Innovative Science-4



Unit – I Plants' Life

Producers of Foods:The Green Plants

Multiple Choice Questions (MCQs) (Based on CCE)

Tick (✓) the correct answer:

Ans. 1. (a) 2. (c) 3. (b)

Section I: Formative Assessment (Based on CCE)

A. Oral Questions:

- **Ans.** 1. Only green plants are able to make their own food because they have a green pigment called chlorophyll in their leaves. It helps the plant to manufacture the food.
 - 2. Due to the lack of sunlight the plant could not prepare its food. Hence it will be die or faint.

B. Fill in the blanks:

- **Ans.** 1. Leaf **blade** is the flat part of a leaf.
 - 2. The **stomata** helps in the exchange of gases.
 - 3. Only green plants can make their own **food.**
 - 4. **Cactus** is generally found in the desert area.
 - 5. Plants are **living** things.

C. Unscramble the following and with the correct words:

Ans. 1. Stomata

2. Energy

3. Mushroom

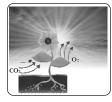
4. Balance

D. Which of the following shows the process of photosnthesis correctly:

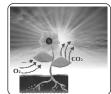
Ans.













Section II: Summative Assessment (Based on CCE)

E. Write true and false:

Ans. 1. The energy from the sun is trapped in stomata.

F

2. Non-green plants do possess chlorophyll.

 \mathbf{F}

3. Main vein of the leaf is also called midrib.

T

4. The leaves prepare their food in the form of glucose or simple sugar.

T F

5. Plants like Dodder (amarbell), can make their own food.

<u>61</u>

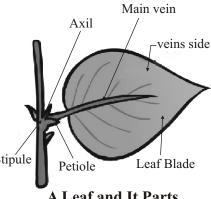
F. Match the following:

Ans. 1. The process is preparing food

- 2. The flat surface of the leaf
- 3. A non-green plant
- 4. Gas required during photosynthesis
- 5. Prepared food is stored as

G. Answer the following questions:

- Ans. 1. In a leaf there is a main vein running along the centre of the leaf. It is called mid ribs. It has a number of side veins. The flat part of a leaf is called leaf blade. A leaf also has many kidney shaped openings called stomata. The stomata helps in the exchange of gases. The cells of the leaves contain a green coloured pigment called Stipule chlorophyll. It traps the energy from the sunlight and helps the plant to manufacture its food.
- (i) photosynthesis
- (ii) leaf blade
- (iii) mould
- (iv) carbon dioxide
- (v) starch



A Leaf and It Parts

- 2. Plants are the only living things that can make their own food. Plants make their food in the presence of sunlight, water from the soil and carbon dioxide from the air. The process of making food is known as photosynthesis. The word photosynthesis consists of two words photo and synthesis. 'Photo' means 'light' and 'synthesis' means 'to put together'. Thus, plants put together carbon dioxide and water in the presence of sunlight to make their food.
- 3. In the presence of sunlight, green leaves put together water and carbon dioxide and convert them into simpler sugar that acts as food for the plant. As such the leaves of plants are known as the food factories of a plant.
- 4. Animals and plants are dependent on each other in several ways. Green plants are the main producers of food. Besides they also give out oxygen, which is needed by animals to breathe. Animals in return give out carbon dioxide, which is needed by plants for synthesis. Also, animals help plants in the formation of fruit and in spreading their seeds.



Habitat of Plants

Multiple Choice Questions (MCQs) (Based on CCE)

Tick (\checkmark) the correct answer:

Ans. 1. (a) 2. (c) 3. (b)

Section I: Formative Assessment (Based on CCE)

A. Oral Questions:

- **Ans.** 1. Because this shape helps leaves to face the cold weather. It also prevent the plant to any damage from snow.
 - 2. The leaves are absent in Cactus because they reduced into spiny thorns and helps to reduce water loss from the plant.
 - 3. Because a desert receives very little ranifall and these trees require high rainfall.

B. Fill in the blanks:

- Ans. 1. The natural surroundings in which a part or animal lives is called its **Habitat**.
 - 2. The plants which grow on hills are called **coniferous** plants.
 - 3. The trees that grow in **Marshy** plains are called mangroves.
 - 4. **Dried** grasses are used as packaging materials.
 - 5. The leaves of venus flytrap are like a **Trap.**

C. Tick (\checkmark) the correct answer:

- **Ans.** 1. The leaves of the pitcher plant are filled with minerals/nectar.
 - 2. Most of the plants grow in **soil**/water.
 - 3. Mulberry/Coconut trees grow in coastal areas.
 - 4. Water lily, lotus are the examples of floating/fixed aquatic plants.
 - 5. Underwater plants breathe through their **body surface**/roots.

D. See the following pictures and name the plant along with its group:

Ans.



Name Water Hyacinth Group Floating plants



Name Neem
Group plants in plains



Name Cactus
Group Plants in Deserts.

Section II: Summative Assessment (Based on CCE)

F Write true or false.

14.	Write true or raise.	
Ans.	1. Dried grasses are used as packaging materials.	1
	2. Water lettuce and duckweed are the examples of underwater plants.	F
	3. Plants that grow in water are called terrestrial plants.	I
	4. Conifers have broad leaves.	I
	5. Habitat is the place where plants and animals are adapted to live.	1

F. Match the following:

Ans. 1. Floating

(i) Water hyacinth

2. Underwater plant

(ii) Hydrilla

3. Fixed water plant

(iii) Water lily

4. Non-green plant

(iv) Mushroom

5. Evergreen tree

(v) Deodar

G. Answer the following questions:

- **Ans.** 1. Terrestrial plants are grow on land. These plants have well development root system and shoot system. Terrestrial plants are of following types:
 - (a) Plants on hills and mountains, called coniferous plants.

(b) Plants in plains.

(c) Plants in coastal areas.

- (d) Plants in deserts.
- (e) Plants in Marshy areas, called mangroves.
- (f) Plants in areas of heavy rainfall, called evergreen trees.

Aquatic plants are grow in water. Their root, stem and body are light and spongy. Aquatic plants are of three kinds:

(a) Floating plants

(b) Fixed plants

- (c) Underwater or submerged plants.
- 2. Habitat is that natural surrounding in which a plant or animal lives. Plants growing in various places are adapted to the climate around them. We find different kinds of plants in different areas because plants needs to adapt to the natural conditions of the area in which it lives to be able to survive. In this way adaptation is related to the habitat.
- 3. The roots which grow above the soil are called breathing roots. These roots have tiny openings at their tips, through which gases can pass. The soil is sticky and clayey in marshy areas. So the air cannot reach at the roots of the plants which grow in that areas. Thus the air can reach through the tiny openings of these breathing roots.
- 4. The three types of aquatic plants are as follows:
 - (i) Floating plants: These plants float freely in the water. e.g.: Duckweed.
 - (ii) Fixed plants: These plants have their roots fixed to the bottom of the pond. e.g.: Lotus.
 - **(iii) Submerged or underwater plants :** These plants grow completely under the water. e.g. : *Hydrilla*.
- 5. Non-green plants like moulds, fungus etc. do not have chlorophyll. So these plants are non-green. They cannot make their own food. They get their food from dead and decaying matter.
- 6. (a) Mountains: Pine and Deodar (b) Plains: Neem and Peepal.
 - (c) Coastal areas: Coconut and Rubber tree.
 - (d) Deserts: Cactus and Date palm.
 - (e) Marshy areas: Rhizopus and mangroves.
 - (f) Places with heavy rains: Teak and sugarcane.

Unit – II Animals' World



Adaptations— How Animals Survive

Multiple Choice Questions (MCQs) (Based on CCE)

Tick (✓) the correct answer:

Ans. 1. (c) 2. (a) 3. (b)

Section I: Formative Assessment (Based on CCE)

A. Oral Questions:

- This causes the lack of food. It disturb the flow of food and energy. It also destroy the food chain and ecosystem.
 - 2. Rhinoceros.
 - 3. Monkeys need strong arms and legs to climb trees.

B. Tick the correct answer:

- Ans. 1. A fish breathes with the help of its nose/gills.
 - 2. Penguins store **fat/**protein in their body.
 - 3. The padded feet protect the camel from the hot sand/air.
 - 4. The place where an animal lives is called its house/habitat.
 - 5. The **poles**/desert are the coldest places on earth.

C. Unscramble the following and write the correct words:

Ans. 1. Survive 2. Desert 3. Podded

4. Adaptation 5. Habitat 6. Migration.

Section II: Summative Assessment (Based on CCE)

D. Write true or false:

Ans. 1. All animals live in same climatic condition.
2. The process of adapting to the environment is called adaptation.
3. Deserts are very hot during the day and night.
4. Aquatic animals have lungs to breathe.
5. Solid bones make birds' body light.
F

E. Match the following:

Ans. 1. An amphibian
2. Aquatic animal
3. Terrestrial animal
4. Arboreal animal
5. Aerial animal
(i) Salamander
(ii) Whale
(iii) Camel
(iv) Squirrel
(v) Bat

F. Answer the following questions:

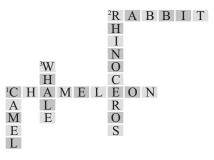
Ans. 1. Some animals can live both on land and in water. These animals are called amphibians. Frog, salamander and toad are the examples of amphibians.

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- 2. The natural place where an animal lives is called its habitat. The process of changing to suit the surroundings is called adaptation. In this process a plant or an animal adapts or changes itself to suit its surroundings.
- 3. The cuttle fish has an ink sac on its body. When it senses danger, it releases the ink, making the water blue. The many is not able to see anything and the fish swims to safety.
- 4. (i) Migration: Animals that live in very cold places, find it difficult to survive in wniters. So they leave their homes and travel to warmer places. When winter ends they travel back home. This is called migration.
 - (ii) **Hibernation**: Some snakes and frogs can not survive in the cold winter. So they eat a lot during summers and store the extra food in their body as fat. When winter comes, they sleep in caves or underground holes. This is called hibernation.

Activity

Ans.





Reproduction in Animals

Multiple Choice Questions (MCQs) (Based on CCE)

Tick (✓) the correct answer:

Ans. 1. (b) 2. (a) 3. (b)

Section I: Formative Assessment (Based on CCE)

A. Oral Questions:

Ans. 1. Animals that carry their babies in their pouch are called marsupials.

- 2. Birds sit on their eggs to keep the eggs warm while the baby birds grow inside them.
- 3. Frogs live both on land and in water. The webbed feet help the frog to swim.

B. Fill in the blanks:

Ans. 1. A young **cockroach** is called nymph.

- 2. **Kangaroos** has a pouch to carry his young one.
- 3. The caterpillar forms a shell called **Cocoon.**
- 4. When the babies are born, they are weak and helpless.
- 5. The process of shedding of old skin is called **moulting.**

C. Tick (\checkmark) the correct answer:

- **Ans.** 1. Human beings are also **mammals**/reptile.
 - 2. An adult butterfly come out of the egg/pupa.
 - 3. The baby bird is called crow/chick.
 - 4. The pupa is covered by a shell called larva/egg (cocoon).
 - 5. Mammals give birth to babies/eggs.

D. Complete the names of the following mammals:

- **Ans.** 1. Whale
- 2. Camel
- 3. Anteater

- 4. Horse
- 5. Pig

6. Elephant.

Section II: Summative Assessment (Based on CCE)

Ans. 1. Caterpillar

(i) Butterfly

2. Chick

(ii) Bird

3. Larva

(iii) Housefly

4. Tadpoles

(iv) Frog

5. Nymph

(v) Cockroach

F. Write true and false:

Ans. 1. All animals have young ones.

T

2. The female bird lays her eggs in the soil.

- F
- 3. The developing embryo obtains food from the shell.
- \mathbf{F}
- 4. Each egg hatches to produce a young one called larva.
- F

5. Mammals give birth to babies.

T

G. Name the following:

Ans. 1. The process of producing young ones

Reproduction

2. The yellow portion of an egg3. The young one of a frog

- Yolk Tadpole
- 4. Shedding of old skin by animals
- Moulting
- 5. The young one of a cockroach
- Nymph

H. Answer the following questions:

- Ans. 1. Living things do not live for ever. They die after completing their lifespan. For life to be continue, living things must produce more of their own kind. The process by which living beings produce more of their own kinds, is called reproduction.
 - 2. Insects like cockroaches pass through three life cycle stages. A young cockroach, called nymph, develops from an egg. It does not have wings. It sheds its skin several times and changes into a adult. Thus, egg, nymph and adult are the stages in the life cycle of a cockroach.
 - 3. The main features of insects are as follows:
 - (i) All insects lay eggs.
 - (ii) Insects have three pairs of legs.

- (iii) They shows metamorphosis in their life cycle.
- (iv) Life cycle is completed through several stages.
- (v) The stages of life cycle is different in different insects.
- (vi) Some insects shed its skin, this is called moulting.
- 4. Some animals give birth to the babies. These animals are called mammals. The babies of mammals grow inside the body of the mother for many weeks. Then mother give birth to the babies. The mother cares for them, feeds with milk and protects them till they can look after themselves.
- 5. All insects lay eggs. The eggs then go through several stages before becoming adult insects. This process is called metamorphosis. Cockroaches and butterflies are two examples of animals that show metamorphosis.

Formative Assessment-1

A. Oral Questions:

- **Ans.** 1. Only green plants are able to make their own food because they have a green pigment called chlorophyll in their leaves. It help the plant to manufacture the food.
 - 2. Because a desert receives very little rainfall and these trees require high rainfall.
 - 3. Frogs live both on land and in water webbed feet help the frog to swim.

B. Tick (\checkmark) the right option:

Ans. 1. (c) 2. (b) 3. (b) 4. (b).

C. Fill in the blanks:

- **Ans.** 1. A young **cockroach** is called nymph.
 - 2. The baby bird is called a **chick.**
 - 3. Plants are **living** things.
 - 4. Leaf **blade** is the flat part of a leaf.
 - 5. They natural place where an animal lives is called its **habitat.**

D. Unscramble the following and write the correct words:

Ans. 1. SURVIVE

2. PADDED

3. HABITAT

4. STOMATA

5. BALANCE

6. PENGUINS.

E. Tick (\checkmark) the correct answer:

- Ans. 1. Human beings are also mammals/reptile.
 - 2. Mammals give birth to **babies**/eggs.
 - 3. The **poles**/desert are the coldest places on earth.
 - 4. The leaves of the pitcher plant are filled with minerals/nectar.
 - 5. Underwater plants breathe through their **body surface**/roots.

Unit – III Food



Food and Digestion

Multiple Choice Questions (MCQs) (Based on CCE)

Tick (\checkmark) the correct answer:

1. (b) 2. (c) 3. (c)

Section I: Formative Assessment (Based on CCE)

Α. **Oral Questions:**

- Ans. 1. Milk contains calcium and many other nutrients in it. It helps in the formation of our bones and teeth. So, we need more milk in our diet.
 - 2. We must not eat too much of fried food because it is full of fat. It may be harmful for our health. Too much frying also destroy the nutrients of the food.

B. Fill in the blanks:

- Ans. 1. **Roughage** is the fibre in our food.
 - 2. Three-Fourths of our body weight is water.
 - 3. The undigested food passes into the large intestine.
 - 4. Digested food is absorbed by the blood vessels of the **small intestine**.
 - 5. **Carbohydrates** give us energy to work.

C. Unscramble the following and write the correct words:

- 1. DIGESTION 2. INTESTINE Ans.
 - 3. STOMACH 4. SALIVA
 - 5. DEHYDRATE 6. CANNING.

Section II: Summative Assessment (Based on CCE)

D. Write true and false:

- Ans. 1. Cooking makes the food tasty and easy to digest. T 2. Junk food provides with essential nutrients. F 3. An apple a day keeps the doctor away. T
 - 4. A little quantity of carbohydrates gives more vitamins. \mathbf{F} T
 - 5. Children must take food rich in proteins.

Ε. Match the following:

- Ans. 1. Digestive organ (i) Mouth and food pipe 2. Small intestine (ii) Long coiled tube 3. Junk food (iii) Pizza and burgers
 - 4. Balanced diet (iv) Contains all the nutrients (v) Vitamins and minerals 5. Protective food
 - 6. Protein (vi) Pulses and egg

F. Answer the following questions:

- Ans. 1. Fats gives us more energy. Fats are the richest sources of energy. They help in keeping our body warm. Proteins help us to grow. Our body is made up of cells. Protein helps in the repair of worn out cells. Foods that are rich in proteins are called body-building foods. While foods that are rich in fats and carbohydrates are called energy-giving foods.
 - 2. A diet which has the right amounts of all the nutrients like, carbohydrates, fats, proteins, vitamins and minerals, is called balanced diet.
 - 3. Our body needs vitamins and minerals because vitamins help our body to fight diseases. Lack of vitamins causes many diseases. Mnierals help in the formation of bones, teeth and blood. Calcium, iron, sodium etc. are some examples of minerals. Foods rich in vitamins and minerals keep us fit and healthy and are called protective foods.
 - 4. The process of digestion begins from the moment we put food into our mouth. Our teeth bite and chew the food. Here saliva is also mixes with the food. From the mouth food passes through the food pipe into the stomach. The food is churned here. From the stomach, the food is pushed into a long coiled tube called the small intestine. Here the food is completely digest. The blood vessels present in the walls of the small intestne absorb the digested food and carry it to all the parts of the body. The undigested food passes into the large intestine. The blood vessels in the walls of the large intestne absorb the extra water. At the last the semisolid waste is passed out through the anus.



Teeth and Microbes

Multiple Choice Questions (MCQs) (Based on CCE)

Tick (✓) the correct answer:

Ans. 1. (a) 2. (a) 3. (c)

Section I: Formative Assessment (Based on CCE)

A. Oral Questions:

Ans. 1. A tooth has three parts, crown, neck and root.

2. In a adult person there are 32 teeth.

3. Enamel is the hardest substance in our body.

B. Tick (\checkmark) the correct answer:

Ans. 1. Microbes are large/tiny living things.

2. Disease-causing microbes are called **germs**/enamel.

3. Inside the destine is the crown/pulp.

- 4. Humans have three/two sets of teeth.
- 5. The outer cover of a tooth is very soft/hard.

C. Unscramble the following and write the correct words:

Ans. 1. PREMOLAR

2. INCISOR

3. ENAMEL

4. BACTERIA

5. MICROBES

6. FUNGI.

Section II: Summative Assessment (Based on CCE)

D. Write true or false:

Ans. 1.	A tooth has four parts.
----------------	-------------------------

 \mathbf{F}

2. We use canines to tear pieces of food.

T

3. A newborn-baby has no teeth.

T

4. Wash your mouth after every meal.

T

5. There are five molars in each jaw.

F

E. Match the following:

Ans. 1. Moloars

(i) To grind food

2. Canines

(ii) To tear pieces of food

3. Incisors

(iii) To bite the food

4. Premolars

(iv) To crush food

5. Bacteria

(v) Tiny living things

F. Answer the following questions:

Ans. 1. Microbes are tiny living things. They can be seen only through a microscope. Microbes are the oldest form of life on the earth. They are found everywhere.

- 2. There are four main kinds of microbes. These are:
 - (i) Bacteria (ii) Virus (iii) Protozoa (iv) Fungi
- 3. Our teeth are a very important part of our body. They enable us to bite and chew food. This makes digestion easy. Teeth help us to speak clearly. They give proper shape to our face. Teeth are essential to enjoy our life. Clean and well-kept teeth make our smile beautiful.
- 4. If we take good care of our teeth, we can save them from decaying. Tooth decay results in bad breathe, cavities, toothache, bleeding gums and indigestion. Calcium is very important for strong teeth. We get it mainly from milk and other milk products. We should follow the following rules to protect our teeth:
 - (i) Brush our teeth at least twice a day.
 - (ii) Wash our mouth well after meals.
 - (iii) Use floss to clean between the teeth.
 - (iv) Clean the tongue also to remove bacteria.
 - (v) Avoid eating too many sweets.
 - (vi) Visit the dentist regularly for check ups.

Unit – IV Matter and Materials



Matter-Solids, Liquids and Gases

3. Solid

Multiple Choice Questions (MCQs) (Based on CCE)

Tick (✓) the correct answer:

Ans. 1. (a) 2. (c) 3. (b)

Section I: Formative Assessment (Based on CCE)

A. Oral Questions:

- **Ans.** 1. In liquid the molecules have more space because the molecules of a liquid are loosely packed.
 - 2. Because due to the heat of sun, water of the clothes evaporate and the clothe dry faster.

B. Fill in the blanks:

- **Ans.** 1. Everything around us in made up of **matter.**
 - 2. Molecules of solid are very **closely** packed.
 - 3. Liquids flow from a **higher** level to a **lower** level.
 - 4. All matters occupy some **space**.
 - 5. Water is known as the universal solvent.

C. Unscramble the following and write the correct words:

Ans. 1. Molecule 2. Liquid

4. Volume 5. Vessel

Section II: Summative Assessment (Based on CCE)

D. Match the following:

Ans. 1. Solids (i) Closely packed molecules

2. Liquids (ii) Loosely packed molecules

3. Gases (iii) Very loosely packed molecules

4. Volume (iv) Amount of space taken by a substance

5. Water (v) The universal solvent

E. Write true and false:

Ans. 1. Only some substances contain matter.

2. There are the three states of matter.

3. Liquids have a definite volume.

4. Solids can be both hard and soft.5. Sand is insoluble in water.T

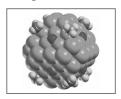
3. Sand is misoruble in water.

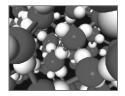
F. Answer the following questions:

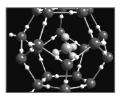
Ans. 1. Objects that take up space and have mass are called matter. Everything around us is made up of matter. Matter is made of very tiny particles called molecules. The matter has three states, solid, liquid and gas.



- 2. Water is known is the universal solvent because it can dissolve a wide variety of substances. Sand, wood, glass, oil, rubber, plastic etc. are some substances which do not dissolve in water.
- 3. The diagrams which show the arrangement of molecules in solids, liquids and gases are as following:







Molecules in solid

Molecules in liquid

Molecules in gas

4. Solids have a definite shape, size and volume. The molecules of solids are very closely packed. They do not have space between them to move. Liquids do not have a definite shape. They have a definite volume. The molecules of liquids are loosely packed. There is some space between the molecules. This allows the molecules some movement.



Unit – IV Materials and Ideas

The Right Clothes To Wear

Multiple Choice Questions (MCQs) (Based on CCE)

Tick (✓) the correct answer:

Ans. 1. (a) 2. (b) 3. (c)

Section I: Formative Assessment (Based on CCE)

A. Oral Questions:

- Ans. 1. Cotton socks allow to pass the air and keep the feet airy and fresh, so these are better than nylon.
 - 2. The clothes, which are made from natural fibres are porous. They absorb the sweat properly.

B. Fill in the blanks:

- **Ans.** 1. **Raincoat** protects us from rain.
 - 2. Thick and warm clothes protect us from the cold.
 - 3. Light-coloured clothes make us feel comfortable.
 - 4. The national dress of an Indian woman is the **Sari**.
 - 5. Clothes can be made from **Natural** or **Synthetic** materials.

C. Write True or False:

Ans. 1. Clothes protect us from dust, heat cold and rain.

F

2. We wear thick and warm clothes in warmer.

T.

T

3. Nylon, rayon and polyester are natural fibres.

- 4. People working in factories wear overalls. T 5. We should wear wet socks and tight shoes. \mathbf{F} D. Tick (\checkmark) the correct answer: 1. We wear **different**/same type of clothes. Ans. 2. We wear **raincoats**/uniforms to keep ourselves dry. 3. Wool is a synthetic/natural fibre. 4. Woollen clothes keep our body cold/warm. 5. **Doctors**/soldiers wear white coats. Section II: Summative Assessment (Based on CCE) Ε. Match the following: Ans. **Column A** Column B 1. Cotton (i) Natural fibre 2. Silk (ii) Silkworm 3. Wool (iii) Sheep (iv) Ropes and sacks 4. Jute 5. Lycra (v) Man-made fibre F. Write true or false: Ans. 1. Long ago humans lived in bungalows. F 2. Synthetic fibres are non-porous. T 3. We must wear dirty clothes to stay healthy. F 4. Dried neem leaves keep the insects away. T 5. Drity clothes can cause skin diseases. T G. Write the reasons for the following: 1. Cotton clothes are usually worn in summer because summer has hot Ans. weather and cotton clothes allow the body heat to escape. Cotton clothes absorb sweat also. 2. White or light coloured clothes suit the hot weather because they reflect
 - the heat and keep the body cool.
 - 3. We should keep mothballs between the folds of woollen clothes because these keep insects away.

H. **Answer the following questions:**

- 1. Clothes are important for us by the following ways: Ans.
 - (a) Clothes protect us from the heat of the sun.
 - (b) Clothes protect us from cold.
 - (c) Clothes protect us from rain.
 - (d) Clothes protect us from dust.
 - (e) Clothes protect us from insect bites.
 - (f) Clothes make us look smart.
 - 2. Natural fibres are made from parts of plants or animals. Cotton, jute, wool, silk etc. are some examples of natural fibres.

Synthetic fibres are prepared artificially and are called man-made fabrics. These fabrics are waterproof, stretchable and wrinkle free. They are non-porous and dry very quickly. Nylon, rayon, polyester etc. are examples of synthetic fibres.

- 3. A soldier wears a uniform made from tough material because it does not tear easily.
- 4. We wear socks and shoes to protect our feet from dust, heat, cold, germs and worms. Walking barefoot can cause cuts and various germs and worms may get into the cut and cause infection.
- 5. When the season is over, clothes must be exposed out to the sun for a few hours or drycleaned. They should then be stored properly. Keep mothballs or dried neem leaves between the folds of the clothes. These keep insects away.

Formative Assessment-2

A. Oral Questions:

- **Ans.** 1. Milk contains calcium and many other nutrients in it. It helps in the formation of our bones and teeth. So, we need more milk in our diet.
 - 2. Enamel is the hardest substance in our body.
 - 3. Cotton socks allow to pass the air and keep the feet airy and fresh, so these are better than nylon.

B. Tick (\checkmark) the right option:

Ans. 1. (c) 2. (b) 3. (b) 4. (b).

C. Fill in the blanks:

- Ans. 1. Roughage is the fibre in our food.
 - 2. Carbohydrates give us energy to work.
 - 3. Liquids do not have a definite **shape.**
 - 4. Disease causing microbes are called **Germs.**
 - 5. Water is known as the universal solvent.

D. Unscramble the following and write the correct words:

Ans. 1. DIGESTION 2. SALIVA

3. SOLUBLE 4. LIQUID
5. PREMOLAR 6. TYPHOID

E. Tick (\checkmark) the correct answer:

Ans. 1. States of matter are **three**/two.

- 2. **Food**/Sun give us energy to work.
- 3. Microbes are largest/tiny living things.
- 4. Humans have three/**two** sets of teeth.
- 5. The outer cover of a tooth is very soft/hard.

Summative Assessment-1

A. Write true or false:

Ans. 1. Only some substances contain matter.

2. Water lettuce and duckweed are the examples of underwater plants.

3. This process of adapting to the environment is called adaptation.

4. A little quantity of carbohydrates gives more vitamins.

5. A new born-baby has no teeth.

B. Match the following:

	1,1000011 0110 10110 ,,1119 ,		
Ans.	1. Tadpoles	(i)	Frog
	2. Aquatic animals	(ii)	Whale
	3. Canines	(iii)	To tear pieces of food
	4. Underwater plant	(iv)	Hydrilla
	5. Junk food	(v)	Pizza & Burger

C. Answer the following questions:

- **Ans.** 1. Water is called the universal solvent because it can dissolve a wide variety of substances.
 - 2. The roots which grow above the soil are called breathing roots. These roots have tiny openings at their tips, through which gases can pass. The soil is sticky and clayey in marshy areas. So the air cannot reach at the roots of the plants which grow in that areas. Thus the air can reach through the tiny openings of these breathing roots.
 - 3. The cuttle fish has an ink sac on its body. When it senses danger, it releases the ink, making the water blue. The enemy is not able to see anything and the fish swims to safety.
 - 4. If we take good care of our teeth, we can save them from decaying. Tooth decay results in bad breathe, cavities, tootache, bleeding gums and indigestion. Calcium is very important per strong teet. We get it mainly from milk and other milk products. We should follow the following rules to protect our teeth:
 - (i) Brush our teeth at least twice a day.
 - (ii) Wash our mouth well after meals.
 - (iii) Use floss to clean between the teeth.
 - (iv) Clean the tongue also to remove bacteria.
 - (v) Avoid eating too many sweets.
 - (vi) Visit the dentist regularly for check ups.
 - 5. Natural fibres are made from parts of plants or animals. Cotton, Jute, wool, silk etc. are some examples of natural fibres.

 Synthetic fibres are prepared artificially and are called man-made

fabrics. These fabrics are waterproof, stretchable and wrinkle-free. They are non-porous and dry very quickly. Nylon, rayon, polyester etc. are examples of synthetic fibres.

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Unit – V Safety Rules



Safety First

Multiple Choice Questions (MCQs) (Based on CCE)

Tick (✓) the correct answer:

Ans. 1. (a) 2. (a) 3. (b)

Section I: Formative Assessment (Based on CCE)

A. Oral Questions:

Ans. 1. Because vehicles comes from our right side and we should cross the road when it is clear.

- 2. Many accidents can occur in kitchen and bathrooms. If there is no proper light. It may be harmful for us and accidents may happen.
- 3. We should not crowd around a fainted person because he may be nervous due to the crowd. It disturb the comfort and calm of that person.

B. Fill in the blanks:

Ans. 1. Be **careful** while crossing the road.

- 2. Accidents always happen all of a sudden.
- 3. A few **precautions** can take care of some unwanted incidents.
- 4. Do not fight with your Friends.
- 5. Do not walk on the road.

C. Tick (\checkmark) the correct answer:

Ans. 1. Turn off the regulator of the **gas cylinder**/cycle.

- 2. Do not play with **sharp objects**/toys.
- 3. Use the road/**footpath** to walk.
- 4. The first medical help the person gets is called **first aid**/treatment.
- 5. By applying **antiseptic lotion**/water we can prevent the infection caused by germ.

Section II: Summative Assessment (Based on CCE)

D. Make the following correctly:

Ans. 1. First aid

2. Zebra crossing

3. Burns are

4. Do not fight

5. Be careful of

(i) The first medical help

(ii) Cross the road(iii) Very painful

(iv) Your friends

(v) Slippery floors

E. Write true and false:

Ans. 1. A wound should never be ignored.

T

We should always have a first-aid box at home.
 We should walk on the road.
 We should be careful of slippery floors.
 Chlidren can also pay electrical appliances.

F. Answer the following questions:

- **Ans.** 1. We should not listen to music while riding a bicycle because it can keep away us from hearing the sound or horn of a moving vehicle.
 - 2. Whenever a person is hurt, the first medical help the person gets is called first aid. It is the immediate help given to a person before the arrival of doctor.
 - 3. If somebody gets a minor burn, we should do the following things:
 - (i) Wash the burnt area with running water.
 - (ii) Put an ice pack on the burnt area, or dip it in cold water till the skin irritation is gone.
 - (iii) Then put an antiseptic cream like Burnol on the affected area.
 - 4. We should take the following precautions to avoid falling down at home:
 - (i) Do not climb on shelves, windows, tables etc.
 - (ii) Do not leave our toys on the floor.
 - (iii) Be careful of slippery floors.
 - 5. Make him lie down with his head lower than the body, so that the supply of blood to the brain increases.

Never panic. Send for an adult or call a doctor.

Loosen the victim's clothing.

Keep the victim protected from flies and dust.

Do not crowd around the victim.

Make sure the victim is comfortable and calm him down.

- 6. A first aid box usually has the following things:
 - (i) First aid book (vi) A pair of forceps
 - (ii) Cotton roll (vii) Athermometer
 - (iii) Clean cloth pieces (viii) A soapo
 - (iv) Some band-aids (ix) Apencil torch
 - (v) Ascissors (x) Antiseptic solution etc.



Unit – VI Moving Things, People and Ideas

Force, Work and Energy

Multiple Choice Questions (MCQs) (Based on CCE)

Tick (✓) the correct answer:

Ans. 1. (b) 2. (b) 3. (a)

Section I: Formative Assessment (Based on CCE)

Α. **Oral Questions:**

- Ans. 1. Chalk powder is used on a carrom board to reduce friction.
 - 2. We need heat energy to cook food.

B. Fill in the blanks:

- Ans. 1. A push or pull applied on the body is called **Force.**
 - 2. A bottle opener is the example of lever.
 - 3. Friction slows down the **Movement.**
 - 4. **Sun** is the main source of energy on the earth.
 - 5. **Energy** is ability to do work.

C. Tick the correct answer:

- 1. Energy from the wind is called solar/wind energy. Ans.
 - 2. A **screw**/hammer is used to hold the things together.
 - 3. An axe is an example of screw/wedge.
 - 4. The wind energy can rotate the blades of a table fan/wind mill.
 - 5. Friction **opposes**/flavours the motion of an object.

Section II: Summative Assessment (Based on CCE)

D. Match the following:

	_	_	
Ans.	1.	Force	

(i) Friction

2. Pulley

(ii) Awell

3. Wedge

(iii) An axe

4. Lever

(iv) Seesaw

5. Screw

(v) Screwdriver

Ε. Write true and false:

1. Friction can be of different kinds.

F

2. A screw is a simple machine to cut things.

F

- 3. A stopped water also has energy.
 - F T
- 4. Plants use solar energy to make food in the green leaves. 5. Friction slows down the movement.

 \mathbf{T}

F. **Answer the following questions:**

- 1. Friction is a force that tries to stop a moving object. Friction slows down Ans. the movements. The force of friction is more on a rough surface than on a smooth surface.
 - 2. Friction helps us to write on a paper.
 - 3. The flowing water also has energy. It is called water energy. Dams use the force of fast flowing water to generate electricity. Electricity produced by the energy of flowing water is called hydro-electricity.
 - 4. Energy from the wind is called wind energy. It is used to move the fan of a wind mill to produce electricity.



Air, Water and Weather

Multiple Choice Questions (MCQs) (Based on CCE)

Tick (\checkmark) the correct answer:

1. (b) 2. (c) 3. (c)

Section I: Formative Assessment (Based on CCE)

Α. **Oral Questions:**

- 1. We like most the cloudy weather. Ans.
 - 2. Rain is the purest form of water.
 - 3. Storm is the very strong wind.

В. Fill in the blanks:

- Ans. 1. The **Sun** causes changes in the condition of weather.
 - 2. The process of adding chlorine in water is called **chlorination**.
 - 3. **Air** is the mixture of many gases.
 - 4. Most of our earth surface is water.
 - 5. The changes of water vapour into water by cooling is called condensation.

C. Unscramble the following and write the correct words:

Ans. 1. Atmosphere

- 2. Moisture
- 3. Evaporation

- 4. Condensation
- 5. Humidity

Section II: Summative Assessment (Based on CCE)

D. Write true and false:

Ans. 1. The sun heats the air near the land. T F

2. Wind that blows gently is called wind storm.

3. Water changes its state only on cooling.

F

4. Condensation is a reverse of evaporation.

T

5. Rain is the purest form of water.

Т

E. Matching the following:

Ans.

- 1. Evaporation
- (i) Water changes into water vapour
- 2. Condensation
- (ii) Water vapour changes into water
- 3. Sea breeze
- (iii) Breeze blowing from sea towards the land
- 4. Land breeze
- (iv) Breeze blowing from land towards the sea
- 5. Strong wind
- (v) Gale

F. Answer the following questions:

Ans.

1. The process of change of water into water vapour on heating is called evaporation. The change of water vapour into water by cooling is called condensation. It is a reverse of evaporation.

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- 2. A coastal breeze blowing from sea towards the land is called sea breeze. It blows during the day time. A coastal breeze blowing from land towards the sea is called land breeze. It blows at night.
- 3. Boiling is the simplest method to purify water. In this method water is boiled at least for 10 minutes. Germs present in water are killed by boiling.
- 4. Weather is the state of the atmosphere. Cloudy, rainy, windy, hot, cold, humid, all these terms show the different conditions of the atmosphere around us. This is called the weather.
- 5. There are many methods to purify water. Boiling, sedimentation and decantation, filtration and chlorination are some of them.



Our Solar System

F

Multiple Choice Questions (MCQs) (Based on CCE)

Tick (\checkmark) the correct answer:

Ans. 1. (c) 2. (a)

Section I: Formative Assessment (Based on CCE)

A. Oral Questions:

- **Ans.** 1. If the earth stopped rotation on its axis, the day and night would not occur.
 - 2. Because earth is the only planet which has air and water. Without air and water life cannot be possible.

B. Tick (\checkmark) the correct answer:

- **Ans.** 1. The **sun**/moon is a huge ball of gases.
 - 2. Our solar system has nine/eight planets.
 - 3. The movement of the earth around the sun is called rotation/revolution.
 - 4. The earth revolves around the **sun**/moon.

Section II: Summative Assessment (Based on CCE)

C. Match the following:

Ans. 1. Blue planet
2. Red planet
3. Planet closest to the sun
4. Largest planet
(i) Earth
(ii) Mars
(iii) Mercury
(iv) Jupiter

1. We look up at the sky that is called solar system.

D. Write the true and false:

Ans.

2. A star is a huge ball of gases.
3. Star look small because they are very far from us.
4. The hottest planet is mercury.
F

5. The earth rotates from north to south on its axis.

(Science-4

E. Answer the following questions:

- **Ans.** 1. The sun, the eight planets and their satellites (moons) and other heavenly bodies like comets, and asteroids form the solar system.
 - 2. The spinning of the earth around its own axis is called rotation. The earth completes, one rotation in 24 hours. The earth moves around the sun. Te movement of the earth around the sun. The movement of the earth around the sun is called revolution. Earth takes 3651/4 days to complete one revolution.
 - 3. Satellites are the small bodies that revolve around planets. Some planets have their own satellites. The moon is the natural satellite of the earth.
 - 4. The hemisphere which is titled towads, the sun gets the direct sunrays, so it is warmer. It has longer days and shorter nights. It has summer. At this time the other hemisphere that is away from the sun, gets slanting sunrays. It has shorter days and longer nights. It has winter.

Formative Assessment-3

A. Oral Questions:

Ans. 1. We should not crowd around a fainted person because he may be nervous due to the crowd. It disturb the comfort and calm of that person.

- 2. We need heat energy to cook food.
- 3. If the earth stopped rotation on its axis, the day and night would not occur.

B. Tick (\checkmark) the right option:

Ans. 1. (b) 2. (c) 3. (a) 4. (a).

C. Fill in the blanks:

- **Ans.** 1. Friction slows down the **movement.**
 - 2. **Energy** is ability to do work.
 - 3. **Air** is the mixture of many gases.
 - 4. Be **careful** while crossing the road.
 - 5. Do not walk on the road.

D. Unscramble the following and write correct words:

Ans. 1. ATMOSPHERE

2. CONDENSATION

3. FRICTION

4. SURFACE

5. ACCIDENT

6. GRAVITY.

E. Tick (\checkmark) the correct answer:

Ans. 1. Energy from the wind is called solar/wind energy.

- 2. An axe is an example of screw/wedge.
- 3. Friction **opposes**/favours the motion of an object.
- 4. Do not play with sharp **objects**/toys.
- 5. By applying **antiseptic lotion**/water we can prevent the infection caused by germs.

Unit – VIII Natural Resources



Soil and its Conservation

Multiple Choice Questions (MCQs) (Based on CCE)

Tick (\checkmark) the correct answer:

1. (a) 2. (c) 3. (b)

Section I: Formative Assessment (Based on CCE)

A. **Oral Questions:**

- Ans. 1. Because this soil has small and tightly packed particles.
 - 2. Trees bind the soil firmly with their roots. It cannot be blown away by wind and water.

B. Fill in the blanks:

- Ans. 1. **Plant** grows in the soil.
 - 2. All plants gives us **oxygen** and **food**.
 - 3. **Gravel** is made of tiny stones.
 - 4. Soil is home of many **living** organisms.
 - 5. Plants bind the soil firmly with their **roots.**

C. Tick (✓) the correct answer:

- 1. Soil/Rock is very important for all life forms living on the earth. Ans.
 - 2. All plants give us **oxygen**/water.
 - 3. Top soil is the least/most fertile layer.
 - 4. **Subsoil**/Rock bed is not suitable for the growth of plants.
 - 5. Loam/Clay is found in ponds and river-beds.

Section II: Summative Assessment (Based on CCE)

D. Match the following:

- 1. Soil is made of Ans. (i) tiny particles of rock (ii) died, they become a part of the soil 2. When plants and animals (iii) below the top soil 3. Subsoil is
 - 4. It is used for (iv) making pots, toys and bricks 5. Due to soil erosion (v) fertile land become dry and arid.

E. Write true or false:

- Ans. 1. The soil gives all nutrients to plants. T 2. The moon heated the rocks. F
 - 3. Earlier the surface of the earth was covered with water. F
 - 4. Plants grow in subsoil. F

5. Soil can be divided into three types.

F. Answer the following questions:

- **Ans.** 1. Soil is made of tiny bits of rocks. It contain water, air and pieces of dead plants and animals. It also contain many microorganisms.
 - 2. Soil erosion is the carrying away of the top fertile soil by agents like wind and water. Due to soil erosion fertile lands become dry and arid. We can check the soil erosion by planting trees and grasses. Plants bind the soil firmly with their roots. It can not be blown away by wind and water. Dams should be constructed across the rivers to stop floods.
 - 3. Soil is made of different layers. These are:
 - (a) Top soil: This is the topmost layer of the soil which is dark in colour; humus is present in it. Plants grow in this layer. This is the most fertile layer of the soil.
 - **(b) Sub soil :** It is the second layer of the soil. It is lighter in colour. It is harder than the top soil. It is not suitable for the growth of plants.
 - **(c)** Rock bed: Further down, the soil particles are still bigger and it mostly contains stones and rocks.
 - 4. Soil can be divided into the following types:
 - (i) Gravel: This type of soil is full of tiny stones and does not hold water well.
 - (ii) Sand: It is grey or light brown in colour. Sand particles are big in size and have a lot of space between them. This soil also cannot hold much water.
 - (iii) Clay: It is yellowish or black in colour with small and tightly packed particles. It can hold a lot of water.
 - 5. Soil contains water, air, pieces of dead plants and animals. This is called humus. Humus is formed when animals living in the soil eat dead plants and animals and mix them with soil. Humus contains many useful things that plants require for their growth.
 - 6. Soil conservation is the prevention of soil erosion by planting trees and grasses. Plants bind the soil firmly with their roots. It cannot be blown away by wind and water. Dams should be constructed across the rivers to stop floods.

Soil is a valuable natural resource and must be conserved.



Resources Used in Our Daily Life

Multiple Choice Questions (MCQs) (Based on CCE)

Tick (\checkmark) the correct answer:

Ans. 1. (b) 2. (c) 3. (b)

Section I: Formative Assessment (Based on CCE)

A. Oral Questions:

- **Ans.** 1. There are two types of natural resources. These are:
 - (i) Renewable resources.
- (ii) Non-renewable resources.
- 2. Forests are very important for us because we get fruits, timber, medicines and many other useful products from them.
- 3. Gold, silver, iron, copper, zinc, led etc. are of some useful metals.

B. Fill in the blanks:

- **Ans.** 1. Renewable resources can be **recycled**.
 - 2. Soil provides **nutrients** that help plants to grow.
 - 3. **Life** cannot exist without water.
 - 4. Wind energy can be put to use with the help of windmills.
 - 5. We get **coal** and **petroleum** from under the ground.

C. Unscramble the following and write the correct words:

- **Ans.** 1. Natural
- 2. Renewable
- 3. Minerals

- 4. Petroleum
- 5. Forest

Section II: Summative Assessment (Based on CCE)

D. Match the following:

- **Ans.** 1. Renewable resource
- (i) Water
- 2. Non-renewable resource
- (ii) Coal

3. Wind-energy

- (iii) Wind mills
- 4. Low energy light bulbs
- (iv) CFLs

5. Solar energy

(v) Photo-sensitive cells

E. Write the true or false:

Ans. 1. We need different things in our daily life.

T

2. Sunlight is the secondary source of energy.

F

3. Soil is essential for life.

T

4. Minerals are substances found naturally in the earth.

T

5. Recycling the things that are made of polythene.

F

F. Answer the following questions:

- **Ans.** 1. We get food, medicines, wood etc. from plants. Coal and petroleum are dug out of the earth. All these are useful to us and are called resources. Resources given to us by nature are called natural resources.
 - 2. Coal and petroleum are non-renewable resource. These resources are limited and will be exhausted one day due to their extensive use. So it is necessary to conserve these resources. To conserve it we should not waste these resources. We should utilize these resources carefully and when it is necessary.
 - 3. A renewable resource is something that we use to make everyday products that is replaced faster than we use it up. Sunlight, air, soil and water are renewable resources.

A non-renewable resources is something that we use to make everyday products that is replaced much more slowly than we consume it. These resources include forests, minerals, coal and petroleum.

- 4. Minerals are substances found naturally in earth. They make up the rocks that cover the earth. Many metals can be obtained from minerals.
- 5. Metals are very useful and are used for making chains, nuts, pipes, cylinders, tools and railway tracks, stainless steel and utensils and many other things.

Formative Assessment-4

A. Oral Questions:

Ans. 1. Because this soil has small and tightly packed particles. So it can hold a lot of water.

- 2. Trees bind the soil firmly with their roots. It can not be blown away by wind and water.
- 3. Forests are very important for us because we get fruits, timber, medicines and many other useful products from them.

B. Tick (\checkmark) the right option:

Ans. 1. (b) 2. (c) 3. (a) 4. (c).

C. Fill in the blanks:

Ans. 1. **Plants** grows in the soil.

- 2. All plants give us oxygen and food.
- 3. Plants bind the soil firmly with their **roots.**
- 4. We get **coal** and **petroleum** from under the ground.
- 5. Renewable resources can be recycled.

D. Unscramble the following and write the correct word:

Ans. 1. NATURAL

2. MINERALS

3. FOREST

4. TURBINES

5. SUNLIGHT

6. ELECTRICITY.

E. Tick (\checkmark) the correct answer:

Ans. 1. **Soil**/Rock is very important for all fire forms living on the earth.

2. All plants give us **oxygen**/water.

3. Loam/clay is found in pounds and river-beds.

4. **Renewable**/Non-renewable resources can be recycled.

5. Soil is the lowermost/uppermost layer of the earth.

Summative Assessment-2

A. Write true or false:

Ans.	1. The soil gives all nutrients to plants.	T
	2. A lever is used to lift weights.	T
	3. Rain is the purest form of water.	T
	4. The moon causes changes in weather conditions.	\mathbf{F}
	5. We need different things in our daily life.	T

B. Match the following:

	0		
Ans.	1. Dwarfplanet	(i)	Pluto
	2. Strong wind	(ii)	Gale
	3. Renewable resource	(iii)	Water
	4. Force	(iv)	Friction
	5. Be careful of	(v)	Slippery floors

C. Answer the following questions:

- **Ans.** 1. We should not listen to music while riding a bicycle because it can keep away us from heating the sound or horn of a moving vehicle.
 - 2. Friction helps us to write on a paper.
 - 3. Minerals are substances found naturally in earth. They make up the rocks that cover the earth. Many metals can be obtained from minerals.
 - 4. The sun, the eight planets and their satellites (moons) and other heavenly bodies like comets, and asteroids form the solar system.
 - 5. Weather is the state of the atmosphere. Cloudy, rainy, windy, hot, cold, humid, all these terms show the different conditions of the atmosphere around us. This is called the weather.
 - 6. A renewable resource is something that we use to make everyday products that is replaced faster than we use it up. Sunlight, air, soil and water are renewable resources.

A non-renewable resources is something that we use to make everyday products that is replaced much more slowly than we consume it. These resources include forests, minerals, coal and petroleum.

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