

Conservation of Plants and Animals

Q.1 Fill in the blanks:

- (a) A place where animals are protected in their natural habitat is called a ____.
- (b) Species found only in a particular area are known as ____.
- (c) Migratory birds fly to faraway places because of __ changes.

Sol: (a) A place where animals are protected in their natural habitat is called a **Wildlife sanctuary**.
(b) Species found only in a particular area are known as **endemic species**.
(c) Migratory birds fly to faraway places because of **climatic** changes.

Q.2 Differentiate between the following.

- (a) Wildlife sanctuary and biosphere reserve
- (b) Zoo and wildlife sanctuary
- (c) Endangered and extinct species
- (d) Flora and fauna

Sol: (a) Wildlife sanctuary and biosphere reserve:

Wildlife sanctuary	Biosphere reserve
It is a reserved area within which animals are protected within their natural habitats.	It is a very large protected area in forest which are constructed for the conservation or protection of biodiversity.
It provides protection and suitable conditions for living of wild animals and plants	It provides the conservation of various life forms such as plants, animals, and micro-organisms.
Example: Gir sanctuary, it is a wildlife sanctuary for the conservation of Asiatic lions.	Example: Pachmarhi biosphere reserve is a popular biosphere reserve.

(b) Zoo and wildlife sanctuary

Zoo	Wildlife sanctuary
It is a protected area in which wild animals are kept for public exhibition.	It is a reserved area within which animals are protected within their natural habitats.
Zoo is an artificial habitat.	It conserves the natural habitat of wild animals and plants.
In zoo, animals live in cages and their food and breeding are controlled.	In wildlife sanctuary, animals are free to move anywhere and their food and breeding is not controlled.

(c) Endangered and extinct species

Endangered species	Extinct species
The species of animals that are on the verge of becoming extinct.	The species of animals that are no longer exists. Hence, it is extinct.
Examples: Blue whale, tiger, leopard, etc.	Examples: Dodo, passenger pigeon, etc.

(d) Flora and fauna

Flora	Fauna
Flora is referred to all living plants which are found in a particular area.	Fauna is referred to all animals which are found in a particular area.
Example: Sal, teak, wildmango, etc. are the flora of Pachmarhi biosphere reserve.	Example: Leopard, wild dog, etc. are the fauna of Pachmarhi biosphere reserve.

Q.3 Discuss the effects of deforestation on the following.

- (a) Wild animals
- (b) Environment
- (c) Villages (Rural areas)
- (d) Cities (Urban areas)
- (e) Earth
- (f) The next generation

Sol: Effects of deforestation on:

(a) Wild animals:

The removal of trees or other vegetation from the forests for industrial, agricultural, or other purposes is known as deforestation. Trees are the habitat or sources of food for many animals. If the habitat or food sources of wild animals is destroyed, then their numbers will decrease.

(b) Environment:

Plants take CO₂ from the environment to make their food by the process of photosynthesis and give out the O₂. If plants are destroyed, then the level of CO₂ in the environment will rise. As a result of the increase in the temperature of the Earth which will lead to global warming. This will disturb the natural water cycle.

(c) Villages (Rural areas):

In villages, the source of income is crop production for which they need fertile soil. If trees are destroyed, the soil will become loose and it can be easily carried away by wind and water. Due to this, the soil will become infertile.

(d) Cities (Urban areas):

As we know due to deforestation, level of CO₂ and pollutants will increase in the environment which will lead to global warming. This affect the life in cities.

(e) Earth:

Due to deforestation, the fertility of soil decreases. This changes the physical properties of soil which will lead to desertification.

(f) The next generation:

As we know that deforestation affects the wild animals, environment, earth, village, cities and climate of earth. These changes will majorly affect the life of next generation. There will be less food availability and an unclean environment. And our next generation will not be able to see most of the animal species due to their habitat loss.

Q.4 What will happen if:

- (a) We go on cutting trees.
- (b) The habitat of an animal is disturbed.
- (c) The top layer of soil is exposed.

Sol:

(a) If we go on cutting trees, there will be a time when the trees will vanish from the earth. Animals and birds will lose their habitat. Due to this, biodiversity will be vanished. This will disturb the water cycle, rainfall pattern. Natural disaster like floods and draughts etc. can be seen.

(b) If the habitat of the animal is disturbed then their basic need such as food, shelter and protection is lost for the animals. Animals will reach to the level of endangered and at the end both flora and fauna will diminish.

(c) If the top layer of the soil is exposed, it will gradually open the nutritious lower layer of the soil and exposed layer loses all its nutrients.

Q.5 Answer in brief:

- (a) Why should we conserve biodiversity?
- (b) Protected forests are also not completely safe for wild animals. Why?
- (c) Some tribals depend on the jungle. How?
- (d) What are the causes and consequences of deforestation?
- (e) What is Red Data Book?
- (f) What do you understand by the term migration?

Sol:

(a) Biodiversity includes all the variety of plants, animals and microorganisms. We also know that all the living beings are dependent on each other directly or indirectly for food, nutrients, for shelter and so on. So, we should conserve this biodiversity for maintaining the inter-relationship. If any one of the parts is disturb it will affect the others.

(b) Protected forests are not completely safe for wild animals because people who live near the forest area poach animals for their own benefit and sell the products like wood from the forest for money. They also use the resources for their own requirements.

(c) Tribals totally depend on forests for their daily requirements such as food, medicine, clothes and shelters etc. They collect food, fodder, and fallen branches of trees from forests.

(d) Causes of deforestation:

- 1) Natural causes like-forest fire and drought.
- 2) Forests are cleared for cropping and cattle grazing.
- 3) Trees are cut down for making furniture and using wood as a fuel.
- 4) Consequences of deforestation:
- 5) Soil erosion due to deforestation.
- 6) Extinction of biodiversity
- 7) Floods and droughts.
- 8) Disturb water cycle.
- 9) Decreases in level of ground water.
- 10) Climate change due to global warming

(e) Red Data Book is a source book which keeps list of all endangered animal and plant species. This book is maintained by IUCN (International Union for Conservation of Nature and Natural resources).

(f) Migration means that the movement of a species from its own habitat to another place at a certain time every year. They migrate for avoiding inhabitable climatic conditions or for breeding.

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

Sol: No, it is not at all justified to meet the ever-increasing demand in factories and for shelter, trees are being continually cut. Trees are the habitat for various organisms like humans, animals and microorganisms. They provide good quality air, food and wood etc. They maintain the O₂ and CO₂ balance by giving out O₂ and absorbing the harmful CO₂ gas from the atmosphere. They prevent from natural disasters like- floods drought and soil erosion. They keep the soil fertile and protects the earth from global warming, greenhouse effect. The deforestation will disturb the balance of nature. Hence forests should be conserved.

Q.7 How can you contribute to the maintenance of green wealth of your locality? Make a list of actions to be taken by you.

Sol: To contribute to the maintenance of green wealth of the society, following actions to be taken:

- (i) Firstly take care of the plants and trees which are already growing in the surrounding.
- (ii) Planting saplings and trees.
- (iii) Spreading awareness among people in the society and explain the importance of trees.
- (iv) Not throwing the garbage on the streets.

Q.8 Explain how deforestation leads to reduced rainfall.

Sol: Deforestation is cutting down the plants and trees from the surroundings for the industrial raw materials, agricultural land and human purposes. Trees give the huge amount of water in the form of water vapour during the transpiration process for rain. The reduction of water vapour affects formation of clouds and this will reduce rainfall.

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

Sol:



Sol: We all know that papers are made from the trees. For making one tone of paper, seventeen full grown trees are cut. Therefore, we should save paper for saving the trees and save our environment.

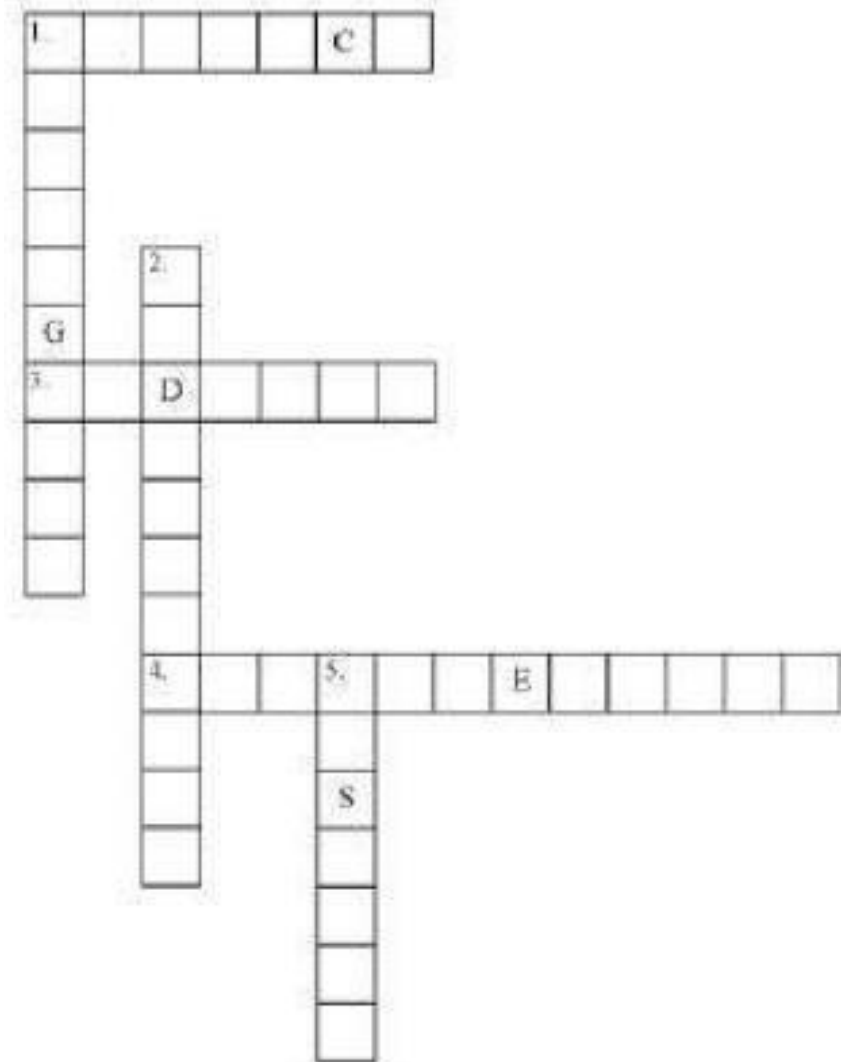
- 1) Reducing the use of papers.
- 2) By using both sides of the paper.
- 3) Paper should not be burnt.

Down

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



Sol:

