



CHAPTER: 17
FORESTS: OUR LIFELINE

SOLUTIONS:
EXERCISES

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

Ans: Animals dwelling in the forest help it grow and regenerate. In nature, trees produce enough seeds. Animals help to disperse these seeds. Dead animals and animal dung provides manure to the soil for plants to grow. Micro-organisms convert dead animals and plants to humus.

2. Explain how forests prevent floods.

Ans:- The plants and trees in the forests absorb rain water. Because of presence of forests, the soil holds water. Thus forests prevent floods.

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

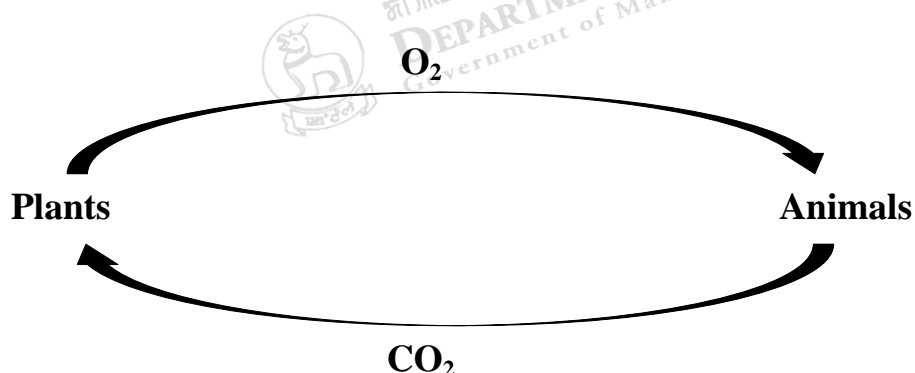
Ans:- The micro-organisms which convert the dead plants and animals to humus are known as decomposers.

Two decomposers are fungi and bacteria.

They decompose dead plants and animals thus providing nutrients to the soil.

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

Ans:- Plants in the forest consume carbon dioxide and release oxygen during the process of photosynthesis and animals take in oxygen and release carbon dioxide through respiration. Thus, forests maintain a balance between oxygen and carbon dioxide in the atmosphere.



5. Explain there is no waste in a forest.

Ans:- There is no waste in a forest. The dead plants and animals are biodegradable that is they can be decomposed into humus and gets mixed up with the soil.

6. List five products we get from forests.

Ans:- Five products we get from forests are –

- i) Wood ii) Paper iii) Gum iv) Medicines v) Spices.

7. Fill in the blanks:-

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

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

Ans:- We should worry about the conditions and issues related to forests far from us because-

- a) If forests disappear, the amount of carbon dioxide in air will increase. This results in the increase in earth's temperature.
b) In absence of forests, the animals will not get food and shelter.
c) In absence of trees, the soil will not hold water causing floods.
d) In absence of forests, land will turn dry and barren.

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

Ans:- Every living organism plays a role in maintaining a balanced environment. Plants provide food for herbivores which in turn serve as food for carnivores. The decomposers decomposed the dead and decayed plants and animals into manures. The animals help in dispersing the seeds of the plants. Thus, there is a need of variety of animals and plants in a forest.

10. In Fig. 17.15, 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 following labels: clouds, rain, atmosphere, carbon dioxide, oxygen, plants, animals, soil, roots, water table.

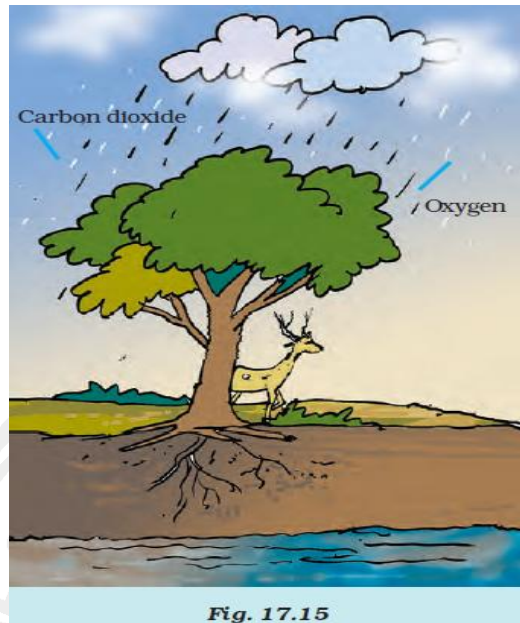
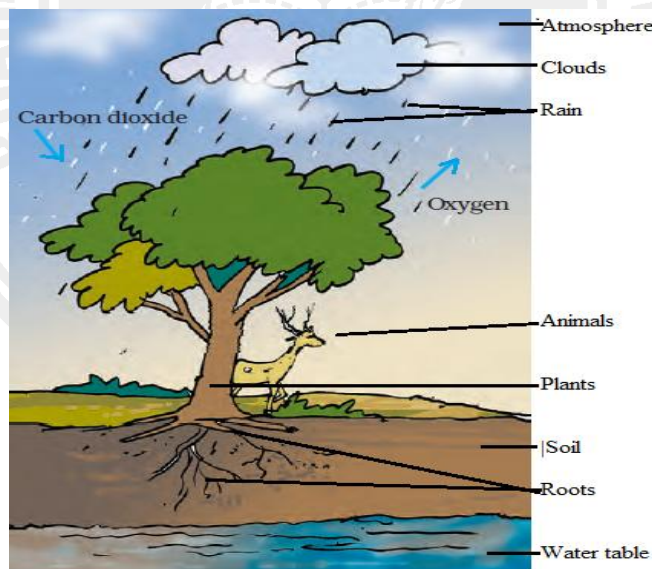


Fig. 17.15

Ans:-



11. Which of the following is not a forest product?

- i) Gum ii) Plywood iii) Sealing wax iv) Kerosene

Ans:- iv) Kerosene

12. Which of the following statements is not correct?

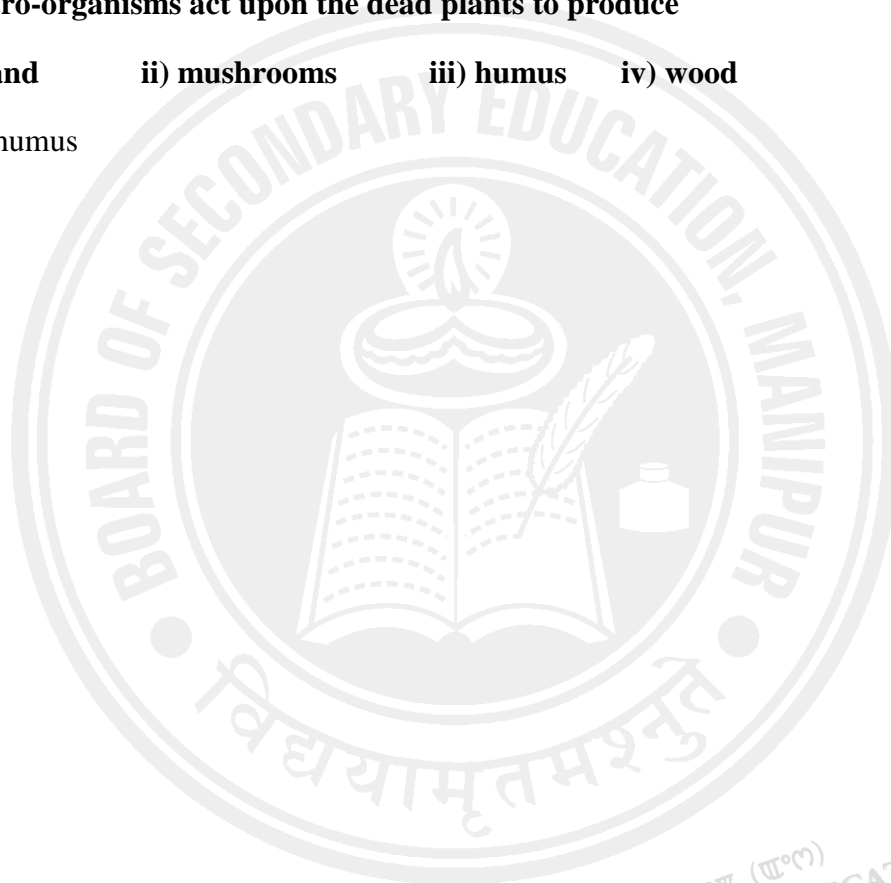
- i) Forests protect the soil from erosion.**
- ii) Plants and animals in a forest are not dependent on one another.**
- iii) Forests influence the climate and water cycle.**
- iv) Soil helps forests to grow and regenerate.**

Ans:- ii) Plants and animals in a forest are not dependent on one another

13. Micro-organisms act upon the dead plants to produce

- i) sand**
- ii) mushrooms**
- iii) humus**
- iv) wood**

Ans:- iii) humus



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EXTRA QUESTIONS AND ANSWERS

1. What is habitat?

Ans:- The natural environment of an animal, plant or other organism is called a habitat.

2. Name some trees found in Indian forest.

Ans:- Sal, Teak, Semal, Sheesham, Neem, Palash, Fig, Amla, Bamboo, Kachnar etc.

3. Name some items obtained from the forest?

Ans:- Plywood, fuel wood, boxes, paper, matchsticks, furniture, gum, oils, spices, fodder, medicinal plants, resins etc.

4. How do so many trees flourish in a forest?

Ans:- In nature, trees produce enough seeds. The forest floor provides favourable conditions for them to germinate and develop into seedlings.

5. What are understoreys?

Ans:- Trees have crowns of different types and sizes. These had created different horizontal layers in the forest. These are known as understoreys.

6. What is a crown?

Ans:- The branchy part of a tree above the stem is known as crown.

7. What is a canopy?

Ans:- The branches of tall trees which look like a roof over the other plants in the forest is called a canopy.

8. Would we see similar kind of trees in every forest?

Ans:- No, we would not see similar kind of trees in every forest. Due to different climatic conditions there are variations in the types of trees and other plants.

9. What are autotrophs?

Ans:- Those organisms that can produce their own food are called autotrophs.

Example: plants.

10. What are heterotrophs?

Ans:- Those organisms that depend on others for their food are called heterotrophs.

Example : Deer, cow.

11. What are saprotrophs?

Ans:- Saprotrophs are those organisms that feeds on decaying organic matter.

Example: Fungi, Bacteria.

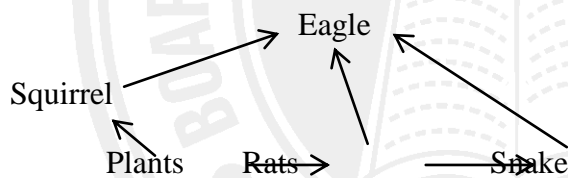
12. What is food chain?

Ans:- Food chain is a series of organisms in which each organisms eats the one below it(in the series) and in turn is eaten by the organism above it.

Example: Grass → Insects → Frog → Snake → Eagle

13. What is food web?

Ans:- A food web is the interconnection of food chains.



14. Why are forests called green lungs?

Ans:- Forests are called green lungs because –

- i) Plants help to provide oxygen for animal respiration.
- ii) Plants maintain oxygen and carbon dioxide in the atmosphere.

15. If there were fewer trees, how will the water cycle be affected?

Ans:- If there were fewer trees, there will be less absorption of water and less evaporation because of which there will be decrease in rainfall.

16. Who are the tribes?

Ans:- The tribes are those people who live in the forests and depend on them for food, shelter, water and medicines.

17. Why is the forest called a “dynamic living entity”?

Ans:- The forest is called a “dynamic living entity” because of the following reasons-

- i) Animals disperse seeds and harbour greater variety of plants.
 - ii) This in turn provides food and habitat to herbivores.
 - iii) Larger number of herbivores increases food facilities for carnivores.
 - iv) Decomposers help in maintaining the supply of nutrients to the soil.
- Thus, this cycle helps the forest to regenerate and grow.

18. How does forest maintain the water table throughout the year?

Ans:- The forest act as a natural absorber of rain water and allows it to seep thus maintaining the water table throughout the year.

19. What causes soil erosion?

Ans:- Deforestation causes soil erosion. Roots of trees normally bind the soil together, but in their absence the soil is washed away or eroded.

20. Give the importance of forests.

Ans:- The importance of forests are-

- i) Forests provide us with oxygen.
 - ii) Forests protect soil and provide habitat to a large number of animals.
 - iii) Forests help in bringing good rainfall.
 - iv) Forests are a source of medicinal plants, timber and many useful products.
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