



1 Animals Everywhere

Exercise

Formative Assessment (CCE Pattern)

1. Oral Questions :

Ans. a. Frog, Earth worm. b. Siberian cranes. c. Fish breathe through gills

2. Tick (✓) the correct answer:

Ans. a. (iii) b. (i)

3. Name these :

Ans. a. Blood vessels. b. Limbs c. Spiracles

4. Identify the pictures and write their names given below :

Ans.



Ostrich,



Butterfly,



Tortoise,



Grasshopper

Summative Assessment (CCE Pattern)

5. Fill in the blanks:

Ans. a. Insects breathe through small holes called **spiracles**.
 b. Animals which gnaw their food are called **rodents**.
 c. Front legs are called **forelimbs**.
 d. Humans have an **upright** posture.
 e. Large scale movement of an animal species from one place to another is called **migration**.

6. Write T for true and 'F' for False:

Ans. a. T b. F c. F d. T e. T

7. Match the following:

Ans. a. horses (i) hooves
 b. fish (ii) fins
 c. turtles (iii) paddles
 d. butterfly (iv) four wings
 e. snakes (v) scales on lower side

8. Answer the following questions:

Ans. a. Fish breathe through gills. Gills are situated on either side of the head. They have a rich supply of blood vessels. When these animals take water into their mouth, oxygen dissolved in water is absorbed by the blood vessels present in the gills and carbon-dioxide is given out.
 b. Animals move from one place to another for various reasons. They move in search of food, to build or find shelter, and to protect themselves from enemies. They have limbs or other body parts which help them to move.
 c. Frogs use their webbed feet to swim in water and their hind legs to jump on land.



e. Watering the fields through holes in pipes is called **drip** irrigation.

7. Write T for true and 'F' for False:

Ans. a. T b. T c. T d. F e. F

8. Match the following:

Ans. a. cotyledons (i) seed leaves
b. kharif crop (ii) grows in summer season
c. underground stem (iii) ginger
d. pea pod (iv) self dispersion
e. spores (v) found in ferns
f. dandelion (vi) wind dispersal
g. coconut (vii) water dispersal

9. Answer the following questions:

- Ans. a. The different parts of a seed are as follows seed coat, cotyledon, seed leaves, Embryo.
- b. A seed needs good soil which is rich in nutrients. It need air, warmth and water. Air is needed by the seed to breathe. Warmth makes the seed active. Water softens the food inside. Water also softens the seed coat so that the baby plant can break open the seed coat and come out.
- c. The cotyledons provide energy to do all this when water is absorbed into the seed and oxygen enters the seed. As the food reserve gets used up by the developing embryo, the cotyledons shrink. The embryo has two important parts. sleeping shoot and sleeping root. The embryo continues to grow. Now, a short 'hook' forms near the shoot and grows upwards. It breaks ground and emerges above the soil. The hook straightens out and in doing so pulls the shoot out of the ground. The seed coat falls off. Cotyledons shrink more and finally disappear. The shoot now becomes green and forms the first leaves of the baby plant. The baby plant is called a seedling.
- d. Potato is stem called tuber that grows underground. The swollen part of a potato is its underground stem. It has several tiny scars called eyes. Buds develop from the eyes and grow into new plants. We can plant these to form new plants in a potato field.
- e. Protecting the growing crops against diseases and harmful insects is done by spraying insecticides and pesticides. Growing crops are protected from grazing animals by building walls and fences. Scarecrows placed at different places to scare away birds.

Formative Assessment (CCE Pattern)

Project

Ans. Do it yourself



3 Adaptations by plants and Animals

Exercise

Formative Assessment (CCE Pattern)

1. Oral Questions :

**1. Oral Questions:**

1 × 5 = 5

Ans.

- Siberian cranes.
- Rice is grown in summer season.
- Agriculture is important for us because it provides us the all important food as well as other things.
- Snakes move with the help of scales.
- Fins help a fish to swim in water.

2. Tick (✓) the correct answer:

1 × 5 = 5

Ans.

- a. (iii) b. (ii) c. (i) d. (iii) e. (iii)

3. Ring the odd one:

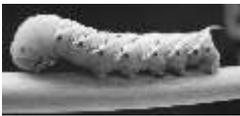
1 × 4 = 4

Ans.

- | | | |
|---------------------|------------|-------------|
| a. Butterfly | Lizard | Snake |
| b. Bat | Ant | Mosquito |
| c. Fish | Crocodile | Bird |
| d. Rice | Potato | Onion |

4. Identify the pictures and write their names:

2 × 3 = 6

Ans.

Caterpillar,



Teeth of a rat,



Dragon fly

**4 Atmosphere : Supports Life Air water and Environment**

Unit-2 :

Exercise

Formative Assessment (CCE Pattern)

1. Oral Questions :**Ans.**

- Ozone is useful to us as it saves us from the harmful UV Rays of sun.
- The common properties of air are as follows:
(i) Air has weight, (ii) Air occupies space, (iii) Air exerts pressure, (iv) Air is needed for burning, (v) A part of air is used for burning.
- The processes by which insoluble substances which are heavier than water are separated, are called sedimentation and **decantation**.

2. Tick (✓) the correct answer:**Ans.**

- a. (iii) b. (ii) c. (iv) d. (iii)

3. Circle the correct answer :**Ans.**

- There are four five layers in the atmosphere.
- The ozone layer is located in the stratosphere troposphere.
- Soluble impurities can be removed by decantation distillation.
- Insoluble impurities can be removed by Filtration exaporation.

4. Identify the pictures and write their names :



5 Our Environment



Exercise

Formative Assessment (CCE Pattern)

1. Oral Questions :

- Ans.**
- Those organisms which eat the food prepared by producers are called **consumers**.
 - Zebra, Giraffe
 - Decomposers are tiny organisms or bacteria which reduce plant and animal matter into simpler substances and return them to the soil.
 - Herbivores
 - The harmful change made in the environment due to human activities is called pollution.

2. Tick (✓) the correct answer:

- Ans.** a. (ii) b. (iii) c. (i) d. (ii) e. (ii)

3. Identify the pictures and write their names :

Ans.



Elephant,



Producers,



Air pollution

Summative Assessment (CCE Pattern)

4. Fill in the blanks:

- Ans.**
- Harmful substances that pollute our environment are called **Pollutant**.
 - Animals such as jackals, hyenas and vultures which feed on remains of dead animals are called **scavengers**.
 - The biotic components are classified as consumers, **producers** and **Decomposers**.
 - Air** pollution can lead to respiratory diseases.
 - Excess of **Carbon dioxide** gas causes global warming.

5. Match the following:

- Ans.**
- | | |
|--------------------------|--------------------------|
| a. Plants, animals | (i) Biotic components |
| b. Excess carbon dioxide | (ii) Global warming |
| c. Soil, water, air | (iii) Abiotic components |
| d. Loudspeakers | (iv) Sound pollution |
| e. Air pollution | (v) Respiratory diseases |

6. Write the kind of pollution that is being caused in the following:

- Ans.**
- | | |
|--------------------|--------------------|
| a. Soil pollution | b. Noise pollution |
| c. Water pollution | d. Air pollution |

7. Answer the following questions:

- Ans.**
- Everything that surrounds us forms our environment. The environment consists of two main components— Abiotic environment or physical environment and biotic environment or biological environment.
 - The environment consists of two main components—



Abiotic component and biotic component

Abiotic Environment:- Abiotic Environment or physical environment refers to the non-living things in the environment. Soil, water and air on the surface of the earth constitute the physical environment.

Biotic Environment:- Biotic environment means living things that form a part of the environment. The living components of the environment consist of three types of organisms producers or autotrophs, consumers or heterotrophs and decomposers.

- c. The harmful change made in the environment due to human activities is called **pollution**. The substances that cause pollution of our environment are called pollutants. Pollution is mainly of four types air pollution, water pollution, land pollution and noise pollution.
- d. The main source and reasons for air pollution are given below.
- Vehicles which run on petrol or diesel release smoke, soot and harmful gases into the air. These pollute the air in cities and large towns.
 - There is an increase in gases and particles from factories. Industries also release harmful gases such as sulphur dioxide, oxides of carbon and nitrogen.
 - Deforestation takes place when man cuts down trees for food or residential purposes. Trees purify air by decreasing the carbon dioxide content of air during photosynthesis and releasing oxygen. Hence, deforestation cause air pollution.
- e. **Chemical compounds:** Dissolved chemical compounds are present in the ground water. Some of these chemical compounds affect human health.
- Sewage:** The drains of the cities, towns and large villages empty out their contents in rivers and lakes which are the main source of drinking water. The presence of these pollutants affects aquatic animals, worms and insects that form a part of the ecosystem. The pollutants may also spread diseases like jaundice, dysentery, cholera, etc.
- f. Noise pollution affects us in many ways.
1. Noise disturbs the peace and quiet of a place. It causes headaches and sleeplessness.
 2. Loud sounds can even cause deafness especially in children. It makes people irritable and unable to work.

Formative Assessment (CCE Pattern)

Project

Ans. Do it yourself



6 Our Body : Bones and Muscles

Unit-III :
Human Body

Exercise

Formative Assessment (CCE Pattern)

1. Oral Questions :

Ans. a. Brain.



There are three kinds of arches in each foot: (i) at the base of the heel (ii) at the base of the big toe and (iii) at the base of each small toe.

- d. **Voluntary or striped or skeletal muscles:** These muscles are under our control. We can use them as we like. These muscles have stripes on them, just like the stripes on the body of a zebra. That is why they are also called **striped muscles**. These muscles are present in our arms, legs, hands and feet.

Involuntary or Smooth muscles: Some muscles of our body are not under our control. For example, we cannot control our stomach muscles. They work on their own will. They are automatically controlled by our brain.

- e. **Cardiac muscles:** These muscles are not attached to any bone. Our heart has cardiac muscles. These muscles of heart keep on working 24 hours a day, throughout our lifetime. Cardiac muscles are very strong. So, they do not get tired. Our heart beats many times in a minute. But we cannot control our heart beat, making it faster or slower whenever we want.

Formative Assessment (CCE Pattern)

Project

Ans. Do it yourself



Formative Assessment-II (CCE Pattern)

Max Marks : 20

1. **Oral Questions:** $2 \times 5 = 10$

- Ans. a. Water is colourless, odourless, tasteless and shapeless.
b. Everything that surrounds us forms our environment. The environment consists of two main components— Abiotic environment or physical environment and biotic environment or biological environment.
c. **Chemical compounds:** Dissolved chemical compounds are present in the ground water. Some of these chemical compounds affect human health.

Sewage: The drains of the cities, towns and large villages empty out their contents in rivers and lakes which are the main source of drinking water. The presence of these pollutants affects aquatic animals, worms and insects that form a part of the ecosystem. The pollutants may also spread diseases like jaundice, dysentery, cholera, etc.

- d. Pivot joint
e. A place where a bone is jointed with another bone, is called a joint.

2. **Tick (✓) the correct answer:** $1 \times 4 = 4$

- Ans. a. (iii) b. (iii) c. (iii) d. (ii)

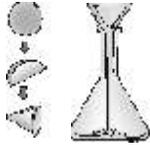
3. **Name these:** $1 \times 3 = 3$

- Ans. a. Carbondioxide b. Neon c. Rib-cage

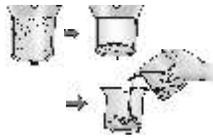
4. **Identify the pictures and write their names:** $1 \times 3 = 3$



Ans.



Filtration,



Sedimentation,



Evaporation



Summative Assessment-I (CCE Pattern)

Max Marks : 40

1. Fill in the blanks:

1 × 5 = 5

Ans.

- Humans have an **upright** posture.
- Animals which gnaw their food are called **rodents**.
- New plants grow from **bryophyllum** leaves
- Sucker are found in **parasitica** plants.
- Air** helps in burning something.

2. Write T for true and F for False:

2 × 5 = 10

Ans.

- a. F b. F c. F d. F e. F

3. Match the following:

2 × 5 = 10

Ans.

- | | |
|-----------------|--------------------------------|
| a. Fish | (i) fins |
| b. Kharif crops | (ii) grow in summer season |
| c. Rabi crops | (iii) grow in winter season |
| d. Rake | (iv) weeds are removed with it |
| e. Pea-pod | (v) seed leaves |

4. Answer the following questions:

3 × 5 = 15

Ans.

- Fish breathe through gills. Gills are situated on either side of the head. They have a rich supply of blood vessels. When these animals take water into their mouth, oxygen dissolved in water is absorbed by the blood vessels present in the gills and carbon-dioxide is given out.
- Frogs use their webbed feet to swim in water and their hind legs to jump on land.
- The cotyledons provide energy to do all this when water is absorbed into the seed and oxygen enters the seed. As the food reserve gets used up by the developing embryo, the cotyledons shrink. The embryo has two important parts. sleeping shoot and sleeping root. The embryo continues to grow. Now, a short 'hook' forms near the shoot and grows upwards. It breaks ground and emerges above the soil. The hook straightens out and in doing so pulls the shoot out of the ground. The seed coat falls off. Cotyledons shrink more and finally disappear. The shoot now becomes green and forms the first leaves of the baby plant. The baby plant is called a **seedling**.
- Potato is stem called tuber that grows underground. The swollen part of a potato is its underground stem. It has several tiny scars called eyes. Buds develop from the eyes and grow into new plants. We can plant these to form new plants in a potato field.



Ans.



Fruits,



Fungi,



Goitre,



Rickets

Summative Assessment (CCE Pattern)

4. Fill in the blanks:

- Ans.
- Our body needs **balanced diet** protection from diseases, regular exercise and **enough rest** to keep fit.
 - Our food should have enough **roughage** to get rid of undigested food.
 - Outdoor games provide **exercise** to the body.
 - Polio** and **chickenpox** are caused by virus.
 - AIDS** attacks the immune system of the patient and leads to death.

5. Match the following:

- Ans.
- | | |
|---------------|---------------------|
| a. Vitamin A | (i) night blindness |
| b. Vitamin B1 | (ii) beri-beri |
| c. Vitamin C | (iii) scurvy |
| d. Vitamin D | (iv) rickets |
| e. Iodine | (v) goitre |

6. Write 'T' for true and 'F' for false:

- Ans. a. F b. T c. T d. T

7. Answer the following questions:

- Ans.
- A diet that contains all the necessary nutrients such as fats, proteins, carbohydrates and vitamins in sufficient amount is called a **balanced diet**.
 - Diseases which spread from a sick to a healthy person are called **communicable diseases**.
 - Houseflies are on garbage and other waste materials in our surrounding. The germs of diseases present in the garbage get stuck to them. Where there flies sit on our food there germs get transferred to our food. When we eat this food we get infected by the diseases.
 - Chlorination** is a way of purifying huge quantities of drinking water. Germs in milk are killed by **pasteurization**. The milk is heated at a high temperature for at least half an hour and then cooled down quickly. This kills harmful bacteria.
Vaccination is another way of protecting ourselves by acquiring immunity against certain diseases. There are vaccines available for diseases like diphtheria, cholera, typhoid, tetanus, polio, measles, mumps, meningitis and hepatitis.

Formative Assessment (CCE Pattern)

Project

Ans. Do it yourself

Sit quietly or speak softly. Do not disturb the driver.

Do not play the stereo loudly.

Do not put your head or your arm out of the window.

Look out for traffic while getting down from the vehicle. Always try to get down on the side of the footpath.

- c. If a person's clothes catch fire, do not allow him to run around in panic. Oxygen is needed for a fire to burn. If a person runs around, he comes in contact with more oxygen and the fire grows. So, ask him to stop and drop to the ground. Wrap him in a blanket to cut off the supply of oxygen and roll him on the ground. It will put out the fire.
- d. In the case of an electrical fire (caused by a short circuit or a faulty electrical appliance), turn off the main switch at once. Take care to wear dry slippers or shoes with rubber soles, since rubber does not allow electricity to pass through it.
- e. In the case of a fire caused by oil such as kerosene, petrol or diesel, use a fire extinguisher or sand to extinguish the fire. Do not use water because oils, being lighter than water, float on top and keep burning.

Formative Assessment (CCE Pattern)

Activity

Ans. Do it yourself

Project

Ans. Do it yourself



Formative Assessment-III (CCE Pattern)

Max Marks : 20

1. Oral Questions:

1 × 5 = 5

- Ans.**
- a. Nerves are like cables sending messages to the brain and from the brain to different parts of the body.
- b. Our tongue help us to detect different taste such as sweet, salty, sour and bitter.
- c. Apples, bananas, guavas, spinach, brinjal, pulses, jaggery meat and liver. This kind of food should be included in our diet to prevent anaemia.
- d. If a person's clothes catch fire, we should try to cut of the air supply to let the fire die out.
- e. We should not put out electric fire with water because it may give us an electric shock.

2. Tick (✓) the correct answer:

1 × 4 = 4

- Ans.** a. (ii) b. (iii) c. (i) d. (ii)

3. Name these:

1 × 5 = 5

- Ans.**
- a. Reflex action b. Retina
- c. Brain d. Communicable diseases
- e. Sling



5. Write T for true and 'F' for False:

Ans. a. F b. T c. F d. T e. T f. T

6. Match the following:

Ans. Column 'A'

a. Ruby

b. Coal

c. Slate

d. Lava

e. Marble

f. Sedimentary rocks

Column 'B'

(i) gem stone

(ii) a fuel

(iii) igneous rocks

(iv) formed from shale

(v) formed from limestone

(vi) formed in layers

7. Answer the following questions:

- Ans.**
- Igneous rocks** are formed from magma, the hot molten material found deep inside the earth. The intense pressure inside the earth pushes the magma towards the surface of the earth. The magma cools first below the earth's surface. Then it hardens to form igneous rocks.
 - Rocks (minerals) also give us useful metals like a platinum, gold, silver, copper, zinc, nickel, aluminium and iron etc. Metals are used for jewellery, coins, internet wire, aeroplanes, machines, furnitures and rails.
 - Coal is valuable natural resources that we get from the earth. It is sedimentary rock. long ago, the earth was covered with forests and swamps. When plants died, they fell into these swamaps. Over million of years, mud and new plants to got deposited on them. Due to intense pressure, the bottom layers of plants matter changed into coal. There are four types of coal: Peat, lignite, bituminous and anthracite.
 - Coal is used as fuel all over the world. It is used to cook, to generate electricity and in steel plants to make steel. Coal is used in power station to generate electricity and to make steam in steam engines. It is used a raw material and fuel in many industries like steel plant.
 - Petroleum is refined in refineries to give cooking gas, diesel, kerosene, lubricants, vaseline, wax asphalt etc.

Formative Assessment (CCE Pattern)

Project

Ans. Do it yourself



12 Moon and Satellites

Unit-VII :
Our Universe

Exercise

Formative Assessment (CCE Pattern)

1. Oral Questions :

- Ans.**
- Artificial satellites are used for various purposes such as data collection, communication and live telecast on television.
 - There is no sound on the moon because of absence of the air, no sound can be heard on the moon.



**1. Oral Questions:****1½ × 4 = 6**

- Ans.** a. Pulley, inclined plane
 b. Rocks are made up of substances called minerals.
 c. Artificial satellites are use for various purposes such as data collection, communication and live telecast on television.
 d. There is no sound on the moon because of absence of air, no sound can be heard on the moon.

2. Tick (✓) the correct answer:**1 × 4 = 4**

- Ans.** a. (i) b. (ii) c. (iii) d. (i)

3. Name these:**1½ × 4 = 6**

- Ans.** a. Flood b. Richter Scale
 c. Epidemic d. After shock

4. Identify the pictures and write their names:**1 × 4 = 4****Ans.**

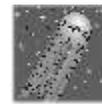
Pliers



Sewing machine



Marble



sputnik I

**1. Fill in the blanks:****1 × 5 = 5**

- Ans.** a. The **brain** is protected in the skull.
 b. **Polio** and **chickenpox** are caused by virus.
 c. Do not use **cliffs** in case of fire.
 d. Space begins where the **earth's** atmosphere ends.
 e. A **simple** machine has very few parts in it.

2. Write T for true and F for False:**2 × 5 = 10**

- Ans.** a. F b. F c. F d. T e. F

3. Match the following:**2 × 5 = 10**

- Ans.** a. Plants, animals (i) Biotic components
 b. Excess carbon-dioxide (ii) Global warming
 c. Soil, water, air (iii) Abiotic components
 d. Loud speaker (iv) Sound pollution
 e. Air pollution (v) Respiratory diseases

4. Answer the following questions:**3 × 5 = 15**

- Ans.** a. An automatic movement in response to a stimulus is called a **reflex action**.
 b. We taste with our tongue. The surface of the tongue has many taste buds. These taste buds have nerve endings. When food enters the mouth, it touches the taste buds. These buds send signals to the brain through the



