



INDIAN SCHOOL AL WADI AL KABIR



Class: VII	DEPARTMENT: SCIENCE 2021-2022	DATE: 31.10.2021
WORKSHEET NO: 9 WITH ANSWERS	TOPIC: FORESTS: OUR LIFELINE	NOTE: A4 FILE FORMAT
NAME OF THE STUDENT:	CLASS & SEC:	ROLL NO.

I. VERY SHORT ANSWER TYPE QUESTIONS (1M):

1. Define forests.

[Hint: An area or a part of the land that is covered with trees and a wide variety of plants. They are natural habitat to many animals too.]

2. Name some common trees found in the forests.

[Hint: Sal, Teak, Semal, Sheesham, Neem, Palash, Fig, Khair, Amla, Bamboo and Kachnar.]

3. What are understoreys?

[Hint: The different layers in the forest that consist of plants that grow above the forest floor, but lower than the canopy.]

4. Define deforestation.

[Hint- The cutting down of trees on a large scale is known as deforestation.]

5. What is afforestation?

[Hint-The planting of trees in an area where there is no tree cover.]

6. Give the reason behind variations found in the forests of different regions.

[Hint-The variation in the type of plants and animals is found in different forests because of the climatic conditions of that particular area.]

7. Why is it dark inside a forest?

[Hint-Sun rays are hardly able to penetrate through the dense covering of leaves. The canopy of tall trees forms a roof over the other plants.]

8. Why are forests disappearing? Give two reasons.

[Hint-Overgrazing of animals and indiscriminate felling of trees.]

9. What is the effect of deforestation on soil?

[Hint- Roots of trees normally bind the soil together. In their absence, the soil is washed away or eroded.]

10. What is humus?

[Hint-A dark coloured organic substance made up of decayed plant or animal matter.]

For the questions that follows, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below:

- i) Both A and R are true and R is the correct explanation of the assertion.**
- ii) Both A and R are true but R is not the correct explanation of the assertion.**
- iii) A is true but R is false.**
- iv) A is false but R is true.**

11. **Assertion (A):** There is no waste in the forest.

Reason (R): Decomposers convert all the dead bodies of the plants and animals into the humus.

i) Both A and R are true and R is the correct explanation of the assertion.

12. **Assertion (A):** Forests protect the soil from erosion.

Reason (R): Soil helps forests to grow and regenerate.

ii) Both A and R are true but R is not the correct explanation of the assertion

13. **Assertion (A):** Animals dwelling in the forest help it to grow and regenerate.

Reason (R): Carnivores help the herbivores to grow as they serve as food for them.

iii) A is true but R is false

II. PASSAGE BASED QUESTIONS:

Read the given passage and answer the following questions.

Green plants produce food. All animals, whether herbivores or carnivores, depend ultimately on plants for food. Organisms which feed on plants often get eaten by other organisms and so on. For example, grass is eaten by insects, which in turn is taken by the frog. The frog is consumed by snakes. This is said to form a food chain. Many food chains can be found in the forest. All food chains are linked. If any one food chain is disturbed, it affects other food chains.

1. In a food chain, the green plants are the
 - a. **Producers**
 - b. Consumers
 - c. Decomposers
 - d. All of these
2. Animals that depend on plants and other animals for food are known as
 - a. Decomposers
 - b. Producers
 - c. **Consumers**
 - d. Herbivores
3. Choose the incorrect statement
 - a. Every part of the forest is dependent on the other parts.
 - b. **If one component, say trees are removed, only herbivores would be affected.**
 - c. Many food chains can be found in a forest.
 - d. In the forest, there is interaction between soil, water, air and living organisms.
4. Find the missing part from the food chain:
Grass → insects → ----- → snake → eagle
 - a. Peacock
 - b. Crow
 - c. **Frog**
 - d. Deer
5. In a food chain, the first link is a green plant because they are
 - a. Widely distributed
 - b. Fixed at one place in soil
 - c. **Photosynthetic**
 - d. More in number

III. CASE STUDY BASED QUESTIONS

1. Y and Z are two types of organisms which are found in the forests. Y eats up dead animals while Z breakdown the body of the dead animals into simpler substances.
 - (a) What is the general name of organism Y?
 - (b) Write one example of Y type organism.
 - (c) What is general name of organism Z?
 - (d) Write one example of Z type organism.

[Hint-(a) Scavenger (b) Vulture (c) Decomposers (d) Fungi (mushroom)]
2. Boojho, during his trip to the forest, noticed that even after heavy rains, water did not stagnate in the forest. Which among the following options explain it well?
 - a. The uppermost layer of the forest canopy intercepted the flow of raindrops.
 - b. The closed canopy and many layers of vegetation slow down the speed of raindrops.
 - c. The root system helps water to seep down in the ground.
 - d. **All of the above reasons.**

IV.a) SHORT ANSWER TYPE QUESTIONS: (2M)

1. Distinguish between a food chain and a food web?

[Hint- The chain of organisms being dependent on each other for their food is called a food chain. Food web is a network of food chains where all the chains are naturally interconnected.]

2. Differentiate the terms crown and canopy.

[Hint: The branchy part of a tree above the stem is known as the crown. The uppermost branches and leaves of tall trees (the crowns) that appear as a roof over the forest is called a canopy.]

3. List the main products we get from forests.

[Hint- (i) We get medicines, gum, oils and spices from forests. (ii) We get wood which is used for many purposes like making furniture, paper etc. (iii) We get fodder for animals from forests.]

4. Lots of trees are seen growing in the forests. Why?

[Hint- In nature, trees produce enough seeds. The forest floor provides favourable conditions for them to germinate and develop into seedlings and saplings.]

5. How is forest beneficial for the people living nearby forests?

[Hint- Due to the surrounding forests, they receive good rainfall. The air remains cool. The noise pollution is also less, because the forest absorbs the nearby noise.]

IVb) SHORT ANSWER TYPE QUESTIONS: (3M)

1. Forests are called green lungs. Explain.

[Hint- Plants release oxygen through the process of photosynthesis. They provide oxygen for animal respiration. They also maintain the balance of oxygen and carbon dioxide in the atmosphere.]

2. What are decomposers? Mention the role played by them in the forest?

[Hint- Decomposers are the organisms which feed on the dead bodies of plants and animals. They clean the forests by decaying the dead bodies and replenishing the nutrients back to the forest soil in the form of humus. e.g. Beetles and grubs.]

3. What would happen if forests disappear?

[Hint- Soil erosion, landslides, increase in carbon dioxide, increase in temperature and floods.]

4. Mention the role of forests in providing a steady supply of water.
[Hint-Forests act as a natural absorber of rainwater and allows it to seep. It helps to maintain the water table throughout the year. And also help maintain the flow of water in the streams so that we get a steady supply of water.]
5. Explain why is there a need of variety of animals and plants in a forest.
[Hint- All plants and animals sustain the forest life and also carbon dioxide – oxygen cycle goes on due to animals and plants. Animals convert the dead and decaying matters into humus and increase the fertility of soil, thus enhancing plant growth. All food chains and food webs need variety of plants and animals.]
6. How do forests prevent floods?
[Hint- Forests can absorb a lot of water. The roots of the trees absorb the water and prevent it from flowing away. Roots of trees also help in percolation of water into the soil. This helps in preventing floods.]
7. Give any four factors which are responsible for the destruction of forests.
[Hint- The growing human population has been the primary cause of forest destruction. Human clears forests for the following purposes:
 - i)Construction of roads
 - ii)Construction of buildings
 - iii)Industrial development
 - iv)For agricultural purposes to meet the increasing demand of food.
 There are also some natural causes of deforestation viz. forest fire occurring due to lightning during a storm or by friction between dry branches of trees.]

V. LONG ANSWER TYPE QUESTIONS. (5M)

1. Explain the role of forest in maintaining the balance between oxygen and carbon dioxide in the atmosphere.
[Hint- Plants release oxygen in the atmosphere during the process of photosynthesis. This oxygen is inhaled by the animals for respiration. During respiration, they release carbon-dioxide which is absorbed by plants. In this way the oxygen and carbon dioxide cycles go on. Since forests contain a large number of plants, they help much in this cycle and maintain balance in nature.]
2. Explain why a forest is called a ‘dynamic living entity’.
[Hint-Forests are called dynamic living entity because of the various plants, animals and microorganisms. The wide variety of animals helps the forest to regenerate and grow. Decomposers help in maintaining the supply of nutrients to the growing plants in the forest. Thus, in a nutshell, forest is a dynamic living entity, full of life and vitality.]
3. Nothing goes waste in a forest. Explain.
[Hint: Forests work as a self-sustaining system in nature. Whatever is produced in the forest is utilised by different components of the forest and is naturally recycled. All animals (whether herbivores, carnivores or omnivores) depend ultimately on plants for food. Herbivores eat plants. Carnivores eat herbivores. Omnivores eat both plants and animals. When plants and animals die, their dead remains are decomposed by microorganisms (bacteria and fungi) into nutrients, which are released back into soil.

From the soil, these nutrients are absorbed by the roots of living plants. This is called recycling of nutrients due to which nothing goes waste in a forest.

4. Why is it important to conserve forests?

[Hint-Forests provide us with oxygen. They protect soil and provide habitat to a large number of animals. Forests help in bringing good rainfall in neighbouring areas. They are a source of medicinal plants, timber and many other useful products.]

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