Natural Science

4

Chapter-1 Food And Digestion

Section-A

A. Oral Questions:

- 1. It is our body that makes us feel hungry.
- 2. Water is required by our body to dissolve, digest and absorve the food.
- 3. We should chew the food well for proper digestion of food.

B. Science Quiz:

- Rice, Wheat, Potatoes, Maize, Sugarcane and Honey are the food items rich in carbohydrates.
- Different food items may become rotten at room temperature after some time. Rotten foods starts giving foul smell and bad taste For long use food items should be kept preserved.
- Fries, Chips, Cake and Pizza are the junk foods.

C. Work Sheet:

- 1. Multiple Choice Questions (MCQs):

 (a) (iii) fats, (b) (iii) blood vessels, (c) (i) calcium, (d) (ii) Iron.
- 2. Circle the odd one:
 - (a) Banana (b) Cooking oil (c) Nose
- 3. Fill in the blanks:
 - (a) warm (b) proteins
 - (c) Fats (d) Calcium (e) rotten
- 4. Write the names of the nutrients present in the following foods:

(a) eggs (b) pulses (c) butter

5. Join the dots, identify the organs given in the following picture and write their name:

Mouth, Lever, Small Instestine, Stomuch, Pancreas, Large Intestine

Section-B

A. Multiple Choice Questions (MCQs):

1. (iii) junk food, 2. (iii) both

B. Very Short Answer Questions:

- 1. We get energy from carbohydrates.
- 2. We should chew the food well for proper digestion of food.

C. Short Answer Questions:

 We eat food to get energy to study, play and work, to grow and become stronger. To keep us fit and healthy. 2. Digestion is the process in which the food is eaten by us is broken down into simple and soluble substances that is absorbed by the body.

D. Long Answer Type Questions:

- 1. The food eaten by us is called our diet. A diet that contains the adequate quantity of all the nutrients, roughage and water required for good health is termed as balanced diet.
- 2. Good eating habits for proper digestion are:
 Always eat your food in a happy environment.
 - Eat at regular intervals.
 - Properly chew the food before swallowing.
 - Drink plenty of water everyday.
 - Eat lots of green leafy vegetables and fruits.
 - Avoid access eating.

Chapter-2 Teeth And Microbes

Section-A

A. Oral Questions:

- 1. We should avoid eating too many sweets and chocolates because they spoil our teeths.
- 2. We must brush our teeth at least twice a day.
- **3.** Typhoid, Diptheria, Pneumonia, Tuberculosis are the disease caused by Bacteria.

B. Science Quiz:

- 1. Cutting teeth is the other name of incisors.
- 2. Protozoa is the name of microbe that cause malaria.

C. Work Sheet:

- 1. Multiple Choice Questions: (MCQs)
 (a) (ii) twenty, (b) (i) two, (c) (ii) enemel.
- 2. Fill in the blanks:
 - (a) twice (b) calcium (c) Fungi (d) germs
- 3. Name the following pictures:
 Bacteria, Protozoa, Fungi
- 4. Join the dots, identify the pictures, write their names:
 - 1. Structure of a tooth, 2. Incisors

Section-B

- A. Multiple Choice Questions (MCQs):
 - 1. (iii) teeth, 2. (ii) Yeast
- B. Very Short Answer Questions:
- Microscope is the instrument from which we can see microbes.

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- 2. Fungi is the microbe that causes ringworm.
- C. Short Answer Questions:
- Microbe are very small living things. We can see them only through a microscope.
- 2. Tooth decay causes holes or cavities in the enamel. As a consequence, the nerves and the blood vessels in the pulp get exposed.
- D. Long Answer Type Questions:
- 1. The child has a set of 20 teeth by the time of reaching the age of three. This sets of teeth is of milk teeth or temporary teeth. As the milk teeth fall, new teeth grow in their places from the gums. This new set of teeth is called permanent teeth.
- 2. Teeth are useful for us because:
 - They give shape to our face.
 - They help us to properly bite and chew food eaten by us.
 - They help us to speak clearly.

Chapter-3 Safety And First Aid

Section-A

A. Oral Questions:

- 1. Most of the accidents occur on account of our carelessness.
- 2. We should follow safety rules to avoid accidents.
- Any sort of accident may happen in school when children are in a hurry in school.
- 4. When there is nose bleeding, pinch the nose and hold it for a few minutes till it stops bleeding.
- B. Science Quiz:
- 1. Dettol is antiseptic lotion which is used for the cleaning of wounds.
- The paste which is used for treatment of an insect bite is a paste of baking soda and cold cream.
- 3. Antiseptic lotion, sterilized gauze and cotton pads, scissors, band-aids, crepe bandage, antiseptic cream, methyl spirit and sticky tape etc. are the things that should be kept in a first-aid box.
- C. Work Sheet:
- 1. Multiple Choice Questions (MCQs):
 (a) (ii) follow, (b) (ii) slipping
- 2. Circle the odd one:
 - (a) Chilled water (b) Exercising

3. Fill in the blanks:

- (a) nylon (b) poisioning (c) push (d) hands (e) antiseptic
- 4. Identifying the following pictures. Write what is happening in the space provides:
 - (a) First aid for nose bleeding
 - (b) First aid for fainted person
 - (c) First aid for deeper cut
- 5. Join the dots, identify the pictures and write their names:
 - 1. First aid for nose bleeding
 - 2. Do not touch electric plugs

Section-B

- A. Multiple Choice Questions (MCQs):
- 1. (iii) wet hands, 2. (i) on
- B. Very Short Answer Questions:
- 1. Boro Plus is an antiseptic cream.
- 2. Dettol is an antiseptic lotion.
- C. Short Answer Questions:
- 1. We should not rub or push, especially on the stairs, run about or climb on the desks, throw things around in the classroom in school
- 2. The immediate help provided to an injured person before the doctor's arrival is called First Aid.
- D. Long Answer Type Questions:
- 1. We should follows the rules which crossing a road. These are:
 - We should never cross a road behind a parked vehicle.
 - We should always follow the traffic lights.
- 2. When a person has fainted, make him/her lie with the head lower than the body. Also allow fresh air around the person. It gives blood to his brain.

Chapter-4 Clothes—Our Protectors

Section-A

A. Oral Questions:

- 1. Clothes protect us from the scorching, heat of the sun, cold, rain, dust and insect bite.
- 2. During winter we wear woollen clothes.
- 3. Charkha is one of the oldest known forms of the spinning wheel.
- B. Science Quiz:
- Powerloom is the machine used to weave clothes.

- 2. Cotton and wool are the two natural fibres.
- 3. Spinning is the first step in making clothes.
- C. Work Sheet:
- 1. Multiple Choice Questions (MCQs):
 (a) (i) cool, (b) (iii) cotton, (c) (ii) natural
- 2. Circle the odd one:
 - (a) Boiling (b) Evening (c) Sweing machine
- 3. Fill in the blanks:
 - (a) cotton (b) uniform (c) Nylons (d) Stitching (e) soap
- 4. Identifying the following pictures. Write their names in the space provided:
 - (a) Powerloom (b) Spinning machine (c) Dyeing
- 5. Join the dots, identify the pictures and write their names:
 - 1. Cap

2. Coat

Section-B

- A. Multiple Choice Questions (MCQs):
 - 1. (i) loom, 2. (i) dyeing
- B. Very Short Answer Questions:
- 1. Natural Fibres are obtained from natural sources such as plants and animals.
- 2. We wear cotton clothes in summer.
- C. Short Answer Questions:
- Weaving is second step in native of clothes. Cloth is wooven from yarn (Thread) on a loom.
- 2. Spinning is the first step in making cloth. Spinning means making threads from fibres. In ancient days, people used to spin on a spinning wheel, called the charkha.
- D. Long Answer Questions:
- Natural Fibres are obtained from natural sources. Whereas synthetic fibres are obtained from chemicals, synthetic fibres are stronger than natural fibres.
- 2. Woollen clothes should be wrapped in a cotton cloth and store with dried neema leaves and napthalene balls to protect them from insects.

Chapter-5 Solids, Liquids And Gases

Section-A

- A. Oral Questions:
- 1. No, air does not occupies space.
- 2. Salt molecules fill up empty spaces between

- the water-molecules. So we cannot see salt disolving in water.
- 3. In solid objects the molecules are very closely packed. They have very strong force of attraction between them. Hence, there is a fixed shape of solid.
- B. Science Quiz:
- 1. Liquid is the state of matter whose volume is fixed but shape is not fixed.
- **2.** Microscope is the instrument used to see the molecules of matter.
- 3. Gase, Liquid, Solid are the three states of matter.
- C. Work Sheet:
- 1. Multiple Choice Questions (MCQs):
 (a) (i) solids, (b) (i) solution
- 2. Circle the odd one:

 (a) Force (b) Oxygen (c) Chair
- 3. Fill in the blanks:
 - (a) loosely (b) fixed (c) Gases (d) oxygen
- E. Identify the following pictures and write their state of matters:

Liquid state, Liquid state, Solid state

Section-B

- A. Multiple Choice Questions (MCQs)
 - 1. (i) water vapour, 2. (ii) soluble
- B. Very Short Answer Questions:
- 1. The molecules are so small that it is impossible to see them with our nacked eyes.
- 2. Oxygen is the gas that can be dissolved in water.
- C. Short Answer Questions:
- 1. Solid has a definite shape and volume. Solid is usually hard.
- 2. Gas is not in definite shape and volume. Gas is not hard.
- D. Long Answer Questions:
- When a sugar is dissolved in water, sugar molecules fill up the empty spaces among the molecules of water. This is the reason the volume of water remains the same.
- 2. The substances that dissolve in liquid are said to be soluble in that liquid and are known as solutes. For example: Sugar and Salt. The liquid in which a substance (solute) dissolves is known as a solvent. For example water and milk.

Chapter-6 Soil

Section-A

A. Oral Questions:

- 1. Plant and trees are grown in the soil. Hence, soil is voluable to us.
- 2. Large scale plantation of trees maintain the fertility of soil.
- The uppermost layer of soil contains minerals some amount of air, water, sand and organic matter.

B. Science Quiz:

- 1. Three types of soil are: (i) sandy soil, (ii) clayey soil, (iii) loamy soil.
- 2. Sandy soil is used for making building.
- 3. The uppermost layer of soil is most fertile.

C. Work Sheet:

1. Multiple Choice Questions (MCQs): (a) (ii) clayey soil, (b) (ii) sandy soil

- 2. Circle the odd one:
 - (a) Snow (b) Coastal (c) Crop rotation

3. Fill in the blanks:

- (a) soil
- (b) soil erosion
- (c) soil conservation
- (d) crop rotation
- 4. Identify the following pictures and write their names in the space provided:
 - 1. Soil erosion, 2. Planting trees, 3. Sandy soil

5. Match the column:

- 1. Sand—(c) fine powder of rocks
- 2. Clavey soil—(d) contains sand and clav
- 3. Loam—(e) found in ponds and river beds
- 4. Removal of top soil—(b) soil erosion
- 5. Humus—(a) makes the soil fertile

Section-B

A. Multiple Choice Questions:

1. (ii) soil erosion, 2. (ii) floods

B. Very Short Answer Questions:

- We should do the large scale plantation to make the soil fertile.
- 2. We call soil erosion to the removal of top soil.

C. Short Answer Questions:

- 1. Growing of different crops in the same field is called Crop Rotation.
- 2. The type of soil depends upon the kind of

rock from which it is formed.

D. Long Answer Questions:

- 1. There are different layers of soil. The top most layer is known as top soil. It is the most fertile layer and most suitable for farming. Sometimes, the top soil is carried away by strong winds and running water. This is known as soil erosion. The causes of soil erosion are:
 - (i) Strong winds and heavy rain
 - (ii) Large scale cutting down of trees.
- 2. The protection of soil can be done in following ways:
 - (i) Large scale plantation of trees.
 - (ii) Cultivation of different type of crops.
 - (iii) Plantation of trees and grass.
 - (iv) Construction of Dams.
 - (v) Cattle should not allowed to graze for long time.
 - (vi) Encouragement of step farming and construction of embankment.

Chapter-7 Green Plants

Section-A

A. Oral Questions:

- 1. Chlorophyll is green pigment present in leaves makes the leaves green.
- 2. Plants burn food to produce energy and they use it for their growth.
- 3. Oxygen made by leaves are use by the animals to breathe.

B. Science Quiz:

- 1. Stack, leaf blade, main vein, side veins and stomata are the main parts of a leaf.
- 2. Roots get water and minerals from the soil and send them to the leaves. Leaves absorbs sunlight and carbon dioxide together for making food.
- 3. Iodine solution is the solution which is used to test the presence of starch in the leaves.

C. Work Sheet:

1. Multiple Choice Questions:

(a) (ii) plant, (b) (ii) green

2. Circle the odd one:

(a) moulds (b) steam (c) water

3. Fill in the blanks:

- (a) Chlorophyll
- (b) Photosynthesis

- (c) Starch
- (d) Blue-Black
- (e) Leaf Blade
- 4. Identify the following pictures and write their names in the space provided:
 - (a) Cactus (b) Croton (c) Mushrooms
- 5. Join the dots, identify the pictures and write their names:
 - 1. Leaf structure, 2. Moulds

Section-B

- A. Multiple Choice Questions (MCQs):
 - 1. (ii) Blue-Black, 2. (ii) Green Colour
- **B. Very Short Answer Questions:**
- The green leaves make food in the presence of sunlight by using chlorophyl, Carbon-dioxide, water and minerals. This process is called photosynthesis.
- 2. Leaves are called the kitchen of the plant.
- C. Short Answer Questions:
- 1. Plants use their food in following ways:
 - Plants burn it to produce energy.
 - They use it for their growth.
- 2. The flow of energy in the form of food from one living thing to another is called foodchain.

D. Long Answer Questions:

- 1. The leaves of some plants such as croton have chlorophyll but they look dark in colour. This is far reason that the red pigment for existing in them hides the green colour of chlorophyll.
- 2. A balance between the number of plants and animals is necessary in nature. It will become rather difficult for plants to supply sufficient food and oxygen to all the animals. If there is an increase in the number of plants, animals may not be able to supply sufficient quantity of carbon-di-oxide to the plants for their food making process.

Chapter-8 Adaptations: How Plants Survive

Section-A

A. Oral Questions:

 Mangrove plants can grow in marshy areas because there is sticky and clayey soil in marshy regions.

- 2. Lotus have hollow and light steams which help in keeping the leaves and flower of loat.
- 3. Some plants have spines on their bodies to help in protecting them from animals.
- B. Science Quiz:
- 1. Adaptation is the process of adjustment in a particular environment.
- 2. Mountains region is the region where pine and fir tree can grow well.
- 3. Rubber Tree, teak and sugarcane are the plants that can grow in the areas of heavy rain fall.
- C. Work Sheet:
- 1. Multiple Choice Questions (MCQs):
 - (a) (iii) desert, (b) (ii) pitcher plant
- 2. Circle the odd one:

 (a) Pine (b) Neem (c) Peepal
- 3. Fill in the blanks:
 - (a) marshy (b) Cactus (c) marshes (d) aquatic (e) floating
- 4. Identify the following pictures and write their names in the spaces provided:

Water Hyacinth, Lotus, Tape Grass

Section-B

- A. Multiple Choice Questions (MCQs):
 - 1. (ii) conical, 2. (i) desert
- **B. Very Short Answer Questions:**
- 1. Hot and dry places are called deserts.
- 2. The aquatic plants can be divided into three parts:
 - (i) floating plants, (ii) fixed aquatic plants (iii) Under water plants.
- C. Short Answer Questions:
- 1. Cactus, date, palm, babool and keekar are desert plants.
- Saprophytic plants cannot make their own food but get their food from dead plants and animals.
- D. Long Answer Questions:
- 1. Deserts have little water. In deserts, most of the plants are grown without leaves or having very few leaves. Leaves changes into spines in most plants. This helps in prevention of water loss.
- 2. Trees in hilly areas have needle like leaves because their shape is helpful in sliding off easily as there is snowfall in hilly areas.

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Chapter-9 Animals And Their Young Ones

Section-A

A. Oral Questions:

- 1. Dolphins and whales are called mammals because they capable of swimming.
- 2. The process of embryo grows into a chick takes about 21 days when the fully grown chicks breaks the egg and comes out. This is known as hatching.
- 3. Insects such as grasshoppers and cockroaches have tree stages in their life cycle.

B. Science Quiz:

- 1. Boat is mammal can capable of flying.
- 2. All insects lay eggs.
- 3. The eggs of frogs are called spawns.

C. Worksheet:

- 1. Multiple Choice Questions (MCQs):
 - (a) (i) amphibians, (b) (iii) Yolk
- 2. Circle the odd one:
 - (a) Bird, (b) Caterpillar, (c) Fry
- 3. Fill in the blanks:
 - (a) Albumen
- (b) Fry
- (c) Yolk
- (d) Nymph
- (e) Pupa
- 4. Identify the pictures and write what is happening in the spaces provided:
 - (a) A cat with kitten.
 - (b) A baby snake coming out from an egg,
 - (c) Grasshopper.
- 5. Join the dots, identify and write the names of following pictures:
 - 1. Internal structure of an egg, 2. Frog

Section-B

A. Multiple Choice Questions (MCQs):

- 1. (iii) moulting.
- 2. (ii) spawns

B. Very Short Answer Questions:

- 1. All insects reproduced by laying eggs.
- 2. There are four stages in the life cycle of butterfly and housefly.

C. Short Answer Questions:

- Animals can reproduce as followings:
 by directly giving birth to young ones.
 - (b) by laying eggs out of which a baby hatches after a few days.
- 2. Their mother take care and protect them as they learn to look after themselves.

D. Long Answer Questions:

- Animals giving birth to young one and feeding them with their own milk are called mammals. In mammals, babies are formed inside the body.
- 2. A frog lays eggs in a safe place in the water. A large number of frog's eggs are called spawns. In about a duration of three weeks, the baby frogs come out of the eggs. They are called Tadpoles and look like tiny fish and breathe through gills. The Tadpoles after sometime lose their tails and develop legs. In due course, they become adult frogs.

Chapter-10 Adaptations—How Animals Survive

Section-A

A. Oral Questions:

- 1. All kinds of animals are kept in a zoo.
- 2. Animals that live on land known as terrestrial animals.
- 3. Animals such as camels are mainly found in desert.

B. Science Quiz:

- 1. Frog is an amphibian.
- 2. Monkey is an arboreal.
- 3. Vulture is a scavenger.

C. Work Sheet:

- 1. Multiple Choice Questions: (MCQs)
 - (a) (ii) Amphabians, (b) (ii) aerial, (c) (ii) flesh of dead animals
- 2. Circle the odd one:
 - (a) Goat (b) Hawk (c) Dolphin

3. Fill in the blanks:

- (a) habitat
- (b) terrestrial
- (c) arborcal
- (d) aerial
- (e) Herbivores
- 4. Identify the following pictures and write their names in the space provided:
 - A hedgehog has spines for protection;
 - A frog,
 - An Ostrich has strong long legs for running.
- 5. Join the dots, identify and write the names of these pictures:
 - 1. Horse, 2. Crane

Section-B

A. Multiple Choice Questions:

- 1. (iii) frog,
- 2. (ii) tortoise

B. Very Short Answer Questions:

- 1. A very large scale movement of birds from colder to warmer regions is known as migration.
- 2. Bees have stings.

C. Short Answer Questions:

- A very deep sleep of a few animals such as polar bear, lizards and frogs during winter is called winter sleep or hiberation.
- 2. Polar bear have thick fur on their bodies which keeps them warm and helps to survive them in extremely cold polar region.

D. Long Answer Questions:

- 1. The colours and shapes of a few animals like zebra, camelian (a lizard-like animal) and grasshoper are such that they merge with their surrounding. This merging is called camouflaging and these animals are called camouflaging animals.
- 2. Birds living in extremely cold places such as sibaria find it very difficult to survive in the cold winter. Hence, they live their homes in winter and fly thousands of killometers to warmer places in search of food and shelter. They fly back to their native places when winter ends there.

Chapter-11 Force, Work And Energy

Section-A

A. Oral Questions:

- Gravitational force and friction are the kinds of force.
- Work is said to be done on the body, when a force is applied on body to make it move through a distance.
- **3.** A friction is less on smooth surface.

B. Science Quiz:

- Gravitational force is responsible for the fall of the ball thrown upwards.
- Friction is the force that help us to write on a paper.
- **3.** The energy obtained from the sun is called sollar energy.

C. Work Sheet:

1. Multiple Choice Questions (MCQs):

(a) (ii) force, (b) (i) simple machine

2. Circle the odd one:

(a) ball (b) bycycle (c) electric heater

3. Fill in the blanks:

- (a) direction
- (b) opposes
- (c) Energy
- (d) windmill
- (e) force

4. Identify the following pictures and write their state of matter:

1. A bottle opener, 2. Solar cooker, 3. Wheel and axle

5. Join the dots, identify the pictures and write their names:

A screw, A scissor, A wedge

Section-B

A. Multiple Choice Questions (MCQs):

- 1. (i) lever,
- 2. (iii) flowing water

B. Short Answer Questions:

- 1. Friction is the force that opposes movement.
- 2. Heavy Barrels are the examples of inclined plane.

C. Short Answer Questions:

- 1. Simple machines make our work easier. So we use simple machines.
- 2. When a heavy object is pushed, it does not move from its place, than work is not done in this situation because the position of heavy object does not change and remains the same.

D. Long Answer Questions:

- 1. A screw is used to hold the things together whereas a wedge is a simple machine used to cut things.
- 2. Sun is the main and most important source of energy on earth. The energy obtained from sun is called solar energy. Solar energy is used in cookers and solar heaters for cooking and heating. Plants also use solar energy for making of food in green leaves.

Chapter-12 Air, Water And Weather

Section-A

A. Oral Questions:

1. Hot, cold, cloudy, rainy, windy, humid, all these terms telling us about different conditions of atmosphere.

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- 2. When sun rises or sets, its rays are slanting.
- 3. Cooler air flows down to take its place. This cooler air flowing in is called the wind.

B. Science Quiz:

- 1. The quantity of water vapour existing in the air is known as humidity.
- A Land breeze is the coastal breeze which is blowing from cloud to sea.
- Boiling is the simplest method to purify water.

C. Work Sheet:

1. Multiple Choice Questions (MCQs): (a) (ii) weather, (b) (i) atmosphere, (c) (ii) day

2. Circle the odd one:

(a) Moon (b) Condensation (c) Rain

3. Fill in the blanks:

- (a) breeze, (b) gale, (c) evaporation, (d) Humidity, (e) dew
- 4. Identify the following pictures and write their names in the space provided:

Dew, Hailstones, Snow

Section-B

A. Multiple Choice Questions (MCQs): 1. (ii) frost, 2. (i) quickly

B. Very Short Answer Questions:

- When water vapour freezes in the air, it forms crystal of ice called snow. Snowfall takes place on hill stations during winter season.
- 2. Rain is the purest form of water.

C. Short Answer Questions:

- 1. Water is allowed to stand for few hours in a container. This helps in settling down the impurities at the bottom of the container. This process is called sedimentation.
- 2. The process of change of water vapour into water by cooling is called condensation.

D. Long Answer Questions:

- Evaporation of water takes place at a faster rate in cases when :
 - The weather is windy.
 - The air is dry.
 - The temperature is high.
 - The exposed surface is large.
- 2. There are many methods to purity water such as:
 - (i) **Boiling:** Boiling is the simplest and largely used method of purify water. In this

method, water is boiled at least for 10 minutes. Thus, the germs present in water are killed by boiling.

(ii) Chlorination: In this process of chlorination, chlorine is added to water to kill germs. The process of adding chlorine in water is called chlorination.

Chapter-13 The Solar System

Section-A

A. Oral Questions:

- 1. Rotation is the movement of the earth causing the formation of days and nights.
- 2. Earth takes about 365 1/4 days in the completion of one resolution.
- **3.** Jupiter is the biggest planet of the solar system.

B. Science Quiz:

- 1. There are eight planets in our solar system.
- 2. Saturn have 56 sattelites.
- **3.** The spinning of the earth around its own axis is known as rotation.

C. Work Sheet:

- 1. Multiple Choice Questions (MCQs):

 (a) (ii) revolution, (b) (i) equator, (c) (iii)
 Neptune
- 2. Circle the odd one:

(a) Sun, (b) Moon, (c) Hemisphere

3. Fill in the blanks:

- (a) sun, (b) Jupiter, (c) earth (d) west to east, (e) earth
- 4. Identify the following pictures and write their names in the spaces provided:

Saturn, Solar System, Rotational Earth

5. Join the dots, Identify the pictures and write its name:
Solar System

Section-B

A. Multiple Choice Questions (MCQs):

1. (i) days and nights, 2. (i) day

B. Very Short Answer Questions:

- 1. Earth is also known as blue planet.
- 2. Neptune is the coldest and farthest from the sun.

C. Short Answer Questions:

1. The sun, The eight planets and their satellites (moons) and other heavenly bodies

- like comets and asteriods are constitute our solar system.
- 2. The earth rotates from west to east on its axis. This is the reason why the sun appears to rise in the east and set in the west.

D. Long Answer Questions:

- 1. The spinning of the earth around its own axis is known as rotation whereas the movement of the earth around the sun is known as revolution.
 - The time period of rotation is called solar day whereas the time period of revolution is called solar year.
- 2. The spinning of the earth around its own axis is known as rotation. The earth takes 24 hours in the comptetion of one rotation. This time period is called solar day. It is because rotation of the earth, days and night occur.

Chapter-14 Keeping Our Earth Green And Clean

Section-A

A. Oral Questions:

- 1. Cutting down of trees in large numbers is called deforestation.
- 2. Van Mahotsav is a festival of trees celebrated in the month of July for one week.
- The addition of harmful substance in air, water and soil that adversaly affects human beings and other living organisms is called pollution.

B. Science Quiz:

- 1. Three kinds of pollutions are: Water pollution, Air pollution and Soil pollution.
- 2. Sulphur-dioxide is the gas which cause air pollution.
- Throwing of Garbage into water bodies and bathing of animals in rivers and ponds make the water polluted.

C. Worksheet:

1. Multiple Choice Questions:

(a) (ii) harmful, (b) (ii) infertile, (c) (i) steel

2. Circle the odd one:

(a) Food pollution, (b) Smoke, (c) Milk

3. Fill in the blanks:

(a) pollution, (b) smoke, (c) fuel, (d) recycle, (e) land

- 4. Identify the following pictures and write their names in the given spaces:
 - Soil pollution,
 - Air pollution is caused by burning of fuels,
 - Deforestation
- 5. Write (T) For True and (F) For False Statement:

(a) (T), (b) (F), (c) (T), (d) (T)

Section-B

A. Multiple Choice Questions (MCQs):

1. (iii) sulphur-dioxide, 2. (i) CNG

B. Very Short Answer Questions:

- 1. The garbage thrown in the open is a soil pollutant.
- 2. Burning of garbage is an air pollutant.

C. Short Answer Questions

- 1. Planting trees on a very large scale is called afforestation.
- 2. World Environment Day is celebrated all over the world on June 5. On this day, the people discuss the environmental issues and talk about ways to save and improve the quality of our environment.

D. Long Answer Questions:

- 1. We must take the following measures to keep our water bodies clean:
 - Stop washing clothes or bathing animals in water bodies.
 - Stop throwing garbage into water bodies.
 - Cleaning of the waste water from factories before allowing it to flow into water bodies.
- 2. We should plant more number of trees for the following reasons:
 - Trees give fruits and vegetables to eat.
 - They give oxygen to all living creatures.
 - They clean the air by taking in carbon dioxide.
 - They help to reduce soil erosion by holding the soil.
 - They help in bringing rainfall.

Skill Test-1

A. Oral Questions:

- The important nutrients present in our food are carbohydrates, protiens, fats, vitamins and minerals.
- 2. We must take care of our teeth to prevent tooth decay. We can take care of teeths in many ways:

- We must brush our teeth at least twice a day.
- We should eat plenty of raw vegetables like carrots and fruits like apple.
- We should avoid eating too many sweets and chocolates.
- We should properly brush our teeth.

B. Multiple Choice Questions (MCQs):

1. (a) vitamins, 2. (a) Molars, 3. (c) Pulp, 4. (c) both

C. Answer the following questions:

- 1. Minerals makes our bones and body stranger.
- 2. Tooth decay causes holes or cavities in the enamel.
- We should apply a paste of baking soda and cold cream on the affected area and place ice cubes over the affected area in case of insect bite.
- D. Cirlce the odd one:
- 1. Digestion, 2. Vitamins
- E. Fill in the blanks:
 - 1. Eggs, fish, Meat, Cereals, Beans and Soyabeans
 - 2. Plague, 3. An ice pack.
- F. Fill in the missing letters. Look a the pictures for hints:

Vegetables, Flossing, Microscope

Skill Test-2

A. Oral Questions:

- Moulds and Mushrooms are Non-green plants. Hence, they do not have chlorophyll. They cannot make their food. They get their food from dead and rotting plants and animals.
- 2. The two types of plants are: Terrestrial plants and Aquatic plants.

B. Multiple Choice Questions (MCQs):

1. (c) lotus, 2. (b) embryo, 3. (c) both, 4. (b) arboreal

C. Answer the following questions:

- 1. The flattened part of a leaf is called leaf blade.
- 2. The process by which animals produce their young ones is known as reproduction.
- 3. Vulture is the example of scavenger.
- D. Circle the odd one:
 - 1. Fish, 2. Camels
- E. Fill in the blanks:
 - 1. shells, 2. aerial animals, 3. three

F. Fill in the missing letters:

Cactus, Gibbon, Dolphin

Skil Test-3

A. Oral Questions:

- 1. Woollen clothes protects our body to cold. So that we should wear woollen clothes in winter.
- 2. Three states of matter are : Solid, Liquid and Gas.

B. Multiple Choice Questions (MCQs):

1. (a) nylon, 2. (a) solid, 3. (c) solute, 4. (c) soil erosion

C. Answer the following questions:

- 1. We should use dried neem leaves and naphtalene balls to protect woollen clothes.
- 2. Sugar is the solute other than salt.
- 3. Clavey soil is used for making pots and toys.
- D. Circle the odd one:
 - 1. Wearing, 2. Soil erosion
- E. Fill in the blanks:

(a) rain coat, (b) shape, (c) clay

F. Fill in the missing letters:

Handloom, Water (Liquid), Deforestation

Skill Test-4

A. Oral Questions:

- 1. A push or pull applied on an object is called force.
- 2. The quantity of water vapour existing in the air is known as humidity.

B. Multiple Choice Questions (MCQs):

1. (b) friction, 2. (c) dew, 3. (a) days and nights, 4. (a) cutting down of trees

C. Answer the following questions:

- 1. Gravitational force is the force that pulls down the objects towards earth.
- 2. Chlorination is the process of adding chlorine in water to purify it.
- 3. World Environment Day is celebrated on 5 June all over the world.
- D. Circle the odd one:

1. Moon, 2. Research

- E. Fill in the blanks:
 - 1. hydro electricity, 2. 27, 3. pollutants
- F. Fill in the missing letters. Look at the pictures for hints:

Snow, Saturn, Pulley

Model Test Paper-1

A. Multiple Choice Questions (MCQs):

1. (c) both, 2. (b) Microscope, 3. (c) chlorophyll

B. Very Short Answer Questions:

- 1. Dettol is the antiseptic lotion to clean wounds.
- 2. There are six molars in each jaw.
- 3. When a solute dissolves in a solvent we get a liquid known as solution.
- 4. Sandy soil is used for making buildings.
- **5.** Moulds and mushrooms get their food from dead and rotting plants and animals.

C. Short Answer Type Questions:

- The immediate help provided to an injured person before the doctor's arrival is called first aid. First aid plays an important role in our everyday life at home, work or play. Everyone should learn about first aid.
- 2. The three states of matter are: Solid, Liquid and Gase.
 - Ice cube is the example of solid, water is the example of liquid, steam is the example of gas.
- 3. Two causes of soil erosion are:
 - Overgrazing of cattle
 - Strong winds and heavy rain.

D. Long Answer Questions:

- 1. While walking on the road we should follow safety rules these are:
 - Always walks on the footpath.
 - Always cross the road at a zebra crossing.
- 2. Plants and animals are dependent on each other for their survival. Plants give food to eat and oxygen to breathe to the animals. Animals breath out carbon dioxide. This carbon dioxide is used by the plants for making their food. Thus, plants and animals are dependent on each other.

Model Test Paper-2

A. Multiple Choice Questions (MCQs):

- 1. (a) nymph, 2. (c) wedge, 3. (a) moon
- B. Very Short Answer Questions:
- 1. Grasshoper is an insect eating plant.
- Animal that spend most of their time in air is known as Aerial Animals.
- Cocoon is the covering that covers caterpillar.
- 4. A screne is a simple machine that helps us to hold the things together.

5. Various elements that determine weather named on temperature, air pressure, wind, moisture and clouds.

C. Short Answer Questions:

- 1. In abou a duration of three weeks, the baby frongs comes out of the eggs called tadpoles. The tadpoles after some time lose their tails and develop legs. In due course, they become adult frogs. This whole process is called metamorphosis.
- 2. The earth moves around the sun. The movemet of the earth arround the sun is known as revolution. Earth takes about 365 1/4 days in the completion of one revolution. This time period is called a solar year. The revolution of the earth results in the occurrence of seasons.
- 3. There are three R's which everyone should adopt to reduce the pollution. The three R's are reduce, reuse and recycle.

D. Long Answer Questions:

- 1. Different source of energy are:
 - (i) Sun: Sun is the main and most important source of energy on earth. The energy obtained from the sun is called solar energy.
 (ii) Wind: Energy from the wind is called wind energy. It is used to move the fan of a windmill to produce electricity.
 - (iii) Water—The flowing water also has energy it is called water energy. This helps in the generation of electricity.
- 2. There are following methods of purifying the water such as:
- (i) Chlorination: In this process of chlorination, chlorine is added to water to kill germs. The process of adding chlorine in water is called chlorination.
- (ii) **Boiling:** Boilling is the simplest and largely used method to purify water. In this method, water is boiled at least for 10 minutes. Thus, the germs present in water are killed by boiling.
- (iii) Filtration—The process of purifying water called filtration is better than decentation. In this process, water is passed through a filter paper. The impurities become gathered over the filter paper. These impurities are called residue. The clear liquid gathered in separate beaker is called filtrate.

Sample Paper National Science Olympiad

1. (c), 2. (b), 3. (b), 4. (a), 5. (c), 6. (c), 7. (c), 8. (a), 9. (c), 10. (c), 11. (d), 12. (c), 13. (d).