

Board –CBSE

Class –10th

Topic – Management of Natural Resource

1. Suggest three ways to maintain a balance between environment and development to survive.

Ans. The three ways to maintain a balance between environment and development to survive are as follows:

1. Forest resources should be used in an environment-friendly and developmentally sound manner.
2. Instead of using non-renewable natural resources, the use of renewable natural resources should be preferred.
3. Wastewater generated by industries should be recycled. We should use natural resources cautiously so that economic growth and ecological conservation go hand in hand.

2. State two reasons each for conserving (a) forest and (b) wildlife.

Ans. Two reasons each of conserving:

(a) Forest

- i. It helps in retaining the sub-soil water.
- ii. It checks flood.

(b) Wildlife

- i. To maintain ecological equilibrium.
- ii. To protect nature.

3. An environmentalist on a visit to your school suggested the use of three R's to save the environment. Explain what he meant by three R's and how you would follow his advice at home.

Ans. Three R's to save the environment: We can reduce pressure on the environment by applying the maxim of 'Reduce, Recycle and Reuse' in our lives. Reduce means 'to use less'.

- By switching off unnecessary lights and fans to save electricity.
- By repairing leaky taps to save water.
- By not wasting food.

Recycling means collecting plastic, paper, glass, and metal items and recycling these materials to make required things.

- In order to recycle, firstly segregation of waste is necessary so that materials that can be recycled are not dumped along with other wastes.

Reuse means 'to use things again and again'

- The used envelopes can be reversed and used again instead of being thrown away.
- The plastic bottles of food items like jam or pickles can be used for storing things in the kitchen.

4. List any two causes of our failure to sustain the availability of underground water.

Ans. Two causes of our failure to sustain the availability of underground water are:

- i. Rising population: As the population increases, demand for water increases resulting in depletion of underground water levels.
- ii. Industrialization: Industries need more and more water to manufacture products. With the growing industrialization, demand for water increases which results in a reduction in the availability of underground water.

5. What is meant by exploitation of resources with short-term aims? List its four advantages.

Ans. The exploitation of resources with short-term aims means consumption of resources for immediate requirement without their conservation for the future. Its four advantages are i. It fulfills the requirement of the mass population. ii. It provides industrial growth. iii. It provides economic development. iv. It makes life comfortable.

6. Name any four categories of people who depend on the forest resources, mentioning the major needs of each category.

Ans.

1. Local people who live around forests: They use forests for grazing their cattle, collecting fruits, firewood, bamboo, and thatch.
2. Industrialists: They collect raw materials from forests for their industries.
3. Tourists: They visit forests for recreation.
4. Forest department of Government: They control the resources of the forest.

7. What changes can you make in your habits to become more environment-friendly?

Ans. We should use the formula of three R's in our home in order to be environment friendly.

- (a) Reduce, i.e. to use less, and save the water and the electricity by stopping their wastage.
- (b) Recycle, i.e. to segregate the waste so that materials that can be recycled should be dumped in a place for recycling.
- (c) Reuse, i.e. to reuse certain materials like bottles of jams and pickles for storing other kitchen items, etc.

8. What would be the advantages of exploiting resources with short-term aims?

Ans. There would be no advantage of exploiting resources with short-term aims. Their exploitation may appear to be advantageous in the short term but it is highly disadvantageous in the long-term. By doing so, we may be able to enjoy the comforts of life but we would damage our environment gradually.

9. How would these advantages differ from the advantages of using a long-term perspective in managing our resources?

Ans. The exploitation of natural resources with short-term aims are advantageous for the present generation to meet their daily requirements whereas management of natural resources with a long-term perspective is aimed to fulfill the needs of future generation and to maintain their sustainability.

10. Why do you think there should be equitable distribution of resources? What forces would be working against an equitable distribution of our resources?

Ans. Everybody has equal rights over natural resources and also everybody should get the benefits from them. Therefore, equitable distribution of resources is essential to ensure that everybody gets their due benefit. But many forces go against the equitable distribution of natural resources. The geographical factors are the most important factors which do not allow equitable distribution of natural resources. The economy is another factor that prevents equitable distribution of these resources.

11. Why should we conserve forests and wildlife?

Ans. We should conserve forests and wildlife for preserving our environment. They together maintain an ecological balance of nature. We should conserve them for our economic and social growth and meet our material aspirations.

12. Suggest some approaches towards the conservation of forests.

Ans. The principles of the three R's should be followed to conserve the forests. In addition to this, all stakeholders should be made a part of any conservation programmes. Also, the interests of local forest dwellers should always be kept in mind while organizing conservation programs.

13. List four advantages of water stored in the ground.

Ans. Four advantages of storing water in the ground are:

- a) It does not evaporate.
- b) It is relatively protected from contamination by human and animal wastes.
- c) It does not provide the breeding ground for mosquitoes.
- d) It provides moisture for vegetation.

14. "Burning fossil fuels is a cause of global warming." Justify this statement.

Ans. Fossil fuels like coal and petroleum are formed from biomass. In addition to carbon, they contain hydrogen, nitrogen, and sulphur. When fossil fuels are burnt, the products are carbon dioxide, water vapor, oxides of nitrogen, and oxides of sulphur. Carbon dioxide is a greenhouse gas. An increase in the percentage of carbon dioxide increases the temperature on earth which leads to global warming.

15. List the products of combustion of fossil fuels. What are their adverse effects on the environment?

Ans. When fossil fuels are burnt, carbon dioxide, water, oxides of nitrogen, and oxides of sulphur are formed. If the combustion takes place in insufficient air, then carbon monoxide is formed instead of carbon dioxide. Of these products, the oxides of sulphur and nitrogen, and carbon monoxide are poisonous gases and carbon dioxide is a greenhouse gas.

16. State the meaning of "sustainable management". Reuse is better than recycling. How?

Ans. 'Sustainable management' is the management of resources in which development can be maintained for a long time without undue damage to the environment. Recycling needs additional energy to make a usable item. Reuse does not require additional energy and hence, is better than recycling.

17. Why forests are considered “biodiversity hot spots”? List two ways in which an individual can effectively contribute to the management of forests and wildlife.

Ans. Biodiversity is measured by the number of different life forms found in an area. In a forest, various species exist which include bacteria, fungi, ferns, plants, nematodes, insects, birds, reptiles, and mammals. Forests are therefore considered as biodiversity hot spots. An individual can contribute to the management of forests and wildlife by a. Avoiding cutting down of forests and killing of wildlife. b. Educating people about the importance of forests and wildlife in our life.

18. How did ‘Chipko Andolan’ ultimately benefit the local people? Describe briefly.

Ans. Chipko Movement: a. During 1970, in Reni village of Garhwal, a contractor was allowed to cut trees in a forest near the village. b. When the contractor’s workers went to the forest to cut trees, the women of the village hugged the tree trunks to prevent the workers from cutting trees. c. Chipko means ‘hug’ and the movement began with the villagers hugging trees. It is called the ‘Chipko Andolan’. The movement benefited the local population as it conserved the forest products. It benefited the environment as it conserved the quality of soil and sources of water thereby, maintaining balance in nature.

19. Which of the two is a better option, (i) to collect rainwater in ponds or artificial lakes, or (ii) to let it recharge groundwater by water harvesting? List two advantages of the option to justify your answer.

Ans. To allow rainwater to recharge groundwater by water harvesting is the better option. Its advantages are:

- a) Groundwater does not evaporate.
- b) Groundwater does not provide a breeding ground for mosquitoes.

20. Which of the two is a better option, (i) to collect rainwater in ponds or artificial lakes, or (ii) to let it recharge groundwater by water harvesting? List two advantages of the option to justify your answer.

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21. List any four characteristics of good fuel.

Ans.

1. Higher calorific value
2. Lesser pollution
3. Sustainable for a longer period
4. Easily transportable