



## CLASS NOTES-ANSWERS

1) Fill in the blanks.

- a) A place where animals are protected in their natural habitat is called wildlife sanctuary.
- b) Species found only in a particular area is known as endemic specie.
- c) Migratory birds fly to far away places because of climatic change.

2) Differentiate between the following:

- a) Wildlife sanctuary and biosphere reserve

Answer:

Wildlife Sanctuary	Biosphere Reserve
A protected area within which wild animals are protected from external dangers like hunting	The area meant for the conservation of the biodiversity. It also helps in maintaining the culture of that area.

- b) Zoo and wildlife sanctuary

Answer:

Zoo	Wildlife Sanctuary
Animals are kept in artificially constructed facilities for public exhibition.	A protected area within which wild animals are protected from external dangers like hunting
It is an artificial habitat, and the animals may or may not adapt to the new living conditions.	The animals are conserved within their natural habitat itself. So they won't have a problem with their surroundings.

- c) Endangered and extinct species

Answer:



Endangered species	Extinct species
The species which are on the verge of extinction are called endangered species.	The species of animals or plants that no longer exist are called extinct species.
Example: Bengal tiger, blue whale	Example: Caribbean monk seal, dinosaur

d) Flora and fauna

Answer:

Endangered species	Extinct species
It is the collective name for plant life from a particular area.	It is the collective name for the animal life from a particular area.
Example: Jamun and sal in Nilagiri regions	Example: Tiger, leopard in Nilagiri regions

3) Discuss the effects of deforestation on the following.

a) Wild animals

Answer: Effects of deforestation on wild animals:

Removal of trees and plant life from a particular area for the construction of industries, agriculture or for other such purposes is termed Deforestation. Plant life forms an integral part of the ecosystem, and they form the natural habitat of various animals in an ecosystem. Destroying plant life will ultimately threaten the existence of animals in a particular ecosystem and may lead to their extinction.

b) Environment

Answer: Effects of deforestation on the environment:

In plants, Photosynthesis takes place through the absorption of CO<sub>2</sub> from the earth's atmosphere. The percentage of CO<sub>2</sub> in the atmosphere increases rapidly if the plant life of an area is destroyed. Increased concentrations of CO<sub>2</sub> result in



the trapping of excessive heat radiations within the Earth's atmosphere contributing to global warming. This results in the rise of the temperature of the Earth and disturbs the water cycle which occurs in nature. Hence, rainfall pattern changes, leading to droughts and floods. Deforestation decreases the soil fertility and so, increases the chances of natural calamities.

c) Villages (Rural areas)

**Answer:** Effects of deforestation on villages:

The soil particles are held together in a place by the roots of the plants, trees and other vegetation. In the event of water flow or a high-speed wind over the top layer of the soil, the soil particles get removed easily as there are no plants to hold them in place. Lately, soil erosion has increased by deforestation activities. Soil loses fertility and humus. Hence, fertile land fit for agriculture turns into a desert. The lack of quality air to breathe, decline in rainfall, the decrease in soil fertility and the chances of natural disasters affect the village life.

d) Cities (Urban areas)

**Answer:** Effects of deforestation on cities:

The risk of natural calamities like floods and drought in urban areas has increased by deforestation. It will also lead to global warming because of increased CO<sub>2</sub> levels in the atmosphere. Global warming is a result of continuous pollution from automobiles and industries. The water cycle in the vicinity is also affected.

e) Earth

**Answer:** Effects of deforestation on Earth:

Deforestation leads to increased chances and occurrences of desertification, droughts and floods. The level of carbon dioxide in the earth's atmosphere also increases, which leads to global warming. The water cycle is disrupted, and there is also an increased risk of natural calamities.



- f) The next generation

**Answer:** Effects of deforestation on the next generation

Our environment is slowly changing due to the activities of deforestation, both directly and indirectly. Soil erosion, global warming, desertification, drought, greenhouse effect, floods and many other problems are caused only because of deforestation. Ultimately, the next generation will face the consequences of deforestation. Climatic conditions will be adversely affected. There will be scarcity of food and clean environment. Next generation won't be able to see most of the species due to habitat loss.

- 4) What will happen if

- a) we go on cutting trees

**Answer:** If we go on cutting the trees, the animals will lose their natural habitat as an essential part of their ecosystem is destroyed. This reduces the biodiversity of the affected areas. The temperature of the Earth also increases and paves the way to global warming. Global warming, in turn, affects the water cycle. Hence, rainfall pattern changes, leading to droughts and floods. As a result, risks of soil erosion, global warming, desertification, greenhouse effect increase.

- b) the habitat of an animal is disturbed

**Answer:** All the basic necessities for an animal, like food, water, shelter and protection, are provided by the habitat in which the animal lives-in. Many animals will lose their natural habitat and will reach the level of being endangered. Disturbing the habitat of the animals forces them to move to another place in search of food, water, shelter and protection. The animals, in due course, may get killed by other animals.

- c) the top layer of soil is exposed

**Answer:** Removing the top layer of the soil gradually exposes the lower layers of the soil. The lower layers of the soil are hard and rocky in nature and are less



fertile. This is because of the reduced quantity of humus and decrease in water holding capacity of soil. Soil erosion on a continued basis will turn land barren and infertile.

5) Answer in brief.

a) Why should we conserve biodiversity?

**Answer:** The number and variety of various life forms, such as plants, animals and microorganisms in the area, are called Biodiversity. Both plants and animals have a mutual dependence on each other for their survival. As they are related to one another, the destruction of one will automatically destroy the other. Hence, biodiversity has to be conserved in order to maintain nature's balance.

b) Protected forests are also not completely safe for wild animals. Why?

**Answer:** People who live near the forests depend on the resources of the forests in order to fulfill their day-to-day needs. Therefore, it is not safe for animals living in protected forests. The animals would be threatened by the presence of the human population. This results in the killing of wild animals and selling their products for huge sums of money.

c) Some tribals depend on the jungle. How?

**Answer:** The forests provide food and other resources to the tribal people. It is inevitable for them to depend on forests and their resources for everyday needs.

d) What are the causes and consequences of deforestation?

**Answer:**

Causes of deforestation

- In order to accommodate the ever-expanding urban population, forest areas are often cleared and converted into lands for building houses and factories.
- For agricultural activities, like crop cultivation and cattle grazing, forest lands are cleared.



- Making furniture and using wood as a fuel.
- Natural disasters like forest fires, droughts, etc.

Consequences of deforestation

- Soil erosion
- Loss of biodiversity
- Natural calamities like flood, drought, etc.
- Global warming as a result of climate change
- Disruption of the water cycle and decrease in ground water level

e) What is Red Data Book?

**Answer:** The Red Data Book is a sourcebook which has an international list of all plant and animal species which are endangered, that is, on the verge of extinction. The International Union for Conservation of Nature and Natural resources (IUCN) maintains the books and adds/removes species. The commonly used colour code is, black for extinct, red for endangered and green for safe.

f) What do you understand by the term migration?

**Answer:** The movement of an organism or a group of organisms from its natural habitat to another place on a standard basis at a particular time each and every year is known as migration. The organisms do so in order to avoid uninhabitable conditions of climate or for the process of breeding.

6) In order to meet the ever-increasing demand in factories and for shelter, trees are continually being cut. Is it justified to cut trees for such projects? Discuss and prepare a brief report.

**Answer:** No. Cutting trees in order to meet the ever-growing demands of the human population is not at all justified. There are a vast number of organisms, like wild animals, insects, and birds, living in the forests. The forests provide good-quality air for animals, birds, humans and other organisms. This is because of the process of plant respiration by which they consume harmful carbon dioxide and give out good



quality Oxygen. Thus, they keep greenhouse gases and global warming under check. The roots of the flora of the forests help in preventing soil erosion. Natural Calamities such as floods and droughts could also be prevented by their presence. They help in increasing the soil's fertility and conserving the biodiversity of the ecosystem.

Over utilisation of forests and their resources by cutting a large number of trees in order to satisfy the demands of the ever-increasing human population leads to many long-term problems like

- Soil erosion
- Greenhouse effect
- Global warming
- Floods
- Droughts

Besides the above-listed problems, the effects of large-scale deforestation will leave an everlasting mark on the face of human civilisation. The balance of nature is disturbed by the destruction of trees. Hence, it is of utmost priority and importance to conserve forests.

7) How can you contribute to the maintenance of the green wealth of your locality?

Make a list of actions to be taken by you.

**Answer:**

- Forbidding others to cut trees
- Providing care to existing trees
- Planting saplings and trees
- Not throwing the garbage on the streets
- Reusing and recycling paper to save trees, energy and water
- Making people aware of the significance of a clean and green environment

8) Explain how deforestation leads to reduced rainfall.

**Answer:**



- Removal of trees and plant life from a particular area for the construction of industries, agriculture and other purposes is termed Deforestation. Photosynthesis, in plant life, takes place through the absorption of  $\text{CO}_2$  from the earth's atmosphere. When plant life is destroyed, the Carbon Dioxide levels in the atmosphere will increase drastically, leading to the trap of heat radiation which causes global warming. This rise in temperature will affect the water cycle. Disturbance in the water cycle will lead to a chain of events, and in the end, the rainfall pattern changes and results in droughts.
- Trees give out a huge amount of water in the form of water vapour during transpiration. The reduction water vapour affects cloud formation and thus, results in less rainfall.

9) Find out about national parks in your state. Identify and show their location on the outline map of India.

**Answer:** Periyar National Park, located in the state of Kerala.



10) Why should the paper be saved? Prepare a list of ways by which you can save paper.

**Answer:** If one ton of clean white paper is to be produced, seventeen full-grown trees are cut down. Trees play a major role in maintaining a balance in nature. So, it





is essential to save paper in order to protect the trees and avoid the impact of the loss of trees on the living organisms that depend on these trees. Ways to save paper are,

- Collection and recycling of used paper.
- Using both sides of a paper for writing.
- Spreading awareness about the importance of paper among school children and youth.
- Intelligent and proper use of paper.

11) Complete the word puzzle.

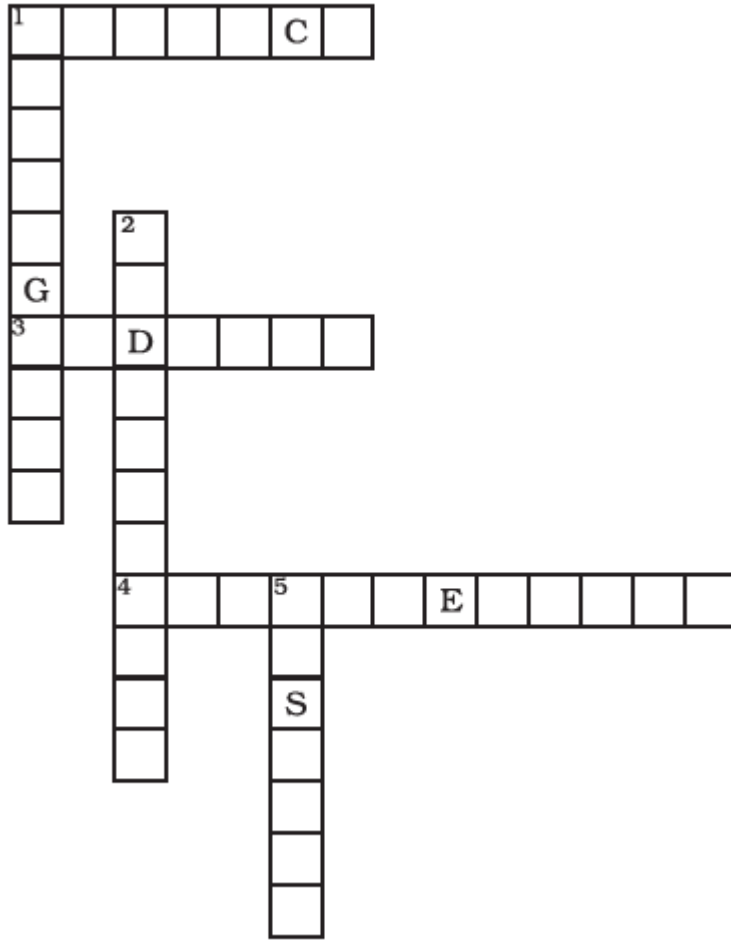
### **Down**

1. Species on the verge of extinction.
2. A book carrying information about endangered species.
5. Consequences of deforestation.

### **Across**

1. Species which have vanished.
3. Species found only in a particular habitat.
4. Variety of plants, animals and microorganisms found in an area.





Answer:

**Down**

- 1. Endangered
- 2. Red Data Book
- 5. Deserts

**Across**

- 1. Extinct
- 2. Endemic
- 4. Biodiversity

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