

## Forests Our Lifeline

### In text Questions

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**1. Is there similar kind of trees in every forests?**

**Ans.** No, due to different climatic conditions, there are variations in the types of trees and other plants. The types of animals also differ from forest to forest.

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**2. What is photosynthesis?**

**Ans.** The process by which green plants synthesise their own food and release oxygen in the environment is known as photosynthesis.

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**3. How can a pipal sapling would have grown on a sidewall of some old buildings?**

**Ans.** Animals disperse the seeds of certain plants with the help of their droppings. Therefore, pipal seed would have come to the wall by a bird dropping. On coming in contact with water and suitable nutrient medium, it would have grown into pipal sapling.

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**4. What would happen if forests disappear?**

**Ans.** If forests would disappear, then

- (i) carbon dioxide level will increase while oxygen level will decrease in the environment.
- (ii) plants and animals will lose their food and shelter.
- (iii) temperature of the earth will increase.
- (iv) floods would be common.
- (v) water table would be disturbed.
- (vi) soil erosion would occur.



# NCERT

## Exercises

(Questions-Solutions)

### Exercises

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

**Ans.** 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.

(i) Microorganisms convert the dead plants and animals into humus. This humus helps in returning the nutrients back to the soil. These are absorbed by plants.

(ii) The animals also help in dispersing the seeds of certain plants.

(iii) The decaying animal dung provides nutrients.

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

**2. Explain how forests prevent floods.**

**Ans.** Forests provide floods in the following ways:

(i) Forests act as a natural absorber of water. It allows rainwater to seep through.

(ii) In the absence of trees, the rainwater would hit the ground directly, resulting in flood.

(iii) Because of presence of trees, rainwater does not hit the ground directly.

(iv) It rather hits the ground slowly. Hence, before flooding, all the rainwater seeps through ground.

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

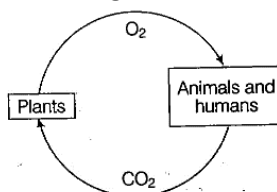
**Ans.** Decomposers are the microorganisms that convert the dead plants and animals into humus. Bacteria and mushroom are the two types of decomposers.

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.

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

**Ans.** 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 atmosphere.



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

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

**6. List five products we get from forests.**

**Ans.** The five products we get from forests are given below:

- (i) Fruits
- (ii) Vegetables
- (iii) Medicines
- (iv) Oxygen
- (v) Cereals

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**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 .....**

**Ans.** (a) pollination (b) air, water  
(c) lowest (d) soil as human

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

**Ans.** There are various reasons for which we should be vigilant about matters related to forests:

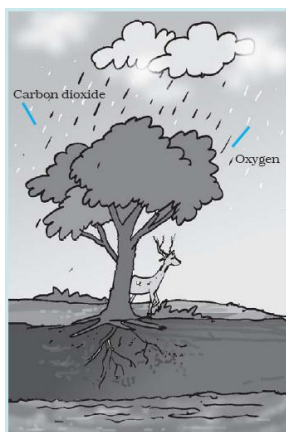
- (i) A decrease in forest area would lead to an increase in carbon dioxide in air. This will lead to an increase of earth's temperature.
- (ii) Soil erosion would occur if there are no forests.
- (iii) Floods would occur if there are no forests.
- (iv) Forests provide shelter and food to the living organisms.

**Note** When forests are affected the habitat of wild animals and all living organisms are adversely affected. Therefore, we need to conserve our forests.

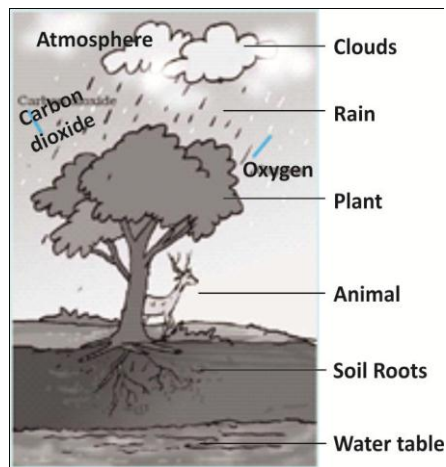
**9. Explain why there is a need of variety of animals and plants in a forests.**

**Ans.** A greater variety of plants and animals in the forests help it to regenerate and grow. Greater variety of plants means more food and habitat for the herbivores. An increase in herbivores means more food for carnivores.

**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, plants, animals, soil, roots, water table.**



**Ans.** The given figure completely explains the exchange of gases between plants and animals.



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

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

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

12. Which of the following statements is incorrect?

- (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 forest to grow and regenerate

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

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13. Microorganisms act upon the dead plant to produce

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

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



# NCERT

## Exemplar

(Problems-Solutions)

### Multiple Choice Questions

1. Which of the following serve as green lungs?

- (a) Green pigment of the plants
- (b) Forests
- (c) Kitchen gardens
- (d) Greenhouse gases

**Ans.** (b) Forests serve as green lungs as they produce oxygen and help in maintaining oxygen and carbon dioxide balance.

2. Boojho visited a forest near his town with his classmates and his teacher. As they were entering the forest, their class teacher told them not to make noise in the forest as noise could disturb the

- (a) birds
- (b) animals
- (c) Both (a) and (b)
- (d) plants

**Ans.** (c) As Boojho was entering the forest, his class teacher told him not to make noise in the forest because it could disturb both birds and animals.

3. Which among the following forests animals is the smallest?

- (a) Fox
- (b) Boar
- (c) Bison
- (d) Porcupine

**Ans.** (d) Porcupine is the smallest forest animal among the following given in the question.

4. Which of the following has the strongest stem?

- (a) A tree
- (b) A creeper
- (c) A climber
- (d) A bush

**Ans.** (a) A tree has the strongest stem.

5. Which of the following is not prepared from the wood obtained from forest?

- (a) Paper
- (b) Thermocol
- (c) Matchsticks
- (d) Plywood

**Ans.** (b) Thermocol is not prepared from the wood obtained from the forest. Paper, matchsticks and plywood are prepared from the wood.

6. Which of the following is not the name of a tree?

- (a) Teak
- (b) Sal
- (c) Porcupine
- (d) Kachnar

**Ans.** (c) Porcupine is not the name of a tree rather it is an animal. Teak, sal and kachnar are names of trees.

7. Pick the option which gives the names of a tree and an animal, respectively from the following.

- (a) Semal and hornbill
- (b) Sal and khair
- (c) Chinkara and blue bull
- (d) Neem and palash

**Ans.** (a) From the above given options, semal and hornbill are the names of a tree and an animal respectively.

**8. Which of the products is not obtained from a forest?**

- (a) Honey (b) Catechu  
(c) Gum (d) Ginger

**Ans.** (d) Ginger is not a forest product.

**9. The branchy part of a tree above the stem is known as**

- (a) crown (b) canopy  
(c) sapling (d) humus

**Ans.** (a) The branchy part of a tree above the stem is known as crown.

**10. Forests are not responsible for**

- (a) providing medicinal plants  
(b) maintaining the flow of water into the streams  
(c) creating flood conditions  
(d) absorbing rainwater and maintaining water table

**Ans.** (c) Forests are not responsible for creating flood conditions, as they protect from flood condition.

#### Very Short Answer Type Questions

**11. Paheli while moving in a forest observed that there was no noise pollution, though lots of heavy vehicles were passing from the nearby highway. Explain why.**

**Ans.** Paheli observed that there is no noise pollution in a forest even though there is lots of heavy vehicles passing from the nearby highway because trees present in the forest absorb the noise.

**12. State whether the following statements are True or False. If False, give the correct statement.**

- (a) Forests influence climate, water cycle and air quality.  
(b) In a forest, trees form the uppermost layer, followed by herbs. The shrubs form the lowest layer of vegetation.  
(c) The forest keeps on growing and changing and can regenerate.  
(d) Forests protect the soil from erosion.

**Ans.** (a) True  
(b) False, in a forest, trees form the uppermost layer followed by shrubs. The herbs form the lowest layer of vegetation.  
(c) True  
(d) True

**13. Paheli wrote a food chain in the following way:**

**Frog → Eagle → Insects → Grass → Snake**

**The chain is not in the correct order. Help her to write the food chain correctly.,**

**Ans.** The correct food chain is

Grass → Insects → Frog → Snake → Eagle

#### Short Answer Type Questions

**14. Give names of any four birds which you expect to see in a forest.**

**Ans.** The four birds which we expect to see in a forest are jungle crow, hornbill, myna and koel.

**15. Two friends shared their experiences of their vacation trip to two different forests. Do you think they would have seen the same type of plants and animals during their respective trips? Give reason.**

**Ans.** No, they would not have seen the same type of plants and animals. This is so because climatic conditions in the two forests would vary leading to variations in the types of plants and animals.

**16. A bunch of seedlings were seen sprouting on a heap of animal dropping in a forest. How do you think is the seedling benefited from the animal dung?**

**Ans.** The seedling was being benefited from the animal dung as the decaying animal dung provided nutrients to the growing seedlings.

**17. Match Column I with Column II**

|     | Column I    |       | Column II                     |
|-----|-------------|-------|-------------------------------|
| (a) | Decomposers | (i)   | Dead plant and animal tissues |
| (b) | Canopy      | (ii)  | Habitats for wildlife         |
| (c) | Porcupine   | (iii) | Microorganisms                |
| (d) | Humus       | (iv)  | Wild animals                  |
| (e) | Forest      | (v)   | Branches of tall trees        |

**Ans.** The correctly matched Column I with Column II is given below:

|     | Column I    |       | Column II                     |
|-----|-------------|-------|-------------------------------|
| (a) | Decomposers | (iii) | Microorganisms                |
| (b) | Canopy      | (v)   | Branches of tall trees        |
| (c) | Porcupine   | (iv)  | Wild animal                   |
| (d) | Humus       | (i)   | Dead plant and animal tissues |
| (e) | Forest      | (ii)  | Habitats for wildlife         |

**18. Deforestation may lead to floods. Why?**

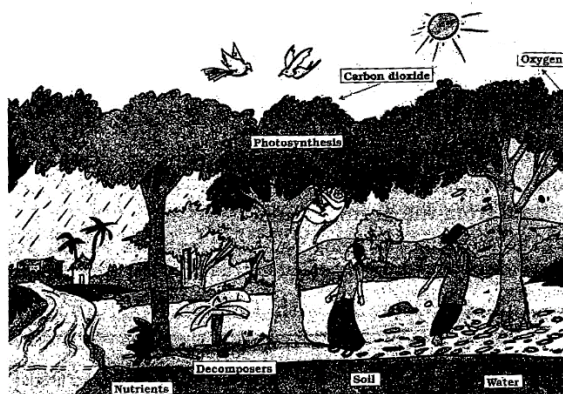
**Ans.** Deforestation leads to floods as lesser number of trees -will be available due to deforestation. In the absence of-trees, the soil will not hold water leading to floods.

**19. Name any four useful products other than wood, which we get from forests.**

**Ans.** Four useful products other than wood which we get from forests are gum, spices, fodder tor animals and medicinal plants.

### Long Answer Type Questions

**20. Figure shows a part of a forest.**



**Write any three activities going on in the forest on the basis of this figure.**

- Ans.** The three activities going on in the forest on the basis of the given figure are
- (i) Oxygen is given out by plant leaves.
  - (ii) Carbon dioxide is consumed by the plants to prepare their food by the process of photosynthesis.
  - (iii) Nutrients are being added to the soil by the action of decomposers.

**21. Give any four factors which are responsible for the destruction of forests.**

- Ans.** The four factors which are responsible for the destruction of forests are
- (i) Construction of roads
  - (ii) Construction of buildings
  - (iii) Industrial development
  - (iv) Increasing demand of wood

**22. All the needs of animals living in a forest are fulfilled. Justify this statement in a few sentences.**

- Ans.** Forest provides home (shelter), food and water to the animals living there. Thus, all the needs of animals living in a forest are fulfilled.