

Class 10 our environment and Management of Natural Resource board solved Questions

1. What is the function of ozone in upper atmosphere?

Ans: It shields the surface of the earth from ultraviolet rays from the Sun.

2. What is meant by “sustainable management”? Why reuse considered better than recycling?

Ans: A type of management which encourages utilization of resources that meet current basic human needs while preserving the resources for the needs of future generations.

Reuse considered better than recycling as it does not consume energy.

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

Ans: In forest large number of life forms such as bacteria, insects, birds, reptiles, mammals, etc are found.

it is a region with large biodiversity of endangered species, many of them being highly endemic and such regions being subjected to large scale destruction are designated as “Hot spots” by ecologists.

Two ways in which an individual can contribute effectively to the management of forest and wildlife –

- i) Not allowing cutting of trees
- ii) To promote / make people aware about the importance of forests and wild life.
- iii) Not using wild life products / fur coat or any other named product

4. Why do we need to manage our resources carefully ?

Ans: These are not unlimited and with a tremendous increase in human population, the demand for resources is increasing at an exponential rate.

5. Why management of natural resources require a long term preservative?

Ans: Long term perspective required to meet the needs of the present as well as for the generations to come.

6. List four measure to conserve forest ?

Ans: Four measures to conserve forest are:

- (i) Reforestation of the deforested areas as soon as possible.
- (ii) Ban on the indiscriminate cutting of trees.

(iii) Felling of trees for fuel wood should be avoided.

(iv) Overgrazing in forests should be discouraged.

7. Why should biodegradable and non biodegradable waste be discarded in two separate dustbins?

Ans: So that the time and energy required in segregation may be saved and waste may be disposed off quickly

8. List two advantages associated with water harvesting at the community level.

Ans: Two advantages associated with water harvesting at the community level are :

(i) Recharges ground water

(ii) Mitigates floods and droughts

(iii) Brings rivers and wells back to life and makes more water available

9. Every one of us can do something to reduce our personal consumption of various natural resources. List four such activity based on 3 – R approach.

Ans: Four activities every one of us can do to reduce our personal consumption of various natural resources:

i) Reduce excessive use of natural resources like water, fossil fuels, etc..

ii) Reuse of some resources instead of wasting (throwing) them, like empty bottles.

iii) Recycle the materials like paper to reduce the pressure on existing natural resources.

iv) Changes in lifestyle, personal attitudes and practices.

10. The following organisms form a food chain. Which of these will have the highest concentration of non-biodegradable chemicals ? Name the phenomenon associated with it. Insects, Hawk, Grass, Snake, Frog.

Ans: Hawk ; Biomagnification

11. What is meant by three types of 'R' (3-R's) to save the environment ?

Ans: Reduce, Reuse, Recycle

12.Explain with examples how would you follow the 3-R's in your school to save the environment.

Ans: To save the environment we at school:

- Switch off the fans and bulbs when not in use,

- Reuse of paper, polythene bags, etc.,
- Reduce the wastage of water / paper or any other item

13. List four advantages of water stored in the ground as “ground water”

Ans: Advantages of water stored in the ground as “ground water” –

- I. It does not evaporate.
- II. Spreads out to recharge wells.
- III. Provides moisture for vegetation over a large area.
- IV. Does not provide breeding ground for mosquitoes.
- V. Remain protected from contamination from human excreta, etc..

14.. Write the full name of the group of compounds mainly responsible for the depletion of ozone layer.

Ans: Chlorofluorocarbons

15. List two problems that may arise by planting trees of single variety over vast tracts of a forest.

- Ans: 1. Loss of biodiversity
2. Varied needs of the local people can no longer be met.
 3. Degradation of soil

16. Building of big dams gives rise to some problems. List three main problems that may arise. Suggest a solution to any one of these problems.

- Ans: 1. Social problems
2. Economic problems
 3. Environmental problems

Solution: Adequate rehabilitation / compensation to the displaced persons / afforestation

17. List two examples of natural ecosystem.

Ans: Forests ,Ponds,Lakes

18. Write two advantages of sustainable management of natural resources. Out of the two – reuse and recycle – which is better and why ?

Ans: Two advantages -

- (i) Provides the resources for the present generation.

(ii) Preserve the resources for the future generation as well.

Reuse is better than recycling because it does not involve use of energy

19. "Energy flow in food chains is always unidirectional." Justify this statement. Explain how the pesticides enter a food chain and subsequently get into our body.

Ans:

? In a food chain the energy moves progressively through the various trophic levels and is no longer available to the organisms of the previous trophic level / energy captured by the autotrophs does not revert back to the solar input.

? Pesticides used for crop protection when washed away into the soil or water bodies absorbed by plants.

? On consumption they enter our food chain and being non – biodegradable these chemicals get accumulated progressively and enter our body.

20. What will be the amount of energy available to the organisms of the 2nd trophic level of a food chain, if the energy available at the first trophic level is 10,000 joules ?

Ans: 1000 J

21. List two main causes of the pollution of water of the river Ganga. State how pollution and contamination of river water prove harmful for the health of the people of neighbouring areas.

Ans: Causes: Disposal of industrial effluents. Human activities like bathing, washing, immersion of ashes, etc.

Disposal of untreated sewage

Harmful effects on health – Spreads water borne diseases,- Consumptions of contaminated fishes

22. What is biodiversity? What will happen if biodiversity of an area is not preserved ? Mention one effect of it.

Ans: Biodiversity - number and range of variety of species of life forms in an area

Effect – loss of diversity may lead to a loss of ecological stability

23. Differentiate between biodegradable and non-biodegradable substances with the help of one example each. List two changes in habit that people must adopt to dispose non-biodegradable waste, for saving the environment.

Ans: Biodegradable substances – can be broken down into simpler substances by nature / decomposers/ bacteria/ saprophytes/ saprobionts.

Ex. – Human Excreta/ Vegetable peels, etc.

Non-biodegradable substances – can't be broken down into simpler substances by nature / decomposers.

Ex. – Plastic/ glass (or any other) (any one)

Habits:

- Use of separate dustbins for biodegradable and non biodegradable waste,
- Reuse of things such as poly-bags, etc.,
- Recycle of waste
- Use of cotton /jute bags for carrying vegetables

24. What is ozone ? How and where is it formed in the atmosphere ? Explain how does it affect an ecosystem.

Ans: Ozone (O₃) is a molecule formed by three atoms of oxygen.

Ozone is formed at at the higher levels of the atmosphere by action of UV radiation on oxygen (O₂) molecule.

The higher energy UV radiations split apart some molecular oxygen (O₂) into free oxygen (O) atoms. These atoms then combine with the molecular oxygen to form ozone as shown—



Ozone shields the surface of the earth from ultraviolet (UV) radiation from the Sun. This radiation is highly damaging to organisms, for example, it is known to cause skin cancer in human beings.