



FOREST : OUR LIFELINE

EXERCISE SOLUTIONS

Question 1:

Explain how animals dwelling in the forest help it to grow and regenerate?

Answer:

- (i) The animals in forests are of various types. These could be herbivores, carnivores, microorganisms, etc. These play an important role in maintaining the food chains.
- (ii) Microorganisms convert the dead plants and animals into humus. This humus helps in returning the nutrients back to the soil. These are then absorbed by plants.
- (iii) The animals also help in dispersing the seeds of certain plants.
- (iv) The decaying animal dung provides nutrients.

All these activities of animals dwelling in the forest help it to grow and regenerate.

Question 2:

Explain how forests prevent floods?

Answer:

Forests play a crucial role in preventing floods by acting as natural water absorbers. The roots of trees and plants in a forest hold the soil together, preventing erosion and increasing the soil's capacity to absorb water. During heavy rainfall, forests slow down the flow of water, allowing it to seep into the ground instead of rapidly running off into rivers and streams. This reduces the chances of sudden water surges that cause floods. Additionally, the forest canopy intercepts rainfall, reducing its direct impact on the ground. By controlling water flow and preventing soil erosion, forests help reduce the risk of flooding.

Question 3:

What are decomposers? Name any two of them. What do they do in the forest?

Answer:

Decomposers are the microorganisms that convert the dead plants and animals into humus. Bacteria and mushrooms are examples of decomposers. They help in the process of recycling of nutrients by decomposing various dead organisms such as plants and animals to form humus. Therefore, decomposers are helpful for the environment.

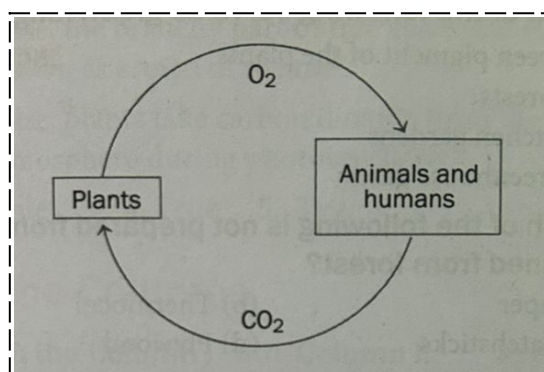
Question 4:

Explain the role of forests in maintaining the balance between oxygen and carbon dioxide in the atmosphere.

Answer:

Forests are called the green lungs. This is because plants in forests release oxygen through the process of photosynthesis and help in providing oxygen to animals for respiration.

They consume carbon dioxide released by the animals. In this way, plants help in maintaining a balance of oxygen and carbon dioxide in the atmosphere.

**Question 5:**

Explain why there is no waste in a forest?

Answer:

There is no waste in a forest because microorganisms act on the waste and convert it into humus. The humus ensures that the nutrients are returned back to the soil.

Question 6:

List five products we get from forests.

Answer:

The five products we get from forests are:

- (i) Fruits
- (ii) Honey
- (iii) Medicines
- (iv) Oxygen
- (v) Gum

Question 7:

Fill in the blanks.

- (a) The insects, butterflies, honeybees, and birds help flowering plants in _____.
- (b) A forest is a purifier of _____ and _____.
- (c) Herbs form the _____ layer in the forest.
- (d) The decaying leaves and animal droppings in a forest enrich the _____.

Answer:

- (a) pollination
- (b) air, water
- (c) lowest
- (d) soil

Question 8:

Why should we worry about the conditions and issues related to forests far from us?

Answer:

We should worry about the conditions and issues related to forests, even those far from us, because forests play a vital role in maintaining the balance of the Earth's ecosystems. They regulate the climate by absorbing carbon dioxide, provide oxygen, and support biodiversity by being home to numerous plant and animal species. Forests also prevent soil erosion and maintain the water cycle. Destruction of forests leads to global consequences such as climate change, loss of biodiversity, and increased natural disasters like floods and droughts. Therefore, the health of forests affects everyone, no matter where they live.

Question 9:

Explain why there is a need for variety of animals and plants in a forest.

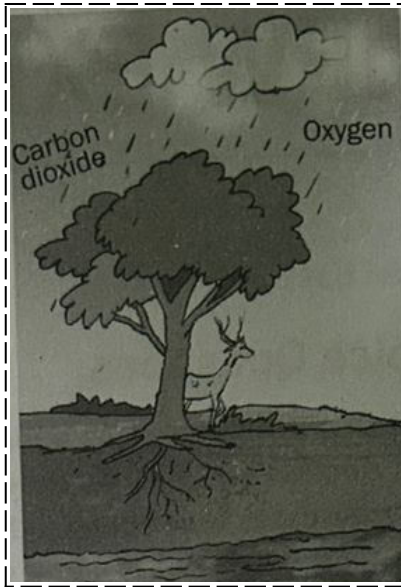
Answer:

A variety of animals and plants in a forest is essential for maintaining a balanced and healthy ecosystem. Different species depend on each other for survival through food chains and food webs. Plants provide food and shelter to animals, while animals help in pollination, seed dispersal, and maintaining soil fertility through their waste. The diversity of species ensures that the ecosystem remains resilient to changes, such as disease or environmental shifts. If one species is lost, it can disrupt the balance, affecting many others. Therefore, biodiversity in forests is crucial for their growth, regeneration, and overall health.

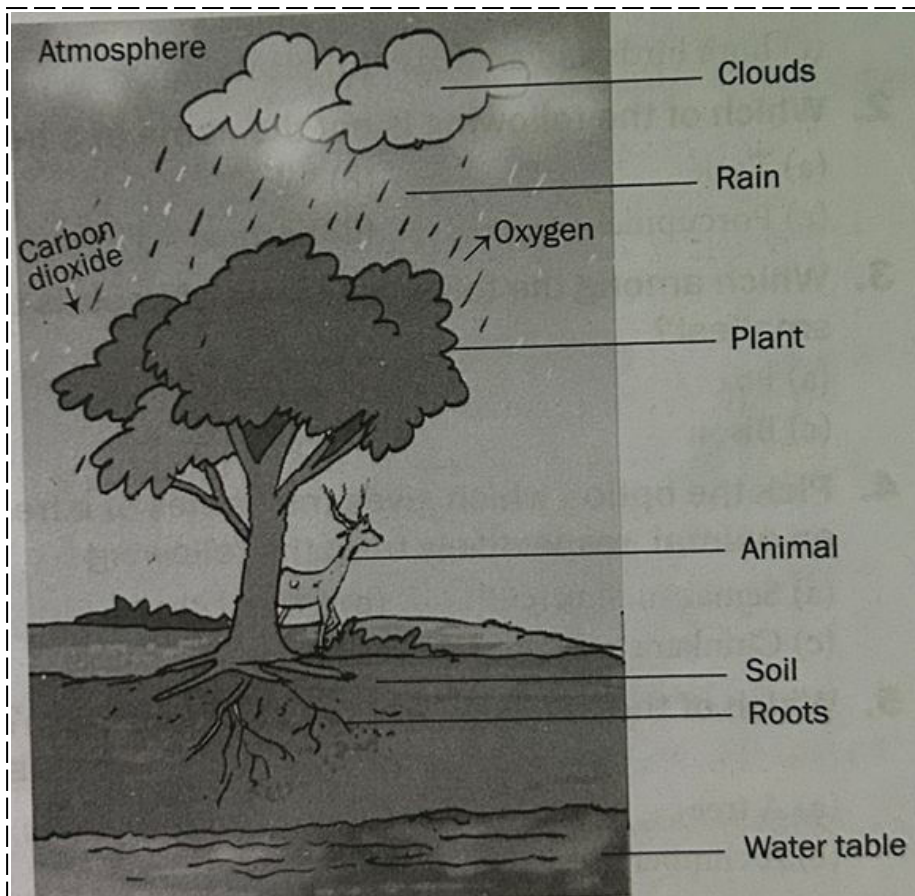
Question 10:

In figure, the artist has forgotten to put the labels and directions on the arrows. Mark the directions on the arrows and label the diagram using the labels:

clouds, rain, atmosphere, carbon dioxide, oxygen, plant, animal, soil, roots, water table



Answer:



Question 11:

Which of the following is not a forest product?

- (a) Gum
- (b) Plywood
- (c) Sealing wax
- (d) Kerosene

Answer:

(d) Kerosene is a fossil fuel, it is not a forest product.

Question 12:

Which of the following statements is not correct?

- (a) Forests protect the soil from erosion
- (b) Plants and animals in a forest are not dependent on one another
- (c) Forests influence the climate and water cycle
- (d) Soil helps forests to grow and regenerate

Answer:

(b) Plants and animals in a forest are not dependent on one another.

Question 13:

Microorganisms act upon the dead plants to produce _____.

- (a) sand
- (b) mushroom
- (c) humus
- (d) wood

Answer:

(c) Microorganisms act upon the dead plants to produce humus. It forms the fertile layer of the soil.

