

St. Andrews Scots Sr. Sec. School

9th Avenue, I.P. Extension, Patparganj, Delhi – 110092

Session: 2024-2025 – Answer Key

Class: VIII

Subject: Science

Topic: Conservation of Biodiversity

Define these terms:

- 1) Biodiversity - Biodiversity is the species richness of the biosphere. It is defined as the number and variety of life forms such as plants, animals and microorganisms in an area.
- 2) Biosphere Reserve – The area that is meant for the conservation of biodiversity i.e., Wildlife.
- 3) Deforestation – Deforestation is the process of clearing of forests in order to use the land for industrial, agricultural, and other purposes.
- 4) Red Data Book – It is the source book maintained by IUCN. It keeps a track record of various endangered species of plants and animals.
- 5) Reforestation – Restoring of destroyed forests by planting new trees is called Reforestation. It helps in checking environmental degradation.

CHECK POINT 1

1. Biodiversity
2. Desertification
3. Afforestation
4. Flora

CHECK POINT 2

- 1.(F) 2. (F) 3. (T) 4. (F)

PRACTICE TIME

A. Tick (√) the correct answer:

1. (b) 2. (d) 3. (d) 4. (a) 5. (a) 6. (a) 7. (c)

B. Fill in the blanks:

1. Odisha

2. Asiatic Lion
3. poaching
4. fauna
5. deforestation

C. Very Short Answer Type Questions:

1. World Conservation Union (WCU)
2. Uttarakhand
3. Core zone, Buffer zone and Manipulation zone
4. Dodo
5. Forests

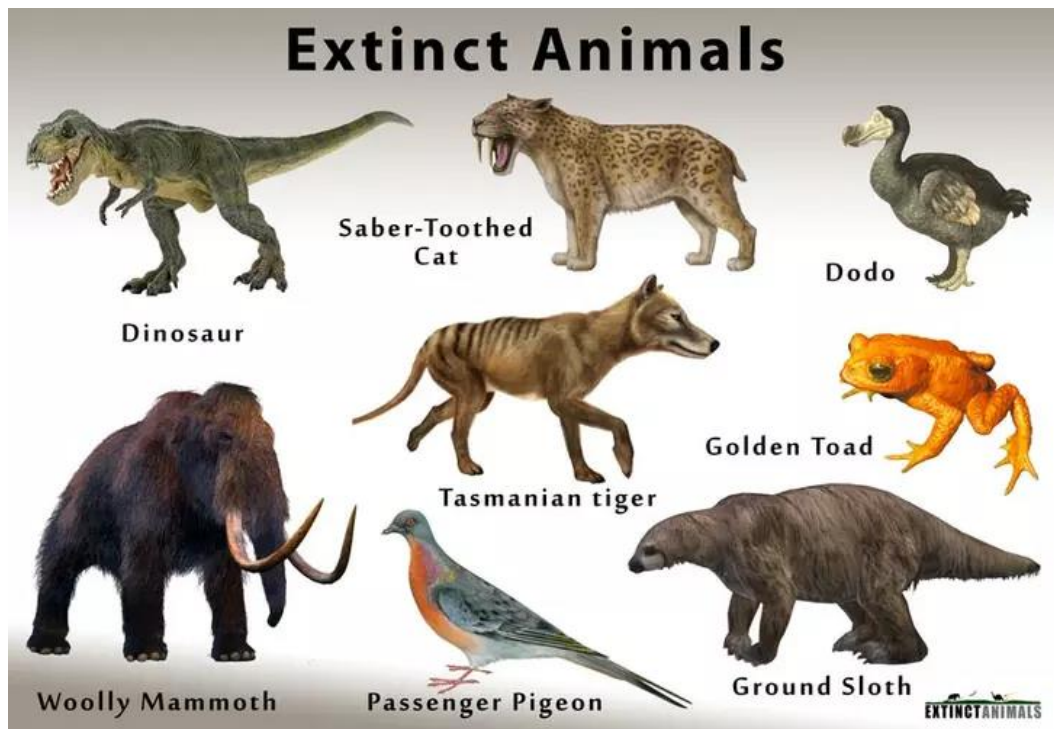
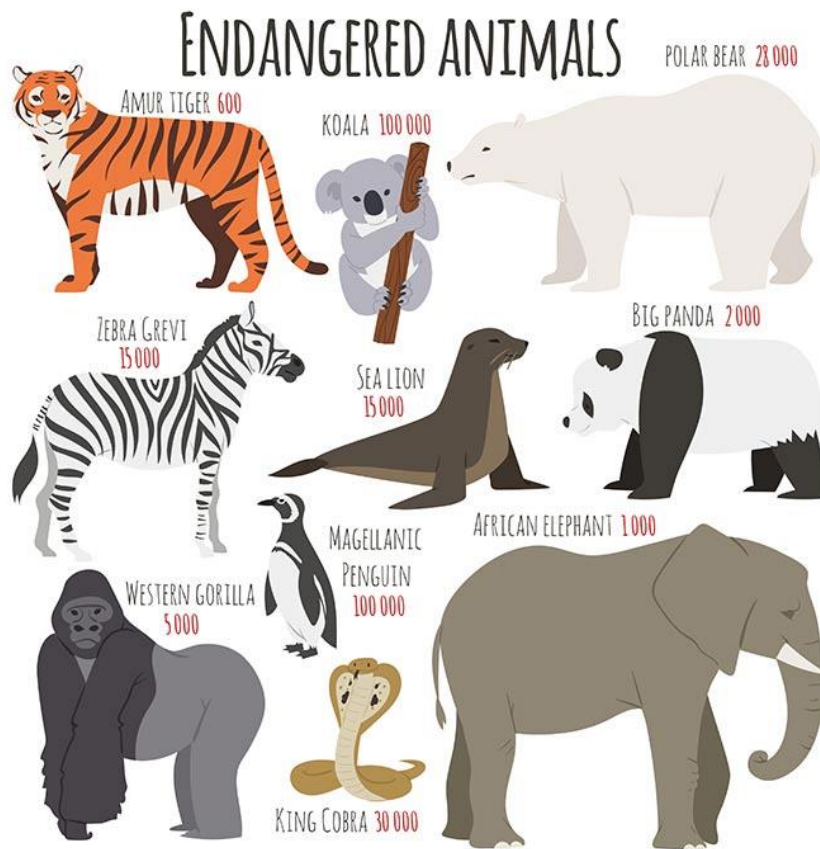
D. Short Answer Type Questions:

- 1.(a) To maintain balance in nature through food chains and food web.
(b) To regulate climate changes, changes in rainfall pattern, wind speed, proper cycling of nutrients and preservation of soil fertility.
2. Deforestation changes the physical property of soil. The water holding capacity of the soil is reduced which makes the topsoil dry. The dry topsoil is blown away by strong winds. This gradually changes a fertile land into a desert.
3. Biosphere reserves help in maintaining the biodiversity as well as the culture of that area. Hence, they are the best way of wildlife conservation.
4. Habitat loss, hunting, deforestation and overgrazing, introduction of exotic species, climate change, human greed and pollution are the causes of wildlife depletion.
5. (a) The plants found typically in a particular area are called the flora of that area, whereas the animals found in a particular place are called fauna of that place.



Examples of flora and fauna

(b) Species of plants and animals which are lost forever are called extinct species, whereas the species of plants and animals whose members are greatly reduced or are near extinction are called endangered species.



E. Long Answer Type Questions:

1. Conservation of biodiversity is essential because:

- Biodiversity maintains a balance in nature or in the ecosystem through food chains and food webs.
- Biodiversity regulates climate, rainfall and wind speed.
- Wild animals and plants provide a variety of commodities.
- Wildlife is needed for breeding programmes in agriculture, horticulture, sericulture, apiculture, etc.
- It helps in cycling of nutrients and preservation of soil fertility.

2. Various factors which lead to extinction and depletion of biodiversity are:

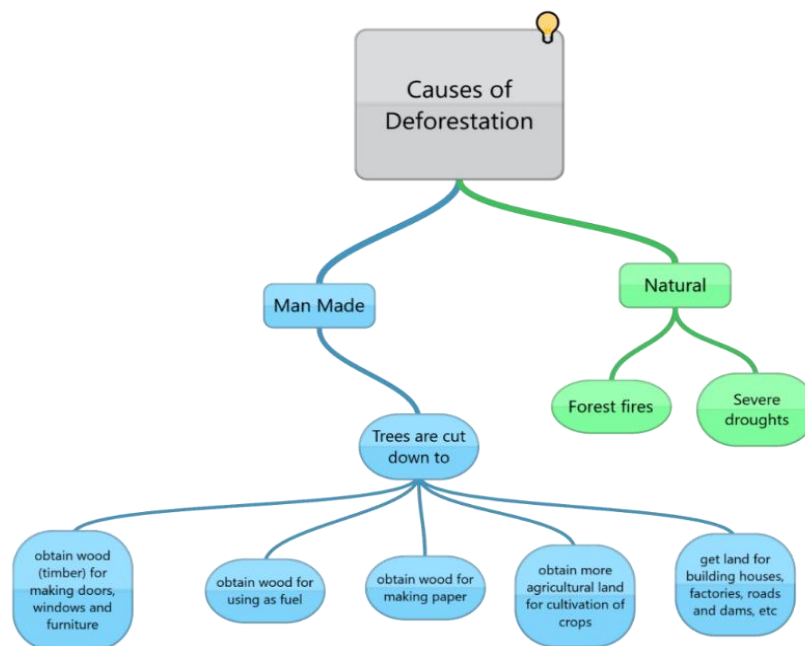
- Habitat loss due to increase in human population.
- Deforestation and overgrazing by increased population of cattle.
- Pollution of air, water and soil due to various human activities.
- Introduction of exotic species which may cause extinction of some native species.
- Climate change due to change in temperature and rainfall patterns.
- Hunting of wild animals for wildlife products such as horn, hoof, skin, etc.

3. Deforestation leads to:

- Global warming due to increased level of carbon dioxide in nature.
- Climate change due to decrease in rainfall and increase in temperature and wind speed.
- Desertification due to reduction in water-holding capacity of the soil.
- Droughts due to disturbed water cycle, reduced rains and lowered water table.
- Soil erosion and floods due to decreased water-holding capacity of soil.
- Loss of wildlife due to loss of natural habitats of wild animals and plants.
- Depletion of resources displaces tribal people who depend on forests for their livelihood.
- Man-made causes of deforestation: Human beings are felling trees for: } Getting land for cultivation of crops, vegetables and fruits. } Clearing the land for building houses, factories, roads and for mining. } Obtaining wood for making furniture, paper, and for fuel.
- Natural causes of deforestation: These are forest fires, severe droughts, floods, earthquakes, landslides, pests, and viral and fungal diseases of plants.



Deforestation



4. The objectives of Wildlife Protection Act are as follows:

- Prohibition of hunting of the listed threatened species.
- Setting up and management of national parks, sanctuaries and biosphere reserves.
- Control and management of captive breeding.
- Protection of specific plants and natural habitats of animals.

Wildlife products such as skin, fur, horns, tusks, etc. are traded illegally.

5. Breeding wild animals in captivity is called captive breeding. It has saved many species of wild animals from extinction. These species are Musk deer in Garhwal hills, Asiatic Lion in Gir Forest and Gharial in Nandan Kanan Zoological Park. Some wildlife breeding projects in

India are Project Tiger, Gir Lion Project, Crocodile Breeding Project, Himalayan Musk deer Project and Rhino Conservation Project, etc.

F. HOTS Questions:

1. Large scale exploitation of forests has made this area barren which altered the climatic pattern of Cherra punji.
2. Overgrazing causes shrinkage of grasslands which leaves the topsoil dry and exposed to air. Gradually, the topsoil is blown away by winds making the land barren.