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Session: 2025 – 2026

(Answer Key)

Class : VII

Subject : Science

Chapter : Forest

CHECKPOINT 1

1. Canopy 2. Recreation Parks 3. Tribals
4. Suspended particulate matter

CHECK POINT 2

1. Pollination 2. Oxygen 3. Deforestation; pollution
4. Afforestation

PRACTICE TIME

A. 1. (a) 2. (d) 3. (c) 4. (b)

B. 1. (c) 2. (b) 3. (a) 4. (b)

C. 1. (F) 2. (T) 3. (F) 4. (F) 5. (T)

- D. 1.** About 3.9 billion hectares of Earth's surface is covered with forests.
2. Living things and their environment together form an ecosystem.
3. Burning of fossil fuels, automobiles, thermal power plants, etc
4. Large-scale planting of tree saplings is called afforestation.
5. In the year 1970.

- E. 1. (a)** Forests purify and provide fresh air by using carbon dioxide during photosynthesis and releasing oxygen in atmosphere.
(b) Forests prevent soil erosion by holding soil particles together.

2. Plants are producers. They make food by trapping solar energy, using carbon dioxide from air, and water and minerals from soil. Herbivores, which are primary consumers, eat plants and carnivores, which are secondary consumers, prey upon herbivores. Thus, plants provide food to all animals directly or indirectly. On the other hand, plants depend on animals for inorganic nutrients and carbon dioxide.
 3. The roots of plants hold soil particles together. The plants growing on the ground check the free flow of water and also that of the wind. This prevents the topsoil from being washed away by water or blown away by wind. Hence, forests help in the conservation of soil.
 4. Social forestry is a scheme introduced by the Indian Government in 1970. In this scheme, urban and rural wastelands are used to grow trees by local people.
 5. (a) Plants need carbon dioxide for photosynthesis which is released by animals during respiration.
(b) Plants need inorganic salts which they get from the soil. The bodies of dead and decaying animals are broken down by microbes into inorganic compounds. These compounds get percolated into the soil and provide nutrients to the plants.
 6. The conversion of a green area into a dry and sandy one due to low rainfall and removal of vegetation is called desertification.
- F. 1.** If decomposers are destroyed from the forest, the break down of dead and decaying complex organic matter of plants and animals into simple inorganic matter will not take place and there will be dead bodies all around in the forest.

2. Large-scale cutting of trees is called deforestation. The main causes of deforestation are:
- Increased demand of fuelwood and wood for paper and timber.
 - Increased demand of land for industries, houses, roads, railway tracks and other transport facilities.
 - More land for agriculture to provide food for increasing human population.
 - Increased mining activity.
 - Lowering of watertable causes plants and trees to wilt and die.
 - Overgrazing by cattle and sheep.

3. Animals depend on plants for:

- Food, which is a source of energy, is obtained by eating leaves, fruits, seeds, nuts, etc.
- Oxygen, which is needed for respiration, is released by plants during photosynthesis.
- Shade and protection is provided by large trees. Animals hide under the trees to protect themselves from bright sun or rains.
- **Shelter:** Birds live and make their nests on trees. The nests provide shelter and protection to their eggs and young ones. Wild animals hide themselves in dense bushes and tall grasses.

4. Deforestation leads to:

- Increase in overall temperature of the earth called global warming.
- Lesser rain causing desertification, i.e., spread of deserts.
- Increased soil erosion, i.e., loss of humus from soil.
- Unbalanced ecosystem leads to depleted groundwater, and disturbed oxygen (O₂) and carbon dioxide (CO₂) ratio in the atmosphere.
- Danger to wildlife.
- Loss of forest produce.
- Loss of biodiversity due to extinction of various forest plants and wild animals.

5. ● Large scale felling of the forest trees must be stopped.
- When trees are cut, more trees should be planted in their place.
 - Overgrazing by cattle and other animals should be stopped.
 - To develop new forests, more saplings should be planted every year during the rainy season.
 - Forests must be protected from insects, pests and infections by treating them with insecticides and pesticides.
 - Forest fires must be checked. People should avoid smoking or cooking in the forest area.
 - Human activities leading to soil erosion must be stopped.
 - Air, water and land should be conserved, i.e., pollution of air, water and land should be controlled so that trees and vegetation could survive.

G. 1. Large-scale felling of trees is known as deforestation, whereas conversion of green land into desert is called desertification.

2. Carnivores are the animals such as lion, tiger, etc. that prey upon herbivores, whereas scavengers are the animals that feed on the bodies of dead animals and left over food by the carnivores, for example, hyena, jackal, etc.

3. The sequence in which a producer (green plant) is eaten by a herbivore (primary consumer) and the herbivore is preyed upon by a carnivore (secondary consumer) is called food chain.

Food web is the interlinking of various food chains in which a consumer gets various sources of food. In case one food chain gets disturbed, the other food chain is always there to support the animal.

H. 1. Forests are called lungs of nature because green plants release oxygen during photosynthesis and take carbon dioxide from the air.

2. Initiatives taken by the government towards the environment and conservation of forests are:

- Organisation of Vanamahotsava programme.
- Introduction of social forestry.
- Planting sapling on a large scale during rainy season every year.
- Restricting human activities that lead to soil erosion.

3. Decaying matter appears warm and moist because microbes feed upon decaying matter and use it for getting energy. They respire anaerobically releasing water and heat.

