



INDIAN SCHOOL AL WADI AL KABIR

Class: VII	DEPARTMENT: SCIENCE-2020-2021	DATE: 14.01.2021
WORKSHEET NO.: 15 WITH ANSWERS	TOPIC: FOREST	NOTE: A4 FILE FORMAT
NAME OF THE STUDENT	CLASS & SEC:	ROLL NO.

I. VERY SHORT ANSWER (1M):

1. What is forest? [Hint- An area with large number of trees that serves as a natural habitat for animals and plants.]
2. What name is given to the different horizontal layers created by different types and sizes of trees? (Hint: Understory)
3. Write two examples of plants that give us medicines. (Hint: Eucalyptus, Tulsi)
4. Name the branchy part of the tree above the stem. (Hint: Crown)
5. What is a canopy? (Hint- The uppermost branches and leaves of tall trees act like a roof over forest ground, this is called a canopy.)
6. List five products we get from forests. [Hint- (i) We get medicines from forests. (ii) We get gum from forests. (iii) We get wood which is used for many purposes like making furniture, paper etc. (iv) We get food for animals from forests. (v) We get sealing wax from forests.]
7. Why should we worry about the conditions and issues related to forests far from us? [Hint- We should be worried about deforestation as it would lead to floods, increase in earth's temperature, decreasing animal's habitats and soil erosion. Damage to forests directly or indirectly affects human habitat and environment so it must be a matter of concern among us.]
8. What is meant by a food chain and 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.]
9. Parth 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.
[Hint- The correct food chain is as follows: Grass → insects → frog → snake → eagle]
10. Define deforestation and afforestation. [Hint- The cutting down of trees on a large scale is known as deforestation. Afforestation is the planting of trees in an area where there was no tree cover.]

For the question numbers 8,9 and 10, 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 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 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 helps the herbivores to grow as they serve as food for them.

iii) A is true but R is false.

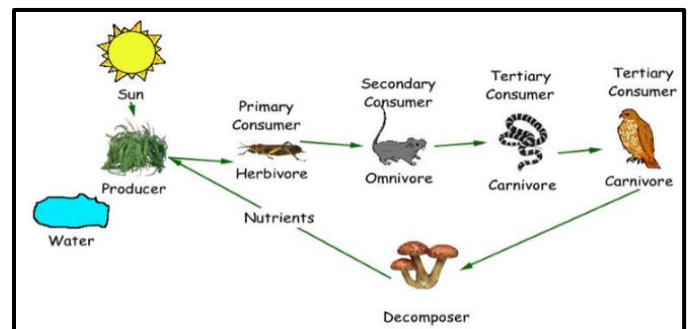
II.PASSAGE BASED QUESTIONS:

Read the following passage and answer the questions.

Food chain can be defined as a sequence of living organisms in which one organism feeds on another.

The sun is the ultimate source of energy for everything on the planet. Green plants or producers are able to harness the energy of the sun to make food. In a food chain, energy from plants (producers) is passed on from one organism to another. From the producers, the energy goes to primary consumers (herbivores) and is then passed on to secondary consumers (carnivores). Thus, producers are always at the beginning of the food chain.

By harbouring greater variety of plants, the forest provides great opportunities of food and habitat for the herbivores. Larger number of herbivores means increased availability of food for a variety of carnivores. 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.



i) Flow of energy in nature takes the following path:

a) carnivores herbivores → green plants

b) green plants herbivores → carnivores

c) sun → green plants → herbivores → carnivores

d) sun → carnivores → herbivores → green plants

- ii) The first link in all food chains are
a) herbivores b) carnivores c) **green plants** d) None of these
- iii) Sequence that represents the series of eating and being eaten is called:
a) food series b) **food chain** c) food web d) food hub
- iv) Which of the following statements is not correct?
a) The energy goes to primary consumers (herbivores) from the producers.
b) Larger number of herbivores means increased availability of food for a variety of carnivores.
c) Decomposers help in maintaining the supply of nutrients.
d) **Plants and animals in a forest are not dependent on one another.**
- v) The ultimate source of energy for all living organisms.
a) **Sun** b) Water c) Land d) All the above

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

1. Explain why there is 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.]
2. 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? [Hint: Trees in the forest absorb sound of the nearby areas and help to reduce noise pollution. Hence, Paheli while moving in a forest did not feel noise of heavy vehicles passing from the nearby highway.]
3. 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.]
4. What are decomposers? What do they do 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, e.g. Beetles and grubs.]

III.b) SHORT ANSWER TYPE QUESTIONS (3 M):

1. All the needs of animals living in a forest are fulfilled. Justify. [Hint- Plants and animals in a forest show interdependence. Plants present in the forest fulfill all the needs of animals present there. Plants provide oxygen to the animals to respire. They also provide food to all the animals directly or indirectly. Herbivores obtain food directly from plants, carnivores depend on herbivores for food. Trees in forest provide shelter to forest animals. Hence, we can say that all the needs of animals in a forest are fulfilled.]
2. 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

cycle go on. Since forests contain a large number of plants, they help much in this cycle and maintain balance in nature.]

3. What would happen if forests disappear? [Hint-The conditions and issues we have to face when forests disappears are: Soil erosion, Landslides, Temperature increase, Increase in carbon dioxide, Floods)

IV. LONG ANSWER TYPE QUESTIONS (5 M):

1. People say that nothing goes waste in a forest. Can you explain, how? [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 as recycling of nutrients due to which nothing goes waste in a forest.]

2. 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. Humans clear 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.]

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