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

Solution:

Animals dwelling in the forest help it grow and regenerate in the following ways:

- Animals help in dispersing plant seeds.
- Decaying animal dung provides nutrients for plants to grow.
- Microorganisms convert the dead plants and animals to humus.

2. Explain how forests prevent floods.

Solution:

Plants in the forests will not allow the rainwater to fall directly on earth and these plants also hold water which helps in preventing floods.

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

Solution:

The micro-organisms which convert the dead plants and animals to humus are known as decomposers. Example: bacteria and Fungi. They help in recycling of nutrients by decomposing dead plants and animals.

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

Solution:

Plants in the forests consume carbon dioxide and releases oxygen by photosynthesis process. This helps in balancing oxygen and carbon dioxide in the atmosphere.

5. Explain why there is no waste in a forest.

Solution:

There is no waste in a forest because waste created is bio-degradable, which gets converted to humus by the action of microorganism.
6. List five products we get from forests?

Solution:

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

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 _______.

Solution:

(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?

Solution:

We should worry about the forest for the following reasons.

- A decrease in forest results in an increase in Carbon dioxide content in the atmosphere this results in global warming.
- Depletion of forests results in soil erosion
- Decrease in forest adversely affect the lives of animals living in the forest.
- Absence of forests leads to flooding more often.
- Due to the reduction of forest land will turn barren which is called desertification.

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

Solution:

Variety of plants and animals in the forests helps plants to regenerate and grow. More excellent range of plants supports herbivores, which in turn serve as food for carnivores. Decomposers turn dead animals and plants into humus; thereby maintain nutrient recycling. This wide variety makes forest a dynamic living entity.
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.
11. Which of the following is not a forest product?
(i) Gum
(ii) Plywood
(iii) Sealing wax
(iv) Kerosene

Solution:
The answer is (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.

Solution:
Statement (ii) Plants and animals in a forest are not dependent on one another - is incorrect

13. Micro-organisms act upon the dead plants to produce
(i) sand (ii) mushrooms (iii) humus (iv) wood

Solution:
Answer is (iii) humus