textile finishing is of two types

a) Finished fabric	b) Unfinished fabric
Finished Fabrics	Unfinished fabric/Gray Fabric
i) These are fabrics where Artificial Colors are used for printing and Designs. They appear shiny	i) These fabrics are available only in natural colors. They appear dull
ii) These fabrics are very attractive to individuals	ii) These fabrics are not attractive to individuals
iii) These fabrics are free from defects due to their shine	iii) These fabrics show wrinkles stains, and broken threads
iv) These fabrics are expensive	iv) These fabrics are inexpensive

Importance of textile finishing: -

- When we make some improvements in textiles (clothes) they look beautiful
- Fabrics can be made more useful
- Variety can be introduced in fabric through dyeing, printing, and designing
- The feel and wear ability of the fabric can be improved
- It makes the fabric suitable for specific (special) uses

Classification on the Basis of Function:

- i) **Basic finish:** - This finish is applied to all fabrics. Its purpose is to improve the appearance and feel of the fabric, for example- to enhance the whiteness of yellow- white fabric and for dyeing and printing to make the fabric more attractive.
- ii) **Functional finish:** - This finish is generally created for a specific purpose. Examples include fire-proof finish for fire fighters. Water- proof finish for umbrellas and raincoats, and bulletproof finish for police personnel's jackets.

Classification on the Basis of Performance

- i) **Temporary finish:** - This finish is not durable. It is removed (deteriorates) in the very first wash for example; starching and bluing of cotton fabric.
- ii) **Semi Durable:** - This does not last for a long time such as dyeing fabrics and preventing their deterioration for a short period. Example Bleaching.
- iii) **Durable:** - This finish remains on the fabric for a considerably long time but with repeated washing its effectiveness decreases. Example wrinkle resistance.
- iv) **Permanent finish:** - This finish remains on the fabric throughout its entire lifespan, such as water - resistant and fire - resistant finishes

Chemical and Mechanical finishes:

Chemical Finish: Wet in this process, the size and shape of fabrics are altered to make them durable and permanent by using chemical treatment. Ex: anti-crease, water-proof, fire-proof finishes etc.

Note: This finish is similar to a durable finish.

Mechanical Finishing: (Dry finish) The process consists of application of moisture, pressure and heat or a mechanical device to finish a fabric. Fabrics are made useful by beating, brushing, calendaring, and filling.

Note: This finish is similar to a semi-durable finish.

Basic finishing processes and their types.

- i) **Cleaning/Scouring:** In this process, hot water and soap are used to clean fabrics, making them smooth, clean, and absorbent after washing.

ii) Dyeing & Printing: The process of coloring clothes and creating designs is called dyeing and printing.

iii) Bleaching: This process involves using a chemical treatment applied to yarn or fabric to remove yellowness or discoloration, making it white. Great care must be taken during this process to avoid damaging the fabric quality.

iv) Calendaring/Industrial ironing: This is the simplest process. It involves using an iron to remove wrinkles from fabrics and make them shiny by removing creases with the help of heated rollers.

v) Starching: - Starch is used to make fabrics stiff and wavy, adding luster to them. Starching is primarily used on cotton fabrics.

Special Finishes

- Sanforization
- Parchmentization
- Dyeing and Printing
- Mercerization
- Wash 'n' Wear

Mercerization:

Cotton fabrics wrinkle easily. Therefore, sodium hydroxide is used to make them strong, shiny, and absorbent; this is a common process used for both cotton fabrics and cotton threads.

Note: Organdy fabric is transparent and stiff and does not require starching.

Dyeing & Printing of Fabric

Dye: In textile (fabric finishing)-Two types of dyes are used:

- Natural dyes
- Synthetic dyes.

Natural dyes	Synthetic dyes
a) The dyeing process with natural dyes is called natural dye.	a) The dyeing process with the help of different chemicals is called synthetic Dye.
b) These dyes are slow, less efficient and more expensive	b) These Dyes are fast and easy
c) These dyes are obtained from plants. Ex- turmeric, henna, indigo, etc.	c) These dyes are obtained from chemicals for ex- Acids, azoic, vat etc.

Application of Dyes

In the market, not only fabrics of various colors are available, but also threads of various levels at which textile dyeing is done are as follows;

- **Fiber Stage:**

- In this level all types of threads (fibers) are dyed. It gives uniform dyeing.
- This is especially used for man-made fibers, such as dyeing white threads.

- **Yarn level:**

- In this process yarn is dyed after spinning.
- This is done after combining two fibers to prepare the yarn

- **Fabric level:**

- In this dyeing is done after weaving the fabric. It gives uniform color.
- Suitable for dyeing blended fabric.

- **Garment stage:**

In this ready-made garments are dyed. This is called piece dyeing. For examples, printing or dyeing ready garments of different color example T-Shirts, shirts, dresses etc. are dyed in different colors.

Various methods of dyeing & printing

- **Simple dyeing:** -This is the easiest method of textile dyeing. In this method the fabric is soaked in clean water, and a solution is prepared to dye the fabric.

- **Cross dyeing:** - This method is used for dyeing fabrics made from various fibers. In this method, such fabric are dyed in a single color solution and different shades are produce.
- **Decorative Dyeing:** Popular techniques of decorative or resist dying are.
 - i) **Tie-dyeing (Bandhani)**
 - ii) **Batik**

i) **Bandhani:-** It is a beautiful art form of Rajasthan. In this method, the fabric is not dyed completely instead parts of the fabric are tied with thread to prevent dye absorption, creating various designs and colors. This method is mostly applied to cotton, wool and silk fibers. Thread is used as a resist material to stop the dye from entering selected areas of fabric. There are many ways in which you can create designs using tie and dye technique.

- **Marbling:** Take the fabric and crumble it to form a ball. Tie it with a thread at different areas, randomly. Then dye the fabric. Open it and dry. The dyed fabric will have a marble effect.
- **Binding:** Pick up the fabric (Duptatta, table cloth or bed sheets) from one point and tie with a thread at intervals and dye it.
- **Knotting:** Put knots on the fabrics wherever desired and dye it.
- **Folding:** Put the fabric flat on a table. Pleat and fold it uniformly in lengthwise direction. Tie it with a yarn at regular intervals, to get widthwise lines after dyeing. For horizontal lines, pleat and fold the fabric widthwise. Roll the fabric from one corner to the diagonally opposite corner and tie at regular intervals to get diagonal lines.
- **Peg Tying:** You can also use cloth pegs or clamps as resist materials. Fold the fabric and put pegs at regular interval.
- **Tritik:** Make a design of your choice on the fabric with running stitch, pull the thread tightly and tie it.

ii) **Batik dyeing:** - In this method attractive patterns (designs) are created on textiles. Wax is used as resist material and is applied to the fabric, and then it is dyed. The dye does not adhere to the waxed areas. After drying the wax is removed by heating

"Basic dyeing is always done by preparing a solution in cold water and using dark and light colors."

Printing: - It is a process of coloring the fabric but color is applied in selected areas to create design. It is also called as selective dyeing. Popular methods of printing.

a)Block printing b) Screen printing c) Roller printing d) Stencil printing

a) **Block Printing:** -Wooden block which has a design engraved on it is pressed into a thick dye paste and stamped on fabric.

b) **Screen Printing:** - For screen printing, a wire mesh is applied to a wooden frame. In places where color is required for the design, a line is drawn in that proportion and waterproof varnish is applied. Where color is not needed the fabric to be printed on is then processed slowly allowing the color to dry and then the design and color are used in the screen.

• **Roller Printing:** - Roller printing is a method of printing in which the design is engraved on a cylindrical metal roller, and then the roller is pressed into the fabric. In this the design is transferred to the fabric in a continuous manner. This method uses rollers of different size etc. to print the design.

• **Stencil Printing:** - This is a method in which, after preparing the design in the shape of a stencil the color is applied to the fabric through the cut -out areas of the stencil.

Chapter -11

Fabric Finishes

Objective Question Answers:

- Q1. The term used for those unfinished textiles that are used as such after they are removed from the loom.
a) Gray goods b) Rough fabric c) Finished fabric d) Smooth fabric
- Ans. a) Gray goods
- Q2. An example of chemical finishing is;
a) Tendering b) Beating c) Napping d) Mildew resistant
- Ans. d) Mildew resistant
- Q3. This is chemical treatment performed to remove yellowness from fiber, yarn or fabric.
a) Beating b) Bleaching c) Cleaning d) None of these
- Ans. b) Bleaching
- Q4. Should mercerized thread be used for sewing (True/false)
a) True b) False c) None of the above
- Ans. a) True
- Q5. The reduction in the size of a Fabric is called?
a) Bleaching b) Shrinkage c) Dyeing d) Printing
- Ans. Shrinkage
- Q6. **Fill in the Blanks.**
i) Mercerization is a _____ finish.
ii) Shrinkage control is indicated as _____ on the label.
iii) Wash n wear is a _____ finish.
iv) If the color does not bleed on washing, it means fabric is _____
- Ans. i) Durable ii) Sanforised iii) Special iv) Colorfast
- Q7. **State True or False:**
i) Scouring is a finish used to clean the fabric. (True / False)
ii) Bleaching has no damaging effect on fabric. (True / False)
iii) Shrinkage control can be done at home also. (True / False)
iv) Organdy is a permanently stiff fabric. (True / False)
v) Mercerized thread should be used for stitching. (True / False)
- Ans :- i) True ii) False iii) True iv) True v) True

Very Short Answer Type Questions:

- Q8. What is the meaning of the word "textile"?
Ans. The complete study of fibers yarn and fabric.
- Q9. Into how many categories are dyes divided?
Ans. Dyes are divided into two categories:-
i) Natural Dyes ii) Synthetic dyes.
- Q10. Give two examples of basic finishes.
Ans. i) Tendering ii) Sizing
- Q11. Which two substances would you use to add stiffness (Crispness) to fabric?
Ans. Starch, gum

Short Answer Type Questions

- Q12. What is finishing?
Ans. The process applied to fabric after weaving to enhance its appearance, feel and functionality is called finishing.

Q13. What is the difference between basic finish and special finish?

Ans. Basic finishes or common finishes are applied to all fabrics to improve their appearance, feel and Body Eg. Calendaring, Scouring, Bleaching. Special finishes or functional finishes are applied to improve the performance of a fabric for a specific purpose eg. Fire proofing, Mercerization.

Q14. What is Mercerization?

Ans. Cotton is essentially a dull fiber, cotton fabrics wrinkle easily and are difficult to dye make them strong shiny, and absorbent, they are treated with sodium hydroxide. This process is called Mercerization.

Long Answer Type Questions.

Q15. What is the importance of fabric finishes?

Ans. i) It improves the appearance of the fabric and makes it look beautiful.
ii) It brings diversity to fabrics through dyeing and printing.
iii) It improves the touch (feel) or sensation of the fabric.
iv) It makes fabrics more useful.
v) It increases the efficiency of wearing light weight fabrics.
vi) It makes the fabric suitable for its actual (specific) use.

Q16. Differentiate between dyeing and printing.

Ans.

Dyeing	Printing
a) In dyeing, the fabric is uniformly colored using dyes.	a) In printing, dyes are applied to specific areas of the fabric based on a design.
b) No specific design is required.	b) It is based on a specific design.
c) Only one color is generally used throughout.	c) Multiple colors or specific design can be used.
d) The dye penetrates both sides of the fabric evenly.	d) In printing the dye is usually visible only on one side of the fabric.
e) During dyeing the fabric is immersed entirely in a dye solution.	e) In printing the dye is applied only to the selected areas as per the design.

Model Test Paper

Lesson 9, 10, 11

Objective Type Questions:

- Q1. What is the industrial process of cleaning clothes with help of lukewarm water and soap mixture called?
i) Scouring ii) Bleaching iii) Dyeing iv) Starching
- Q2. Twill weave provides _____ to the fabric.
i) Softness ii) Strength iii) Shine iv) Crispness
- Q3. Polyester should be ironed at _____ centigrade.
i) 150⁰ C ii) 170⁰ C iii) 160⁰ C iv) 180⁰ C
- Q4. What kind of stiffening agent is used for silk fabrics?
i) Starch ii) Gum Arabic iii) Modified starch iv) All of these
- Q5. Cotton is a type of fiber
i) Novelty ii) Filament iii) Spun iv) Natural
- Q6. The qualities of denim fabric are:
i) Light in weight and loose weave ii) Transparent and stiff
iii) Heavy and thick iv) Medium weight and ordinary
- Q7. What is used to remove blood stains from a white cotton garment?
i) Hot water and soap ii) Hot iron
iii) Cold water and soap iv) Talcum powder
- Q8. What type of fabric should be used for our undergarment?
i) Cotton ii) Silk iii) Wool iv) Nylon

Very Short Answer Type Questions:

- Q9. Why should damp clothes not be kept for long?
- Q10. What is the source of linen?
- Q11. Methylated spirit is used to remove which type of stain?
- Q12. Which city in west Bengal is famous for Batik printing?

Short Answer Type Questions:

- Q13. Write any two difference between warp and weft fibers?
- Q14. What two things will you keep in mind while pressing your silk shirt with embroidery kasidakari design?
- Q15. Name any four such substances used for dyeing clothes that are environmentally friendly.



Long Answer Type Questions:

- Q16. Why is silk called the "Queen of 17 fibers" give five reasons?
- Q17. Write five differences in washing silk and woolen clothes.
- Q18. Define the following terms
i) Weaving
ii) Knitting
iii) Parchmentizing
iv) wash 'n' wear
v) Ply Yarn
- Q19. Why do Nylon, Polyester and Acrylic fabric catch fire easily? Write any five reasons.

Lesson- 12

Housing

Food, shelter and clothing are our basic needs. Human beings call shelter a house. The location, surroundings, sanitation are considered while building a house where our daily activities like cooking, eating, bathing, studying, sleeping take place.

<p>'House' is physical construction made of brick, sand, cement, stone etc.</p>  <p>Fig. 1</p>	<p>A 'house' becomes 'Home' when all the family members start living there and enjoy all the happiness, love and affection, health, ease, comfort, social and entertainment activities</p>  <p>Fig. 2</p>
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1. Functions of Home: -

a) Protective functions: -

- A good home protects the family from heat, rain, cold, storms etc.
- A good home provides shelter to all members of the family.

b) Economic functions: -

- A home teaches the value of money and resources
- A permanent house supports stability in living and a settled life style in society.

c) Educational functions: -

- A house helps in developing the personality of an individual
- It also supports learning good habits, cooperation, responsibility, and discipline.

d) Social / Religious functions: -

- A House is the center of our social and religious activities
- It builds a sense of belonging and bonding among family members.
- It helps in maintaining customs, values, and the religious and social traditions of the family and community.

2. Site selection for a house.

- Our home fulfills many of our daily needs.
- The place where we construct an house is called the site

a) Neighbourhood

b) Physical features

- While selecting a site for building a house the place should be open and spacious.
- The house should not be located near polluted or contaminated areas.
- A house should not be constructed on a landfill or swampy land because it remains at risk of collapsing or water logging

c) Soil / Ground Requirements: -

- The foundation of the house should be strong
- The soil should be firm and compact (e.g.-red or black soil)
- Rocky or Sandy soil is not ideal for building a house

d) Cleanliness-Related Requirements: -

- There should be no heaps of garbage or waste near the house.

e) Practical Facilities: -

- The house should be built in a location where schools or colleges are nearby for children.
- For daily needs the house should be close to essential facilities such as the market shops hospitals and transportation services, all within walking distance.

3. Interior Areas of the House

There are various rooms and spaces in a house. According to need, all members perform activities like eating, entertaining studying etc. in these rooms.

a) Drawing Room / Living Room

- This room is mainly used to entertain guests.
- Family members can also rest and engage in recreational activities in this room.
- This room often contains furniture such as sofas and chair where people can comfortably sit.

b) Bedroom or Sleeping Room: -

- This room should provide privacy and be free from noise and disturbances
- The bed and a dressing table should be properly arranged in this room.

c) Bathroom / Bathing Room

- The bathroom should be built in a corner, to maintain privacy.
- Its flooring should be easy to clean and non-slippery
- There should be adequate lighting and proper ventilation

d) Kitchen / Cooking Rom

- The kitchen should be located in the east or north-east direction
- There should be a proper system for drainage and smoke ventilation
- The kitchen should have insect proof and rodent proof cabinets.

Some Ways To Make Your Small Home Appear More Spacious, Comfortable And Functional

- i) Try to use multipurpose furniture eg. sofa cum bed.
- ii) Use pieces of furniture as storage unit and room dividers.
- iii) Storage can be provided in furniture itself like bed with boxes.
- iv) Space below staircase can be converted into store room/toilet.

4. Maintaining Hygiene

To live a healthy life maintaining cleanliness in and around the home is essential.

a) Lighting: -

- Proper lighting is very important to carry out household tasks efficiently.
- Every house has two types of lighting – i) Natural lighting ii) Artificial lighting

b) Ventilation: -

- i) Fresh air is necessary for healthy living.
- ii) Windows, doors and ventilators should be placed properly to allow air circulation and to expel bad smells, smoke and heat from the room

c) Sanitation: - To prevent the spread of diseases and maintain a clean environment inside and outside the house, cleanliness is crucial. Every house hold member should be responsible for ensuring proper hygiene and sanitation.

Types of sanitation:

Maintaining cleanliness: Keeping the house tidy helps to maintain health and keeps the environment disease free and prevents infection from spreading. Everyone in the family must contribute to maintaining cleanliness.

Types of Cleaning:

i) Daily cleaning: - Dusting, sweeping wiping etc.

ii) Weekly cleaning: - Washing bed sheets, kitchen cleaning, deep cleaning.

iii) **Seasonal or spring cleaning:** Washing blankets, curtains and carpets, sun-drying mattresses, and cleaning ceilings.

Removal of garbage:

House hold waste, dust after sweeping and fruit and vegetable peels should be put in dustbin.

Disposal of waste water:

Waste water from bathrooms and kitchens should be directed to the garden or a soak pit with the help of pipes.

Disposal of Human excreta

- i) Human waste or excreta can be safely disposed of through water closets and septic tanks.
- ii) Proper (clean) disposal of human waste is very important to prevent the spread of diseases.

Lesson- 12

Housing

Objective Type Questions:

Q1. Your home provide you shelter. Which function of the house does this represent?
a) Economic b) protective c) Social d) educational

Ans. b) protective

Q2. Which furniture is suitable for a small room?
a) Sofa b) dressing table c) Multi-purpose furniture d) fan

Ans. c) Multi-purpose furniture

Q3. Which of these is not a non-biodegradable waste material?
a) Thermocol b) eggshells c) Tea leaves d) fruit peels

Ans. a) Thermocol

Q4. Sulabh Shauchalya are based on the principle of:
a) Septic tank b) Water closet c) Soakage pit d) Pit latrine

Ans. a) Septic tank

Q5. Which option best describes the relationship between the assertion and the reason given below?

Assertion: - Septic tank maintenance is easy.

Reason: - Septic tank pits do not require cleaning and only 6/8 liters of water are needed for flushing.

Choose the correct option:-

- i) Both assertion and reason are true
- ii) Both assertion and reason are false
- iii) Assertion is true and reason is false
- iv) Assertion is false and reason is true

Ans. iv) Assertion is false and reason is true

Q6. **State True or False**

- 1) Sunlight acts as a mild disinfectant.(True/False)
- 2) Indoor plants turn yellow when placed in brightly lit rooms. (True/False)
- 3) People living in dark and dingy rooms are more prone to falling sick. (True/False)
- 4) Circulation of air removes stale air and brings in fresh air.(True/False)
- 5) Ventilators provide light and fresh air in rooms.(True/False)

Ans. (1) True (2) False (3) True (4) True (5) True

Q7. Match the column A and column B.

Column A

- a. Ideal home
- b. Small rooms
- c. Drawing room
- d. Bathroom
- (v) Privacy

Column B

- (i) Entertainment
- (ii) Exhaust fan
- (iii) Provides space for all the functions
- (iv) Multipurpose furniture

Ans. a) iv (b) v (c) i (d) ii

Very Short Answers Type Questions:

Q8 Name two sources of light in the house.

Ans 1) Natural source:- Sunlight
2) Artificial source:- Bulb, Tube light, lantern light.

Q9. What materials are needed to clean plastic mugs, buckets, chairs and taps?

Ans. To clean the above mentioned items, a solution of soap or detergent in lukewarm water, scrubber, vinegar, kerosene and soda are required.

Q10. What will you use to clean metal /brass taps at home?

Ans. Lemon, Vinegar, hot soapy water and salt.

Short Answer Type Questions:

Q11. What precautions should be taken while cleaning the wallpaper on the walls of the drawing room?

Ans. i) Wall paper should never be scratched.
ii) Stains should be cleaned with a sponge or a soft damp cloth.

Q12. Explain the meaning of ventilation.

Ans. Ventilation means arrangement for the entry of fresh air into the house and exit of stale air from inside the house to maintain freshness.

Q13. Mention five important points to keep in mind while choosing a house.

Ans. i) Sufficient sunlight and light
ii) Proper ventilation.
iii) Clean environment
iv) Pollution-free area of all types
v) Arrangement for electricity, water and sewage lines.
vi) According to budget

Long Answer Type Questions:

Q14. What is soak pit system and what are its benefits?

Ans i) This system is very necessary for areas where there is no provision for water drainage.
ii) They are economical and easy to construct
iii) A suitable soak pit should be 2 meters deep, 1 meter wide and sufficiently long
iv) It should be covered with soil and grass
v) Dirty water goes into the soak pit with the help of a drainage pipe where it slowly saps into the ground through the constructed pits.
vi) A soak pit should never be built near a well because it can contaminate the well water.

Q15. What are the six benefits of building a toilet based on a septic tank?

Ans. i) They are clean and easy to maintain
ii) They do not pollute the land or ground water.
iii) They prevent the breeding of mosquitoes, germs and flies.
iv) They are less costly and easier to construct as compared to water closet systems.
v) They are odorless.
vi) In this system, only 1.5 to 2 liters of water are required per flush.

Lesson -13

Safety In the Home

A house is a place where we live with peace, comfort, and safety. However, while living in a house, we may sometimes face situation which are difficult to manage. Some incidents can occur suddenly such as electric shocks, falls, cuts, or burns.

1) Need For Safety at Home: Safety at home is necessary due to several reasons.

- To protect against accidents and criminal activities like theft, fire etc.
- To ensure the safety of woman and children.
- To protect valuable assets such as jewelry, furniture, important documents and other precious items.

2) Common Accidents at Home:

a) Falling or slipping: -

Incidents like slipping on wet floors or staircases, or falling from ladders and roofs are quite common. cluttered and broken floor can also cause serious injuries especially in children and elderly.

Precautions: -

- Do not leave soap or phenyl on the floor.
- Do not place unnecessary items on stairs.
- Do not keep the bathroom floor wet all the time.

b) Cuts: -

Sharp tools such as knives, scissors blades, pins or broken glass can lead to deep cuts and cause severe bleeding.

For certain individuals these injuries may be especially dangerous and may lead to serious health issues.

Precautions: -

- Do not use broken tools at home.
- Do not place sharp objects in easily accessible areas.
- Keep blades and knives away from children.
- Always store sharp items carefully in covered or closed containers

c) Burns and Scalds: - Burns can occur due to fire boiling liquids, hot oil, chemicals acids, faulty electric wires, iron and stoves.

Children are after victims due to their curiosity or carelessness. Proper safety measures are essential to prevent such accidents.

Precautions

- Keep flammable and hot substances like oil and water away from fire.
- Do not place flammable curtains or clothes near heaters or lamps.
- Avoid using old or damaged electric wires.
- Always turn off the gas cylinder after use.
- If clothing catches fire, wrap the person in a thick blanket to extinguish the flames.

d) Poisoning (Toxic substances)

Poisoning occurs when harmful chemicals, medicines, or substances are consumed by mistake.

Children are especially at risk if these are not stored properly. Poisoning can also occur through food, water or expired products.

Precautions

- Store all harmful chemicals and substances out of reach of children and label them clearly.
- Read and understand usage instructions before using any chemical.
- Keep toxic substances away from children and food storage areas.

e) Electric shock

Electric shocks occur due to faulty wiring or misuse of electrical appliances. These can be life-threatening if not handled properly. With proper precautions such accidents can be prevented.

Precautions

- Do not touch electrical wires or appliances with wet hands.
- Keep electrical sockets and appliances away from water sources.
- Keep electrical devices out of children reach and place them at a height.
- Replace damaged or old wiring immediately.
- Use only ISI marked electrical appliances.

f) Suffocation and choking;-To prevent accidents related to choking and suffocation among children following points must be kept in mind.

3) First Aid and Its Rules:

i) Adult supervision is a must.

ii) Keep polythene bags out of the reach of children.

First aid refers to the immediate help given to an injured person before medical aid or a doctor arrives.

It is the initial treatment provided during emergencies

Basic Principles of first Aid: -

i) Do not panic in emergencies; stay calm and give aid with confidence

ii) Provide appropriate help after assessing the situation.

iii) Keep the patients calm and reassured.

iv) Seek medical help immediately if necessary.

v) If bleeding occur apply pressure and rush to a nearby safe place or hospital.

Lesson -13 **Safety in the Home**

Objective Type Question Answers.

Q1. While working in the kitchen, what type of clothes should be worn?

- a) Loose b) Cotton c) Silk d) Nylon

Ans. c) Cotton

Q2. What should be poured on an electrical fire?

- a) Water b) Kerosene c) Oil d) Sand

Ans. d) Sand

Q3. In case of suffocation from smoke during a fire, which material releases the most harmful smoke?

- a) Plastic item b) Paper c) Clothes d) Wood

Ans. a) Plastic item

Q4. Why should cold water be used during burn treatment?

- a) To reduce the body temperature b) To relieve pain and swelling
c) To soothe the wound d) All of the above

Ans. d) All of the above

Q5. **Fill in the Blanks:-**

i) Keep the matchbox and chemicals _____ reach of children. (within/ out of)

ii) Before sleeping _____ burning candle or lighted fire.(extinguish/ continue)

- iii) Store inflammable liquids in _____containers.(labelled/ unlabelled)
 iv) Put two electric appliances in _____socket/s. (two /one)
 Ans. i) out of ii) extinguish iii) labelled iv) two

Very Short Answer Type Questions:

- Q6. Which gas is produced by the burning of coal, wood or charcoal which may even cause death?
 Ans. Carbon monoxide
 Q7. What is meant by unconsciousness?
 Ans. Unconsciousness is a condition in which a person suddenly falls and becomes unresponsive due to internal or external injuries. This unresponsive state is known as unconsciousness.
 Q8. What do you understand by health - related emergency situations?
 Ans. Health-related emergency situations refer to incidents where a person's health is severely affected due to a sudden accident or illness. In such situations the person's life is at risk and immediate medical assistance is required to save them.
 Q9. What basic first aid materials should you keep in your first aid box?
 Ans. i) Cotton and bandages for cleaning and covering wounds.
 ii) Thermometer iii) Scissors and tweezers iv) Antiseptic cream and Dettol

Short Answer Type Questions:

- Q10. Your younger brother has been stung by a honeybee. In this situation what primary treatment would you provide?
 Ans. i) Remove the stinger with the help of clean tweezers.
 ii) Apply calamine lotion to reduce pain and swelling.
 iii) In case of severe pain, swelling, or discomfort apply cold water to the affected area.
 iv) If the swelling increases or spreads, take the person to the doctor immediately.
 Q11. A person has suffered from a dog bite. What first aid treatment would you provide to him?
 Ans. i) Wash the affected area thoroughly with soap and water.
 ii) Apply antiseptic cream like Betadine.
 iii) Do not cover the wound with cloth.
 iv) Take the patient to the hospital for tetanus and anti -rabies vaccination.
 v) Consult a doctor immediately.

Long Answer Type Questions:

- Q12. If someone around you suddenly becomes unconscious or faints, how will you provide first aid treatment to him?
 Ans. If a person faints in front of us, we should help him in the following ways:
 i) Quickly check the surroundings and ensure proper ventilation and fresh air.
 ii) Loosen tight clothing around the neck and chest.
 iii) Gently lay the person down and slightly elevate their legs.
 iv) Sprinkle cold water on their face.
 v) Check for breathing and pulse. If irregular, seek help quickly.
 vi) If the person does not regain consciousness within a few minutes take them to the nearest hospital or doctor immediately.
 Q13. What qualities should a good first aid provider possess?
 Ans. Good first-aid provider should possess the following qualities
 i) Basic knowledge of the human body and health.
 ii) Knowledge of how to provide first aid for common injuries.
 iii) Ability to stay calm and act quickly in emergencies.
 iv) Should be physically and mentally strong.
 v) Must have presence of mind and decision-making ability
 vi) Should be trained in practical first-aid skills

Model Test Paper

Lesson - 12, 13

Objective Type Questions:

- Q1. Children in your family take care of each other. Which household task does this represent?
a) Economic b) Social c) Educational d) Safety-related
- Q2. Which of the following paint colors should be used on the walls in the kitchen to provide brightness?
a) Pink b) bright purple c) Red d) light green
- Q3. State true or false:
Ans. a) The space under the stairs can be converted into a toilet. ()
b) A sofa cum bed is a multi-purpose furniture item. ()
c) Removing cobwebs is a daily activity. ()
d) Rocky surface is used for foundation because they absorb water. ()
- Q4. How many feet below the ground surface should the foundation be solid for the house's foundation to be strong?
a) 2 to 5 feet b) 4 to 7 feet c) 3 to 6 feet d) 5 to 6 feet
- Q5. House made of which type of soil tend to lean to soil?
a) Sandy soil b) Gravelly soil c) Stony soil d) clayey soil
- Q6. In which of the following shelves should medicines be kept in the cupboard?
a) Front b) Bottom c) Top d) Back
- Q7. Which liquid substance can easily catch fire due to carelessness?
a) Coca-Cola b) petrol c) Hot water d) soda
- Q8. A broken bone can be splinted with
a) A wooden stick b) An umbrella c) A scale d) All of the above
- Q9. Which of the following is incorrect? In case of a gas leak
a) Do not switch off or switch on anything. b) Windows and doors should be opened.
c) The regulator pipe should be immediately closed.

Short Answer Type Questions:

- Q10. When constructing a bathroom, and a bedroom, what two considerations will you keep in mind?
- Q11. Why are Sulabh Shauchalaya becoming popular nowadays?
- Q12. If a person suffers from heatstroke, how will you help them?
- Q13. What do you understand by food poisoning? Suggest some measures to prevent it?
- Q14. If for some reason a fire breaks out in the house, what will you do in that situation?
- Q15. In case of a sudden accident, what materials should be present in the first aid kit?

Lesson – 14

Introduction to Resources

The materials, tools, equipment and human skills that are used to fulfill our needs and achieve our goals are called resources. Thus, the means used to attain goals are called resources.

Objective (Goal): A desired goal is purpose for which we make efforts.

Example- Scoring good marks in exams, winning a competition etc.

Objective (Goal) are of two types

- i) Short-term (temporary)
- ii) Long-term (permanent)

Short term (temporary): Short term can be achieved in a short period of time, such as scoring good marks.

Long term (permanent): long term goals require a long period of time and consistent efforts to achieve, such as becoming a doctor, engineer or teacher.

- To achieve both types of objectives resources are required at every step.

Resource

Definition: Anything that helps us acquire or use things or to satisfy our needs, is called a resource.

Types of resource:- 1) Human resource (2) Non human resource

Human Resource:

Human resource refer to the assets and capabilities found within individuals. They are related to a person's abilities and skills. These resources are an integral part of a person and can only be used by them. Some examples of human resources are:-

- Time
- Skills / Abilities
- Energy
- Knowledge
- Interests
- Attitude

Time: Time is valuable resource that is available to everyone in a limited and equal amount. It is a perishable resource and cannot be stored for later use. Once lost, it can never be recognized. Everyone gets 24 hours in a day.

Energy: Energy is the power required to perform any task. Therefore, if we want to do a task efficiently, we should work when our energy is at peak and fatigue is minimal.

Knowledge: Knowledge is a valuable asset and is essential for everyone to perform tasks effectively. It is a continuous process and there is no limit to the acquisition of knowledge.

Interests: Someone might be interested in human resources as a career or field of study.

Skills and Abilities: -

- | | | |
|-------------------------------|-------------------------------|--|
| i) Communication skills | ii) Interpersonal skills | iii) Conflict Resolution |
| iv) Organizational skills | v) Decision making | vi) Recruitment and talent acquisition |
| vii) Training and development | viii) Knowledge of labor laws | |

Non - Human Resources

All the resources which can be used to obtain wealth and can be utilized by more than one individual are called non - human resources. These are resources that can be shared among other people. Example

- Raw materials
- Land
- Money
- Work
- Clothing
- Transportation

Community Park, Hall – they can be shared by several people.

Utilization of Resource and Guidance

- i) Do not misuse resources ii) Protect the resources
- iii) Maintain resources for a long period iv) Use scientific method for the best utilization of resources

Management Process

The process of planning, organizing and controlling the use of resource efficiently is called the management process.

Stages of the management process:-

- | | | |
|-----------------------------|---------------------------|--|
| 1) Planning: - | i) Making a list of tasks | ii) Deciding what to do and how to do it |
| 2) Organizing: - | i) Who will do what? | ii) When and how will it be done? |
| 3) Implementation: - | Execution of the plan | |
| 4) Evaluation: - | i) To assess | ii) What is right or wrong? |

Management is a (cyclical process)

a) Planning: In this stage it is initially considered what needs to be done and which tasks are to be carried out, A list of necessary tasks is prepared and from this suitable option are selected. While planning it is essential to keep in mind the availability of resource and the current situation, and plans can be adjusted accordingly.

b) Organizing: Organizing involves fixing responsibility and collecting resources need to carry out a plan so that all work gets finished on time

c) Implementation (Execution):- Implementation refer to bringing a plan, rule, policy into action in real life. Organizing tasks and starting the actual work of the plan is known as implementation. The moment you begin working on or building something that you have thought or planned about, you are in the process of implementation.

d) Evaluation: When we analyze any performance, idea, plan to determine what is right or wrong and identify its strength and weaknesses, this process as known as evaluation.

Benefits of Evaluation

- i) Evaluation helps in determining the success or failure of a plan.
- ii) Evaluation allows up to judge what is right or wrong.
- iii) Evaluation initiates the process of improvement.

Lesson – 14

Introduction to Resources

Objective Type Question Answers

Q1. Which of these is not human resource?

- | | | | |
|--------------|----------|-----------|---------|
| a) Knowledge | b) Skill | c) Wealth | d) Time |
|--------------|----------|-----------|---------|

Ans. c) Wealth

Q2. Which of the following is human resource?

- | | | | |
|-------------|----------|--------------|--------------|
| a) Property | b) Water | c) Attitudes | d) Character |
|-------------|----------|--------------|--------------|

Ans. c) Attitudes

Q3. Resource are _____ ?

- | | | | |
|--------------|------------|---------------|------------|
| a) Unlimited | b) Limited | c) Sufficient | d) Extinct |
|--------------|------------|---------------|------------|

Ans. b) Limited

Q4. **Fill in the Blanks:-**

- a) Anything that can be used to satisfy a need is a _____.
- b) Dams, roads and buildings are example of _____ resources.

c) Sunlight is a _____ resource.

d) Natural resources are obtained from _____.

Ans. (a) Resource (b) Manmade (c) Natural resource (d) Nature

Q5. **State True or False**

(a) Time plain is always made in advance. (True / False)

(b) Shopping and washing clothes are inflexible activities. (True / False)

(c) Labour saving equipment's do not save time. (True / False)

(d) Dusting is a light activity. (True / False)

Ans (a) True (b) False (c) False (d) True

Very Short Answer Type Questions: -

Q1. What is a Goal / objective?

Ans. A goal / objective is a desired outcome that we wish to achieve, which fulfills our desires and needs.

Q2. Define goal / objective and resource?

Ans. **Goal / Objective** - A desired outcome that we wish to achieve.

Resource - The means used to achieve a goal.

Q3. How many types of resource are these?

Ans. Resources are of two types -

Human Resources - A person's own resources that no one else can use such as time, energy intelligence skill etc.

Non - Human Resources - Resources that can be used by an individual or a community, such as money, property etc.

Q4. What is a management?

Ans. Management is a process that involves controlling and organizing available resource to achieve predetermined goals.

Q5. Explain the steps of the management process?

Ans. The steps are: Planning, Organizing, Implementing, Evaluating

Q6. What do you understand by planning?

Ans. Planning is a process in which decisions are made on how to achieve goals and corrective measures are taken to ensure the plan stay on track.

Q7. What is the meaning of a plan?

Ans. A plan is the act of deciding in advance what to do, how to do it and who will do it.

Long Answer Type Questions.

Q8. What is that importance of planning? Plan your five years old sister's birthday party using all the aspects of party planning management?

Ans. Planning is important because it helps to organize all the activities, resources and time efficient, it ensures that everything runs smoothly, avoids last minute confusion, stay within the budget and make the event successful and memorable

Five-year-old sister's Birthday party plan

Planning: Time, inviting friends, place, arrangements, decoration

Organization: Assigning tasks, parents' roles

Implementation - Purchasing arrangements cooking food for the wedding, purchasing

Evaluation - Inspection

Q9. What is meant by evaluation?

Ans. Evaluation means checking for deficiencies in the implementation of your plan and improving them. For example, you cook for your family and taste it after it's cooked. Why do you do this? This is done so that you can identify your shortcomings and improve them, similarly, evaluation is also a process that allows us to identify our shortcomings and make improvements.

Lesson – 15

Managing Time and Energy

To complete our daily life tasks, we need both time and energy resources. Time and energy are complementary to each other. If we have sufficient energy to perform a task but no time, work cannot be completed.

"Time and energy as Resources" - Resources are of two types

- (a) Human Resources (b) Non - Human Resources

Some resources are available in limited quantities, such as time, money and energy. The optimal utilization of time and energy is called time and energy management.

Time planning / schedule: A time plan is an advance plan of what we are going to do in a given time.

Steps of Time Planning

1) **Using Activities:** Prepare a list of all tasks to be done with in a specific time frame so that all tasks can be completed on time such as eating meals, sleeping, going to schools etc.

Resource management

- Prepare a list by setting time for work
- Forming a group of flexible tasks: All tasks are divided into two parts

2) **Grouping Flexible and Inflexible Activities:**

- **Flexible Tasks:** These are tasks that do not have a specific time constraint for completion and can be done at any other time for example going to the market for shopping.
- **Inflexible Tasks:** These are tasks that must be completed at a specific time and cannot be changed for example children going to school, reaching the office on time.

3) **Estimating the required time for each task:**

Estimate how much time will be needed to complete each task. By accurately estimating the time required for a task we can set a definite time for the work to be done.

4) **Balancing:** Balancing is the adjustment of time for tasks to be done in a day and for each task to be done in 24 hours of a day is called balancing. Achieving balance makes it easy to complete and organize all tasks. This allows for easy and quick completion of flexible and inflexible tasks by minimizing time usage.

- **Peak Load:** Certain times of the day when a number of activities have to performed within a fixed time period. This time period is called peak load period.
- **Fatigue:** Working constantly leads to tiredness and fatigue both physical and mental.
- **Leisure Period:** It is essential to give rest to the body and break the monotony of daily routine. Time spent on rest and hobby is called leisure period.

Key points to consider during time management

- Prepare a list that you can complete accurately.
- The plan should be practical and flexible allowing for modification if needed.
- Have an alternative action plan ready for emergencies.
- Allow for rest and leisure time activities.

Advantages of preparing a time plan

- You will be able to complete all you task on time without getting tired.
- You get time for relaxation.
- You get time for your hobbies such as dance music and watching TV.
- You can engage in more creative work in less time.
- You avoid last minute stress.

Saving Energy: We perform numerous tasks throughout the day, each requiring various amount of energy.

Heavy Tasks: Activities like running, jogging or planting require a significant amount of energy

Routine Tasks: Activities such as sweeping ironing or cooking require a moderate level of energy while we cannot avoid heavy tasks, we can certainly save energy by planning the sequence of our work.

Some methods to conserve energy

- i) **Break the tasks into smaller parts:** By breaking down your work into smaller segments, you can complete tasks without exhaustion and save energy
- ii) **Cut all unnecessary movements and combine activities:** Streamline your work by removing redundant steps and combining related activities.
- iii) **Perform activities in better order:** By organizing tasks in a better sequence, we can save energy. For example. If we are sweeping, we should do dusting later so that the dust stirred up by sweeping also gets cleaned.
- iv) **Be more skilled at work:** Performing tasks efficiently makes work easier and reduces the chances of errors.
- v) **Use correct posture:** One should use the correct posture to complete tasks to avoid health - related problems. For example, using short handled tools for cleaning the house.
- vi) Work at proper heights and keep things nearby.
- vii) **Labour Saving equipment:** We should use equipment to save energy and labour, such as using a mixer grinder for grinding spices or a washing machine for washing clothes.

Lesson – 15

Managing Time and Energy

Objective Type Questions:

Q1. One benefit of energy management is

- a) Waste of energy
- b) Increase in bill
- c) Damage to the environment
- d) Conservation of resources.

Ans. d) Conservation of resources.

Q2. A renewable source of energy is:

- a) Coal
- b) Petroleum
- c) Solar energy
- d) Natural gas

Ans. c) Solar energy

Q3. In "energy management" what does the word "energy" mean?

- a) Capacity to work
- b) To relate
- c) To waste time
- d) To sleep

Ans. a) Capacity to work

Q4. Which of the following are non - flexible tasks?

- a) Cleaning
- b) Booming
- c) Cooking food
- d) attending a wedding

Ans. c) Cooking food

Q5. **State True or False**

- a) Time and energy are closely related to each other. (True /False)
- b) Time can be utilized more effectively if time-plan is not made.(True /False)
- c) When we combine two or three activities together it is known as dovetailing. (True /False)
- d) While preparing time-plan there is no need to think about number of activities to be performed. (True /False)

Ans:- (a) True (b) False (c)True (d) False

Short Answer Type Questions

Q4. What is the optimal utilization of time and energy called?

Ans. Management

Q5. What is meant by harmony?

Ans. Performing two or more tasks simultaneously.

Q6. What is energy management?

Ans. Managing time and energy by utilizing one's time and energy in the best possible way.

Q7. What is a Time plan?

Ans. Making a plan in advance of what we have to do in a specific period of time is called a time plan.

Q8. What is meant by simplification of task or work simplification?

Ans. Simplification of tasks refers to using methods or tools that save maximum effort, energy and time while performing a task so that we do not get tired easily.

Q9. What are the benefits of time management?

Ans. Time management offers numerous benefits such as:

i) You will get time for rest and relaxation

ii) You will get time for your hobbies like playing outdoor games, listening to music watching T.V etc.

Long Answer Type Questions

Q1. What would happen if you worked without a time plan, either mentally or on paper? Ans. You would not have enough time to complete each task. You would not have time to deal with unexpected events, such as a sudden guest arrival or taking a sick family member to the doctor immediately in an emergency.

Q2. How can we save time?

Ans. We can save time in the following ways;

i) Do not waste time

ii) Use tools to avoid confusion

iii) Create time plan

iv) Perform two or more tasks simultaneously which is called task synchronization

Q3. What are the benefits of using labor saving appliances?

Ans. The use of labor-saving electrical appliances results in saving of both energy and time for example: A mixer for grinding spices or a toaster for making toast. This leads to widespread saving of energy and time.

Q4. Your friend Geeta easily gets tired. Suggest ways for her to save her energy?

Ans. We all have a limited amount of energy so we must conserve energy. Energy can be saved in the following ways;

i) By performing tasks in sequence.

ii) By developing skill in work.

iii) By adopting a correct posture while working.

iv) By working at an appropriate height.

v) By keeping objects close at hand.

Lesson – 16

Managing Family Income

Food shelter and clothing are fundamental human necessities. To meet these basic needs family income must be managed in a way that it fulfills the requirements of family members and allows for future savings.

Definition of family income: Family income refers to the sum of all income received by all members of the family, like rent, salary etc.

Income and its Sources

i) Employment income

- Salary
- Pension
- Commission

ii) Business income

- Self-employment
- Partnership
- Company owner

iii) Income from Government schemes

- Pension
- Grants
- Subsidies

iv) Non-monetary income

- Rent
- Dividends
- Royalties

It may be earned using your skills

Expenditure

Money spends from income for buying various things to fulfill our need is called expenditure.

Types of Expenditure

- Food
- Housing
- Education
- Transportation
- Medical Expenses
- Entertainment

Saving

Saving refers to setting aside a portion of one's future income to secure future needs

Sources of savings: -

- i) Life insurance
- ii) Opening a savings account in bank
- iii) Creating a budget
- iv) Reducing unnecessary expenses

Need for Income Management

What is Spending plan / Budget

A budget is a plan that estimates income and expenditure indicating how much money an individual has spent and how much is secured for the future.

Importance of Income Management: - To save money. Your expenses should be less than your income. This is based on the total income of the family. This helps the family in living their life within their income and also helps in fulfilling future needs

How to create a spending plan:

To create your expenditure plan, follow these steps:

- i) Consider your available income and resources for the period for which the expenditure plan is to be made.
- ii) Create a list of all the needs of family members for that period.

- iii) Prioritize the most important needs.
- iv) Allocate funds to different expenses while considering the total income. This ensures proper utilization of funds and other resources.
- v) Maintain balance in the expenditure plan: This also helps in saving some money.

Characteristics of a good budget:

- a) Accurate estimation of income.
- b) Accurate estimate of expenditure.
- c) Reasonably accurate allocation of money.
- d) Flexible budget, allowing for adjustments in expenditure or income according to unexpected changes.

Investment: Investment is a form of consumption that leads to an increase in saving. For example, if you save 10,000 rupees and deposit this money in a bank instead of keeping it at home the interest you receive on it is called investment.

Lesson – 16

Managing Family Income

Objective Type Question Answers:

- Q1. Which of these is an example of a human resource?
 a) Table b) Chair c) Time d) House
 Ans. c) Time
- Q2. What is an example of indirect income?
 a) Cash salary b) Food items
 c) Rental income d) Profit from the sale of good
 Ans. c) Rental income
- Q3. Which of the following is not a source of family income?
 a) salary from job b) Income from rent
 c) Interest d) Money for recreation / leisure
 Ans. d) Money for recreation / leisure
- Q4. What is the term for supervising any work while it is being done?
 a) Implementation b) Controlling c) Evaluation d) Planning
 Ans. b) Controlling
- Q5. For which purpose should family income be used first?
 a) Entertainment b) Debt repayment c) Basic necessities d) Investment
 Ans. c) Basic necessities
- Q6. **True or False**
 i) Budget is the process of allocating income among various uses. (True /False)
 ii) Family goals affect the budget. (True /False)
 iii) A budget forces you to decide what is more important than the other. (True /False)
 iv) A budget can't help in achieving long term goals. (True /False)
 v) Budgeting helps in the management of your finance. (True /False)
 Ans. (a) True (b) True (c) True (d) False (e) True

Very Short Answer Type Questions:

- Q1. What is expenditure?
 Ans. Expenditure refers to the spending of one's income on the purchase of goods to fulfill needs.
- Q2. What are the methods of investing on a small scale?
 Ans. a) Bank b) Post office c) Life insurance

Q3. Why is proper management of family income necessary?

Ans. Proper management of family income is necessary so that the needs of the family can be met with limited resources and plans can be made for the future by saving.

Q4. Explain the source of direct and indirect income?

Ans.

Direct Source	Indirect Source
i) This is a fixed amount obtained in exchange for Work Examples – Salary, consulting, Business, Freelancing	i) this is not fixed amount first one has to invest and then income is received Examples - Investment, Rent, Interest, Dividend

Short Answer Type Questions:

Q5. Write a long-term goal for which a family should save money

Ans. Saving money for long term goals is very important for a family

i) **Children's Education:** A family can provide good education to their children and secure future.

ii) **Buying a house:** saving money to buy a house is an important long-term goal.

iii) **Children's marriage:** Saving for children's marriage is a long-term goal that helps the family be financially prepared for their children 'weddings'.

iv) **Emergency fund:** An Emergency fund can help a family remain financially secure in any emergency situation

Long Answer Type Questions:

Q6. Mention some ways to earn more money, what is the importance of age in earning?

Ans. Ways to earn additional income apart from salary

i) Creating a home garden

ii) Poultry farming

iii) Tailoring clothes

iv) Making pickles

v) Giving tuition classes

In these days everything is becoming expensive and it is becoming very difficult for an Individual to purchase all necessary items with their salary. Therefore earning additional income is very important. By earning additional income, we can easily fulfill our unnecessary needs and also increase our income.

Q7. Define spending plan/budget and describe the factors influencing decisions on fund allocation across various categories.

Ans. Spending planning, or budget is based on the total income of a family. This is the plan that helps a family live within its income limits and save for the future.

Q8. Expenditure planning depends on the following factors;

i) **Income:** The amount of expenditure depends on the household's income and the amount of money it possesses. The higher the income the more can be spent on various categories.

ii) **Family:** Expenditure is determined by the number of family members. If the family is large expenses are higher, if the family is small, expenses are lower.

iii) **Age of family members:** In a family where children attend school education incurs significant expenses and savings are low. Where older children are employed, expenses tend to be lower and family income is comparatively more.

iv) **Residence:** Expenses are higher in large cities while expenses are lower in smaller towns.

v) **Skills:** If family members possess skills, they can reduce expenses by performing several tasks themselves instead of spending money outside to get them done eg: changing bulb, plug, stitch clothes for oneself.

vi) **Savings:** Encourage reducing expenditure and promoting savings keeping future needs in mind.

Lesson - 14, 15, 16

Objective Type Questions:

- Q1. What is an advance plan, which tells us what to do at a determined time, called?
a) Evaluation c) Time management
b) Development d) Implementation
- Q2. What will you use to save energy and time?
a) Mixer and grinder b) Pan c) Rolling board d) Broom and mop.
- Q3. Which of the following statements is false?
a) Create a flexible budget. c) Keep expenses less than income
b) Check various sources of income d) Borrow money when needed and spend freely
- Q4. Which of the following is an example of a non-human resource?
a) Time b) Knowledge c) Skill d) Land
- Q5. Which of the following is an example of a human resource?
a) Garden b) Time c) Money d) Fan
- Q6. Which of the following is a natural resource?
a) Petrol b) Computer c) Table d) Mobile
- Q7. What is the biggest example of human resources?
a) Farmer b) Water c) Land d) Forest
- Q8. What is an example of a man - made resource?
a) Sun b) River c) Forest d) Dam
- Q9. The ability to do two or three activity at the same time.
a) Salary b) Dovetailing c) Interest d) Evaluation
- Q10. Which of the following is not a regular income?
a) Salary b) Gift c) Rent d) Interest
- Q11. Which of the following is not a part of income management?
a) Budgeting b) planning expense c) Taking donations d) Savings.
- Q12. What is the most important in time and energy management?
a) Prioritizing tasks b) Being busy c) Thinking more d) Resting
- Q13. On what does the effective use of time depend?
a) Money b) Planning and discipline c) Helping others d) workload

Short Questions:

- Q14. What is the main objective of time management?
- a) Wasting Time. b) Working more and more,
c) Making the best use of available time d) Resting
- Q15. Which of the following options best describes the relationship between the assertion and assertion?
- Assertion:** - In cities, more money is spent on rent.
Reason: - The residence affects the family's expenses.
- Choose the correct options:
- i) Both assertion and reason are correct
ii) Both assertion and reason are incorrect
iii) Assertion is correct and reason are incorrect
iv) Assertion is incorrect and reason are correct
- Q16. **Identify true or false in the following:**
- i) A time table should not be flexible. (True / False)
ii) Flexible activities are those activities whose time taken for each activity is called the leisure period. (True / False)
iii) The time taken for each activity is called the leisure period. (True / False)

- iv) Mental fatigue can be removed by resting on time. (True / False)
- v) Utilizing the skills of family members is also part of family income. (True / False)
- vi) The time spent on rest and hobbies is called the busiest period. (True / False)

Q17. Match the following:

- | | |
|---|---|
| i) Daily task planning | a) Reduces time wastage |
| ii) Prioritizing tasks | b) Important tasks are completed first |
| iii) Adhering to the time table | c) All tasks are completed first |
| iv) Benefits of time management | d) Lack of attention and fatigue |
| v) Trying to do multiple tasks simultaneously | e) Reduces stress and increases work efficiency |

Q18. Match the following;

- | | |
|---------------------|--|
| i) Planning | a) Setting goals and necessary tasks |
| ii) Organizing | b) Classification of resources and division of tasks |
| iii) Implementation | c) Completing tasks according to the plan |
| iv) Evaluation | d) determining the quality of work and results |
| v) Decision making | e) choosing the most suitable among various options |

Q19. Match the following:

- | | |
|---------------------|-------------------------------|
| i) Planning | a) what is right or wrong |
| ii) Organizing | b) creating a list of tasks |
| iii) Implementation | c) Who will do what |
| iv) Evaluation | d) Implementation of the plan |

Long Questions

- Q20. Seema recently got married. Identify three domestic activities that she does not perform efficiently and suggest three ways to improve their sequence for better execution.
- Q21. Give four suggestions to your brother from time management so that he can reach his office on time.
- Q22. List any three work simplification procedures to save energy so that your mother does not get tired while working in kitchen.
- Q23. What are the two benefits of a newly married couple seeking family planning counseling?
- Q24. Give two examples of dovetailing that can make household chores easier for your mother.
- Q25. Homemakers spend most of their time doing household chores: suggest six ways to save their energy.
- Q26. How would you define values, standards and goals?
- Q27. How many stages are there in management? Describe the stages and arrange them in order.
- Q28. Differentiate between human resources and non-human resources.
- Q29. Your brother is unable to find a job, suggest four activities to cut down on his expenses.

Lesson – 17

Life Begins

The process of a child's birth in a family and the changes that occur in the woman's body during that time bring joy, and this is considered as beginning of life.

Pregnancy

Pregnancy is also called conception. The state of development of the embryo in a woman's uterus is called pregnancy. It usually lasts for 40 weeks/280 days from the date of the last menstrual period until the estimated date of delivery.

This is determined by the combination (meeting) of the mother's and father's chromosomes. Total number of chromosomes are 46 or 23 pairs.

Note: A fertilized egg is called a Zygote.

Signs of Pregnancy

- i) Cessation of menstruation (Periods) in women.
- ii) Feeling unwell or vomiting in the morning.
- iii) Changes in the size of the breasts.
- iv) Frequent urination in the last stage or last of pregnancy.
- v) Hormonal changes in a woman's body.

Expected date of delivery: First day of last menstrual period + 9 months + 7 days.

The fetus remains in the mother's womb or uterus for 9 months. This period is called the prenatal period.

Development of fetus inside the mother's womb

• Pregnancy is divided into two parts:

- a) Prenatal (Before Birth)
- b) Postnatal (After Birth)

Prenatal: - In "Prenatal" delivery refers to birth and refers to before birth. The period before birth is called Prenatal.

- The Prenatal period is considered to be 9 months.
- This is divided into three parts: -
 - i) First trimester or (0 - 3) months.
 - ii) Second trimester or (3-6) months.
 - iii) Third trimester or 6-9 months.

Postnatal: - Or post-delivery refers to the period after birth. That time which is after birth is called post-delivery.

Factors Affecting Growing Fetus

1) **Mother's Emotional State:** A mentally healthy mother gives birth to a healthy baby Therefore, the mother should not remain in a state of stress and pressure for a long time.

2) **Mother's Diet:** The mother should consume a nutritious diet so that her baby can receive proper nutrition. The necessary oxygen and food for fetal development are obtained from the mother's placenta.

A pregnant woman's diet must mandatorily include the following elements:

- For bone development: - Milk (for calcium)
- For Muscle development: - Necessary protein (e.g. lentils, eggs etc.)
- For brain development: - Required minerals (e.g. leafy vegetables and fruits)
- For energy: - Carbohydrates (e.g. rice, wheat)

3) Mother's Age: The ideal age for a mother to give birth to a child is between 21 and 35 years. Giving birth before 21 years can be dangerous for both the mother and the child. There is a risk of miscarriage. A minimum gap of three years between two children is necessary.

4) Mother's Intake of Medicines: A pregnant woman should not consume any type of medicine without a doctor's advice. This can harm the baby in the womb.

5) Diseases, Germs Affecting the Fetus: If the mother has any infectious disease (like sexually transmitted disease like AIDS) and if these germs reach the fetus through the uterine wall, they can affect its development.

6) Drugs, Alcohol, Smoking: The consumption of intoxicants, alcohol and smoking during pregnancy can have harmful effects on the baby in the womb. Therefore, women should not consume them.

Care of Pregnant Woman (Prenatal Care)

Care of pregnant woman is very important so that the development of their child can be proper. During pregnancy, the family should pay special attention to the following things:

- **Medical Check-up:** - It is essential for all pregnant women to contact a doctor regularly and get medical check-ups done. Register your name at the nearest health center.
- **Nutrition:** - A healthy mother gives birth to a healthy baby for staying healthy, the woman should consume food rich in nutrients. Women need more nutrition during pregnancy.
- **Weight:** - Along with the development of the fetus, the weight of the pregnant women also increases the woman's weight should increase by approximately 8-12kg. This indicates the development of a healthy baby.
- **Taking Medicines:** - A pregnant woman should consult a doctor before consuming any type of medicine. Pregnant women should get the tetanus vaccine so that the newborn baby can be protected from the risk of tetanus. Doctors can give iron and folic acid tablets to prevent or treat Anemia.
- **Exercise and Rest:** - A pregnant woman should remain active. The woman can do light exercises. The woman should not lift any heavy items. She should get enough rest because women get tired easily. The women must get 10 hours of sleep daily.
- **Safe Delivery:** - For a women, the time of giving birth to a child is the most exciting time in life. At this time, many types of questions arise in the woman's mind. She will be able to give birth to her child safely or not. A woman can have a safe delivery in a hospital, primary health center, or registered nursing home. If the health center is far away, a trained midwife or dhai (traditional birth attendant) can be called home for delivery.

Care of New Born Baby and Mother (Post-Natal Care)

Both female and male child have an equal right to be born and receive love and affection from their parents. After birth, the child is completely dependent on others, so proper care is necessary at this time. The woman goes through a lot of effort during child birth therefore, the woman should also be properly cared for at this time.

Hygiene

- **For the baby:** Elements like white butter and some fine hairs are found on the newborn's body. Clean it with a clean cloth soaked in lukewarm water. Do not rub its skin.
- **Care while cutting the umbilical cord:** The fetus remains connected to the mother's womb by a tube called the umbilical cord. At the time of the baby's birth, this tube is cut and separated from the mother's womb. There is a risk of infection when cutting it, so caution should be exercised while cutting it. After cutting, the cord should be kept dry.
- **Immunization:** Immunization is necessary to protect infants from infectious diseases. This vaccination is provided free of charge at all government hospitals and health centers.

Vaccination List

BCG (Bacillus Calmette Guerin): At birth.

- i) Hepatitis-B: At 6 weeks, 10 weeks, 14 weeks.
- ii) Mumps: 9-12 months
- iii) Tetanus: At 10 years and 16 years of age.

Nutrition

1) Infant's Diet: After birth, the infant should be given mother's milk. In the first few days, mother's milk contains a yellow fluid called colostrum which is essential for the infant's health. It provides natural immunity to the infant. For the first 6 months, only mother's milk is the best diet for the infant.

2) Mother's Diet: When the mother is breast feeding, her diet should be balanced so that she can provide sufficient milk to her infant.

Family Planning

This is the right of both parents to decide when and how many children they want. Family planning means planning means planning by a couple to control the number of their children and the interval between their births. Through family planning, a woman can properly build and take a care of her family. If there is no proper spacing between children in a family, the woman starts facing problems, both physically and mentally, in such a situation.

Lesson - 17 **Beginning of Life**

Very Short Answer type Questions:

Q1. What is a fertilized egg called?

Ans. Zygote

Q2. What is a zygote called after implantation?

Ans. Embryo

Q3. To which membrane does the zygote attach itself?

Ans. Uterus

Q4. For how many days does the embryo remain in the mother's womb?

Ans. 280 days (9 months)

Q5. When does fetal movement begin in the womb?

Ans. In the sixth month

Q6. What is the correct age for the mother to give birth to a child?

Ans. 20 to 35 years

Q7. What kind of diet should be consumed to prevent anemia?

Ans. Iron-Rich diet

Q8. What is included in the life support system of the fetus?

Ans. Amniotic sac, Umbilical cord

Q9. What important organs of the fetus develop by the end of the first three months?

Ans. The heart and lungs, Male and female reproductive organs also develop.

Q10. In which trimester does the size of the fetus grow rapidly?

Ans. In the second trimester (around 6 months)

Q11. Fill in the Blanks: -

- i) Care of a woman during pregnancy is calledcare.
- ii) A New born baby is likely to sleep forhours.
- iii) Immunization is offered free at hospitals and health centers.
- iv) A woman should get herself immunized foras early as possible during pregnancy.
- v)and polio vaccine are given to a baby at a time of birth.

Ans. i) Antenatal ii) 16-18 iii) Government iv) Tetanus v) Tetanus

Q12. State True or False: -

- i) The cut cord of a new born baby should be left exposed to dry up. (True / False)
- ii) Colostrum is good for the baby. (True / False)
- iii) The mother should not breast feed the baby for first few days after birth. (True / False)
- iv) Breast fed babies are stronger and healthier. (True / False)
- v) Mother who are breast feeding need a nutritious diet. (True / False)

Ans: i) True ii) True iii) False iv) True v) True

Short Answer Type Questions:

Q1. When and in which trimester does brain development occur?

Ans. In the second trimester (7-9 months) brain development occurs rapidly.

Q2. State any two initial symptoms of pregnancy?

Ans. The first two symptoms of pregnancy are-

- i) Cessation of menstruation
- ii) Morning sickness

Q3. What is an embryo?

Ans. When a male germ cell called sperm, comes into contact with the female germ cell called ovum, they combine. Until this develops into a baby is called an embryo.

Q4. What is family planning?

Ans. Family planning means deciding the number of children one wants according to one's wishes.

Q5. Which nutrients are essential in the diet of a pregnant woman?

- Ans.
- i) Consumption of milk for calcium, essential for bone and teeth development.
 - ii) Pulses, eggs, paneer, etc. for essential protein for muscle development.
 - iii) Green leafy vegetables and fruits for essential minerals for brain development.
 - iv) Rice, Wheat, etc. for essential carbohydrates for energy.

Q6. Which factors determine the sex of a child?

Ans. The sex of a child is determined by the combination of sex chromosomes from the mother and father.

Q7. State two health-related harms caused by child marriage?

Ans. Early age marriage leads to premature conception and harm the reproductive system.

Q8. When should a newborn baby be fed mother's milk?

Ans. A new born baby should be fed mother's milk from the very first day or breast feeding should begin on the day the baby is born.

Q9. Which are the main factors affecting fetal development?

- Ans.
- a) Mother's emotional state
 - b) Mother's diet
 - c) Mother's age
 - d) Mother's consumption of medicines.
 - e) Various types of germs and diseases.
 - f) Intoxicating substances, like alcohol and smoking.

Q10. What are the reproductive organs?

Ans. They are the organ that help in reproduction for making a baby. They are different in boys and girls.

Long Answer Type Questions

Q1. How does a woman know she is pregnant?

- Ans. i) A woman's menstrual period stops.
ii) feeling sick or vomiting in the morning.
iii) Changes in breast size.
iv) Hormonal changes in the woman's body.

Q2. Why is breast feeding more beneficial for an infant than bottle-feeding?

- i) Mother's milk is more balanced than any other milk and is according to the need of the child.
ii) It has colostrum which provides immunity against disease.
iii) Mother's milk is clean, and it protects children from diarrhea and other illnesses.

Q3. Some essential tips for home delivery for a pregnant woman?

Ans. A pregnant woman should prepare the following items from the seventh month of her pregnancy.

- i) Many clean cotton clothes.
ii) Antiseptic soap or any other soap.
iii) Alcohol swabs to apply on hands after washing.
iv) Sterilized cotton for cleaning hands and nails and for applying on the body after washing hands
v) New blade.
vi) Two ribbons to tie the umbilical cord.

Lesson - 18

Concept Of Development

Basic Concept

This is the foundation or the core idea upon which everything else is based. It is the most prominent, essential and significant idea or principle in any field.

Basic Concept of Development

Growth and Development

Growth: Growth refers to the increase in human weight and height and changes in bodily proportions.

Development: The development of a child encompasses all aspects, such as physical cognitive, linguistic, social emotional, and others.

Difference between Growth and Development

Growth	Development
i) Growth involves physical changes like weight, height etc.	i) Development involves physical, social and emotional changes.
ii) Growth can be measured.	ii) Development cannot be measured.
iii) Growth occurs until adolescence.	iii) Development continues throughout life.

Maturation and Learning

Maturation- Refers to the changes in an individual's way of thinking, feeling, behaving that occur with age.

Learning- Learning is a process that continues throughout life where an individual acquires new information and understanding.

Maturation and learning work together to promote development.

Heredity and Environment

Heredity: Heredity refers to the qualities or habits inherited from parents, grandparents.

Environment: Environment refers to all surrounding aspects both human and non-human such as parents, friends, school, neighborhood, workplace and social and economic conditions with which an individual comes in to contact from birth.

The Principles of Development

- i) **Development involves changes**: From birth to death, humans undergo various physical, mental, social and behavioral changes.
- ii) **Development follows a fixed sequence**: Sequential pattern of development can be seen in two directions:
 - **Cephalo - caudal Sequence**: Means that development spreads over the body from head to toe i.e. individual begins to grow from head region down wards.
 - **Proximodistal sequence**: means that the development proceeds from central part of the body towards peripheries. In this sequence, the spinal cord of the individual develops first and then outward development takes places.
- iii) **Development proceeds from general to specific**: In infancy activates progress from general to specific.
- iv) **Development is Inter-related**: Different aspects of development, such as physical, mental, social, emotional are inter connected or linked to each other.
- v) **Development is continuous process**: Development continuous from birth until death.
- vi) **Development is predictable**: Development can be estimated or predicted in advance.
- vii) Development occurs at different rate for different parts of the body.

viii) Development is sequential meaning it progresses from one level to another.

ix) Early development is more important compared to later development.

x) Development varies individually.

xi) Development is a result of maturation and learning.

Maturation comes from genetic factors, while learning results from an individual's efforts and practice.

The combination of maturation and learning is very important for development.

Factors Influencing Development

- Heredity
- Environment such as parents, school neighborhood and people an individual interacts with from birth.
- Child rearing practices.
- Individual and social adjustment of children.
- Early stimulation environment, good mental and physical condition are helpful in development.
- Nutrition is essential for the healthy development of children.

Types of Development

1. Physical Development

i) **During Infancy:** (0 to 1 year)

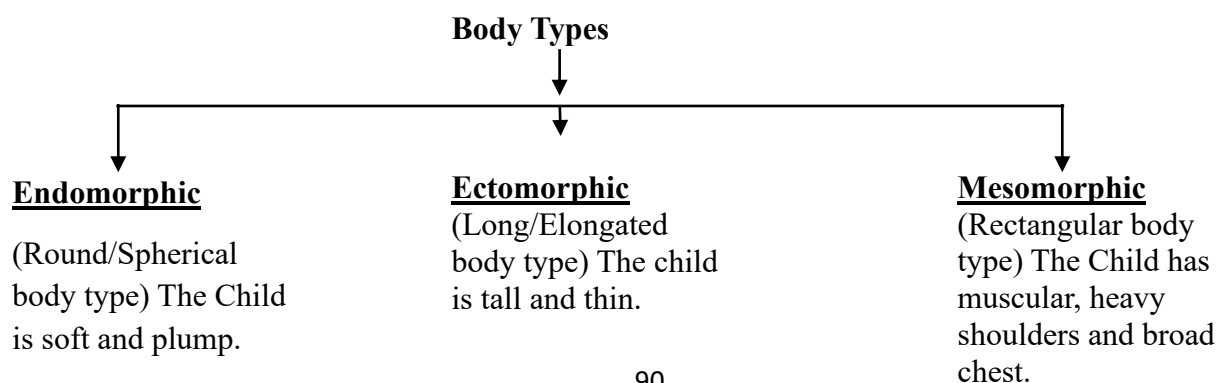
- **Body size:** In the first year of life, significant changes occur in the size of the infant's body.
- **Length:** At birth, the average Indian infant measures 21 inches.
 - At 1st year of age, 28 to 30 inches.
 - At 2nd year of age, 32 to 34 inches.
- **Weight:** The weight of an average Indian infant at birth is 2.5 to 3.25 kg (5-8pounds).
- **Bone Development:** Ossification, the process of bone hardening, primarily occurs during childhood.
- **Tooth Development:** Teeth begin to appear after 5 to 6 months of age in infants.

Order of Initial Tooth Eruption

- Central Incisors: 6 to 12 months
- Lateral Incisors: 9 to 16 months
- Canines: 16 to 23 months
- First Molars: 13 to 19 months
- Second Molars: 22 to 33 months
- By the age of three, all deciduous teeth (milk teeth or temporary teeth) have erupted in children.
- By the age of 5 to 6 years, permanent teeth begin to replace the temporary teeth.

ii) **Early Childhood** (2-6 years): During this period, the child starts to perform many skills such as walking, running, balancing and dressing themselves.

- **Length and weight:** Annual weight gain is approximately 2.5 kg and height increases by 2 to 3 inches.
- **Physical Proportion:** Head development is slow while hands and feet grow rapidly and the body grow at a moderate pace.



- **Bone Development:** Muscles become quite heavy, which makes the child appear thin even though their weight is more.
- **Motor Development:** (Muscular Development) Developing excessive control over various muscles.

iii) **Infancy**

- **Gross Motor Development:** - In this stage an infant can control over large muscles.
 - a) 3 months: Neck holding
 - b) 5 months: Sitting with support.
 - c) 8 months: Sitting without support.
 - d) 9 months: Standing with support.
 - e) 11 months: Crawling on knees.
 - f) 12 months: Standing without support and can walk with support.
 - g) 13 months: Walking without support.
 - h) 18 months: Running
 - i) 24 months: Climbing stairs
 - j) 36 months: Cycling
- **Fine Motor Development:** - At this stage, an infant can control over small muscles.
 - a) 4 months: Grasping rattle when placed in hand.
 - b) 5 months: Grasping an objects with palms in an unrefined manner.
 - c) 7 months: Grasping objects with palms in an unrefined manner.
 - d) 9 months: Grasping small objects with thumb and forefinger.

iv) **Early Childhood**

i) Development of gross motor skills: During the first five years, a child gains control over gross movements.

- **Running:** By the age of 5 or 6, a child can easily run without falling.
- **Jumping:** By the age of 5, a child can easily jump, skip rope or swing a hoop.
- **Climbing:** By the age of 2, a child can go up or down stairs by holding onto railing or someone's hand.
- **Riding a Tricycle:** Children between the ages of 3 and 5 can easily ride a tricycle.
- **Throwing and catching a ball:** By the age of 6, Children become proficient in throwing and catching a ball.

ii) Development of Fine Motor Skills: When Children enter early childhood, they are not yet to able to properly work with objects or use their hands, but as they play with and handle small objects, their small muscles develop, and fine motor skills improve.

Some skills that a child develops by the age of 5 are:

- To eat food oneself, wear clothes and get ready.
- Writing (to be able to write)
- Copying: - Children aged 2 to 5 years can easily copy pictures.

2. Cognitive Development

It means that how a child learns and how they use any information.

- Cognitive abilities (what one can do) that a child possesses, such as thinking, problem-solving, reasoning or argumentation and memory capacity (remembering) are enhanced in this stage.
- In this stage, children enjoy playing with toys and solving puzzles with their peer group i.e. Children of their own age.
- They understand their environment by easily retrieving information again using their senses (sight, Hearing, Touch, Smell and Taste) with the help of the brain or memory.

3. Social Development

- Factors that strength then social development (like- minded or similar) include parental love, spending quality time with them, which makes children feel secure and safe, and they show a sense of belonging towards people around them.
- Some Social skills are:-
 - i) Participation:- Taking part in a work together, or in any activity.
 - ii) Co-operation:- Working together with others to achieve an objective.
 - iii) Patience:- The state of tolerance or stability of a person in difficult situations.

4. Emotional Development

- The ability to control and manage one's impulses is called emotional development or we can say that in this stage, the child can easily control their emotions like laughter, anger, sadness etc.
 - Children in their early childhood are surrounded by people who are emotionally mature and stable, which helps them control their impulses.
- Note: IMPULSE (Emotion): An impulse is an excited or active mental state.

5. Language Development

Language is the medium of communication in which words and symbols are used for the expression(manifestation) of thoughts.

In this stage, the child communicates through various mediums, people interact (converse) with each other, Such as - writing, speaking, cultural language, facial expression, gestures and many artistic forms.

Lesson – 18

Concept of Development

Objective Answer Type Questions:

- Q1. Ram has learned to make new friends. This word is related to: -
a) Learning b) Maturing c) Growth d) Encouragement
- Ans. (a) Leaning
- Q2. Child development occurs in what form?
a) External b) Integrated c) Middle d) Subtle
- Ans. (d) Subtle
- Q3. At 6 months a child produces meaningless mixed sounds like ga, ga, ga, ma, ma, ma etc. What is this called?
a) Cooing b) Babbling c) Language of wire d) Humming
- Ans. (b) Babbling
- Q4. **Fill in the Blanks:-**
i) Listening to a story will enhance a child's _____ development.
ii) Putting the pieces of puzzle together is a part of _____ and _____ development.
iii) Showing _____ is an indication of sound social development.
iv) Severe malnutrition will affect _____ development.
v) Climbing a tree is a part of _____ development.
- Ans. i) Language ii) Cognitive and physical iii) Empathy iv) Overall v) Physical

Q5. State True or False:

- i) The colour of an individual's hair is a product of environment. (True/False)
- ii) Good physical and mental development can take place if the child takes good and his environment is stimulating. (True/False)
- iii) Each child is unique in terms of genetic makeup even if brought up in similar environments. (True/False)
- iv) The best type of child rearing practice followed by parents is permissiveness. (True/False)

Ans. i) False ii) True iii) True iv) False

Very Short Answer Type Questions:

Q1. Up to two years of age, what kind of games do infants actively participate in?

Ans. Sensory-motor games

Q2. How many pairs of teeth does each human normally have?

Ans. Normally a human being have two pairs of teeth: -

- i) Temporary teeth ii) Permanent teeth

Q3. Climbing a tree by a child is part of which development stage?

Ans. Physical development.

Short Answer Type Questions:

Q1. What is ossification?

Ans. The process of strengthening bones during childhood is called ossification.

Q2. Give three examples each of gross motor skills and fine motor skills.

- Ans. i) Gross motor skills: - Walking, Running, jumping
ii) Fine motor skills: - Painting, drawing, buttoning clothes.

Long Answer Type Questions:

Q1. Explain the language development of a ten-years old child.

Ans. A Child in middle childhood (6-11 years) achieves complete mastery over language. The child's vocabulary expands to 14,000 to 30,000 words. the ability to use language develops at this age. At this age, a child also begins to understand that a single word can have multiple meanings. Children can entertain themselves by using the same words in different ways.

Q2. Your brother gets angry over small things. Give him some suggestions to control his anger.

- Ans. i) Think carefully before saying anything.
ii) Until your anger subsides, maintain some distance from that person.
iii) When angry, count to 10; this reduces anger to some extent.
iv) Reduce stress by talking about light or entertaining things.
v) Sit down with the person who is angry and resolve the issue.
vi) Practice calming and stress-relieving techniques.
vii) Exercise regularly.

Lesson – 19

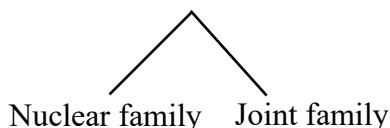
My family and I

We all live with our loved ones and enjoy their affection and support. We call this close group our family.

What is a family?

Members who live together and are emotionally, financially, and socially connected to each other, comprise a family.

Types Of Families



Nuclear family

When a family includes a mother, father, and their children living together under one roof is called a nuclear family.

Joint family

A family that includes besides the mother and father, grand parents, uncles, aunts (paternal and maternal) living together is called joint family.

Functions of a family

- Protection from any kind of danger to life.
- Enhancing a sense of togetherness (emotional security) within the family.
- To provide education.
- Passing on socio-cultural values.
- To provide facilities for advancement in life.
- It provides recreation to all its members.

Family life cycle

The family life cycle is a stage in which the family changes through various stages. The family circle keeps changing according to the age, needs, and circumstances of the family members.

1) Importance of Understanding the Family Life Cycle

- It helps us to foresee the challenges and requirements of each stage.
- It is useful to have the right mental make up for dealing with the challenges and planning of priorities for each stage.

2) Stages in a Family Life Cycle

The family life cycle can be divided into three parts.

a) Beginning stage: This is the beginning phase of life where an individual or family begins their life.

Characteristics of the beginning Stage

- In which individuals and families decide to unite their lives.
- Both individuals strengthen their relationship.
- To face new responsibilities and fulfill each other's needs.
- To build a stable and secure future.

b) Expanding Stage: This is the second phase of the family life cycle, where new children are welcomed into the family. The number of family members increase.

Characteristics of the Expanding Stage

- The family welcomes new member i.e. birth of the first child.
- Family size and responsibilities increase due to new needs and challenges.
- New members need to fulfill various responsibilities.
- The goal of family members is to provide a safe and nurturing environment with a sense of belonging.

c) Contracting Stage:

The contraction stage begins when the number of family members decreases and challenges also change, for example, when children grow up and leave home for instance, after marriage, a girl becomes a member of another family and leaves her parental home. The Contraction stage ends when the last child leaves the home.

Characteristics of the Contracting Level: -

- Children start leaving home to lead an independent life.
- They start forming new families.
- They begin to take responsibility for themselves and becomes a support for their parents.

Importance of the Family Life Cycle-

- Help in understanding the needs of family members.
- Helps in strengthening relationship among family members.
- Improves emotional and mental health.

Taking Caring of Family Members

a) Care During Pregnancy: Care during pregnancy is an important aspect that determines the health and future of the pregnant woman and the unborn child. During pregnancy a family should ensure that the woman:

- Consumes nutritious food at regular intervals.
- Get adequate rest and exercise.
- Stay happy and cheerful.
- Visit doctor regularly for monitoring the growth of the fetus.
- Stay away alcohol and smoking

b) Care During Infancy:

A newborn is totally dependent upon their parents for its care and safety. Therefore, Ensuring the health and development of the baby is an essential task.

- A newborn should be bathed regularly to maintain physical and mental hygiene.
- A newborn should be raised with love and affection.
- Regularly check the baby's weight and length.
- A new born should be vaccinated at the correct time.

c) Care of Young Children:

We often hear phrases "like father, like son", in reality Children are a product of both heredity and environment.

- Heredity is provided to the child by birth and cannot be changed.
- Environment is where children grow up and learn from their parents and surroundings.

Environment is formed by the Following Factors:

- Children aged 5 years learn qualities like cooperation, facing challenges, team spirit and leadership by playing in groups.
- As a child grows it is essential to teach them discipline.
- Children should be allowed to work independently so that they can understand their responsibilities.
- Children should be disciplined.
- Parents should not suppress children's desire, which can lead to negative thinking.

d) Caring for Older, Children and Adolescents:

At this stage, Children start doing their work by themselves, which changes the role and responsibilities of parents. This enables children to gradually become independent and can start making their own decisions. They begin to establish their identity in society-

- Children should be provided with a suitable place to study at home.
- Children should be given opportunities to express their emotions.
- Children should not be pressured in any way to prevent them from engaging in wrong activities.
- Parents should support children on sensitive issues so that they do not involve in wrong tasks.
- Children should be taught cultural and moral values by the family so they can maintain a positive outlook in society.

e) Settling Grown Up Children:

- One important developmental task of adolescence is preparation for a profession or vocation.
- Parents are responsible for guiding their children.
- Preparation for a career should start early.

f) Care for The Elderly:

- After retirement elder persons are relieved from the responsibilities of their profession.
- They should gracefully, take care of themselves.
- They should take life easy, sit back & enjoy their days.

Role of a Family in Different Effective Interpersonal Relationships

Family Relationship

- Family relations depend on the way every member behaves & interacts with each other.
- Various factors that contribute in strengthening the relationship are:
 - i) A clear understanding of one's duties & responsibilities.
 - ii) Feeling of empathy towards all family members.
 - iii) Effective verbal & non-verbal communication skills.
 1. Displaying a genuine concern and love for other.

Values in Life

- a) Values form the crux of our social environment. Children observe their elders and imbibe values like respect for elders, honesty, truthfulness and humility.
- b) Parents teach values by directly telling their children what to do and what not to do and by setting examples themselves.

Lesson – 19
My Family And I

Very Short Answer Type Questions:

- Q1. List four hereditary qualities of children?
Ans. i) Eye color ii) Skin iii) Height iv) Body structure
- Q2. What is the meaning of primary motivation?
Ans. Primary motivation means providing basic facilities for the development of a child in his early years.
- Q3. What development does not occur in a child under permissive discipline?
Ans. Social maturity, self-control, self-confidence.
- Q4. Which parenting method is the best among parenting methods?
Ans. Democratic discipline method.

Q5. What is a family?
Ans. A family is a group of people who live together and are connected to each other.

Q6. **Fill in the Blanks: -**

- i) The human baby is totally dependent upon parents for its _____ and protection.
- ii) All babies need to be exclusively _____ by the mother, as it is the right of a child.
- iii) Feeding should be done exclusively till a baby is _____ months old.
- iv) The pregnant should visit her doctor regularly for monitoring the growth of the _____.

Ans. i) Nourishment ii) Breastfed iii) six (6) iv) Fetus

Q7. **State True or False:**

- (1) Discipline at home helps a child learn self-control. (true /false)
- (2) Toys for children must be safe, durable, interesting and attractive. (true /false)
- (3) Heredity factor is given to a child by birth and cannot be changed. (true /false)
- (4) Growth and development of a child depend only on heredity. (true /false)

Ans. (1) True (2) True (3) True (4) False

Short Answer Type Questions:

Q1. What do you understand by a nuclear family?

Ans. A nuclear family consists of a married couple and their children living together under one roof.

Q2. What are the benefits of living in a nuclear family?

- Ans. i) Children get opportunities to make decision, which fosters self-confidences.
ii) It develops the capacity for efforts independence and self-reliance among family members.

Q3. What are the benefits of living in a joint family?

- Ans. i) It fosters a sense of cooperation and harmony among family members.
ii) In the event of parent's demise, children receive complete emotional support within the family. iii) Elderly, disabled and unemployed members of such families receive support.

Q4. Explain motor development.

Ans. Motor development occurs in two types.

- i) Gross motor development.
- ii) Fine motor development

Gross Motor development: Use of large muscle group skill such as standing, running. Fine motor development: Involving the use of small muscles, such as writing, grasping, serving etc.

Long Answer Type Questions

Q1. Explain three reasons for the breakdown of joint families and increase in single parent families in the present time.

Ans. There are several reasons for the breakdown of joint families and the increase in single parent families in the present time: -

- People migrating from villages to cities.
- Domestic disputes, conflicts between mother-in-law and daughter-in-law and husband wife argument are also reason for the breakdown of joint families.
- Changing cultural values have also impact on joint families.
- People want to make their own decisions hence they prefer living in nuclear families.
- Now a day's people desire independence and do not like to listen to others, which is leading to the disintegration of joint families.
- The change in people's thinking is due to an increase in education and awareness.

Lesson - 20

Adolescence: Charms And Challenges

Adolescence is important in life, along with childhood and adulthood. Adolescence is the link between childhood and adulthood. Many changes occur in a person's life during adolescence that is why adolescence is also called the stage of excitement and challenges. Adolescence is the age 10 to 19 years. It is also called puberty.

Characteristics of Adolescence

1) Physical Development:

Physical development during adolescence, various types of changes occur in both boys and girl.

•Changes common to boys and girls: -

- | | |
|--|---|
| i) Increase in height and weight. | ii) Development of reproductive organs. |
| iii) Hair growth in armpits and pubic areas. | iv) Appearance of acne. |

•Changes in Boys:

- | | |
|------------------------------------|---------------------------------|
| i) Broadening of shoulders. | ii) Deepening of voice. |
| iii) Increased Muscle development. | iv) Development of facial hair. |

• Changes in Girls:

- | | | |
|----------------------|------------------------------------|-----------------------------|
| i) Growth of Breast. | ii) First menstruation (Menarche). | iii) Changes in body shape. |
|----------------------|------------------------------------|-----------------------------|

2) Menstruation: Myths and Facts

Menstruation is a normal part of a woman's life. In girls, menstruation (menstrual period) begins at the age of 9-16 years and usually ends around 45-55 years of age. The menstrual cycle is a 28-day cycle, which can occur between 21-35 days.

Symptoms of Menstruation

- Difficulty in sleeping.
- Feeling hungry.
- Body pain and cramps.
- Swelling in the body.

Myths about Menstruation

- One should not bathe daily.
- Women should not go into the kitchen.
- Girls should not go outside during menstruation.

Facts about Menstruation

- It does not cause any sexual or physical weakness.
- It is a natural phenomenon and may not always be associated with sexual thoughts and feelings.

3) Emotional Development:

Emotional development means developing an ability to manage emotional and to express them in positive responsible ways. In adolescence, children's emotions change very quickly for example: they get angry very quickly; moods also change very quickly. One moment they feel very confident, and the next moment they become sad. Therefore, this stage is also called the stage of storm and stress.

a) Self-concept

b) Self esteem

• **Self-Concept:** It means the way in which you see your strengths and weakness. It is said to be low when you see only your weaknesses and it is high when you look at your strength and want to improve yourself.

• **Self Esteem:** It is your personal judgment of your abilities. In other words, if you have high self-esteem then you have more belief in your abilities.

4) Social Development:

In adolescents learn emotions like cooperation, sympathy, leadership, enthusiasm and friendship form their social environment and cultural values. During this period, there are significant changes in

adolescent's relationships with their families and peer groups. They learn to answer the questions like "Am I an adult now?" or "Am I still a child?" by living in society.

i) Relationship with the family.

ii) Relationship with peers.

Relationship with the family:

- Adolescents start distancing themselves from their families.
- They start seeking privacy & like to spend lesser time with their families.
- They dislike and restrictions imposed upon them.

Relationship with peers:

- Peer is defined as a person of equal age, abilities, qualifications, background or social status.
- Peers can act as positive role models and can also encourage healthy behavior.

5) Cognitive Development:

Cognitive development takes place in adolescents, which significantly increase their power of thinking and understanding. In this stage, individuals develop the ability to differentiate between right and wrong and start using their intelligence more and more to elevate their level. We start thinking more about ourselves. To establish our identity we engage in more deliberation and discussion. Through moral values, we begin to understand our place in society and start building our world according to fashion.

i)) Abstract thinking

ii) Personal fable

iii) Systematic thinking

iv) Idealism

v) Imaginary audience

Effect Of Cultural & Social Norms

- Social norms are a set of rules & expectations by which a society guides the behavior of its members.
- These norms affect the way we behave, talk, dress or conduct personal relationship.

6) Influence Of Media On Adolescents:

Media like television, news, films, radio and internet have both positive and negative effects on adolescents. Adolescents consider artists and models as their ideals (heroes).

Positive effects of Media

- Through media, we become aware of various subjects like education, social issues and how to think about them.
- We can get information about different countries through magazines, newspapers and websites.
- We can also solve our problems.

Negative Effects of Media

- Through information obtained from media people start engaging in violent and risky activities.
- They create a world of imagination.
- By considering artists and models as ideals, they leave their own personality behind.

7) Adolescence And Peer Group Relationships:

In adolescence, children prefer to spend time with friends rather than parents. They find their friends' ideas to be like their own, and they enjoy being eating and hanging out with them. The influence of peer groups has both positive and negative effects on society.

Positive Effects of Peer Groups: -

- Adolescents share their experiences with their friends.
- Adolescents feel a sense of equality with their friends, which brings a feeling of security within them.

Negative Effects of Peer Groups: -

- Adolescents can fall into bad company and develop bad habits with friends, such as gambling's, forming gangs, engaging in wrong doings and drinking alcohol.

Preparing for a Career

Towards later adolescence comes the time when you need to choose and prepare for a career.

- Weekly magazine sections of many newspapers offer guidance on vocational choices.
- Parents and employees from specific fields can give firsthand knowledge about their careers.
- An internship or on the job training will also equip you with necessary job-related skills.

Lesson – 20

Adolescence: Charms and Challenges

Very Short Answer Type Questions:

Q1. What is considered the age at which menstruation begins in girls?

Ans. 10-16 years.

Q2. What is the first sign of puberty in girls?

Ans. Menstruation.

Q3. What is considered the duration of adolescence?

Ans. 11 to 18 years.

Q4. **Fill in the Blanks:**

i) Menstruation is a cycle of _____ days.

ii) All girls should have an _____ rich diet to prevent anemia.

iii) If the ovum is not fertilized, the uterus sheds its lining and the _____

iv) Menstruation signifies the ability of a girl to become _____

Ans. i) 28 ii) Iron iii) Menstrual flow iv) Pregnant

Q5. **State True or False:**

i) Malini should not play outdoor games during menstruation. (True/ False).

ii) Sohail's brother makes him feel guilty by saying that nocturnal emission happens to those who have sexual fantasies. (True/ False)

iii) Girls should eat iron rich foods. (True/ False)

iv) A girl cannot become pregnant before her first periods. (True/ False)

v) Genital hygiene is important for both boys and girls. (True/ False)

Ans. i) False ii) False. iii) True iv) False v) True

Short Answer Type Questions:

Q6. What is adolescence?

Ans. The period of development that occurs between childhood and adulthood is called adolescence.

Q7. Why is there irregularity in the menstrual cycle?

Ans. Irregularity in the menstrual cycle can occur due to many reasons like stress, illness and inadequate nutrition.

Q8. Mention any two characteristics of cognitive development in adolescents.

Ans. i) Personal Fable: - Adolescents think they are unique.

ii) Imaginary Audience: - They feel that everyone is watching them.

iii) Abstract perspective: - They imagine even the impossible, which is not true.

iv) Systematic: - Before planning any work all related facts are taken into consideration.

Q9. What are the factors affecting social development?

Ans. i) Too much restriction makes children dependent.

ii) Children learn through rewards and punishments.

Q10. Explain with an example how positive self-confidence helps in better performance.

Ans. i) Positive self-concept is very important for personal development in adolescents.

ii) Positive self-confidence greatly helps in better performance.

iii) If you have self-confidence, you will quickly succeed in 'making your mark'.

Q11. Describe the characteristics of adolescents.

Ans. In this stage, boys and girls undergo many physical and mental changes.

- 1) **Physical Development:** At this stage, rapid physical changes occur. In girls, breast, development begins and in boys, beard and mustache growth starts.
- 2) **Conflict of Experiences:** In this age, adolescents do not give importance to elder's experiences.
- 3) **Feeling of Rebellion:** At this age, a feeling of rebellion often arises.

Long Answer Type Questions:

Q12. How can the pressure of Peer groups be reduced during adolescence?

Ans. The role of peer groups is very important in adolescence. It has both positive and negative effects. The ways to reduce its pressure are as follows:

- i) Learn to say 'no' to your group if you feel a task is wrong.
- ii) Seek advice from your parents and explain in detail about your groups to them.
- iii) Sometimes, give importance to other's or your own ideas rather than just your friend's

ideas.

Q13. What are the specific changes that occur in boys and girls during adolescence?

Ans.

Boys	Girls
i) Broadening of shoulders.	i) Appearance of curves in the body.
ii) Deepening of voice.	ii) Thinning of voice.
iii) Appearance of facial hair.	iii) First menstruation.
iv) Development of muscle.	iv) Development of breasts.

Model Question Paper

Unit – 7

Lesson - 17, 18, 19, 20

Very Short Questions:

- Q1. How is the expected date of delivery? Calculated from the first day of menstruation.
 - a) 8 months + 7 days b) 9 months + 6 days
 - c) 9 months + 7 days d) 8 months + 5 days
- Q2. What should be the minimum age gap between two children?
 - a) one year b) Three years c) Two years d) one and a half-year
- Q3. What do you understand by idealism in the context of adolescence?
 - a) Understanding right and wrong. b) Checking different options.
 - c) Thinking that everyone is watching them. d) Thinking they are unique.
- Q4. Why should pregnant women get their hemoglobin checked?
 - a) To prevent diabetes. b) To prevent AIDS
 - c) To prevent HIV d) To prevent Anemia
- Q5. A pregnant woman may experience gas and discomfort if she eats _____ food?
 - a) Spicy b) Salty c) Sweet d) Boiled
- Q6. Friendship is important during adolescence because friends: -
 - a) Are of the same age. b) Have similar interests.
 - c) Are going through similar experiences. d) Engage in high-risk behaviors.

- Q7. The correct age for a woman to give birth to her first child is:
 a) 17 to 19 b) 21 to 35 c) 17 to 30 d) 18 to 20
- Q8. When does fetal movement (quickening) begin in the womb?
 a) In 6 months b) In 7 months c) In 9 months d) In 4 months
- Q9. At what age do babies typically get their first teeth?
 a) 2 to 4 years b) 4 to 6 years c) 10 to 12 years d) 16 to 18 years
- Q10. At what age do children typically lose their milk teeth?
 a) 2.5 years b) 5.5 years c) 1.5 years d) 8 years

Short Questions:

- Q1. What is fertilized egg called?
- Q2. What are the main factors effecting fetal development?
- Q3. Distinguish between growth and development?
- Q4. Describe the characteristics of authoritative parenting methods.
- Q5. How can growth be measured?

Long Questions:

- Q1. Breast feeding is the best nutrition for newborn baby. Give four reasons.
- Q2. Educate pregnant women about at least 5 changes that occur in the fetus during the first trimester of pregnancy.
- Q3. When planning a diet for a pregnant woman, which four food groups will you includes in her diet?
- Q4. What care should be taken for a pregnant woman during pregnancy?

Very Long Questions:

- Q1. What are Cephalocaudal and Proximodistal sequences and what do they refer to?
- Q2. Educate adolescent girls about any five upcoming physical changes they will experience.
- Q3. Suggest any five ways for adolescents to cope with peer pressure.
- Q4. List any five physical changes boys experience during adolescence.
- Q5. Inform your sister about any four changes occurring in the fetus during the first trimester of pregnancy.
- Q6. State any three factors affecting dynamic development.
- Q7. As a health worker in an ICDS (Integrated child Development Services) Centre raise awareness among pregnant women about any four factors that will affect the growth of their developing fetus.
- Q8. What are the five factors affecting fetal development?
- Q9. Educate girls about any five myths and facts related to menstruation.
- Q10. Explain the importance of knowing the family life cycle.

Lesson – 21

Ethics in Daily life

Values: Values are very important for our life. They guide our decisions and actions.

- Values can be both social and individual.

Ethics: Ethics is what tells us the right and wrong in our behavior and actions.

- It helps us to make our decisions and actions morally sound.

Relationship between Values and Ethics

VALUES OF LIFE	VALUES AT WORK PLACE
<p>It is important for each one of us to possess a set of values in order to maintain conducive atmosphere. A few of them are:</p> <ul style="list-style-type: none">• Honesty and loyalty• Respect for work• Punctuality, regularity and discipline• Courtesy and politeness with others• Judicious use of resources• Taking initiatives• Efficiency in completing tasks	<p>It is very important for an employee to possess a set of values in order to maintain a conducive atmosphere at the workplace. A few of them are mentioned below:</p> <ul style="list-style-type: none">• Honesty and loyalty for the organization• Respect for the work assigned• Punctuality, regularity and discipline• Judicious use of resources• Courtesy and politeness with co-workers• Efficiency in completing tasks• Willingness to take up new tasks

Values and ethics are interconnected. Our values influence our ethical decisions and actions. Ethics shapes our values, and when we act according to our values, and when we act according to our values and ethics. We live a responsible life.

Needs and Importance of Values and Ethics

- Values and ethics play a significant role in our personal development.
- They also play a role in developing social responsibility in humans.
- They help us in making decisions and taking actions.

Necessity of Ethics:

- It protects one's life from harm.
- It prevents the breakdown of families.
- It protects youth from falling in to addiction of wrong paths
- It keeps women and children safe from inappropriate behavior.

Rights and Responsibilities of an individual

- **Importance of responsible behavior:** Individual should act responsibly within their family and community.
- **Dual Nature of individuals:** Every possesses both rights and responsibilities
- **Benefits of fulfilling responsibilities:** Showing respect, helping others and acting maturely lead to personal satisfaction and harmonious relationships.

Caring and respecting others:

- One should respect their elders.
- One should behave respectfully with their friends.
- One should not speak to elders in a loud or disrespectful voice.
- One should not take under credit for other's work.
- Everyone should be given the opportunity to express their opinions freely.

Dignity of labour

- The dignity of labour is essential
- Every individual should be respected for their work.
- No one's work should be considered inferior
- Our tasks are often dependent on the work of others.

Lesson – 21 **Ethics in Daily life**

Objective Type Question Answers:

- Q1. How should we always express our feelings toward elders?
a) Anger b) Disrespect c) Respect d) Rudeness
Ans. c) Respect
- Q2. Children from poor families cannot imbibe values, "Do you agree with this statement"?
a) Agree b) Disagree c) Don't know d) cannot say in definite terms
Ans. b) Disagree
- Q3. What do we learn in school?
a) Discipline b) Misbehavior c) Beating d) None of above
Ans. a) Discipline

Very Short Answer Type Questions:

- Q4. What is the ability to understand recognize and relate to the emotions of other called?
Ans. Empathy
- Q5. What do we call the way we behave in difficult situations, which tests our values?
Ans. Sensitivity

Q6. Fill in the Blanks: -

- i) The term Ethics is derived from the Greek word
- ii) Professional ethics deals with the standards of behavior expected in a
- iii) Honesty, Integrity and fairness are examples ofvalues.
- iv) The study of ethics helps in making decisions.

Ans. i) Ethos ii) Profession iii) Moral iv) Right

Q7. State True or False: -

- i) We can care for others as long as we are happy and contented. (True/ false)
- ii) Only intolerance and aggression can give us what we want. (True/ false)
- iii) Education and good upbringing promote values. (True/ false)
- iv) Children from poor families cannot have values. (True/ false)
- v) Showing tolerance and empathy are the keys for leading a peaceful life. (True/ false)

Ans. i) False ii) False iii) True iv) False v) True

Short Answer Type Questions:

Q6. Which values do you consider important in your life? Write any four values.

Ans. I consider the following values important in my life:

- i) Respecting elders
- ii) Helping the needy and differently abled people.
- iii) Being sensitive towards girls and women.
- iv) Having a sense of empathy and cooperation towards the poor and depressed individuals.
- (v) Maintaining equality in food, education and clothing etc.

Q7. How does a positive attitude help us in our daily life?

Ans.

- i) A positive attitude directly impacts our lives. With a positive mindset, our daily life becomes joyful and hopeful.
- ii) It reflects an optimistic perspective and inspires us to focus on our strengths rather than weaknesses.
- iii) It helps in developing good relationships and maintaining a healthy life style.

Long Answer Type Questions

Q8. “The dignity of labour”-what steps should be taken for the employees in an office?

- Ans.
- i) Proper arrangements should be made for cleanliness and a suitable environment in the office.
 - ii) Employees should be provided with proper health-related facilities on time.
 - iii) Given fair wages based on their qualifications and contributions.
 - iv) Ensured long-term social security.
 - v) Treated fairly at the workplace without any kind of discrimination or partiality.

Q9 What could be four possible outcomes if people in society do not follow values?

Ans. People who do not follow values in society can lead to several consequences, such as:

- i) Such people become selfish and exploit other's right for their own benefit.
- ii) They do not respect the value of life and promote injustice.
- iii) Failure to follow values leads to increased stress, anxiety and disputes.
- iv) People who do not follow values tend to break rules and regulations and they also influence others negatively causing many to stop following social norms.

Model Test Paper
Lesson – 21
Ethics in Daily life

Objective Type Questions:

- Q1. Rohit saw that his friend had left his wallet on the taxi seat. But he thought it better to remain silent and left from there. Which value did he not display?
a) Impoliteness b) Punctuality c) Honesty d) Respect
- Q2. The bus conductor does not return the remaining amount to the passengers he lacks the value of: -
a) Punctuality b) Regularity c) Honesty d) Etiquette
- Q3. Every family has some goals and values. These goals can be short-term, medium-term ____
Ans a) Long term b) Contemporary c) Short term d) Past
- Q4. Whatever work we do, there are always some physical, economic, social, psychological or philosophical elements behind them. And these elements are:
a) Moral values b) Levels c) Goals d) Life values

Short Answer Type Questions:

- Q5. If people do not behave responsibly what four effects can it have on society?
- Q6. State four ethics expected from a doctor.
- Q7. Define the words 'ethics' and 'values'.
- Q8. "Where they are right", these are also responsibilities. Explain.
- Q9. In term "Dignity of labour" What do you understand by dignity? What is its importance for an employee?

Lesson – 22

Consumer! Beware, Be Aware

Consumer: - A person who uses goods for satisfaction and utility is called a consumer.

Problems faced by you as a consumer:

- Adulteration in products sold by many shopkeepers.
- Shopkeepers charge higher prices.
- Products may be defective or expired.
- Weight and measurement fraud
- Selling fake and low-quality goods
- Charging more than the printed price (MRP).

Solution to Consumer Problems:

- Be aware to prevent exploitation.
- Be informed about consumer rights.
- Participate in consumer education programs.
- Protect consumer right actively.
- Use standard certified products.
- Ensure the product has maximum retail price (MRP).

Role of Consumer education:

- What to buy?
- From where to buy?
- How much to buy?
- When to buy?
- How to make payments?

Consumer Aids to Help You?

A consumer aid is anything written or illustrated that helps and guides a consumer in selecting a product He / She wants to buy.

- labels
- Packages
- Advertisements
- Standardized marks
- Legislation
- Consumer organization

Consumer Organization and Laws

- Provides accurate and reliable information.
- Educate consumers through awareness campaigns.
- File complaints regarding consumer grievances in consumer courts.
- Government supervision is essential for resolving such issues.
- The consumer protection act passed in 1986 and amended in 2002, provides legal protection to consumers.

Your Rights as a Consumer

- Right to safety
- Right to information
- Right to Choose
- Right to Be Heard
- Right to seek Redressal
- Right to Consumer Education
- Right to a healthy Environment

Qualities of a Good Product Label

- The label should clearly state the product name, brand and manufactures details.
- Information about price and quantity should be provided.

- The manufacturing date and expiry date should be mentioned.
- The batch number and production code should be printed.
- Color-coded symbols or marks (if applicable) should be included.
- The net weight, volume and length of the product should be mentioned.

Procedure for filling a complaint by a consumer:

Any Person / Consumer can file a complaint. The person concerned can register the complaint on their own understanding.

District Level

Complaints for goods valued up to Rs 20` Lakhs can be registered at the district level

State Level

Complaints for goods valued between Rs 20 Lakhs to ` 1 Crores can be registered
At the state level

National Level

Complaints for goods valued above Rs 1 Crore can be registered at the national level.

Consumer Protection and Redressal Act

The consumer protection and redressal act was passed in 1986 and came into effect in 1987.

Certified quality marks for product quality awareness.

ISI MARK -



Electrical appliance, Pressure cooker, Cement, Biscuit, Toys, and Coffee etc.

FPO MARK -



Processed food products like Canned fruits, Jams sauces, fruits and vegetable, pickles.

AGMARK -



Used for agricultural and food products such as grain, Pulses, fruits, Jaggery, Oil, Spices etc.

WOOL MARK -



Used for pure wool and woolen clothes.

HALLMARK -



Used for the purity of gold and Silver Jewellery.

ECO MARK -



Used for recyclable products, detergents plastics, paints etc.

Lesson 22
Consumer! Beware. Be Aware.

Objective Type Questions:

- Q1. When was the consumer protection act passed?
(a) 1982 (b) 1952 (c) 1986 (d) 1964
Ans. (c) 1986
- Q 2. Which standard mark should be checked when purchasing electrical items to ensure good quality?
(a) Agmark (b) FPO (c) ISI (d) Hall mark
Ans. (b) ISI
- Q3. When is consumer day celebrated?
(a) 1 April (b) 23 October (c) 15 March (d) 4 December
Ans. (a) 15 March
- Q4. Which substance is usually added as an adulterant to black pepper?
(a) Papaya Seed (b) Husk (c) Turmeric powder (d) Brick powder
Ans. (a) Papaya Seeds

Q5. Fill in the Blanks:

1. The person who buys goods and pays for services _____.
2. The items that we buy from the market _____.
3. Repair of an electric switch for which the consumer pays money _____.
4. The term used to indicate duplicate products _____.
5. The process of addition or removal of something to lower the quantity or quality of food stuffs _____.

Ans. 1. Consumer 2. Goods 3. Service 4. Adulteration 5. Adulteration

Q6. Match Column A with Column B:

Column A

- (i) A consumer should buy from
- (ii) The quantity to be bought
- (iii) The best time to buy is
- (iv) A consumer should know
- (v) Payment of goods can also

Column B

- (a) when the shops are less crowded.
- (b) Consumer Protection laws
- (c) Licensed shops/cooperative Stores only
- (d) Depends upon the requirement of the family
- (e) When genuine discounts are offered by shopkeepers be made
- (f) Cheques

Ans: - (i) c (ii) d (iii) a (iv) b (v) f

Very Short Answer Type Questions:

- Q1. What is the full form of CPA?
Ans. Consumer protection Act
- Q2. You want to buy a warm sweater for yourself. Which standardization mark will you look for on that sweater?
Ans. Wool mark standardization mark.
- Q3. Write the full form of FPO.
Ans. Fruit Product Order
- Q4. When is National Consumer Rights Act celebrated?
Ans. 24 December

Short Answer Type Questions

Q1. Define the term 'Consumer'?

Ans. A consumer is a person who buys goods or service for personal use and not for resale or commercial purpose.

Q2. What is adulteration?

Ans. Adulteration is the act of knowingly adding cheap or harmful substance to a product to increase its quantity or appearance, reducing its quality.

Q3. What do you understand by standard marks?

OR

What is the significance of standard marks?

Ans. Standard mark helps identify the purity and quality of a product and aid in choosing a right and safe product.

Q4. Right full forms of: - BIS, ISI, FSSAI.

Ans. BIS: - Bureau of Indian Standards.

ISI: - Indian Standard Institute.

FSSAI: - Food Safety and Standards Authority of India.

Long Answer Type Questions.

Q1. Describe the right of a consumer?

Ans.

- i) Right to safety: This right protects the consumer against goods and service that may be harmful to life and health.
- ii) Right to be informed: According to this right, the consumer must be provided with complete information about the quality, quantity price, ingredients etc. of the product.
- iii) Right to choose: This gives the consumer the freedom to select products from various brands, prices and quantities according to their needs.
- iv) Right to be heard: This ensures that the consumer has the right to raise their voice against any injustice done to them.
- v) Right to seek redressal: If the consumer suffers loss due to the use of a defective product. They have the right to claim compensation.
- vi) Right to consumer education: This right ensures that every consumer has the right to gain consumer related education so they can address their issues properly.
- vii) Right to basic need: Every consumer has the right to access basic, needs such as food, clothing, health facilities, shelter and education.
- viii) Right to a healthy environment: It is everyone's responsibility to keep the environment clean and safe. This right protects consumers from environmental damage and provides a healthy environment.

Q2. Instead of benefits, what kind of problems do consumers often face in the market?

Ans.

- i) **Price difference**: Many shopkeepers change more than the fixed price. Therefore, consumers be aware of the correct price to avoid being exploited.
- ii) **Shortage of quality goods**: There is an often a storage of good quality products in the market, consumers are forced to buy low-quality goods.
- iii) **Misleading packaging and branding**: Fake packaging and branding are often used to deceive consumers in the market by copying popular brands.
- iv) **Adulteration (mixing of impure substance)**: To increase profit shopkeepers mix cheaper or harmful substances into items like food which poses a risk to consume healthy.
- v) **Black Marketing/Hoarding**: Some traders hoard essential item to create artificial scare it and later sell them at higher prices.

Lesson 22

Objective Type Questions:-

- [illegible]

Very Short Questions

- Q1. Which standard mark will you check to buy good quality electrical goods?
Q2. You want to buy a silk scarf. Which standard mark will you look for on it?

Short Questions

- Q1. What do you understand by consumer education?
- Q2. On what types of food product is FPO used? Write the name of some food product on which it is used?

Long Questions

- Q1. Describe the process of filing a complaint in a consumer court.
- Q2. What is the importance of the information given on the label of a product?

Sample Paper - 1
Home Science
गृह विज्ञान
(216)

Time - 2.30 Hrs.

समय – 2:30 घंटे

M.M -85

पूर्णांक – 85

Section - A

- प्रश्न 1 मांसपेशियों के संचालन के लिए भोजन में किस तत्व की उपस्थिति अनिवार्य रूप से होनी चाहिए? 1
 a) आयोडीन b) लोहा c) कैल्शियम d) उपर्युक्त सभी
 Presence of _____ in food is essential for the function of muscles.
 a) Iodine b) Iron c) Calcium d) All of the above
- प्रश्न 2 किस रोग में हीमोग्लोबिन का स्तर कम हो जाता है? 1
 a) स्कर्वी b) एनीमिया c) घेंघा d) रतौंधी
 In which disease hemoglobin production is reduced?
 a) Scurvy b) Anemia c) Goiter d) Night Blindness
- प्रश्न 3 मरसराइजेशन एक _____ परिष्करण (फिनिश) है। 1
 a) नवोन्मेषी b) टिकाऊ c) सैनफोराइज्ड d) पार्चमेंटाइजेशन
 Mercerization is a _____ Finish.
 a) Renewable b) Durable c) Sanforized d) Parchmentization
- प्रश्न 4 टमाटर में सूक्ष्मजीवों की सक्रियता को रोकने में निम्नलिखित में से कौन-सी प्रक्रिया सहायक नहीं है? 1
 a) उबलते हुए पानी में डालें b) फ्रीज़र में रखें
 c) उन्हें शेल्फ पर रखें d) कोई नहीं
 Which of the following is not helpful in preventing microbial activity in tomatoes:
 a) Put in boiling water b) Keep in the freezer
 c) Keep them on the rack d) none of these
- प्रश्न 5 एक गर्भवती महिला को _____ नहीं करना चाहिए। 1
 (a) तम्बाकू का सेवन (b) समय-समय पर उचित भोजन
 (c) थकावट (d) नियमित दिनचर्या
 A pregnant women should not do _____.
 a) Consumption of tobacco b) Proper diet from time to time
 c) Vaccination d) Regular routine.
- प्रश्न 6 बच्चों के अस्थायी दाँत किस वर्ष तक आ जाते हैं? 1
 a) 3 वर्ष b) 5 वर्ष c) 6 वर्ष d) 20 वर्ष
 At which year do a child's temporary teeth appear.
 a) 3-year b) 5-year c) 6-year d) 20-years
- प्रश्न 7 कैनाइन दाँत किस महीने में निकलते हैं? 1
 (a) 6–12 माह (b) 16–23 माह
 (c) 13–19 माह (d) 22–23 माह
 In which month do canine teeth erupt?
 a) 6-12 month b) 16-23 month c) 13-19 month d) 22-23 month
- प्रश्न 8 यदि रेलगाड़ी में एक विक्रेता किसी वस्तु के लिए आपसे MRP से 5 रुपये अधिक लेता है, तो आप— 1
 (a) उसे 5 रुपये दे देंगे (b) खरीदने से इनकार करेंगे
 (c) संबंधित अधिकारियों से शिकायत करेंगे (d) उससे मोलभाव करेंगे
 If a vendor in a train charges you 5 rupees more than the MRP for an item, what will you do?
 a) Give him 5 Rs. b) Refuse to buy
 c) Complain to the concerned authorities d) Bargain with him

- प्रश्न 9 10 लाख से ऊपर मूल्य वाली वस्तुओं की शिकायत दर्ज करने के लिए आप कहाँ जाएँगे— 1
- (a) जिला उपभोक्ता न्यायालय (b) राज्य उपभोक्ता न्यायालय
(c) राष्ट्रीय उपभोक्ता न्यायालय (d) उच्च न्यायालय
- To file complaint for items priced above ₹10 lakh, you would approach the—
- a) District consumer forum b) State consumer forum
c) National consumer forum d) High Court
- प्रश्न 10 मिलावट से बचने के लिए हल्दी पाउडर खरीदते समय आप – 1
- a) एगमार्क (AGMARK) प्रमाणित हल्दी पाउडर खरीदेंगे।
b) सीलबंद पैकेट खरीदेंगे।
c) साबुत मसाले खरीदकर पिसवाएँगे।
d) किसी प्रसिद्ध ब्रांड की हल्दी खरीदेंगे।
- To avoid buying adulterated turmeric powder you-
- a) Will buy agmark certified turmeric powder. b) Will buy sealed packets
c) Will buy whole spices and get ground d) Will buy turmeric famous brand
- प्रश्न 11 लड़कों और लड़कियों की लंबाई में औसत अंतर कितना होता है? 1
- (a) 0.5 सेमी (b) 1.0 सेमी
(c) 1.5 सेमी (d) 2 सेमी
- What is the average difference in height between boys and girls?
- a) 0.5 cm b) 1.0 cm c) 1.5 cm d) 2 cm
- प्रश्न 12 ज्ञानात्मक विकास का तात्पर्य किसके विकास से है? 1
- (a) मस्तिष्क (b) हृदय
(c) सहयोग (d) व्यवहार
- What does cognitive development refer to the development of?
- a) Brain b) Heart c) Cooperation d) Behavior
- प्रश्न 13 एक स्कूल यूनिफॉर्म के लिए कपड़े का चयन करते समय हमें उस कपड़े में क्या सुनिश्चित करना चाहिए? 1
- (a) पक्का रंग (fast colour) (b) वस्त्र विक्रेता
(c) स्टार्च (d) जलरोधक (वॉटर प्रूफ)
- When selecting fabric for school uniform what should be ensured regarding the fabric?
- a) Fast colour b) Fabric seller c) Starch d) Water proof
- प्रश्न 14 लड़कियों में रजःस्राव (कौमार्य/प्यूबर्टी) कब आरंभ होता है? 1
- (a) 6–16 वर्ष (b) 16–18 वर्ष
(c) 9–16 वर्ष (d) 11–20 वर्ष
- When does menstruation (puberty) begin in girls?
- a) 6–16 years b) 16–18 years c) 9–16 years d) 11–20 years
- प्रश्न 15. जिस क्रम में बच्चे समग्र रूप से विकसित होते हैं, वे दो प्रकार के होते हैं— 1
- a) सीखना तथा परिपक्वता b) निरंतर तथा परस्पर संबंधित
c) वृद्धि तथा विकास d) साइकोसोशल व साइकोमोटर
- The order in which children develop as a whole is two-fold as follows.
- a) Learning and Maturity b) Continuous and interrelated
c) Growth and Development d) Cephalocodal and proximodistal
- प्रश्न 16. बिजली के कनेक्शन से चिपके हुए व्यक्ति को अलग करने के लिए— 1
- (a) अपने हाथों का उपयोग करें (b) लोहे की छड़ का उपयोग करें
(c) लकड़ी की वस्तु का उपयोग करें (d) आस-पास की वस्तुओं का उपयोग करें
- To separate a person stuck to an electric connection—
- a) Use your hand. b) Use a metallic rod.
c) Use a wooden object. d) Use a nearby object.
- प्रश्न 17. हड्डी टूटने के मामले में— 1
- (a) घायल अंग को स्प्लिंट करें (b) पीड़ित को बताएँ
(c) पीड़ित को कुछ पीने दें (d) डॉक्टर को बुलाएँ
- In case of a bone fracture—
- a) Splint the limb. b) Tell the victim
c) Give the victim something to drink d) Call a doctor

- प्रश्न 18. सवातन (Ventilation) क्या है? 1
- (a) घर में खिड़की और दरवाजे (b) स्वच्छ हवा
(c) सूर्य का प्रकाश (d) उपरोक्त में से कोई नहीं
- What is ventilation?
a) Windows and doors in the house. b) Fresh air
c) Sunlight d) None of the above
- प्रश्न 19. पल्स पोलियो के लिए कौन-सा दिन चुना गया है? 1
- (a) सोमवार (b) मंगलवार
(c) गुरुवार (d) रविवार
- Which day is chosen for pulse polio?
a) Monday b) Tuesday
c) Thursday d) Sunday
- प्रश्न 20) बताइए कि निम्नलिखित कथन सत्य हैं या असत्य— 2
- (a) ऊनी कपड़ों को किसी भी डिटरजेंट घोल से धोया जाता है।
(b) ऑर्गेन्डी एक स्थायी रूप से कड़क किया हुआ कपड़ा है।
(c) रेशमी कपड़ों को धोने के लिए गुनगुने पानी का उपयोग करें।
(d) शाकाहारी भोजन में दालें प्रोटीन का मुख्य स्रोत होती हैं।
- State whether the following sentences are True or false-
a) Woolen clothes are washed with any detergent solution.
b) Organdy is a permanently stiff fabric.
c) Use mild liquid soap for washing silk clothes
d) This is the main source of protein in vegetarian food.
- प्रश्न 21 कहिए कि निम्नलिखित वाक्य सत्य हैं या असत्य — 2
- a) कॉटन एक फिलामेंट रेशा है।
b) प्राकृतिक रेशों को रसायनों से बनाया जा सकता है।
c) ऊन एक पौधा आधारित रेशा है।
d) रेयान एक मानव निर्मित रेशा है।
- State whether the following sentences are true or false-
a) Cotton is a filament
b) Natural fibers can be made from chemicals
c) Wool is plant fiber
d) Rayon is man-made fiber.
- प्रश्न 22 कहिए कि निम्नलिखित वाक्य सत्य हैं या असत्य — 2
- a) टमाटर और अंगूरों में रेशा होता है।
b) सब्जी खाने से पहले छिलका उतार लेना चाहिए।
c) हमारे आहार में रेशे की आवश्यकता नहीं होती है।
d) भोजन में पोषक तत्वों का होना आवश्यक है।
- State whether the following sentences are true or false-
i) Tomatoes and grapes contain fiber.
ii) The peel should be removed before eating Apple.
III. Fiber is not necessary in our diet.
iv) It is necessary for nutrients to be present in food.
- प्रश्न 23 कहिए कि निम्नलिखित वाक्य सत्य हैं या असत्य — 2
- a) लड़कियों को आयरन-युक्त भोजन लेना चाहिए।
b) जननांग स्वच्छता लड़कों और लड़कियों दोनों के लिए महत्वपूर्ण है।
c) बच्चों को किशोरावस्था के दौरान होने वाले परिवर्तनों की जानकारी होनी चाहिए।
d) मासिक धर्म के दौरान स्वच्छता को बाहर नहीं खेलना चाहिए।
- State whether the following sentences are true or false-
i) Girls should eat iron-rich food.
ii) Genital hygiene is important for both boys and girls.
iii) One should be aware of the changes that occur during adolescence.
iv) One should not play outside during menstruation.

प्रश्न 24 कहिए कि निम्नलिखित वाक्य सत्य हैं या असत्य —

2

- a) माँ का दूध सर्वोत्तम आहार है।
- b) वातावरण में/हवा में धूल के कणों की मात्रा कम हो जाती है।
- c) चूल्हे पर ऊँची चिमनी लगाने से वायु प्रदूषण कम होता है।
- d) सड़कें पक्की होनी चाहिए ताकि धूल वातावरण में न मिल सके।

State whether the following sentences are true or false-

- i) Mother's milk is the best food.
- ii) The amount of dust particles in the air decreases in air pollution.
- iii) Installing a high chimney on the store reduces air pollution.
- iv) Road should be paved so that dust does not mix into environment.

प्रश्न 25 कहिए कि निम्नलिखित वाक्य सत्य हैं या असत्य —

2

- a) किशोरावस्था के दौरान मित्र महत्वपूर्ण होते हैं।
- b) संक्रामक रोग संपर्क, वायु, भोजन, पानी से फैलते हैं।
- c) जल स्रोतों में पशुओं को नहलाया न जाए।
- d) पानी के स्रोत, सीवेज से प्रदूषित होता है।

State whether the following sentences are true or false-

- i) Friends are important during adolescence.
- ii) Infectious diseases spread through contact, air, food, water.
- iii) Animals should not be bathed in water sources.
- iv) Sewage pollutes water sources.

प्रश्न 26- कॉलम I और कॉलम II का मिलान करें —

2

- | | |
|------------------|---------------------------|
| 1. आम का जैम | a) पोटैशियम मेटाबिसल्फाइट |
| 2. नींबू का अचार | b) चीनी |
| 3. आलू के चिप्स | c) साइट्रिक एसिड |
| 4. स्क्वैश | d) नमक |

Match the Column I and Column II

- | | |
|-------------------|-----------------------------|
| i) Mango jam | a) Potassium Metabisulphite |
| ii) Lemon Pickle | b) Sugar |
| iii) Potato chips | c) Citric Acid |
| iv) Squash | d) Salt |

प्रश्न 27 कॉलम I और कॉलम II का मिलान करें —

2

- | | |
|---------------|-------------|
| 1. ग्रिल बर्स | a) पेस्ट्री |
| 2. ओवन | b) पराठा |
| 3. कड़ाही | c) कबाब |
| 4. तवा | d) पकौड़े |

Match the Column I and Column II

- | | |
|-----------------|------------|
| i) Grill bars — | a) Pastry |
| ii) Oven — | b) Chapati |
| iii) Kadahi — | c) Kababs |
| iv) Tava — | d) Pakoras |

प्रश्न 28- कहिए कि निम्नलिखित वाक्य सत्य हैं या असत्य —

2

- a) **अचार में मसाले मिलाने पर सूक्ष्मजीवों की वृद्धि कम हो जाती है।**
- b) जब हम स्क्वैश बनाते हैं तो तेल व चीनी का प्रयोग करते हैं।
- c) एंटीबायोटिक सूक्ष्म जीवों को बढ़ाता है।
- d) सब्जियों को लंबे समय तक खराब हुए बिना रखा जा सकता है।

State following statement are true or false.

- i) Growth of microorganisms reduces when spices are mixed in pickle.
- ii) When we make squash we use acid and sugar.
- iii) Enzymes increase microorganisms.
- iv) Orange can be kept without spoiling for long time.

- प्रश्न 29 निम्नलिखित कथन सत्य है या असत्य। 2
- मेथी की पत्तियों में निर्जलीकरण होता है।
 - प्रातः काल बिस्तर छोड़ने से पहले कुछ खाना चाहिए।
 - भ्रूण के विकास की जाँच के लिए नियमित रूप से डॉक्टर के पास जाना चाहिए।
 - गर्भावस्था का समय नौ महीने होता है।
- State following statement are true or false.
- Dehydration occurs in fenugreek leaves.
 - One should regularly visit the doctor to check the development of fetus.
 - One should eat sometimes before leaving the bed in the morning.
 - Pregnancy lasts for nine months.
- प्रश्न 30 खाली स्थान की पूर्ति करें – 2
- _____ की उपस्थिति में विटामिन D का निर्माण होता है।
 - विटामिन A का एक कार्य _____ को स्वस्थ रखना है।
 - हरी पत्तेदार सब्जियों में _____ मिलता है।
 - _____ और _____ प्रोटीन के स्रोत हैं।
- Fill in the blanks-
- Vitamin D is formed in the presence of _____.
 - One function of vitamin A is to keep _____ healthy.
 - Green leafy vegetables are rich sources of _____.
 - _____ and _____ are sources of protein.
- प्रश्न 31 खाली स्थान भरें – 2
- माचिस तथा रसायनों को बच्चों की पहुँच से _____ रखें।
 - दो इलेक्ट्रिक उपकरणों को _____ सॉकेट में उपयोग करें।
 - रसोईघर में काम करते समय _____ कपड़े पहनें।
 - रात के समय गैस सिलेंडर के नॉब को _____ रखना चाहिए।
- Fill in the Blanks-
- Matches and chemicals should be kept out of _____ of children.
 - Two electrical appliances should be used in a _____ socket.
 - While working in the kitchen, one should wear _____ clothes.
 - The knob of the gas cylinder should be kept _____ at night.
- Section - B**
- प्रश्न 32 रसोईघर में काम करते समय किन चार बातों का ध्यान रखना चाहिए? 2
- While working in the kitchen, what four things should be kept in mind?
- प्रश्न 33 विषाक्तता क्या है? 2
- What is toxicity?
- प्रश्न 34 एम्बुलेंस, अस्पताल, पुलिस स्टेशन, अग्नि शमन केन्द्र के आपातकालीन फोन नम्बर की सूची तैयार करें। 2
- Prepare a list of emergency phone numbers for doctors, ambulances, hospitals, police stations and fire stations?
- प्रश्न 35 प्राथमिक उपचार देने वाले व्यक्ति की दो विशेषताएँ बताइए। 2
- State two characteristics of a person giving first aid.
- प्रश्न 36 लक्ष्य और संसाधनों को परिभाषित कीजिए। 2
- Define Goals and Resources.
- प्रश्न 37 प्रबंधन प्रक्रिया में मूल्यांकन के महत्व को समझाइए। 2
- Explain the importance of evaluation in the management process.
- प्रश्न 38 परिवार के सदस्यों के दो कार्य बताइए। 2
- State two functions of family members.
- प्रश्न 39 आप चौथी तिमाही से क्या समझते हैं? 2
- What do you understand by the fourth quarter?
- प्रश्न 40 परिवार के लिए अनुशासन क्यों आवश्यक है? 2
- Why is discipline necessary for the family?

- या
परिवार जीवन चक्र क्या है?
What is the family life cycle?
- प्रश्न 41 किशोरावस्था में संज्ञानात्मक विकास की किसी भी दो विशेषताएँ बताइए। 3
Mention any two characteristics of the cognitive development of adolescents.
- प्रश्न 42 बच्चों के चार जन्मजात गुणों की सूची बनाइए। 3
List four inherited traits of children.
- या
महत्त्वपूर्ण / प्रचलित भोजन बनाने की विधियाँ लिखिए।
Write down the important / trending food cooking methods.
- प्रश्न 43 संक्रामक रोगों के फैलने के माध्यम का वर्णन कीजिए। 3
Describe the mediums through which infectious diseases spread.
- या
अपने पीने के पानी को दूषित होने से बचाने के चार कारण बताइए।
State four reasons to protect your drinking water from contamination.
- प्रश्न 44 मटर को फ्रीज करने की विधि लिखिए। 3
Write the method of freezing of peas.
- या
फल और सब्जियों को फ्रीज करने के दौरान सावधानी लिखिए।
Write the precaution to be taken during the freezing of fruits and vegetables.
- प्रश्न 45 आपका मित्र ट्यूशन कक्षाओं में नियमित रूप से देर से आता है। इस समस्या से निपटने के लिए प्रबंधन प्रक्रिया उपयोग कीजिए। 5
Your friend is regularly late for tuition coaching classes. Use your knowledge of management processes to deal with this problem.
- प्रश्न 46 समय और ऊर्जा बचाने के लिए घर में उपलब्ध उपकरणों की सूची तैयार कीजिए। 5
बिना किसी उपकरण का उपयोग किए कार्य पूरा कीजिए और फिर अपने शब्दों में समय के अंतर को लिखिए।
Prepare a list of equipment available at home to save time and energy for a task, complete the task without using any equipment and then write in your own words the difference in time taken by own methods.

SAMPLE PAPER-1

ANSWER KEY

SECTION-A

खंड – अ

1-	कैल्शियम	(C) Calcium
2-	एनीमिया	(B) Anaemia
3-	टिकाऊ / सैंफराइज्ड	(B) Durable (C) Sanforized (any one from both)
4-	रैक पर रखें	(C) Keep them on the rack
5-	तंबाकू का सेवन	(A) Consumption of tobacco.
6-	3 वर्ष	(A) 3 years
7-	13-19 महीने	(C) 13-19 months
8-	संबंधित प्राधिकरण को शिकायत करें	(C) Complain to the concerned authorities.
9-	राष्ट्रीय उपभोक्ता फोरम	(C) National Consumer forum.
10-	एगमार्क प्रमाणित हल्दी खरीदेंगे	(A) Will buy agmark certified turmeric powder.
11-	0.5 सेमी	(A) 0.5 cm
12-	मस्तिष्क	(A) Brain
13-	फास्ट कलर	(A) fast colour
14-	9-16 वर्ष	(C) 9-16 years
15-	Cephalocodal और Proximodistal	(D) Cephalocodal and Proximodistal
16-	लकड़ी की वस्तु का उपयोग करें	(C) Use a wooden object.
17-	अंग को पट्टी बांधें	(A) Splint the limb.
18-	ताजी हवा	(B) Fresh Air
19-	रविवार	(D) Sunday
20-	i) झूठा ii) सही iii) सही iv) सही	i) False ii) True iii) True iv) True
21-	i) झूठा ii) झूठा iii) झूठा iv) सही	i) False ii) false iii) false iv) True
22-	i) सही ii) झूठा iii) झूठा iv) सही	i) True ii) False iii) False iv) True
23-	i) सही ii) सही iii) सही iv) झूठा	i) True ii) True iii) True iv) False
24-	i) सही ii) झूठा iii) सही iv) सही	i) True ii) False iii) True iv) True
25-	i) सही ii) सही	i) True ii) True iii) True

	iii) सही iv) सही	iv) True
26-	i) B ii) D iii) A iv) C	i) B ii) D iii) A iv) C
27-	i) C ii) A iii) D iv) B	i) C ii) A iii) D iv) B
28-	i) झूठा ii) सही iii) सही iv) झूठा	i) False ii) True iii) True iv) False
29-	i) सही ii) सही iii) सही iv) सही	i) True ii) True iii) True iv) True
30-	i) सूरज की रोशनी ii) आंखें iii) लौह iv) दालें, सोयाबीन	i) Sunlight ii) eyes iii) Iron iv) pulses, Soyabean

Section-B

खंड – ख

उत्तर32 रसोईघर में काम करते समय सावधानी बरतनी बहुत जरूरी है। इसके लिए निम्नलिखित बिंदुओं का ध्यान रखना चाहिए:

- तेज वस्तुओं का उपयोग सावधानी से करें: चाकू और कैंची जैसी तेज वस्तुओं का उपयोग ध्यानपूर्वक करें ताकि चोट न लगे।
- गैस और चूल्हे का सही उपयोग: गैस, स्टोव या बर्नर का उपयोग करते समय सतर्क रहें।
- ज्वलनशील वस्तुएँ दूर रखें: आग के पास कपड़े या अन्य ज्वलनशील सामग्री न रखें।
- रसोईघर को साफ और व्यवस्थित रखें: काम करने की जगह साफ-सुथरी और व्यवस्थित होनी चाहिए।

While working in the kitchen the following four points should be kept in mind:-

- Use sharp utensils like knives and scissors with caution.
- Exercise caution while using gas, stoves, burners.
- Keep flammable materials, such as clothes away from fire.
- Keep the kitchen clean and organized.

उत्तर33 विषाक्तता (Toxicity) किसी पदार्थ की वह विशेषता है जो जीवित जीवों के लिए हानिकारक हो सकती है और उन्हें नुकसान पहुँचा सकती है या मार सकती है। यह हानि रासायनिक, जैविक या भौतिक पदार्थों के कारण हो सकती है।

Toxicity is property of a substance that is harmful to living organisms and can damage or kill them. This harm can be caused by a chemical, biological or physical substance.

उत्तर34 आपातकालीन स्थिति में निम्नलिखित नंबर उपयोगी हैं:

- मेडिकल / एम्बुलेंस (Ambulance) – 102
- अग्निशमन विभाग (Fire Brigade) – 100
- पुलिस हेल्पलाइन (Police Helpline) – 101
- राष्ट्रीय आपातकालीन नंबर (Other Emergency Services) – 181
- Doctor / Hospital: 102 (Ambulance)

उत्तर35 आपातकालीन स्थिति में व्यक्ति के पास निम्नलिखित गुण होना चाहिए:

1. शांत और धैर्यवान (Calm and Patient):

आपातकालीन स्थिति में शांत रहना और धैर्य के साथ कार्य करना आवश्यक है ताकि सही निर्णय लिया जा सके।

2.सहज ज्ञान और दक्षता (Knowledgeable):

व्यक्ति के पास प्राथमिक चिकित्सा (First Aid) और उसके तकनीकों का सही ज्ञान होना चाहिए।

A person should have the following qualities in an emergency situation:

1.It is important to remain calm and work with patience so that the right decision can be made.

2.Knowledgeable -One should have correct knowledge of first aid and its techniques.

उत्तर36 1.लक्ष्य (Goals):लक्ष्य वे विशिष्ट परिणाम या उद्देश्य हैं जिन्हें कोई व्यक्ति या संगठन प्राप्त करना चाहता है। ये भविष्य की दिशा निर्धारित करते हैं।

2.साधन (Resources):साधन वे सभी माध्यम हैं (भौतिक, वित्तीय, मानव और सूचनात्मक) जिनका उपयोग लक्ष्यों को प्राप्त करने के लिए किया जाता है।

1.Goals - They are specific outcomes or objectives that an individual or organization want to achieve. They determine the future direction.

2.Resources- They are all the mean (physical financial, human, Informational) that are used to achieve goals.

उत्तर37 प्रबंधन प्रक्रिया में मूल्यांकन के निम्नलिखित महत्व हैं:

1प्रदर्शन का आकलन (Assessment of Performance):

यह यह जानने में मदद करता है कि लक्ष्य प्राप्त हुए हैं या नहीं और यदि नहीं, तो क्यों।

2सुधार के अवसर (Opportunities for Improvement):

यह कमजोरियों और कमियों की पहचान करता है, जिससे भविष्य की योजना और रणनीतियों में सुधार किया जा सके।

3जवाबदेही सुनिश्चित करना (Ensuring Accountability):

यह सुनिश्चित करता है कि व्यक्ति और टीम अपने कार्यों और परिणामों के लिए जिम्मेदार हों।

Importance of evaluation in the management process:-

Assessment of performance:- This helps in determining whether the goals have been achieved and if not, why not.

Opportunities for improvement:- This identifies weaknesses and short comings, which allows for improvement in future planning and strategies.

Ensuring accountability:- This ensure that individuals and teams are responsible for their actions and result.

उत्तर38 परिवार के सदस्यों के कार्य

1. एक-दूसरे का सहयोग और समर्थन करना – हाईकोर्ट, जिला और स्थानीय स्तर से एक-दूसरे का सहयोग करना
2. पारिवारिक मूल्यों और परंपराओं को बनाए रखना – अपने अनुभव के अनुसार अनुशासन और सामाजिक शिक्षा प्रदान करना

Two functions of family members :-

- To Co-operate and support each other: To provide emotional, Physical, and financial support to each other.
- To preserve family values and traditions: To impart moral education and cultural heritage to their generation.

उत्तर 39 'The Fourth trimester' उस अवधि को कहते हैं जब बच्चा जन्म लेने के बाद मां और बच्चे दोनों को नई जीवनशैलीके अनुसार ढलना पड़ता है। यह समय मां के शारीरिक और मानसिक स्वास्थ्य तथा बच्चे की देखभाल के लिए बहुत महत्वपूर्ण है।

'The Fourth trimester' refers to the period after the baby is born, and both the mother and the baby need to adapt to a new life. This time is very important for the mother's physical and mental health, as well as the care of the baby.

उत्तर 40 परिवार में अनुशासन का महत्व / परिवार जीवन चक्र

परिवार में शांति, सम्मान और समझ बनाए रखने के लिए अनुशासन आवश्यक है। यह बच्चों के पालन-पोषण में मदद करता है, संघर्षों से बचाता है और सुनिश्चित करता है कि सभी नियम और जिम्मेदारियों का पालन करें।

वैकल्पिक: परिवार जीवन चक्र – परिवार के विभिन्न चरण जैसे विवाह, संतान का जन्म, बच्चों का पालन-पोषण, उनकी स्वतंत्रता और वृद्धावस्था, प्रत्येक सदस्य की जरूरतों, भूमिकाओं और जिम्मेदारियों को प्रभावित करते हैं। Discipline is necessary in a family to maintain peace, respect and understanding among all family members. It helps in proper upbringing of children, avoid conflicts, and ensures everyone follows rules and responsibilities.

Or

परिवार जीवन चक्र में चरण को दर्शाता है। इसमें परिवार को विभिन्न चरणों से गुजरना पड़ता है जैसे – विवाह, संतान का जन्म, बच्चों का पालन-पोषण, बच्चों की स्वतंत्रता और वृद्धावस्था। ये चरण प्रत्येक सदस्य की जरूरतों, भूमिकाओं और जिम्मेदारियों को प्रभावित करते हैं।

The family life cycle refers to the stages a family goes through over time-like marriage, childbirth, raising children, children's independence and old age. These stages affect the needs, roles, and responsibilities of each family member.

उत्तर 41– **संज्ञानात्मक विकास की दो विशेषताएँ हैं—**

- i) **तार्किक सोच** – किशोर तार्किक रूप से सोचना शुरू करते हैं। वे परिस्थितियों का विश्लेषण करने और तर्क का उपयोग करके समस्याओं को हल करने में सक्षम होते हैं।
- ii) **अमूर्त सोच** – वे न्याय, स्वतंत्रता, नैतिकता जैसे अमूर्त विचारों के बारे में सोचना शुरू करते हैं। वे भौतिक दुनिया से परे अवधारणाओं को समझने की क्षमता विकसित करते हैं।

Two characteristics of the cognitive development are

- i) Logical thinking- Adolescents start thinking logically. They are able to analyze situations and solve problems using reasoning.
- ii) Abstract thinking- They begin to think about abstract ideas such as justice, freedom, morality. They develop the ability to understand concepts beyond the physical world.

उत्तर 42– **बच्चों के वंशानुगत लक्षण**

बच्चों के प्राप्त होने वाले वंशानुगत लक्षण बच्चों के माता-पिता से उनके आनुवंशिक गुणों के माध्यम से प्राप्त होते हैं।

1. आंखों का रंग – बच्चों की आंखों का रंग माता-पिता के रंग से मिलता-जुलता होता है (उदा. भूरा, नीला, हरा)।
2. बालों का प्रकार – बालों की बनावट (सीधे, घुंघराले), रंग (काला, भूरा, सुनहरा) और गंजापन आनुवंशिक हो सकता है।
3. ऊँचाई – व्यक्ति की अंतिम ऊँचाई माता-पिता की ऊँचाई पर निर्भर करती है।
4. रक्त समूह – बच्चे का रक्त समूह (A, B, AB, O) माता-पिता के रक्त समूहों के संयोजन से निर्धारित होता है।

List of four Inherited traits in children: -

Inherited traits are characteristics acquired by children from their parents through genetic inheritance.

These traits found in children are follows-

- i) Eye Colour- Children eye colour affect resembles or is similar to the eye colour of their parents (eg- Brown, Blue, Green)
- ii) Hair Type- Hair texture (Straight, curly) Colour (Black, Brown, Golden) and balding can be inherited.
- iii) Height- An individual's final height is significantly influenced by the height of their parents
- iv) Blood Group- A child's blood group (eg- A, B, AB, O) is always based on the combination of their parents blood groups.

Or

प्राकृतिक आहार की पोषिकता बढ़ाने के चार तरीके –

1. विभिन्न प्रकार के खाद्य पदार्थों का सेवन – अपने आहार में विभिन्न प्रकार के फल, सब्जियाँ, अनाज और प्रोटीन स्रोत शामिल करें ताकि सभी आवश्यक पोषक तत्व मिल सकें।
2. खाद्य पदार्थों को सही तरीके से तैयार और पकाएँ – पोषक तत्वों को संरक्षित करने वाली विधियों जैसे भाप में पकाना, बेकिंग या हल्की सॉटिंग का उपयोग करें और अधिक पकाने से बचें।
3. फैक्टरीकृत खाद्य पदार्थों और अतिरिक्त शर्करा से बचें – परिष्कृत शर्करा, अस्वस्थ वसा और कृत्रिम एडिटिव्स वाले खाद्य पदार्थों का सेवन कम करें, क्योंकि इनमें अक्सर आवश्यक पोषक तत्वों की कमी होती है।
4. पोषक तत्वों से भरपूर विकल्पों और फोर्टिफिकेशन पर विचार करें – ऐसे खाद्य पदार्थ चुनें जो प्राकृतिक रूप से विटामिन और मिनरल्स में समृद्ध हों और जहाँ आवश्यक हो, फोर्टिफाइड खाद्य पदार्थों का सेवन करें ताकि विशेष कमी को पूरा किया जा सके।

Ways to increase Nutritional value of daily diet:-

- 1) Incorporate a variety of whole foods:- Emphasize fruits, Vegetables, whole grains, lean proteins and healthy fats to ensure a broad spectrum of nutrients.
- 2) Minimize processed foods and added sugar- Reduce intake of foods high in refined sugars, unhealthy fats and artificial additives which often lack essential nutrients.

- 3) Practice proper food preparation and cooking methods:- Utilize techniques that preserve nutrients such as steaming baking or light sauteing and avoid overcooking.
- 4) Consider nutrient dense options and fortification- Choose foods naturally rich in vitamin and minerals and explore fortified foods where necessary to address specific deficiencies.

or

खाद्य पदार्थ बनाने की महत्वपूर्ण आधुनिक विधियाँ –

1. स्टीमिंग (Steaming) – पानी की भाप में खाना पकाना। यह एक नरम विधि है जो खाने में पानी में घुलनशील विटामिन और मिनरल्स को बनाए रखती है।
2. तलना (Frying) – तेल या घी में खाना पकाना। इसमें डीप फ्राइंग और शैलो फ्राइंग दोनों शामिल हैं।
3. भूनना / बेक करना (Roasting/Baking) – ओवन में या सीधे आग पर सूखी गर्मी का उपयोग करके खाना पकाना। यह मांस, सब्जियाँ और बेकरी उत्पादों के लिए उपयोगी है।
4. ग्रिल करना (Grilling) – सीधे गर्म स्रोत के ऊपर खाना पकाना, जिससे बाहर से क्रिस्पी और अंदर से नरम बनता है। यह मांस और सब्जियों के लिए लोकप्रिय विधि है।

Important Trending food cooking method -

i) Steaming:- A gentle method that he retain water soluble vitamin and minerals by cooking food in steam.

ii) Frying:- Cooking food in oil or ghee, This includes deep frying and shallow frying.

iii) Roasting/Baking:- Cooking food using dry heat in an oven or directly over fire. This is used for meat, vegetables and bakery products.

Grilling:- Cooking food directly over a heat source resulting in a crispy exterior and tender interior. This popular for meat and vegetables.

विभिन्न प्रकार के पालन-पोषण शैलियाँ इस प्रकार हैं:-

- 1) अधिकारवादी पालन-पोषण (Authoritarian parenting):
 - इस शैली में माता-पिता कठोर नियम और अपेक्षाएँ निर्धारित करते हैं और बच्चों से उनका पालन करने की उम्मीद रखते हैं।
 - वे अक्सर बच्चों के साथ बहुत कम संवाद करते हैं और दंड का उपयोग करते हैं।
 - बच्चों को अपनी राय व्यक्त करने की कम अनुमति दी जाती है।
- 2) अधिकारसंपन्न पालन-पोषण (Authoritative Parenting):
 - इस शैली में माता-पिता नियम और सीमाएँ निर्धारित करते हैं, लेकिन वे बच्चों की भावनाओं और विचारों को भी महत्व देते हैं।
 - वे बच्चों के साथ संवाद करते हैं और बताते हैं कि नियम उन्हें स्वायत्तता प्रदान करते हैं।
 - इस शैली को बच्चों के लिए सबसे सकारात्मक परिणाम देने वाली माना जाता है।
- 3) अनुमति आधारित पालन-पोषण (Permission parenting):
 - इस शैली में माता-पिता बच्चों पर बहुत कम नियंत्रण रखते हैं और अपेक्षाएँ कम होती हैं।
 - वे बच्चों को बहुत स्वतंत्रता देते हैं और अक्सर उन्हें अपने निर्णय स्वयं लेने देते हैं, भले ही वे गलत हों।
 - वे बच्चों के साथ दोस्ताना संबंध बनाए रखते हैं।
- 4) उपेक्षापूर्ण पालन-पोषण (Neglectful Parenting):
 - इस शैली में माता-पिता बच्चों की जरूरतों पर कम ध्यान देते हैं और भावनात्मक रूप से अनुपस्थित रहते हैं।
 - वे बच्चों को बहुत कम मार्गदर्शन या समर्थन प्रदान करते हैं।
 - इस शैली को बच्चों के विकास के लिए सबसे हानिकारक माना जाता है।

Various types of parenting styles as follows:-

- 1) Authoritarian parenting-
 - In this style parents set strict rule and expectations and expect their children to follow them.
 - They often communicate very little with their children and use punishment.
 - children are given less permission to express their opinions.
- 2) Authoritative Parenting-
 - In this style parents set rules and boundaries, but they also value children emotions and thoughts.
 - They communicate with children and explain that rules provide them with autonomy.
 - This style is considered to yield the most positive outcomes for children.
- 3) Permission parenting:-
 - In this style parents have very little control over children and have very low expectations.

- They give children a lot of freedom and often let them make their own decisions, even if they are wrong.
- They maintain a friendly relationship with their children.

4) Neglectful Parenting-

- In this style parents pay little attention to childrens needs and are emotionally absent.
- They provide very little guidance or support to children.
- This style is considered most detrimental to the development of children.

उत्तर 43 प्राकृतिक आहार की पोषिकता बढ़ाने के चार तरीके –

1. विभिन्न प्रकार के खाद्य पदार्थों का सेवन – अपने आहार में विभिन्न प्रकार के फल, सब्जियाँ, अनाज और प्रोटीन स्रोत शामिल करें ताकि सभी आवश्यक पोषक तत्व मिल सकें।
2. खाद्य पदार्थों को सही तरीके से तैयार और पकाएँ – पोषक तत्वों को संरक्षित करने वाली विधियों जैसे भाप में पकाना, बेकिंग या हल्की सॉटिंग का उपयोग करें और अधिक पकाने से बचें।
3. फैक्टेरीकृत खाद्य पदार्थों और अतिरिक्त शर्करा से बचें – परिष्कृत शर्करा, अस्वस्थ वसा और कृत्रिम एडिटिव्स वाले खाद्य पदार्थों का सेवन कम करें, क्योंकि इनमें अक्सर आवश्यक पोषक तत्वों की कमी होती है।
4. पोषक तत्वों से भरपूर विकल्पों और फोर्टिफिकेशन पर विचार करें – ऐसे खाद्य पदार्थ चुनें जो प्राकृतिक रूप से विटामिन और मिनरल्स में समृद्ध हों और जहाँ आवश्यक हो, फोर्टिफाइड खाद्य पदार्थों का सेवन करें ताकि विशेष कमी को पूरा किया जा सके।

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or

संक्रामक रोगों के संचरण के तरीके –
संक्रामक रोग कई माध्यमों से फैल सकते हैं:-

1. वायु द्वारा (By Air):
खाँसी या छींक के दौरान हवा में छोड़े गए छोटे कणों के माध्यम से रोगाणु फैलते हैं। जब कोई स्वस्थ व्यक्ति इन्हें सांस के माध्यम से ग्रहण करता है, तो वह संक्रमित हो सकता है।
2. पानी द्वारा (By Water):
दूषित पानी पीने या उसके संपर्क में आने से रोग फैल सकते हैं।
उदाहरण: कॉलरा, टायफॉयड, पीलिया।
3. भोजन द्वारा (By Food):
दूषित या अधपका हुआ भोजन खाने से रोग फैल सकते हैं।
उदाहरण: फूड पॉइज़निंग, टायफॉयड।
4. प्रत्यक्ष संपर्क द्वारा (By Direct Contact):
संक्रमित व्यक्ति या जानवर के सीधे संपर्क से रोग फैल सकते हैं, जैसे छूना, गले लगाना या शारीरिक द्रव का आदान-प्रदान।
उदाहरण: रिंगवर्म, यौन संचारित रोग।
5. अप्रत्यक्ष संपर्क द्वारा (By Indirect Contact):
दूषित वस्तुओं या सतहों से, जैसे दरवाज़े के हैंडल, खिलौने या इन वस्तुओं को छूने के बाद शरीर के अंगों को छूने से रोग फैल सकते हैं।
उदाहरण: सामान्य सर्दी, फ्लू।
6. कीट वाहकों द्वारा (By Insect Vectors):
मच्छर और मक्खियाँ जैसे कीट रोगजनकों को एक व्यक्ति से दूसरे व्यक्ति तक पहुँचा सकते हैं।
उदाहरण: मलेरिया, डेंगू, चिकनगुनिया।

Modes of Transmission of Infectious Diseases-

Infectious diseases can spread through Several medium:-

- 1) By Air:- Germs spread through small particles released into the air. When coughing or sneezing these particles enter the body of a healthy person when they breathe in.
- 2) Diseases can spread by drinking contaminated water or coming into contact with contaminated water ex- Cholera, Typhoid, Jaundice.
- 3) By food:- Diseases can spread by eating contaminated food or improperly cooked food ex- food poisoning, typhoid.
- 4) By direct contact:- Through direct contact with an infected person or animal, Fish such as touching hugging or exchange of body fluids ex- Ringworm, Sexually, Transmitted.
- 5) By indirect Contact:- From contaminated objects or surfaces, such as door, handles, toys or touching body parts after touching these objects. Ex- Common cold, flu.
- 6) By Insect Vectors:- Insects like mosquitoes and flies can transmit disease-causing agents from one person to another ex-malaria, dengue, chicken guniya.

or

पेयजल के दूषण को रोकने के चार प्रमुख उपाय –

1. पानी को उबालें या छानें (Boil or Filter Water):
पानी को उबालने से उसमें मौजूद हानिकारक बैक्टीरिया और वायरस नष्ट हो जाते हैं। यदि उबालना संभव न हो, तो फ़िल्टर का उपयोग करें।
2. पानी को सुरक्षित रूप से संग्रहित करें (Store Water Safely):
हमेशा पेयजल को साफ, ढके हुए पात्रों में रखें ताकि धूल, कीड़े या अन्य अशुद्धियों से दूषण न हो।
3. हाथों की स्वच्छता बनाए रखें (Maintain Hand Hygiene):
पानी को छूने से पहले अपने हाथ धोएँ, विशेष रूप से शौचालय का उपयोग करने के बाद।
4. जल स्रोत को साफ रखें (Keep Water Sources Clean):
सुनिश्चित करें कि आपका जल स्रोत (जैसे कुएँ, बोरवेल या नल) साफ और सुरक्षित हो। किसी भी रिसाव या क्षति की मरम्मत करें ताकि बाहरी दूषित तत्व पानी में न मिलें।

Preventing contamination of drinking water: Four key measures:-

- 1) Boil or filter water:- Boiling water eliminated harm bacteria and viruses present in it. If boiling is not feasible, use a filter.
- 2) Store water safely:- Always store drinking water in clean, covered, containers to prevent contamination from dust insects or other impurities.
- 3) Maintain Hand Hygiene:- Wash your hands through before touching water, especially after using the toilet.
- 4) Keep water sources clean:- Ensure that your water source (such as wells, borewells or taps) are clean and secure, repair any leakage or damage to prevent external contaminants from mixing with the water.

उत्तर 44- ताज़ी हरी मटर को फ्रीज़ करने की विधि –

1. आधा किलो हरी मटर लें।
2. स्टेनलेस स्टील के बर्तन में मटर को पानी में पूरी तरह डुबोएँ और पानी में थोड़ा नमक डालें, फिर उबालें।
3. मटर को उबलते पानी में 2 मिनट के लिए डालें।
4. उबालने के बाद, मटर को 10–15 मिनट तक पकने दें।
5. मटर को पॉलीथीन बैग में डालें और हवा निकालते हुए दबाएँ।
6. मटर के सील पैकेट को फ्रीज़र में रखें।

Method of freezing fresh green peas:-

- i) Take half a kilo of fresh green peas.
- ii) In a stainless steel vessel, fully immerse the peas in water and add a little salt to the water and bring it to a boil.
- iii) Place the peas in boiling water for 2 minutes.
- iv) After boiling, leave the peas to cook for 10-15 minutes.
- v) Pack the peas into a polythene bag press to remove the air.
- vi) Store the sealed packets of peas in the freezer.

or

फल और सब्जियों को फ्रीज़ करने के लिए महत्वपूर्ण बातें –

1. ताज़गी और गुणवत्ता (Freshness and Quality):
हमेशा ताज़ी और अच्छी गुणवत्ता वाली फल और सब्जियाँ ही फ्रीज़ करने के लिए इस्तेमाल करें। खराब गुणवत्ता का उत्पादन फ्रीज़ करने पर भी खराब गुणवत्ता वाले आइटम देगा।

2. सफाई और तैयारी (Cleaning and Preparation):
फ्रीज़ करने से पहले फल और सब्जियों को अच्छी तरह से साफ करें। छिलके, डंठल और बीज हटाएँ यदि वे खाने योग्य नहीं हैं या खराब हो चुके हैं।
3. ब्लांचिंग (उबालना) (Blanching/Boiling):
अधिकांश सब्जियों को फ्रीज़ करने से पहले ब्लांच करना महत्वपूर्ण है। यह प्रक्रिया एंजाइम को निष्क्रिय कर देती है, जो खराबी, स्वाद परिवर्तन और बनावट की हानि का कारण बन सकते हैं। फलों के लिए ब्लांचिंग आवश्यक नहीं है।
4. ठंडा करना और सुखाना (Cooling and Drying):
ब्लांचिंग के बाद सब्जियों को ठंडा करें और फिर उन्हें अच्छी तरह सुखाएँ।
5. उचित पैकेजिंग (Proper Packaging):
एयरटाइट, फ्रीज़-सेफ़ कंटेनर, पॉलीथीन बैग या ऐसे रैपिंग मटीरियल का प्रयोग करें जो हवा को प्रवेश करने से रोके। यह गुणवत्ता बनाए रखने और फ्रीज़र बर्न से बचाता है।
6. सही तापमान (Correct Temperature):
फ्रीज़िंग का तापमान -18°C (0°F) या इससे कम होना चाहिए, ताकि फ्रीज़ उत्पाद ठीक से संरक्षित रहें।
7. छोटी मात्रा में फ्रीज़ करना (Freezing in Small Quantities):
एक साथ बहुत बड़ी मात्रा को फ्रीज़ करने से बचें। इससे फ्रीज़र का तापमान बढ़ सकता है और फ्रीज़िंग प्रक्रिया धीमी हो सकती है।
8. लेबलिंग (Labeling):
हमेशा कंटेनर पर खाद्य पदार्थ का नाम और फ्रीज़ करने की तारीख लिखें। इससे पहचान करना आसान होता है और समय पर उपयोग किया जा सकता है।

Explain the important considerations for freezing fruits and vegetables:-

- i) Freshness and Quality:- Always use fresh and good quality fruits and vegetables for freezing, poor quality produce result poor quality frozen items.
- ii) Cleaning and preparation:- Before freeze clean the fruits and vegetables thoroughly. Remove peels, stems and seeds if they are inedible or damaged.
- iii) Blanching (Boiling):- Before freezing most vegetables it is important to blanch them. This process inactivates enzymes that can cause spoilage flavor changes and loss of texture. Blanching is not required for fruits.
- iv) Cooling and drying:- After blanching cool the vegetables and then dry them, properly.
- v) Proper packaging:- Use airtight freeze safe containers, polythene bags or wrapping materials that prevent air from entering as much as possible. This helps maintain quality and prevents freezer burn.
- vi) Correct Temperature:- The freezing temperature should be -18°C (0°F) or lower to ensure proper preservation of frozen products.
- vii) Freezing in small quantities:- Avoid freezing very large quantities at once, as this can raise the freezer temperature and slow down the freezing process.
- viii) Labeling:- Always label the containers with the name of the food items and the date of freezing this makes it easier to identify and use them on time.

उत्तर 45- प्रबंधन के पाँच कार्यों की व्याख्या – प्रबंधन में योजना बनाने और संसाधनों को सही ढंग से उपयोग करने की प्रक्रिया को व्यवस्थित रूप से समझना आवश्यक है।

1. योजना बनाना (Planning):
योजना बनाना उस प्रक्रिया को कहते हैं जिसमें भविष्य में क्या करना है, कैसे करना है, कब करना है और किसके द्वारा करना है, इसके बारे में सोचा जाता है। यह प्रबंधन का प्राथमिक कदम है और यह निर्धारित लक्ष्यों को व्यवस्थित तरीके से प्राप्त करने में मदद करता है।
2. संगठन करना (Organising):
संगठन करना उस प्रक्रिया को कहते हैं जिसमें कार्यों की पहचान और समूह बनाना, जिम्मेदारियाँ निर्धारित करना और अधिकार संबंध स्थापित करना शामिल है, ताकि लोग मिलकर प्रभावी ढंग से लक्ष्यों को प्राप्त कर सकें।
3. कर्मचारी प्रबंध (Staffing):
कर्मचारी प्रबंध सही व्यक्ति को सही नौकरी के लिए नियुक्त करने की प्रक्रिया है। इसमें भर्ती, चयन, प्रशिक्षण, विकास और कर्मचारियों का उचित स्थानांतरण शामिल है।
4. निर्देशन (Directing):
निर्देशन वह प्रक्रिया है जिसमें कर्मचारियों का मार्गदर्शन, नेतृत्व, निगरानी और प्रेरणा शामिल है ताकि वे अपने कार्य

कुशलतापूर्वक और प्रभावी ढंग से कर सकें। यह सक्रिय सहयोग और समन्वय के माध्यम से संगठन के लक्ष्यों को प्राप्त करने में मदद करता है।

5. नियंत्रण (Controlling):

नियंत्रण उस प्रक्रिया को कहते हैं जिसमें वास्तविक प्रदर्शन की तुलना करना, विचलनों की पहचान करना और सुधारात्मक कार्रवाई करना शामिल है ताकि लक्ष्यों को योजना के अनुसार प्राप्त किया जा सके।

i) Planning- Planning is the process of thinking in advance about what is to be done, how it is to be done, when it is to be done and by whom it is to be done this is the primary step of management. It helps in achieving the set goals in a systematic manner.

ii) Organising- Organising is the process of identifying and grouping work defining and grouping work defining responsibilities and establishing authority relationship so that people can work together effectively to achieve objectives.

iii) Staffing: - Staffing is the process of recruiting the right people for the right jobs. It includes recruitment, selection training development and proper placement of employees.

iv) Directing:- Directing is the process of guiding, leading, supervising, and motivating employees so they can perform their tasks efficiently and effectively. It helps in achieving the organizations goals through active cooperation and coordination.

v) Controlling: - Controlling is the process of comparing the actual performance, identifying deviations and taking corrective action so that goals are achieved according to the plan.

उत्तर 47) उपकरणों के उपयोग से समय और ऊर्जा की बचत – किसी भी कार्य में समय और ऊर्जा की बचत करने के लिए उपकरणों का उपयोग किया जा सकता है। इसलिए प्रत्येक कार्य को मैन्युअल तरीके से करने के बजाय, उपकरणों के माध्यम से करना लाभकारी होता है। उदाहरण: कार्य: सब्ज़ियाँ काटना

- बिना उपकरण (हाथ से): चाकू की मदद से सब्ज़ियाँ काटने में लगभग 20 मिनट लगे और अधिक शारीरिक प्रयास की आवश्यकता पड़ी।
- उपकरण का उपयोग (सब्ज़ी काटने की मशीन): सब्ज़ी काटने की मशीन का उपयोग करने से यह कार्य केवल 5 मिनट में पूरा हुआ और कम प्रयास लगा।
- अंतर: उपकरण का उपयोग करने से समय और ऊर्जा दोनों की बचत हुई। जो कार्य बिना उपकरण 20 मिनट में होता, वह मशीन का उपयोग करके केवल 5 मिनट में पूरा हो गया। आप स्वयं भी ऐसे किसी कार्य का चयन कर सकते हैं, जैसे:
- कपड़े धोना (हाथ से बनाम वॉशिंग मशीन)
- फ़र्श झाड़ना (झाड़ू से बनाम वैक्यूम क्लीनर)

Saving time and energy through the use of tools – Tools can be used to save time and energy in any task. Therefore, instead of doing each task manually, using tools proves to be more beneficial.

Example:-

Task- Cutting vegetables. - Without using equipment cutting vegetable with the help of a knife by hand took about 20 minutes and required more physical effort.

With equipment (vegetable cutter machine) - Cutting vegetables using a vegetable cutter machine took only 5 minutes and required less effort.

Difference- using equipment saved both time and energy the task which took 20 minutes without equipment was completed in just 5 minutes using the machine.

You can choose any such task yourself such as:-

- Washing clothes (by hand vs. washing machine)
- Sweeping the floor (by broom vs vacuum cleaner)

SAMPLE PAPER - 2

Home Science

गृह विज्ञान

(216)

Time - 2.30 Hrs.

समय - 2:30 घंटे

M.M -85

पूर्णांक - 85

Section - A

- प्रश्न 1 फूड इंडस्ट्री में से निम्न में से कौन सा अर्ध-नाशयोग्य खाद्य पदार्थ माना जाता है? 1
क) ताज़ा मांस ख) आलू ग) दूध घ) पका हुआ चावल
Which of the following is considered a semi-perishable food item?
a) Fresh meat b) Potatoes c) Milk d) Cooked rice
- प्रश्न 2 बच्चों में कौन सी बीमारी विटामिन D की कमी से होती है? 1
क) स्कर्वी ख) ऑस्टियोपोरोसिस ग) रात का अंधापन घ) रिकेट्स
Which disease in children is caused by vitamin D deficiency?
a) Scurvy b) Osteoporosis c) Night Blindness d) Rickets
- प्रश्न 3 अगर आप अपनी माँ को बताए बिना बाहर जाते हैं, तो यह क्या दिखाता है? 1
क) सम्मान ख) स्वतंत्रता ग) लापरवाह और असम्मान घ) आत्मनिर्भरता
If you go out without informing your mother, what does it show?
a) Respect b) Freedom c) Careless and disrespect d) Self dependence
- प्रश्न 4 काली मिर्च में कौन सा मिलावट किया जाता है? 1
क) नमक ख) पानी ग) पपीते के बीज घ) चीनी
Which adulteration is done in black pepper?
a) Salt b) Water c) Papaya seeds d) Sugar
- प्रश्न 5 उपभोक्ताओं के हितों की सुरक्षा के लिए सरकार द्वारा कौन सा मुख्य कानून बनाया गया है? 1
क) श्रम कानून ख) उपभोक्ता संरक्षण अधिनियम
ग) शिक्षा का अधिकार अधिनियम घ) पर्यावरण संरक्षण अधिनियम
Which is the major law enacted by the government for the protection of consumer interests?
a) Labor law b) Consumer Protection Act c) Right to Education Act d) Environment Protection Act
- प्रश्न 6 जब अंडाशय से अंडा निकलता है तो इस प्रक्रिया को क्या कहते हैं? 1
क) मासिक धर्म ख) निषेचन ग) अंडोत्सर्जन घ) प्रत्यारोपण
What is the term for the process when an egg is released from the ovary?
a) Menstruation b) Fertilization c) Ovulation d) Implantation
- प्रश्न 7 बच्चों की ऊँचाई और वजन मापने के लिए किसका उपयोग किया जाता है? 1
क) थर्मामीटर ख) तराजू ग) मापन मशीन घ) घड़ी
What is used to measure children's height and weight?
a) Thermometer b) Scale c) Measuring machine d) Clock
- प्रश्न 8 मेसोमोर्फिक बॉडी टाइप वाले बच्चे कैसे दिखते हैं? 1
क) पतले और लंबे ख) बहुत मोटे ग) मजबूत और पेशीदार घ) बहुत छोटे
How do mesomorphic body type children look?
a) Thin and tall b) Very fat c) Strong and muscular d) Very short
- प्रश्न 9 प्रारंभिक बाल्यावस्था में हड्डियों का विकास किन बातों पर निर्भर करता है? 1
क) वजन ख) ऊँचाई ग) विकास नियम घ) स्कूल
What does the development of bones during early childhood depend on?
a) Weight b) Height c) Growth rules d) School
- प्रश्न 10 जन्म के बाद रोगों से बचाव के लिए भ्रूण किस चीज़ को प्राप्त करता है? 1
क) दूध ख) ऑक्सीजन ग) प्रतिरक्षा घ) टीका
To protect itself from disease after birth, what does the fetus receive from the mother?
a) Milk b) Oxygen c) Immunity d) Vaccine
- प्रश्न 11 गर्भावस्था की पुष्टि के लिए डॉक्टर कौन सा परीक्षण कर सकता है? 1
क) रक्तचाप परीक्षण ख) आंखों की परीक्षा ग) मूत्र परीक्षण घ) कान की परीक्षा

Which test can a doctor conduct to confirm pregnancy?

- a) Blood pressure test b) Eye test c) Urine test d) Ear test

प्रश्न 12 किस द्रव को हटाने के लिए गर्म पानी का उपयोग नहीं करना चाहिए?

- क) रक्त ख) घी ग) चाय घ) करी

Hot water should not be used to remove which stain?

- a) Blood b) Ghee c) Tea d) Curry

प्रश्न 13 वाटर क्लोसेट सिस्टम किस सुविधा से जुड़ा होता है?

- क) मिट्टी के गड्ढे ख) सीवर लाइन ग) कचरा गाड़ी घ) ड्रेन

The water closet system is connected to which facility?

- a) Mud pits b) Sewer line c) Garbage truck d) Drain

प्रश्न 14 इलेक्ट्रिकल उपकरण किस सतह पर नहीं रखने चाहिए?

- क) लकड़ी का तख्ता ख) प्लास्टिक शीट ग) लोहे की सतह घ) कपड़े की चटाई

On what surface should electrical appliances not be placed?

- a) Wooden plank b) Plastic sheet c) Iron surface d) Cloth mat

प्रश्न 15 सुरक्षित इलेक्ट्रिकल उपकरणों के लिए किस मार्क को चेक करना चाहिए?

- क) ISO ख) ISI मार्क ग) VIP घ) SBI

What mark should you check for safe electrical appliances?

- a) ISO b) ISI mark c) VIP d) SBI

प्रश्न 16 निम्नलिखित में से कौन मानव संसाधन नहीं है?

- क) रचनात्मकता ख) समय ग) फर्नीचर घ) ऊर्जा

Which of the following is not a human resource?

- a) Creativity b) Time c) Furniture d) Energy

प्रश्न 17 समय बचाने का सही तरीका कौन सा नहीं है?

- क) समय योजना बनाना ख) समय बर्बाद करना
ग) श्रम-बचत उपकरणों का उपयोग घ) समय का सही उपयोग

Which of the following is not a proper way to save time?

- a) Making a time plan b) Wasting time
c) Using labor-saving devices d) Utilization of time properly

प्रश्न 18 निम्नलिखित में से कौन परिवार के खर्च को प्रभावित नहीं करता?

- क) परिवार के सदस्यों की संख्या ख) सदस्यों की उम्र ग) इंटरनेट की गति घ) परिवार की आय

Which of the following does not affect how much a family spends?

- a) Number of family members b) Age of family members c) Internet speed d) Family's income

प्रश्न 19 बच्चों के विकास में रोचक और आकर्षक खिलौनों का क्या योगदान है?

- क) शारीरिक विकास ख) मानसिक विकास ग) सामाजिक विकास घ) उपरोक्त सभी

How do interesting and attractive toys help in the development of children?

- a) Physical development b) Mental development c) Social development d) All of the above

प्रश्न 20 सत्य या असत्य बताइए:

क) खराब स्वच्छता संचार रोगों के फैलाव का कारण बन सकती है।

ख) अधिक खर्च करना अच्छी आदत है।

ग) पेड़ काटने से प्रदूषण कम होता है।

घ) बच्चे का विकास 5 साल की उम्र के बाद रुक जाता है।

State true or false:

i) Poor hygiene can lead to the spread of communicable disease.

ii) Spending more than we earn is a good habit.

iii) Cutting down trees reduces pollution.

iv) A child's development stops after they turn 5 years old.

प्रश्न 21 सत्य या असत्य बताइए:

क) माचिस और लाइटर बच्चों की पहुंच से दूर रखे जाने चाहिए।

ख) दौड़ना एक थकाऊ गतिविधि है।

ग) गर्भवती महिलाओं को गर्भावस्था के दौरान कैल्शियम सप्लीमेंट नहीं लेना चाहिए।

घ) एंडोमोर्फिक शरीर प्रकार में व्यक्ति लंबे और पतले होते हैं।

State true or false:

i) Matches and lighters should be kept out of children's reach.

ii) Running is a strenuous activity.

iii) Pregnant women should not consume calcium supplements during pregnancy.

iv) In endomorphic body types, individuals tend to be tall and thin.

प्रश्न 22 सत्य या असत्य बताइए:

2

क) गंदी कपड़े व्यक्तिगत स्वच्छता के लिए हानिकारक हैं।

ख) अचार में मसाले डालने से सूक्ष्मजीव जल्दी बढ़ते हैं।

ग) दूध छोटे बच्चों के लिए सर्वोत्तम आहार माना जाता है।

घ) हमें अनाज और दाल का मिश्रण नहीं खाना चाहिए।

State true or false:

i) Dirty clothes are harmful for personal hygiene.

ii) Addition of spices to pickles allows microorganisms to grow quickly.

iii) Milk is considered the best food for small children.

iv) We should not consume a combination of cereals and pulses.

प्रश्न 23 सत्य या असत्य बताइए:

2

क) समय योजना हमेशा पहले से बनाई जाती है।

ख) कपड़े धोना और खरीदारी अडिग गतिविधियां हैं।

ग) श्रम-बचत उपकरण समय नहीं बचाते।

घ) धूल झाड़ना हल्की गतिविधि है।

State true or false:

i) Time plan is always made in advance.

ii) Shopping and washing clothes are inflexible activities.

iii) Labour saving equipment does not save time.

iv) Dusting is a light activity.

प्रश्न 24 सत्य या असत्य बताइए:

2

क) नवजात शिशु की नाल को नई ब्लेड से काटना चाहिए।

ख) गर्भवती महिला को केवल एक टेटनस का टीका लेना चाहिए।

ग) BCG का टीका जन्म के 6 सप्ताह बाद देना चाहिए।

घ) कोलोस्ट्रम बच्चे के स्वास्थ्य के लिए बहुत महत्वपूर्ण है।

State true or false:

i) Umbilical cord of a newborn baby should be cut with a new blade.

ii) A pregnant woman should take one tetanus vaccination.

iii) BCG vaccine should be given after 6 weeks of birth.

iv) Colostrum is very important for the health of the baby.

प्रश्न 25 सत्य या असत्य बताइए:

2

क) रेशम रेंगने वाले की कोकून से प्राप्त होता है।

ख) संतुलित आहार अच्छे स्वास्थ्य के लिए आवश्यक है।

ग) दवाइयों की समाप्ति तिथि जांचे बिना सेवन करना सुरक्षित है।

घ) नसबंदी एंजाइम और सूक्ष्मजीवों की गतिविधि बढ़ा देती है।

State true or false:

i) Silk is obtained from the cocoon of the silkworm.

ii) A balanced diet is essential for good health.

iii) It is safe to consume medicines without checking their expiry date.

iv) Sterilization increases the activity of enzymes and microorganisms.

प्रश्न 26 सत्य या असत्य बताइए:

2

क) कपास एक कृत्रिम फाइबर है।

ख) लोहित तत्व की कमी से एनीमिया हो सकता है।

ग) दालें शाकाहारी लोगों के लिए विशेष रूप से अनुशंसित हैं।

घ) हड्डियों के स्वास्थ्य के लिए विटामिन C बहुत महत्वपूर्ण है।

State true or false:

i) Cotton is a synthetic fiber.

ii) Iron deficiency can lead to anemia.

iii) Pulses are specially recommended for vegetarian people.

iv) Vitamin C is crucial for bone health.

प्रश्न 27 सत्य या असत्य बताइए:

2

क) बच्चों के खेल के लिए भूमि की तैयारी की जाती है।

ख) बच्चों की मस्ती और खेल गतिविधियां उनके विकास में योगदान करती हैं।

ग) खेल बच्चों के सामाजिक कौशल को बढ़ाते हैं।

State true or false:

i) Sports and playground are prepared for children.

ii) Children's play and fun activities contribute to their development.

iii) Games enhance children's social skills.

प्रश्न 28 कॉलम I और कॉलम II को मिलाइए:

2

Column I	Column II
क) संक्रामक रोग	i) वसा, नमक और शक्कर का अत्यधिक सेवन
ख) जीवनशैली रोग	ii) अनियमित दिनचर्या, व्यायाम की कमी
ग) मधुमेह	iii) बैक्टीरिया, वायरस आदि के कारण होने वाला
घ) कोरोनावायरस	iv) फैलना
ङ) उच्च रक्तचाप	v) एक संक्रामक रोग

Match the column I and column II

Column I	Column II
a) Communicable Disease	i) Excessive consumption of fat, salt and sugar.
b) Lifestyle Disease	ii) Irregular routine, lack of exercise.
c) Diabetes	iii) Caused by bacteria, viruses etc.
d) Coronavirus	iv) Spreading
e) High blood pressure	v) A communicable disease.

प्रश्न 29 कॉलम I और कॉलम II को मिलाइए

2

Column I	Column II
a) ढोकला	iii) स्टीमिंग (Steaming)
b) दाल (Lentils)	iv) उबालना (Boiling)
c) पूरी	i) अधिक तेल में डीप फ्राइंग (Deep frying in excessive oil)
d) पराठा	ii) कम तेल में शैलो फ्राइंग (Shallow frying in less oil)

Match the column I and column II

Column I	Column II
a) Dhokla	i) Deep frying in excessive oil.
b) Dal (lentils)	ii) Shallow frying in less oil.
c) Puri	iii) Steaming
d) Paratha	iv) Boiling

प्रश्न 30 रिक्त स्थान की पूर्ति

2

a) विटामिन ----- हमारी हड्डियों और दांतों को मजबूत रखता है।

b) विटामिन ----- अंडों में नहीं पाया जाता।

c) ओवन में खाना पकाने की विधि को ----- कहा जाता है।

d) गरम रेत में खाना पकाने की प्रक्रिया को ----- कहा जाता है।

Fill in the blanks-

i) Vitamin _____ keeps our bones and teeth strong.

ii) Vitamin _____ is not found in eggs.

iii) The method of cooking food in an oven is called _____.

iv) The process of cooking food in hot sand is called _____.

- i) स्तनपान ----- महीने तक विशेष रूप से किया जाना चाहिए।
- ii) जीवनचक्र का ----- चरण तब शुरू होता है जब अंतिम बच्चा घर छोड़ देता है।
- iii) जब माता-पिता प्रेमपूर्ण हों और बच्चों को अपनी राय व्यक्त करने दिया जाए, इसे ----- अनुशासन शैली कहा जाता है।
- iv) सात से आठ साल के बच्चे ----- खेल खेलना पसंद करते हैं। (अंदर या बाहर)

Fill in the blanks-

- i) Breast feeding should be done exclusively till a baby is _____ month old.
- ii) _____ stage of lifecycle starts when the last child leave home.
- iii) When parents are loving and children are allowed to express their argument it is known as _____ disciplining style.
- iv) Children at the age of seven to eight year love to play _____ games. Indoors or outdoors.

Section-B

- प्रश्न 32 विज्ञान के क्षेत्र में घर पर आधारित स्वरोजगार के चार उदाहरण लिखिए। 2
Write four examples of home-based self-employment in the field of science.
- प्रश्न 33 HIV/AIDS कैसे नहीं फैलता? 2
How is HIV/AIDS not spread?
- प्रश्न 34 विटामिन A की कमी के चार लक्षण बताइए। 2
State four symptoms of vitamin A deficiency.
- प्रश्न 35 छात्र अपने खर्च कम करने के चार तरीके बताएं। 2
In what four ways can students reduce their expenses?
- प्रश्न 36 कपास के रेशे की सामान्य चार विशेषताएँ बताइए। 2
State four general characteristics of cotton fiber.
- प्रश्न 37 उच्च-फाइबर आहार का सेवन किस बीमारी के जोखिम को कम या रोकने में मदद करता है? 2
Consuming a high-fiber diet helps to reduce or prevent the risk of which diseases.
- प्रश्न 38 'नीति' और 'मूल्य' को परिभाषित कीजिए। 2
Define the terms 'ethics' and 'values'.
- प्रश्न 39 भोजन के खराब होने के चार कारण बताइए। 2
state any four reason for food spoilage.
- प्रश्न 40 प्रतिरक्षा क्या है? प्रतिरक्षा के कितने प्रकार हैं? 2
What is immunity? How many types of immunity are there?
or
मीडिया के चार नकारात्मक प्रभाव किशोरों पर क्या हैं?
What are the four negative effects of media on adolescents?
- प्रश्न 41 घर चुनते समय किन बातों का ध्यान रखना चाहिए? 2
What things should be kept in mind while selecting house?
or
किण्वन के क्या लाभ हैं?
What are the benefits of fermentation?
- प्रश्न 42 खाना पकाने के चार लाभ बताइए। 3
State four benefits of cooking food.
or
रेशे का शरीर में क्या कार्य है? यह शरीर की किस प्रकार रक्षा करता है?
What is the function of fiber in the body? How does it protect the body?
- प्रश्न 43 मानव और गैर-मानव संसाधनों में अंतर समझाइए और चार उदाहरण दें। 3
Explain the difference between human and non-human resources providing four examples.
- प्रश्न 44 रेशमी और ऊनी कपड़े धोते समय किन सावधानियों का पालन करना चाहिए? 3
What precautions should be taken while washing silk and woollen clothes?
or
सेप्टिक टैंक आधारित शौचालय बनाने के छह लाभ क्या हैं?
What are six advantages of making a toilet based on septic tanks?

- प्रश्न 45 अच्छे मानसिक स्वास्थ्य और अच्छे सामाजिक स्वास्थ्य की विशेषताएँ क्या हैं? 3
What are the characteristics of good mental health and good social health?
- प्रश्न 46 मिलावट वाले सामान खरीदने से बचने के लिए आप कौन से उपाय अपनाएँगे? 5
What precautionary measure should you adopt to avoid purchasing adulterated goods?
- प्रश्न 47 स्तनपान शिशु के लिए बोतल-पोषण की तुलना में अधिक लाभकारी क्यों है? 5
Why is breastfeeding more beneficial for an infant compared to bottle-feeding?
- or
- विकास और वृद्धि में अंतर स्पष्ट कीजिए।
Clarify the difference between growth and development.

SAMPLE PAPER - 3

Home Science

गृह विज्ञान

(216)

Time - 2.30 Hrs.

समय - 2:30 घंटे

M.M -85

पूर्णांक - 85

खंड - अ **Section - A**

- प्रश्न1 बच्चों में किस रोग में पेट मटका जैसा दिखाई देता है? 1
a) क्वाशियोरकर(Kwashiorkor) b) म्यारास्मस(Marasmus)
c) स्कर्वी(Scurvy) d) कुपोषण (Malnutrition)
In Which disease does a child's stomach resemble a pot?
a) Kwashiorkor b) Marasmus c) Scurvy d) Malnutrition
- प्रश्न2. बीसीजी टीका किस उम्र में लगाया जाता है? 1
a) जन्म के समय (At birth) b) 3 महीने (3 months)
c) 6 महीने (6 months) d) 9 महीने (9 months)
At what age is the BCG vaccine administered?
a) At birth b) 3 months c) 6 months d) 9 months
- प्रश्न3 विटामिन D की कमी के कारण बच्चों में कौन सी बीमारी होती है? 1
a) रिकेट्स b) ऑस्टियोमलेसिया
c) नाइट ब्लाइंडनेस d) स्कर्वी
Which disease is found in children due to vitamin -D deficiency?
a) Rickets b) Osteomalacia c) Night blindness d) Scurvy
- प्रश्न4 उपभोक्ता संरक्षण अधिनियम कब लागू किया गया था? 1
a) 1986 b) 1976 c) 1999 d) 1984
When was the consumer protection Act implemented?
a) 1986 b) 1976 c) 1999 d) 1984
- प्रश्न 5 कपड़े में से धोने के बाद इस्त्री करने की आवश्यकता नहीं होती है। 1
a) लीनन b) रेशम c) पॉलिएस्टर d) रेयन
Which fabric does not require ironing after washing?
a) Cotton b) Silk c) Polyester d) Rayon
- प्रश्न 6 खमीर वाले भोजन में कौन सा विटामिन बढ़ता है? 1
a) विटामिन 'A' b) विटामिन 'B' c) विटामिन 'D' d) विटामिन 'E'
Which vitamin increases in fermented foods:
a) Vitamin 'A' b) Vitamin 'B' c) Vitamin 'D' d) Vitamin 'E'

- प्रश्न 7 पकाए गए भोजन को कितने समय तक फ्रीज़र में रखा जा सकता है? 1
 a) 1-2 घंटे b) 10 घंटे c) 30-40 मिनट d) 30-40 घंटे
 Cooked food items can be stored in the freezer for how long?
 a) 1-2 hours b) 10 hours c) 30-40 minutes d) 30-40 hours
- प्रश्न 8 संरक्षित खाद्य पदार्थों में से कौन सा उदाहरण है? 1
 a) केला b) पापड c) चावल d) दूध
 Which of the following is an example of preserved food
 a) Banana b) Papad c) Rice d) Milk
- प्रश्न 9 वायु प्रदूषण का एक औद्योगिक स्रोत कौन सा है? 1
 a) धुआँ और विषैली गैसें b) उर्वरक का उपयोग c) जंगल की आग और धूल d) परागकण
 Which of the following is an industrial sources of air pollution?
 a) Smoke and toxic gases b) Use of fertilization c) Forest fire d) Pollen grains
- प्रश्न 10 उपभोक्ता शिकायत दर्ज कर सकता है: 1
 a) 6 महीने की खरीद के बाद b) 1 वर्ष की खरीद के बाद c) 2 वर्ष की खरीद के अंदर d) कभी भी
 When can a consumer file a complaint
 a) After 6 months of purchase b) After 1 year of purchase
 c) Within 2 years of purchase d) Anytime
- प्रश्न 11 कौन सा बुनाई प्रकार सबसे आसान माना जाता है? 1
 a) तवील बुनाई (Twill weaving) b) साटन बुनाई (Satin weaving)
 c) साधारण बुनाई (Plain weaving) d) कंप्यूटर बुनाई (Computer weaving)
 Which type of weaving is considered the easiest:
 a) Twill weaving b) Satin weaving
 c) Plain weaving d) Computer weaving
- प्रश्न 12 कौन-सी बुनाई (weaving) में कपड़े पर तिरछी रेखाएँ (diagonal lines) बनती हैं? 1
 a) साधारण बुनाई (Plain weaving) b) ट्विल बुनाई (Twill weaving)
 c) साटन बुनाई (Satin weaving) d) सजावटी बुनाई (Decorative weaving)
 In which type of weaving are diagonal lines formed in the fabric
 a) Plain weaving b) Twill weaving
 c) Satin weaving d) Decorative weaving
- प्रश्न 13 दूध नापने वाले बर्तन पर सरकारी मोहर का क्या संकेत है? 1
 a) दूध की गुणवत्ता b) बर्तन की स्वच्छता
 c) सरकारी सत्यापन d) दूध का तापमान
 What does the government seal on the milk measuring container indicate?
 a) Quality of milk b) Cleanliness of the container
 c) Government Certification d) Temperature of milk
- प्रश्न 14 टिक्की बनाने के लिए आप कौन-सी पकाने की विधि का उपयोग करेंगे? 1
 a) डीप फ्राई करना b) शैलो फ्राई करना
 c) सॉटि करना d) भूनना / रोस्ट करना
 Cooking method you use to prepare tikkis
 a) Deep frying b) Shallow frying c) Sauteing d) Roasting
- प्रश्न 15 रसोई में पर्याप्त प्रकाश प्रदान करने के लिए दीवारों पर निम्नलिखित रंग में से कौन-सा रंग लगाया जाना चाहिए? 1
 a) हल्का हरा b) मारून
 c) नेवी ब्लू d) ब्राइट पर्पल
 To provide light in kitchen, one should paint the following colour on the walls.
 a) Light green b) Maroon c) Navy blue d) Bright purple
- प्रश्न 16 दो बच्चों के बीच न्यूनतम कितने साल का अंतर रखना चाहिए? 1
 a) एक साल b) तीन साल c) दो साल d) साढ़े एक साल
 How many minimum years gap should be maintained between two children:
 a) One year b) Three years c) Two years d) One and half years
- प्रश्न 17 निम्नलिखित में से कौन-सा गृह विज्ञान का विशेषीकृत क्षेत्र नहीं है? 1
 a) भोजन विज्ञान b) परिधान डिज़ाईनिंग
 c) नर्सिंग d) आंतरिक सजावट (इंटीरियर डेकोरेशन)
 Which of the following is not a specialized area of home science?

- a) Food science b) Garment designing c) Nursing d) Interior decoration
- प्रश्न18 गाँव में कचरे के आदर्श निपटान के लिए कौन-सी निर्माण/व्यवस्था आवश्यक है? 1
- a) कम्पोस्ट गड्ढा b) कूड़ेदान रखना
c) सड़क किनारे फेंकना d) इनमें से कोई नहीं
- For the ideal method of waste disposal in a village, what construction is required?
- a) Compost pit b) Placement of dustbins
c) Disposal on roadsides d) None of these
- प्रश्न19 रसोई में काम करते समय कौन सा कपड़ा सबसे खतरनाक होता है? 1
- a) कॉटन b) सिल्क c) नायलॉन d) ये सभी
- Which type of fabric is most dangerous to we while working in the kitchen
- a) Cotton b) Silk c) Nylon d) All of these
- प्रश्न20 सही या गलत बताइए: 2
- a) त्रिटिक डिजाइन में रनिंग स्टिच का उपयोग किया जाता है।
b) पाटोला में धागा बाँधकर रंगा जाता है और फिर बुनाई से पहले रखा जाता है।
c) मार्बलिंग में टाई-एंड-डाई तकनीक में कपड़े को रोकने के लिए पिग्स का इस्तेमाल किया जाता है।
d) लेहरिया को डॉट्स और लाइनों से पहचाना जा सकता है।
- State true or false:
- a) In tritik design is made with running stitch
b) In patola yarn is tied and dyed before weaving
c) In marbling tie and dye technique cloth pegs are used as resist material
d) Leheria can be identified by dots and lines
- प्रश्न21 सही या गलत बताइए: 2
- a) पूरी आवाज़ पर लाउडस्पीकर चलाना वायु प्रदूषण का मुख्य स्रोत है।
b) हमें अपनी कारों के लिए समय पर प्रदूषण-मुक्त प्रमाणपत्र प्राप्त करना चाहिए।
c) कचरे के निपटान के लिए अंतिम तकनीक (इनसिनरेशन) है।
d) घर पर पत्तियों से बहुत अच्छा कम्पोस्ट बनाया जा सकता है।
- State true or false:
- a) Loudspeakers played at full volume is a major source of air pollution
b) We should obtain pollution free certificate for our cars in time
c) Incineration is the latest technology of garbage disposal
d) We can make very good compost with leaves at home
- प्रश्न22 सही या गलत बताइए 2
- a) भोजन पकाने से उसका स्वाद नष्ट हो जाता है।
b) भाप में पकाना पोषक तत्वों को सुरक्षित रखने का अच्छा तरीका है।
c) उपभोक्ता वह व्यक्ति है जो वस्तु या सेवा का उपयोग नहीं करता।
d) रेशों को सीधे कपड़ों में बदला जा सकता है।
- State True or false:
- a) Cooking food destroys its taste
b) Steaming is a good way to preserve nutrients
c) A consumer is a person who does not use goods or service
d) Fibers can be directly converted in to clothes
- प्रश्न23 सही या गलत बताइए 2
- a) उपभोक्ता अदालतों में केवल अमीर लोग ही न्याय माँग सकते हैं।
b) तेज़ आँच पर पकाने से विटामिन-C सुरक्षित रहता है।
c) पॉलिस्टर एक प्राकृतिक रेशा है।
d) परिवार के लक्ष्य बजट को प्रभावित करते हैं।
- State True or false:
- a) Only rich people can seek justice in consumer courts
b) Cooking on high heat preserves vitamin -c
c) Polyester is a natural fiber
d) Family goals affect the budget

प्रश्न 24 सही या गलत बताइए

2

- a) व्यक्ति के बालों का रंग वातावरण का परिणाम होता है।
- b) हमें अपनी गाड़ियों के लिए समय पर प्रदूषण-मुक्त प्रमाणपत्र नहीं लेना चाहिए।
- c) कचरे के निपटान की नवीनतम तकनीक दहन (Incineration) है।
- d) हल्का फर्नीचर कमरे को विस्तृत दिखाता है।

State True or false:

- a) The color of a person's hair is a result of the environment
- b) We should not obtain free certificate for our cars in time
- c) Incineration is the latest technology of garbage disposal
- d) Light furniture makes a room appear spacious

प्रश्न 25 सही या गलत बताइए:

2

- a) पति को चाहिए कि वह अपनी पत्नी को कुछ ज़िम्मेदारियों से मुक्त करे ताकि वह नवजात शिशु के साथ अधिक समय बिता सके।
- b) बुजुर्गों को अपनी बढ़ती उम्र को एक सामान्य प्रक्रिया के रूप में स्वीकार करना चाहिए।
- c) मूल्य (Values) हमारे सामाजिक वातावरण का आधार होते हैं।
- d) मासिक धर्म को देर से या जल्दी करने के लिए दवाइयाँ लेनी चाहिए।

State True or false:

- a) Husbands should relieve the new mother from some responsibilities so that she can spend more time with the new born infant.
- b) The elderly should accept their ageing as a normal process.
- c) Values form the basis of our social environment
- d) Medicine should be taken to delay or fasten menstruation.

प्रश्न 26 सही या गलत बताइए:

2

- a) समय सारिणी लचीली नहीं होनी चाहिए।
- b) अवकाश गतिविधियों को द्वितीयक गतिविधियाँ कहा जाता है।
- c) प्रत्येक गतिविधि के बाद मिलने वाले समय को अवकाश अवधि कहा जाता है।
- d) मानसिक थकान को समय-समय पर विश्राम लेकर दूर किया जा सकता है।

State true and false:

- a) Time schedule should not be flexible
- b) Leisure activities are called secondary activities
- c) Rest period after every activity is called leisure period
- d) Mental fatigue can be removed by periodic rests

प्रश्न 27 सही या गलत बताइए:

2

- a) प्रेशर कुकिंग तेज़ी से पकाने की एक विधि है।
- b) भाप में पकाने (Steaming) से पकाने का समय कम हो जाता है।
- c) भटूरे नम-गर्मी (Moist heat) विधि से बनाए जाते हैं।
- d) पकाने से भोजन लंबे समय तक सुरक्षित रहता है।

State true and false:

- a) Pressure cooking is a fast method of cooking
- b) Steaming shortens the duration of cooking
- c) Bhatura are made by moist heat method
- d) Cooking helps to keep food longer

प्रश्न 28 – Column-1 और Column-2 का मिलान कीजिए

2

Column - I	Column - II
a) कैटरिंग सेवा	i) शुष्क भंडारण एवं कैनिंग
b) गृह-व्यवस्थापन	ii) कॉफी शॉप
c) इंटीरियर डेकोरेटर	iii) घर पर बैठकर गेस्ट सर्विस
d) संसाधन प्रबंधक	iv) डिस्प्ले डिज़ाइन

Match the column - I and column - II

Column - I	Column - II
a) Catering	i) Small saving agent
b) Housekeeping	ii) Coffee shop
c) Interior decorator	iii) Home based buying guest service
d) Resources manager	iv) Window display design

प्रश्न 29 Column-1 और Column-2 का मिलान कीजिए

2

Column - I	Column - II
a) भाप में पकाना	i) पराँठा
b) भूनना	ii) केक
c) कम तेल में तलना	iii) पापड
d) बेकिंग	iv) ढोकला

Match the column - I and column - II

Column - I	Column - II
a) Steaming	i) Paranta
b) Roasting	ii) Cake
c) Shallow frying	iii) Papad
d) Baking	iv) dhokla

प्रश्न 30 – रिक्त स्थान भरिए (Fill in the blanks)

2

- _____ की उपस्थिति में _____ द्वारा विटामिन D का निर्माण किया जाता है।
- विटामिन A का एक कार्य हमारी _____ को स्वस्थ रखना है।
- अपने मसूड़ों और दाँतों को स्वस्थ रखने के लिए हमें _____ लेना चाहिए।
- विटामिन _____ हमारी हड्डियों और दाँतों को मजबूत रखता है।

Fill in the blanks -

- Vitamin D can be produced by the _____ in the presence of _____.
- One function of vitamin A is to keep our _____ healthy
- To keep our gums and teeth healthy we must take _____
- The vitamin which makes bones and teeth strong is _____

प्रश्न 31 – रिक्त स्थान भरिए (Fill in the blanks)

2

- माँ के दूध से नवजात शिशु को प्राप्त होने वाली प्रतिरक्षा _____ है।
- टी.बी. के रोगी को _____ का टीका लगाया जाता है।
- शिशु को पोलियो का टीका सबसे पहले _____ आयु पर दिया जाता है।
- पल्स पोलियो के लिए सप्ताह का _____ दिन चुना गया है।

Fill in the blanks -

- Type of immunity provided to a newly born child by mother's milk _____
- Vaccine against TB _____
- Polio vaccine is first given at the age of _____
- Day of week chosen for pulse polio _____

खंड - ख

Section - B

प्रश्न 32 किशोरावस्था में भावनात्मक और सामाजिक पहलुओं में दो अंतर बताइए।

2

State two differences between emotional and social aspects during adolescence

प्रश्न 33 किण्वन से कौन-कौन से लाभ प्राप्त होते हैं?

2

What benefits are obtained from fermentation?

- प्रश्न 34 अंकुरण से कौन-कौन से लाभ प्राप्त होते हैं? 2
What are benefits of germination?
- प्रश्न 35 नायलॉन और रेयान में अंतर समझाइए। 2
Explain the difference between nylon and rayon
- Or
- गर्मियों में नायलॉन की तुलना में सूती कपड़े पहनने को क्यों प्राथमिकता देते हैं?
Why do we prefer wearing cotton clothes over nylon in summers?
- प्रश्न 36 हवादारी (वेंटिलेशन) के चार लाभ बताइए। 2
State four benefits of ventilation
- Or
- कृत्रिम प्रकाश से आप क्या समझते हैं?
What do you understand by artificial light
- प्रश्न 37 रासायनिक और यांत्रिक फिनिशिंग क्या होती है? 2
What are chemical and mechanical finishes?
- प्रश्न 38 फिनिश किए हुए और वे कपड़े जिन पर फिनिशिंग नहीं की गई हो, उनमें क्या अंतर है? 2
What is the difference between finished fabrics and unfinished fabrics:
- Or
- कपड़े की फिनिशिंग का महत्व क्या है?
What is the importance of fabric finishes?
- प्रश्न 39 विद्यालयों और कॉलेजों में मूल्य और नैतिकता क्यों पढ़ाई जानी चाहिए? 2
Why should values and ethics be taught in schools and colleges
- प्रश्न 40- पाँच संक्रामक और पाँच असंक्रामक रोगों के नाम लिखें। 2
Name five infectious and five non-infectious diseases.
- प्रश्न 41 बैटिक विधि का संक्षिप्त वर्णन करें। 2
Briefly explain batik method of resist dyeing
- Or
- ब्लॉक प्रिंटिंग विधि का संक्षिप्त वर्णन करें।
Briefly explain block printing method.
- प्रश्न 42- सोखने के गड्ढे बनाने के चरण क्या हैं? 3
What are the steps of making a soakage pit?
- Or
- सुलभ शौचालय क्यों लोकप्रिय हो रहे हैं?
Why are sulabh shauchalayas getting popular?
- प्रश्न 43- प्राकृतिक रोग प्रतिरोधक क्षमता और अर्जित रोग प्रतिरोधक क्षमता में क्या अंतर है? 3
What is the difference between natural immunity and acquired immunity?
- प्रश्न 44- यदि मेहँदी का दाग या निशान कपड़ों पर लग जाए, तो इसे कैसे हटाया जा सकता है? 3
If a mehndi stain or mark gets on clothes, how can it be removed:
- Or
- दाग हटाने की डुबकी विधि समझाएँ।
Explain the dipping method for stain removal
- प्रश्न 45- कपड़ा बनाने के किस चरण में रंगाई की जाती है? 3
In which stages of cloth making is dyeing done:
- प्रश्न 46 महिला की सुरक्षित गर्भावस्था सुनिश्चित करने के लिए कौन-कौन से कारक महत्वपूर्ण हैं? 5
List the various factors that can ensure a woman has a safe pregnancy.
- Or
- गर्भवती महिला के लिए पोषक आहार क्यों आवश्यक है?
Why is nutritious food necessary for a pregnant woman;
- प्रश्न 47 यदि कोई व्यक्ति जहर ग्रहण कर ले, तो आप उसे प्राथमिक चिकित्सा कैसे देंगे? 5
In a person suffers from poisoning how would you provide them with first aid;
- Or
- एक अच्छा प्राथमिक चिकित्सा प्रदाता किन गुणों का धनी होना चाहिए?
What qualities should a good first-aid provider possess?

SAMPLE PAPER - 4

Home Science

गृह विज्ञान

(216)

Time - 2.30 Hrs.

समय - 2.30 घण्टे

M.M -85

पूर्णांक - 85

खण्ड - क

Section - A

प्र01. रिश्तों को बनाए रखने के लिए किसी को कभी भी ऐसा नहीं करना चाहिए । 1

- | | |
|-------------------------|----------------------------------|
| 1) एक दूसरे से बात करना | 2) दूसरों के बारे में बुरा बोलना |
| 3) सच बोलना | 4) खुशी से बोलना |

Q1. To maintain relationship, one should NEVER Speak

- | | | | |
|-----------------------|-----------------|-------------------|---------------|
| a) To talk each other | b) ill of other | c) Tell the truth | d) cheerfully |
|-----------------------|-----------------|-------------------|---------------|

प्र02. डॉक्टर ने किन दो लक्षणों के आधार पर पता लगाया कि मरीज काली खाँसी से पीड़ित है । 1

- 1) गहरी आवाज के साथ लगातार खाँसी आना
- 2) नब्ज की तेज गति
- 3) श्लेष्मा झिल्ली में सूजन
- 4) सीने में दर्द

(A) - (i) और (iv) (B) - (ii) और (C) - (iii) और (iv) (D) - (i) और (iii)

Q2. The doctor diagnosed that the patient was suffering from pertussis on the basis of these two symptoms:

- | | |
|-------------------------------------|-----------------|
| i) Cough with whoop like sound | ii) Rapid pulse |
| iii) Inflammation of mucus membrane | iv) Chest pain |

Choose the best option:

- | | |
|-------------------|-------------------|
| A) (i) and (iv) | B) (ii) and (iii) |
| C) (iii) and (iv) | D) (i) and (iii) |

प्र03. आपके मित्र अपने आस पाडोस में लोगों की वायु प्रदूषण के प्रति जागरूक करने के लिए पोस्टर बना रहे हैं । इसके लिए उपयुक्त नारा चुनें - 1

- | | |
|---------------------------------|-------------------------------|
| 1) नलों में रिसाव बंद करे | 2) धीमी आवाज में रेडियो चलाएँ |
| 3) कूड़े का सुरक्षित निपटान करे | 4) वाहन को प्रदूषण मुक्त रखे |

Q3. Your friends are making poster to make people aware of air pollution in their neighborhood. Choose the most suitable slogan given below for this purpose

- | | |
|---------------------------|--------------------------------|
| a) Stop leakage in taps | b) Play radio on low volume |
| c) Dispose garbage safely | d) Keep vehicle pollution free |

प्र04. जीवनशैली संबंधी बीमारियों को निम्नलिखित में से किसी एक द्वारा रोका नहीं जा सकता है । 1

- | | |
|------------------|----------------------------------|
| 1) खूब पानी पीना | 2) मौसमी फल और सब्जियाँ खाना |
| 3) ध्यान और योग | 4) मैदा से बने खाद्य पदार्थ खाना |

Lifestyle diseases cannot be prevented by one of the following:

- | | |
|-----------------------------|--|
| a) Drinking plenty of water | b) Eating seasonal fruits and vegetables |
| c) Meditation and yoga | d) Eating foods made with refined flour |

प्र05. आभूषण पर हॉल मार्क नहीं दिया गया है । 1

- | | | | |
|----------|---------|-------------|---------|
| 1) चाँदी | 2) सोना | 3) प्लैटिनम | 4) पीतल |
|----------|---------|-------------|---------|

Hall mark is not given to this jewellery.

- | | | | |
|-----------|---------|-------------|----------|
| a) Silver | b) Gold | c) Platinum | d) Brass |
|-----------|---------|-------------|----------|

- प्र06. गेहूं का आटा खरीदते समय आप कौन सा मानक चिह्न जाँचेंगे । 1
 1) आई.एस.आई मार्क 2) एगमार्क 3) हॉल मार्क 4) ईको मार्क
 Which standard mark will you check while buying wheat flour?
 a) ISI mark b) Ag mark c) Hall mark d) ECO mark
- प्र07. फलों को कम तापमान और कम पानी में पकाने के लिए कौन सी विधि का प्रयोग किया जाता है 1
 1) उबालना 2) सिझाना 3) सेकना 4) प्रेशर कुकिंग
 Which method is used for cooking fruits at low temperature with water?
 a) Boiling b) Stewing c) Baking d) Pressure
- प्र08. किस नम ताप विधि में भोजन को एक विशेष बर्तन में 1000 सेल्सियस से अधिक दबाव पर पकाया जाता है ।
 1) भूनना 2) प्रेशर कुकिंग 3) बेकिंग 4) सौर कुकर में पकाना
 In which method food is cooked under pressure, above 100° C in a special untensil?
 a) Roasting b) Pressure cooking c) Baking d) solar cooking
- प्र09. गर्दन में अकड़न और निगलने में कठिनाई किस बीमारी के लक्षण हो सकते हैं । 1
 1) टाइफाइड 2) टिटनेस 3) हेपेटाइटिस 4) तपेदिक
 Stiff neck and difficulty in swallowing may be symptoms of which disease.
 a) Typhoid b) Tetanus c) Hepatitis d) Tuberculosis
- प्र10. निम्नलिखित में से कौन सा एक कथन गलत है हमें - चाहिए । 1
 1) लचीला बजट बनाएँ 2) आय के विभिन्न सारतों की जाँच करें
 3) खर्चों को आय से कम रखें 4) जरूरत पड़ने पर पैसे उधार लें और खुला खर्च करें
 Which one of the following statements is in correct we should -
 a) Make flexible budget b) Check various sources of income
 c) Keep expenses less than the income d) Borrow money if need be and spend freely
- प्र11. निम्नलिखित में से कौन - से फलों को पकाने में मदद करता है । 1
 1) फफूँद 2) जीवाणु 3) एंजाइम 4) यीस्ट
 Which of the following helps in ripening of fruit?
 a) Fungus b) Bacteria c) Enzymes d) Yeast
- प्र12. निम्न में से कौन सा खाद्य पदार्थ गैर - नाशवान है -
 1) दालें 2) हरे पत्ते वाली सब्जियाँ 3) ब्रेड 4) मक्खन
 Which of the following is a non perishable food -
 a) Pulses b) Green leafy vegetables c) Bread d) Butter
- प्र13. सुनीता ने बैंगन को सीधे गर्म रेत में डाल दिया है यह कथन कौन-सी पाक विधि का उपयोग कर रही है । 1
 1) ग्रिल 2) सिझाना 3) भूनना 4) बेकिंग
 Sunita has put the brinjals directly in hot sand. Identify the cooking method she is using
 a) Grilling b) Sauting c) Roasting d) Baking
- प्र14. रोहित ने देखा कि उसका यात्री अपना पर्स टेक्सी में सीट पर छोड़ गया है लेकिन उसने चुप रहना बेहतर समझा और वहाँ से चला गया उसने कौन सा मूल्य प्रदर्शित नहीं किया । 1
 1) अशिष्ट 2) ईमानदारी 3) समय की पाबंदी 4) आदर करना
 Rohit saw his passengers purse slipping out of his pocket in his taxi but chose to keep quiet and drove off, which value did he not exhibit

a) Rudeness

b) Honesty

c) Punctuality

d) courtesy

प्र15. दो बच्चों के बीच न्यूनतम कितने वर्ष का अंतर रखना चाहिए ।

1

1) एक वर्ष

2) तीन वर्ष

3) दो वर्ष

4) डेढ़ वर्ष

How many minimum years gap should be maintained between two children

a) One year

b) Three years

c) Two years

d) One and half years

प्र16. आपकी पोशाक पर पीले रंग का दाग है । आपने इसकी पहचान सही की है । 1

1) अंडा

2) कॉफी

3) करी

4) दूध

Your dress has a yellow coloured stain on it. You have rightly identified it as that of

a) Egg

b) Coffee

c) Curry

d) Milk

प्र17. मासिक धर्म के पहले दिन से प्रसव की अपेक्षित तिथि की गणना कैसे की जाती है । 1

1) 8 महीने \$ 7 दिन

2) 9 महीने \$ 6 दिन

3) 9 महीने \$ 7 दिन

4) 8 महीने \$ 5 दिन

How is the expected date of delivery calculated from the first day of menstrual period?

a) 8 Months + 7 days

b) 9 months + 6 days

c) 9 months + 6 days

d) 8 months + 5 days

प्र18. पानी की बोतल खरीदते समय आप कौन-सा मानक चिह्न जाचेंगे । 1

1) आई.एस.आई मार्क

2) एग मार्क

3) हॉल मार्क

4) ईको मार्क

Which standard mark will you check while buying bottle of water?

a) ISI mark

b) Agmark

c) Hall mark

d) ECO mark

प्र19. इडली बनाते समय आप किस पाक विधि का उपयोग करेंगे । 1

1) गहरा तलना

2) भाप द्वारा

3) भूनना

4) उबालना

Which cooking method? Would you use it while preparing idlis?

a) Deep frying

b) Steaming

c) Roasting

d) Boiling

प्र20. निम्नलिखित वाक्य सही है या गलत: - 2

1) अनाज हमारे शरीर के लिए ऊर्जा का प्रमुख स्रोत है ।

2) हमें अनाज को परिष्कृत रूप में खाना चाहिए ।

3) छोटे बच्चों के लिए दूध को सर्वोत्तम भोजन माना जाता है ।

4) हमें अनाज और दालों के संयोजन को नहीं खाना चाहिए ।

State whether the following statement are True or False:

i) Cereals are the main source of energy in our body

ii) We should eat cereals in refined form

iii) Milk is considered the best food for small children

iv) We should not consume a combination of cereals and pulses

प्र21. निम्नलिखित वाक्य सही है या गलत: - 2

1) पकाए जाने वाले भोजन में विद्यमान पोषक के तत्वों पर सोडा का कोई हानिकारक प्रभाव नहीं होता है ।

2) जब पकाए जा रहे भोजन के अतिरिक्त पानी को फेंक दिया जाता है तो खनिज नष्ट हो जाते हैं

3) जब भोजन को प्रेशर कुकर में पकाया जाता है तो इससे पोषक तत्वों का अधिकतर नुकसान होता है ।

4) पकाने की प्रक्रिया के दौरान विटामिन सी आसानी से नष्ट हो जाता है ।

State whether the following statement are True or False:

i) Baking soda has no harmful effect on nutrients present in food that is being cooked.

ii) Minerals are lost when the water in which the foods are cooked is thrown away.

iii) Maximum loss of nutrients occurs when food is pressure - cooked

iv) Vitamin C gets easily destroyed during cooking

प्र22. निम्नलिखित वाक्य सही है या गलत: - 2

1) हमारे आहार में रेशे की आवश्यकता नहीं है ।

2) सेब खाने से पहले हमें उसका छिलका निकाल लेना चाहिए ।

3) रेशे से कैंसर के निवारण में मदद मिलती है ।

4) रेशे मनुष्य को मोटा बनाते हैं ।

State whether the following statement are True or False:

- i) Fiber is not essential in the diet
- ii) We must remove the outer skin of apples before eating
- iii) Fiber helps in the prevention of cancer
- iv) Fiber makes fat

प्र23. निम्नलिखित वाक्य सही है या गलत - 2

- 1) टमाटरों व अंगूरों में रेशें होते हैं ।
- 2) रेशे भोजन को स्थूलता प्रदान करते हैं ।
- 3) यदि आप रेशों का सेवन नहीं करते हैं तो आपका वजन कम हो जाएगा ।
- 4) शाकाहारी लोगों को ही विशेष रूप से दालों का सेवन करना चाहिए ।

State whether the following statement are True or False:

- i) Fiber is found in tomatoes and grapes
- ii) Fiber increases bulk of the food
- iii) You will lose weight if you do not eat fiber
- iv) Pulses are specially recommended for vegetarian people

प्र24. निम्नलिखित वाक्य सही है या गलत - 2

- 1) आँधी से वायु में धूल के कणों की मात्रा कम हो जाती है ।
- 2) चूल्हे पर एक ऊँची चिमनी लगानी चाहिए
- 3) वृक्ष लगाने से प्रदूषण कम होता है ।
- 4) सीसा रहित पेट्रोल व सीएन जी. का उपयोग अधिक करना चाहिए ।

State whether the following statement are True or False:

- i) The amount of dust particles in the air decreases with a storm
- ii) A high chimney should be installed on the stove
- iii) Plantation tree, reduce pollution
- iv) Lead - free petrol and CNG should be used more

प्र25. निम्नलिखित वाक्य सही है या गलत - 2

- 1) स्वस्थ रहने तथा रोगों से मुक्त रहना ही स्वास्थ्य है ।
- 2) स्वस्थ अंतर-व्यक्तिगत संबंध रखते हैं ।
- 3) माँ का दूध उत्तम आहार है ।
- 4) शिशु के लिए टीकाकरण आवश्यक नहीं है ।

State whether the following statement are True or False:

- i) To be healthy and free from diseases is health
- ii) Healthy interpersonal relationships
- iii) Mother's milk is the best diet
- iv) Vaccination is not necessary for infants

प्र26. निम्नलिखित वाक्य सही है या गलत - 2

- 1) समय की योजना हमेशा पहले से बनाई जाती है ।
- 2) खरीदारी और कपड़े धोना गतिविधियाँ हैं ।
- 3) श्रम बचाने वाले उपकरण समय नहीं बचाते
- 4) धूल झाड़ना एक हल्की गतिविधि है ।

State whether the following statement are True or False:

- i) Time plan is always made in advance
- ii) Shopping and washing are inflexible activities
- iii) Labour saving equipment do not save time
- iv) Dusting is a light activity

प्र27. निम्नलिखित वाक्य सही है या गलत - 2

- 1) नवजात शिशु की नाभि को नए ब्लेड से काटना चाहिए ।
- 2) एक गर्भवती महिला को टिटनेस का टीका लगवाना चाहिए ।
- 3) जन्म के 6 सप्ताह बाद ठूँस का टीका लगवाना चाहिए ।
- 4) कोलोस्ट्रम शिशु के स्वास्थ्य के लिए बहुत महत्वपूर्ण है ।

State whether the following statement are True or False:

- i) Umbilical cord of a new born baby should be cut with a new blade
- ii) A pregnant woman should take one tetanus vaccine
- iii) Labour saving equipments do not save time
- iv) Dusting is a light activity

प्र28. निम्नलिखित कॉलम 1 को कॉलम 2 से मिलाएँ

2

कॉलम 1

कॉलम 2

- | | |
|--------------------|-----------------------------------|
| I) ब्लॉचिंग | a) तापमान में वृद्धि करना |
| II) धूप में सुखाना | b) तापमान कम करना |
| III) फ्रीजिंग | c) एंजाइमों की अभिक्रिया को रोकना |
| IV) पास्चुरीकरण | d) निर्जलीकरण |
- सही विकल्प चुनें।

- A) I - (b), II - (d), III - (a), IV - (c)
- B) I - (a), II - (b), III - (d), IV - (c)
- C) I - (c), II - (d), III - (b), IV - (a)
- D) I - (c), II - (d), III - (a), IV - (b)

Match the following column I with that of column II: -

Column I

Column II

- | | |
|--------------------|-----------------------------|
| i) Blanching | a) Raising the temperature |
| ii) Sun drying | b) Lowering the temperature |
| iii) Freezing | c) Arrest action of enzymes |
| iv) Pasteurisation | d) Dehydration |

Choose the correct option

- A) I - (b), II - (d), III - (a), IV - (c)
- B) I - (a), II - (b), III - (d), IV - (c)
- C) I - (c), II - (d), III - (b), IV - (a)
- D) I - (c), II - (d), III - (a), IV - (b)

प्रश्न 29. निम्नलिखित कॉलम 1 को कॉलम 2 से मिलाएँ

2

कॉलम 1

कॉलम 2

- | | |
|------------------|--------------|
| (संक्रामक रोग) | (उद्भव अवधि) |
| I) तपेदिक | a) 1-3 दिन |
| II) पर्टुसिस | b) 4-6 दिन |
| III) इन्फ्लुएंजा | c) 20-35 दिन |
| IV) हेपेटाइटिस | d) 7-12 दिन |

सही विकल्प चुनें।

- A) I - (b), II - (d), III - (a), IV - (c)
- B) I - (a), II - (a), III - (b), IV - (c)
- C) I - (d), II - (c), III - (a), IV - (b)
- D) I - (c), II - (d), III - (a), IV - (b)

Match the following column I with that of column II: -

Column I

Column II

- | | |
|------------------------|---------------------|
| (Communicable disease) | (Incubation period) |
| i) Tuberculosis | a) 1-3 days |
| ii) Pertussis | b) 4-6 days |
| iii) Influenza | c) 20-35 days |
| iv) Hepatitis | d) 7-12 days |

Choose the correct option

- A) I - (b), II - (d), III - (a), IV - (c)
 B) I - (a), II - (a), III - (b), IV - (c)
 C) I - (d), II - (c), III - (a), IV - (b)
 D) I - (c), II - (d), III - (a), IV - (b)

प्र30. रिक्त स्थान भरें ।

2

- 1) लोकतांत्रिक अनुशासन शैली में पले - बड़े बच्चे अधिक होते हैं ।
- 2) जीवन चक्र के चरण के दौरान, एक दंपति सामुदायिक सेवाओं में भाग ले सकता है और अपने शौक पूरे करना शुरू कर सकता है ।
- 3) दो साल तक के शिशु खेलों में सक्रिय रूप से शामिल होते हैं ।
- 4) जब एक परिवार अपने बच्चों के साथ एक ही छत के नीचे रहता है तो उसे परिवार कहा जाता है ।

Fill in the blanks -

- i) Children brought up with democratic discipling style are more _____.
- ii) During _____ stage of life cycle a couple can participate in community services and start pursuing their hobbies
- iii) Infants up to two years are actively engaged in _____ games
- iv) When a family lives with their children under one roof is known as _____ family

प्र31. रिक्त स्थान भरें ।

2

- 1) जूता पॉलिश और लिपस्टिक की पहचान की जा सकती है क्योंकि यह कपड़े को महसूस कराता है ।
- 2) तन्तु अमोनिया का उपयोग ठंडे पानी के साथ दाग हटाने के लिए किया जाता है ।
- 3) उन को विधि से धोया जाता है ।
- iv) पॉलिएस्टर को _____ °C पर इस्त्री किया जाना चाहिए।

Fill in the blanks -

- i) Shoe polish and lipstick can be identified as it makes the fabric feed _____
- ii) Diluted ammonia is used to remove _____ stains along with cold water
- iii) Wool is washed by _____ method of washing
- iv) Polyester should be ironed at _____ C.

खण्ड - ख

Section - B

प्र32. श्री राकेश एक निर्माता के खिलाफ मामला दर्ज करना चाहते हैं । उसे अपनी शिकायत के साथ कौन से दो दस्तावेज जमा करने की आवश्यकता होगी ।

2

Mr. Rakesh wants to file a case against a manufacturer. What two documents would he need to submit with his complaint?

प्र33. आई. सी. डी. एस में स्वास्थ्य कार्यकर्ता के रूप में गर्भवती महिलाओं के चार कारण बताकर नियमित चिकित्सकीय जाँच कराने के लिए प्रोत्साहित करें ।

2

As a health worker in ICDS give four reasons to encourage the pregnant women to get their medical checkup done regularly.

Or

अपनी भाभी को उनकी गर्भावस्था से संबंधित समस्याओं से निपटाने के चार तरीके के बारे में बताएँ

2

Guide your sister in law about four ways to cope with problems related to pregnancy.

- प्र34. हमारे भोजन में अंकुरित खाद्य पदार्थों को सम्मिलित करने के दो लाभ बताए । 2
Give two reasons for including germinated food in our meals.
- प्र35. खाद्य और पोषण के क्षेत्र में स्नातक होने के बाद, गुनीत नौकरी ढूँढना चाहती है । उसे किन्हीं दो संस्थानों के बारे में बताएँ जहाँ उसे अपना आवेदन करना चाहिए । 2
After graduating in the field of food and nutrition, Guneet wants to find a job. Make her aware of any two institutions where she should put in her application
- प्र36. घर पर सफेद सूती कपड़ों पर स्टार्च लगाते समय अपनाई जाने वाली चार सावधानियाँ लिखें । 2
Write any four precautions you will adopt while starching white cotton clothes at home.
- प्र37. मृदा प्रदूषण बढ़ाने के लिए लोग किन चार तरीकों से जिम्मेदार है । 2
In what four ways citizens are responsible for increase in soil pollution.
Or
वायु प्रदूषण बढ़ने के लिए लोग किन चार तरीकों से जिम्मेदार है । 2
In what four ways are people responsible for increasing air pollution.
- प्र38. संचार एवं विस्तार के क्षेत्र में कौन से दो स्व रोजगार के अवसर उपलब्ध है । 2
Write two self-employment opportunities are available in the field of communication and extension
- प्र39. पत्तागोभी के पोषक तत्वों को बचाने के लिए पकाते समय कौन सी चार सावधानियाँ बरतनी चाहिए । 2
Write four precautions should be taken to save nutrients of cabbage while cooking them.
- प्र40. टिवल बुनाई व साटिन बुनाई में अन्तर बताइये । 2
State the difference between twill weave and satin weave.
- प्र41. एक बीमार बच्चे को खुराक देते समय हम किन बातों का ध्यान रखेंगे । 2
What precautions should be taken while feeding a sick child.
- प्र42. घर खरीदने से पहले आप पड़ोस में किन छह सुविधाओं की जाँच करेंगे । 3
Which six facilities would you check in the neighbourhood before buying a house.
- प्र43. आपके भाई को नौकरी नहीं मिल पा रही है उसे अपने खर्चों में कटौती करने के लिए गतिविधियाँ सुझाएँ । 3 छः
Your brother is not able to find a job suggest him any six activities to cut down his expenses.
- प्र44. घर पर अपनी बहन को एक किलोग्राम मटर को सुरक्षित करने का मार्गदर्शन बताएँ 3
Guide your sister to freeze one kg pea at home
Or
घर पर अपनी मम्मी को 2 किलोग्राम आलू को सुरक्षित करने का मार्गदर्शन बताएँ 3
Guide your mother to freeze two kg potatoes at home
- प्र45. एक स्वास्थ्य संबंधी आदतों को पहचानें । अपने छोटे भाई को इस आदत का अनुसरण करने के लिए प्रेरित करें । 3
Identify a healthy habit. Motivate your younger brother to follow this habit
Or
आपकी माँ ने सुबह 7 बजे दोपहर का भोजन तैयार किया है और आप 2 बजे खाएँगे इस भोजन को सुरक्षित रखने के लिए आप क्या सावधानियाँ बताएँगे ।
Your mother prepared lunch at 7 am and you will eat it at 2 pm. What precaution would you suggest to keep this food safe?

- प्र46. प्रबंधन कार्य के चरण - आयोजन, संगठन, क्रियान्वयन और मूल्यांकन की सूची बनाईए निम्न परिस्थितियों में
5

क) परिवार पिकनिक पर जा रहा है।

ख) एक जन्मदिन की पार्टी है।

List the steps of management work - planning, organizing, Implementation, and evaluation, in the following situation

i) Family is going on a picnic

ii) There is a birthday party

- प्र47. गृहणियाँ अपना ज्यादातर समय घरेलू काम करने में बिताती है उन्हें अपनी ऊर्जा बचाने के छह तरीके सुझाएं।
5

Home makers spend most of their time doing household work. Suggest them six ways to save their energy.

Sample Paper - 5

Home Science

गृह विज्ञान

(216)

Time - 2.30 Hrs.

समय - 2.30 घण्टे

M.M - 85

पूर्णांक - 85

Section - A

खण्ड - क

- प्र01. बच्चों के दूध के दांत होते हैं -
क) 15 ख) 18 ग) 20 घ) 24
Milk teeth in children are
a) 15 b) 18 c) 20 d) 24
प्र02. निम्न में से प्राकृतिक स्रोत से कौन-सा तन्तु प्राप्त किया जाता है ?
क) नायलॉन ख) सूत ग) पॉलिस्टर घ) (क) व (ग) दोनों ही
Which fiber is obtained from a natural sources among the following?
a) Nylon b) Cotton c) Polyester d) Both (A) and (B)
प्र03. संवातन क्या है ?
क) शुद्ध वायु का प्रवेश व अशुद्ध वायु का निष्कासन
ख) हल्की वायु का ऊपर उठना एवं भारी वायु का नीचे आना
ग) कोई भी कार्य लम्बे समय तक नहीं करना।
घ) कोई कार्य न करना
What is Ventilation?
a) Entry of fresh air and removal of impure air.
b) Rising of light air and sinking of heavy air.
c) Not doing any work for a long time.
d) Not doing any work.
प्र04. कूड़े-करकट के विसर्जन की उत्तम विधि है -
क) जलाकर ख) जल प्रवाह में डालकर ग) खाद बनाना घ) भराव करने के लिए

The best method for waste disposal is.

- a) By burning b) By disposing in water flow c) Making Compost d) For landfilling

- प्र05. भोज्य पदार्थों को कौन-सा जीवाणु नष्ट करता है । 1
 क) यीस्ट ख) मोल्ड ग) बैक्टीरिया घ) इनमें से सभी
 Which microorganism spoils food items?
 a) Yeast b) Mold c) Bacteria d) All of these
- प्र06. राष्ट्रीय जन सहयोग एवं बाल-विकास संगठन की स्थापना कब हुई ? 1
 क) 4 जुलाई 1975 ख) 3 मई 1975 ग) 5 जुलाई 1978 घ) 8 मार्च 1945
 When was the National institute of public cooperation and child development (NIPCCD) established?
 a) 4 July 1975 b) 3 May 1975 c) 5 July 1978 d) 8 March 1945
- प्र07. सबसे ज्यादा ध्वनियों का शोर निम्न में से किससे है ? 1
 क) फौजी राइफल ख) हवाई हमले में सायरन
 ग) लाडलूस्पीकर घ) राक संगीत
 Which of the following produces the loudest sound?
 a) Army rifle b) Air raid siren c) Loud speaker d) Rock music.
- प्र08. मानव शरीर में ऑक्सीजन को ले जाने वाला वाहक है ? 1
 क) कैल्शियम ख) फॉस्फोरस ग) हीमोग्लोबिन घ) ग्लोबिन
 The carrier that transport oxygen in the human body is.
 a) Calcium b) Phosphorus c) Hemoglobin d) Globin
- प्र09. निम्नलिखित में कौन-सा भोज्य पदार्थ विटामिन 'ब' का अच्छा स्रोत है । 1
 क) फल ख) अण्डे ग) दूध घ) गुड़
 Which of the following food substances is a good source of vitamin 'C'?
 a) Fruit b) Eggs c) Milk d) Jaggery
- प्र10. प्रोटीन की इकाई है 1
 क) वसीय अम्ल ख) सिट्रिक एसिड ग) अमीनोएसिड घ) ग्लूकोज
 The unit of protein is
 a) Fatty acid b) Citric acid c) Amino acid d) Glucose
- प्र11. किस उम्र में बी.एम.आर की दर कम हो जाती है । 1
 क) बचपन में ख) किशोरावस्था में ग) युवावस्था में घ) वृद्धावस्था में
 At what age does the BMR (Basal Metabolic Rate) decrease?
 a) Childhood b) Adolescence c) Youth d) Old age
- प्र12. हमारा शरीर में से कितने प्रतिशत जल से निर्मित होता है ? 1
 क) 80% ख) 90% ग) 63% से 70% घ) 80% से 90%
 Our body is composed of what percentage of water.
 a) 80% b) 90% c) 63 to 70% d) 80% to 90%
- प्र13. रेटिना किन अंग का भाग है ? 1
 क) नाक का ख) आँख का ग) कान का घ) सिर का
 The retina is a part of which organ?
 a) Nose b) Eye c) Ear d) Head
- प्र14. एक मोटे व्यक्ति को खाने में कम प्रयोग करना चाहिए - 1
 क) वसा ख) कार्बोहाइड्रेट ग) प्रोटीन घ) विटामिन
 An obese person should consume less of which in their diet?
 a) fat b) Carbohydrates c) Protein d) Vitamins
- प्र15. प्लास्टिक की वस्तुएँ साफ करनी चाहिए- 1
 क) चूने से ख) राख से ग) सर्फ तथा साबुन से घ) नीबू से
 Plastic items should be cleaned with
 a) Lime b) Ash c) Detergent and soap d) Lemon
- प्र16. स्वस्थ सन्तान को जन्म देने के लिए उपयुक्त आयु कौन-सी है ? 1
 क) 15-20 वर्ष ख) 18-20 वर्ष ग) 25-35 वर्ष घ) 30-40 वर्ष
 "What is the appropriate age for giving birth to healthy off spring?"
 a) 15-20 years b) 18-20 years c) 25-35 years d) 30-40 years
- प्र17. विटामिन 'ए' की कमी से कौन-सा रोग हो जाता है ? 1

क) बेरी-बेरी ख) स्कर्वी ग) रतौंधी घ) रिकेट्स

Which disease is caused by vitamin 'A' deficiency.

a) Beri-Beri b) Scurvy c) Night Blindness d) Rickets

प्र18. किस विधि में भोजन को अनियंत्रित तापमान पर सीधे आग पर पकाया जाता है ? 1

क) भूनना ख) ग्रिलिंग ग) सौर ऊर्जा से खाना पकाना

In Which method food is cooked directly over fire under uncontrolled temperature?

a) Roasting b) Grilling c) Baking d) Solar Cooking

प्र19. बस कंडक्टर यात्री को बाकी रकम वापस नहीं करता है? उसमें कौनसे मूल्य की कमी है 1

क) समय की पाबंदी ख) ईमानदारी ग) नियमितता घ) शिष्टाचार

The Bus conductor does not return the balance to the passenger. which value is lacking in him.

a) Punctuality b) Honesty c) Regularity d) Courtesy

प्र20. निम्नलिखित वाक्य सही है या गलत:- 2

- क) रासायनिक परिसज्जा को 'नम परिसज्जा' भी कहा जाता है ।
- ख) स्थायी परिसज्जा रासायनिक उपचार के माध्यम से दी जाती है ।
- ग) ऊनी कपड़ों को गोंद की गंदगी हटाने के लिए साफ किया जाता है ।
- घ) मंजाई परिसज्जा पानी और साबुन के मिश्रण से की जाती है ।

State whether the following sentences are true or false.

- i) Chemical finish is also known as wet finished.
- ii) Permanent finish is given by chemical treatment.
- iii) Wool fabrics are cleaned to remove gum.
- iv) Scouring finish is done with a mixture of water and soap.

प्र21. निम्नलिखित वाक्य सही है या गलत:- 2

- क) टेलीविजन शो देखना एक अनम्य गतिविधि है ।
- ख) सही मुद्रा में काम करने से समय बचाने में मदद मिलती है ।
- ग) एक ही समय में दो या दो से अधिक काम करने को डोवेटेलिंग कहते हैं ।
- घ) हाथ से चादरें धोना भारी घरेलू कार्य है ।

State whether the following sentences are true or false.

- i) Watching a television show is an inflexible activity.
- ii) Working in the correct posture helps to save time.
- iii) Doing two or more activities at the same time is called dovetailing.
- iv) Washing bedsheets by hand is a heavy household activity.

प्र22. निम्नलिखित वाक्य सही है या गलत:- 2

- क) दूसरों की चीजों को वापस करना मुझे अच्छा नहीं लगता है ।
- ख) अपने मित्र के बैग से पैसे निकालना ।
- ग) मेरे मूल्य मुझे सही निर्णय लेने में सहायक होते हैं ।
- घ) अपना कार्य स्वयं करने से मुझे संतोष प्राप्त होता है ।

State whether the following sentences are true or false.

- i) I do not like returning things borrowed from others.
- ii) I withdraw money from my friend's bag.
- iii) My values help me in making the right decisions.
- iv) I feel satisfied when I complete a task on my own.

प्र23. निम्नलिखित वाक्य सही है या गलत - 2

- क) समय और ऊर्जा एक-दूसरे से घनिष्ठ रूप से संबंधित हैं ।
- ख) समय का उपयोग अधिक कुशलतापूर्वक किया जा सकता है यदि समय योजना तैयार न की जाए ।
- ग) जब हम दो या अधिक गतिविधियों का संयोजन करते हैं तो इसे सामंजस्य कहते हैं ।
- घ) समय-योजना तैयार करते समय किए जाने वाले कार्यों की संख्या को ध्यान में रखने की आवश्यकता नहीं होती है ।

State whether the following sentences are true or False.

- i) Time and energy are closely related to each other.
- ii) Time can be utilized more efficiently if a time plan is prepared in advance.
- iii) When we coordinate two or more activities. It is known as synchronization.
- iv) While preparing a time plan, It is not necessary to consider the number of tasks to be performed.

प्र24. निम्नलिखित वाक्य सही है या गलत - 2

- क) सूर्य का प्रकाश हल्के विसंक्रामक का कार्य करता है ।
- ख) घर के भीतर रखे हुए पौधा को जब तीव्र प्रकाश वाले कमरे में रखा जाता है तो वे पीले पड़ जाते हैं ।
- ग) वायु परिसंचरण से बासी हवा बाहर निकलती है और स्वच्छ वायु अंदर प्रवेश करती है ।
- घ) संवातक, कमरे को प्रकाश तथा स्वच्छ वायु प्रदान करते हैं ।

State whether the following sentences are true or False.

- i) Sunlight works as a disinfectant.
- ii) When indoor plants are placed in a room with intense light, their leaves turn pale.
- iii) Air circulation happens when stale air goes out and fresh air comes in.
- iv) Ventilations provide light and fresh air to the rooms.

प्र25. निम्नलिखित वाक्य सही है या गलत - 2

- क) बजट बनाने से धन की बचत में सहायता मिलती है ।
- ख) बजट आपकी वित्त व्यवस्था के प्रबंधन में सहायक होता है ।
- ग) बजट दीर्घकालीन लक्ष्यों को प्राप्त करने में सहायक नहीं होता है ।
- घ) परिवार के लक्ष्य बजट को प्रभावित करते हैं ।

State whether the following sentences are true or False.

- i) Creating a budget helps in saving money.
- ii) A budget assists in managing your financial system.
- iii) A budget is not helpful in achieving long-term goals.
- iv) Family goals influence the budget.

प्र26. निम्नलिखित वाक्य सही है या गलत - 2

- क) मकड़ी के जाले हटाना एक दैनिक गतिविधि है ।
- ख) मलमूत्र का सुरक्षित निपटान हमारे पर्यावरण को स्वस्थ रखने में मदद करता है
- ग) विपरीत दीवारों पर दो खिड़कियां लगाकर क्रॉस वेंटिलेशन प्राप्त किया जाता है ।
- घ) चट्टानी सतह घर की नींव के लिए अच्छी होती है, क्योंकि यह पानी को सोख लेती है

State whether the following sentences are true or False.

- i) Removing cobwebs is a daily activity.
- ii) Safe disposal of excreta helps to keep our environment healthy.
- iii) Cross ventilation is achieved by placing two windows on opposite walls.
- iv) Rocky surface is good for foundation of a house as it absorbs water.

प्र27. निम्नलिखित कथन सत्य है या असत्य - 2

- क) प्रेशर कुकिंग से भी बैक्टीरिया मर जाते हैं ।
- ख) भाप से पकाने के दौरान, भोजन सीधे पानी के संपर्क में नहीं आता है ।
- ग) सौर ऊर्जा से खाना पकाना पर्यावरण अनुकूल तरीका है ।
- घ) उबालना पाक विधि सुरक्षित नहीं है ।

State whether the following sentences are true or False.

- i) Pressure cooking kills all bacteria.
- ii) During steaming, food does not come in direct contact with water.
- iii) Cooking with solar energy is an environment friendly method.
- iv) Boiling is not a safe cooking method.

प्र28. उचित मिलान करें-

2

क	ख
1) खाद बनाना	यह प्रदूषित होती है जब फैक्टरियों का अपशिष्ट इसमें फेंका जाता है ।
2) थूकना	इसका प्रयोग बगीचे में उर्वरक के रूप में किया जा सकता है ।
3) मृदा	यह सूख कर गायब हो सकता है किंतु इसके कीटाणु यथावत रहते हैं और यह मृदा को प्रदूषित करता है ।
4) भस्मीकरण	यह महानगरों में प्रतिबंधित है ।

Match the following-

A	B
i) Composting	It becomes polluted when waste from factories is thrown on it.
ii) Spitting	Can be used as manure for gardening.
iii) Soil	It may dry up and disappear but germs remain and pollute the soil.
iv) Incineration	It is banned in the metropolitan cities.

प्र29. उचित मिलान करें-

2

क	ख
1) आम का जैम	सिट्रिक एसिड
2) दूध	पोटाशियम मेटाबाईसल्फेट
3) स्क्वैश	चीनी
4) आलू के चिप्स	पास्चुरीकरण

Match the following-

A	B
i) Mango jam	Citric acid
ii) Milk	Potassium Metabisulphite
iii) Squash	Sugar
iv) Potato chips	Pasteurization

प्र30. निम्नलिखित रिक्त स्थान भरें -

2

1) मलेरिया से फैलता है ।

Malaria is spread through

2) तपेदिक रोग से पीड़ित व्यक्ति को खाँसते व छींकते समय चाहिए।

A person suffering from tuberculosis should while coughing or sneezing.

3) संक्रमित भोजन और जल से संचरित होने वाले रोग हैं और

Diseases spread through infected food and water are and

4) यदि एक व्यक्ति निर्जलीकरण से पीड़ित है तो उसे प्रचुर मात्रा में देना चाहिए।

If a patient suffers from dehydration he/she should be given plenty of

प्र31. रिक्त स्थान भरें -

2

1) बिजली से लगी आग के ऊपर डालें ।

2) ईमानदारी का विपरीत है ।

3) जब आपको क्रोध आता है तो उस समय की भावना को कहते हैं ।

4) अपने बच्चों के लिए कपड़ों का चयन करते समय वस्त्रों में तथा गुण होने चाहिए ।

Fill in the blanks-

i) Pour over the fire caused by electricity.

ii) The opposite of honesty is

iii) When you get angry, the feeling at that time is called

iv) When choosing clothes for your children, the clothes should have and

खण्ड - ख

Section - B

- प्र32. सूक्ष्म जीवाणु के विकास की दो परिस्थितियाँ बताइए ? 2
State two conditions for the growth of microorganism?
- प्र33. मृदा प्रदूषण को नियंत्रित करने के लिए दो उपाय बताएँ ? 2
State two measures to control soil pollution.
- प्र34. तन्तु के गुण को परिभाषित कीजिए ? 2
Define the properties of fiber.
- प्र35. भारी, सामान्य तथा हल्के कार्यों में अंतर एक-एक उदाहरण प्रस्तुत करें । 2
Differentiate between heavy, normal and light tasks providing one example for each.
- प्र36. 'सामंजस्य' शब्द से आप क्या समझते हैं ? 2
What do you understand about world harmony?
- प्र37. विजटीकरण क्या है ? 2
What is devitalization?
or
कुंडलन से आप क्या समझते हैं ?
What do you understand by coiling/winding?
- प्र38. बुनाई के गुण क्या-क्या हैं ? 2
What are the properties of Weaving?
or
मूलभूत बुनाई क्या होती है ?
What is basic weaving?
- प्र39. ट्विल बुनाई व साटिन बुनाई में क्या अंतर है ? 2
What is the difference between twill weave and satin weave?
- प्र40. हथकरघा (हैडलूम) क्या है ? 2
What is a handloom?
- प्र41. एचआईवी/ एडस नामक रोग किस प्रकार से फैलते हैं ? 2
How is the disease named HIV/AIDS spread?
- प्र42. धुलाई तथा ड्राय क्लीनिंग में क्या अंतर है ? 3
What is the difference between washing and dry cleaning?
- प्र43. बेकिंग तथा भूनना में क्या अंतर है ? 3
What is the difference between baking and roasting?
or
कम तेल में तलना व अत्यधिक तेल में तलने में क्या अंतर है ?
What is the difference between shallow frying with less oil and deep frying with excessive oil.
- प्र44. संतरे का स्कैश बनाने की विधि लिखिए । 3
Write the method for making orange squash.
or
पास्तुरीकरण क्या है ?
What is pasteurization?
- प्र45. एक बच्चे को बुखार तथा लाल घमौरी है । आप किस प्रकार इस बात की जाँच करेंगे कि उसे खसरा है अथवा चेचक ? दोनों रोगों में लक्षणों की तुलना कीजिए । 3
A child has fever and red rashes. How will you determine whether it is measles or Chickenpox? Compare the symptoms in both diseases?
- प्र46. योजना का क्या महत्व है आपकी पाँच वर्ष की बहन के जन्मदिन की पार्टी की योजना बनाइए ।
प्रबंधन के सभी पदों का उपयोग करते हैं ?
What is the importance of planning? Plan your five-year-old sister's birthday party. use all the functions of management.

Or

अपने जीवन का एक मुख्य लक्ष्य पहचानिए । उन मूल्यों का वर्णन कीजिए, जहाँ से ये निकले हैं । उन लक्ष्यों को प्राप्त करने के लिए जो मानक आपने नियत किए हैं उनकी भी व्याख्या कीजिए ।

5

Achieve a life goal. Describe the values that led you to achieve those goals and explain the standards you set for them.

- प्र47. चार सदस्यों के एक परिवार जिसमें माता-पिता और दो बच्चे जिनकी आयु क्रमशः 12 वर्ष और 17 वर्ष है । वे दिल्ली में एक किराए के मकान में रहते हैं। पिता की प्रतिमाह 10,000 रुपये का वेतन योजना बनाएँ ।

5

A Family with four members, consisting of a mother, father, and two children , whose ages are 12 and 17 years respectively, live in a rented house in Delhi. The father earns a monthly salary of ₹10,000. Prepare a general expense plan.

