

Unit 7(Conservation of Plants and Animals)

Multiple Choice Questions

Question. 1 Wild buffalo is an endangered species because .

- (a) its population is diminishing .
- (b) it has become extinct
- (c) it is found exclusively in a particular area
- (d) its poaching is strictly prohibited

Answer. (a) Wild buffalo is an endangered species because its population is diminishing.

Endangered species are the species which are facing the risk of extinction. Their numbers are decreasing to such a low level that they might face extinction soon.

Question. 2 Which one of the following changes may occur due to desertification?

- (a) Decrease in atmospheric temperature
- (b) Increase in water holding capacity of soil
- (c) Increased chances of floods
- (d) Conversion of fertile land into a desert

Answer. (d) The process by which fertile land becomes desert is called desertification. It takes place due to the deforestation.

When forest trees are cut, there will be no roots to bind the soil particles together and prevent them from carrying away. Thus, the top layer of soil erodes out exposing the lower hardy and rocky soil layer. This layer is not fertile. Gradually plants do not grow well and fertile land gets converted into a desert.

Question. 3 Which one of the following statements is true about a Biosphere Reserve?

- (a) It is a protected area where only endemic species live
- (b) It is meant only for the conservation of plants and animals
- (c) It is meant to conserve both, the biodiversity and the culture of that area
- (d) There are no other protected areas within its limits

Answer. (c) A Biosphere Reserve is large, protected area of land meant for the conservation of wildlife, biodiversity and the traditional lifestyle of tribal people (i.e culture) living in the area.

Question. 4 The places meant for conservation of biodiversity in their natural habitat are

- (i) Zoological garden
 - (ii) Botanical garden
 - (iii) Wildlife sanctuary
 - (iv) National park
- (a) (i) and (ii)
 - (b) (ii) and (iii)
 - (c) (iii) and (iv)
 - (d) (i) and (iv)

Answer. (c) Wildlife sanctuary, national parks are in situ conservation methods of biodiversity.

These places are meant for conservation of species in their natural habitat.

The other options, i.e. zoological and botanical gardens are ex situ conservation methods.

These places conserve the species outside its natural habitat.

Question. 5 Which one of the following statement is true about endemic species?

- (a) They are found exclusively in a specific habitat**
- (b) Endemic species can never become endangered**
- (c) They are found only in zoos and botanical gardens**
- (d) They are not affected by the destruction of their habitat**

Answer. (a) Endemic species are those species of plants and animals which are found exclusively in a specific habitat.

e.g. Sal and wild mango are endemic plants of Pachmarhi Biosphere Reserve.

Their existence is endangered by the destruction of their habitats, increasing human population and introduction of new species.

Question. 6 Which of the following feature is correct for a wildlife sanctuary?

- (a) It is an artificially created area for animals protection**
- (b) It is a protected area for threatened and endangered wild animals**
- (c) It is meant for conservation of only plant species**
- (d) Capturing and poaching of animals is strictly prohibited here**

Answer. (a) A wildlife sanctuary is a protected area, which is artificially created for the protection of wild animals in their natural habitat. Killing (poaching) or capturing of animals is strictly prohibited in these areas.

Question. 7 Which statement is incorrect about endangered species?

- (a) Their number has decreased drastically**
- (b) They might become extinct in the near future**
- (c) They pose a danger to other animals**
- (d) Their natural habitat needs to be protected**

Answer. (c) The species which are facing the risk of extinction due to their diminishing numbers : are called endangered species.

An animal species become endangered due to:

- (i) they are few in number.

- (ii) they are being killed by predators.
- (iii) hunted by human.
- (iv) their natural habitat is being destroyed.

Question. 8 What do blackbuck, elephant, python and golden cat together represent in a forest?

- (a) Fauna (b) Ecosystem**
- (c) Flora (d) Species**

Answer. (a) Blackbuck, elephant, python and golden cat together represent fauna in a forest. The animals of particular area called fauna of that area. Flora is the plants of a particular area. Ecosystem includes all the living organisms of an area and their physical environment. Species is a group of population which are capable of interbreeding.

Question.9 The Red Data Book keeps a record of all the

- (i) endemic species (ii) extinct species**
- (ii) endangered plants (iv) endangered animals**
- (a) (i) and (ii) (b) (ii) and (iii)**
- (c) (iii) and (iv) (d) (i) and (iv)**

Answer. (c) Red Data Book is the source book which keeps a record of all the endangered animals and plants. There are different Red Data Books for plants, animals and other species.

Question. 10 Migratory birds fly to far away areas during a particular time of a year. Which of the following conditions present in their habitat during that time are responsible for this behaviour?

- (i) Unavailability of food.**
- (ii) Extreme weather conditions.**
- (iii) Over crowding.**
- (iv) Lack of nesting areas.**
- (a) (ii) and (iii) (b) (i) and (ii)**
- (c) (i) and (iv) (d) (ii) and (iv)**

Answer. (d) The process of a bird moving from one place to another due to the climatic changes is called migration. It is an adaptation to escape extreme weather conditions and lack of nesting areas.

They fly for laying eggs as the weather in their natural habitat becomes very inhospitable.

Question. 11 In our country, large patches of forests are being cleared for cultivation of crops. The environmental impact of such a practice will lead to : (a) soil erosion (b) soil pollution

- (c) soil conservation (d) soil fertility**

Answer. (a) Soil erosion will be the environmental impact of clearing larger patches of forests (deforestation). When trees are cut down, then there are no roots to bind the soil particles and prevent them from being carried away by strong wind or water.

This removal of top layer of soil is called soil erosion.

Very Short Answer Type Questions

Question. 12 Why is it important to conserve forests?

Answer. It is important to conserve forests because forests:

1. maintain the level of CO₂ in atmosphere.
2. bind the top layer of soil that increases its fertility.
3. help in absorbing rain water and thus, preventing floods.
4. maintain the water cycle.
5. serve as natural habitat of various species.

Question. 13 Mention any one action that you have undertaken to conserve trees.

Answer. I take part in various afforestation programmes where I also spread awareness about individual measures that can be taken by people for conservation of trees such as recycling paper, planting a tree on special occasions, etc.

Question. 14 State whether the following statements are True or False. Correct the false statements.

(i) There can be a wildlife sanctuary within a biosphere reserve.

(ii) Plants of a particular area are collectively termed as fauna.

(iii) Deforestation leads to an increase in the water holding capacity of the soil.

(iv) Bison is an endemic fauna of Pachmarhi biosphere reserve.

Answer. 1. True

2. False,

Plants of a particular area are collectively termed as flora.

3. False,

Deforestation leads to decrease in water holding capacity of soil which causes floods and soil erosion.

4. True

Question. 15 Can a forest regenerate naturally in a short period of time?

Answer. Reforestation (i.e. regeneration of a forest) can take place naturally by leaving the deforested area undisturbed for some time.

During this period, the area re-establishes itself without the interference of human beings by the natural growth of trees.

This process, however takes a long time in terms of years.

Question. 16 Name the first reserve forest of India.

Answer. Satpura National Park located in Madhya Pradesh is the first reserve forest of India.

Short Answer Type Questions

Question. 17 Why are wildlife sanctuaries important for conservation of plants and animals?

Answer. In a wildlife sanctuary, killing and capturing of wild animals is strictly prohibited. Any human activity which disturbs the wild animals and plants or their habitat is not allowed.

So, in these areas, animals live in natural environment protected from any interference. This is why, sanctuaries are important.

Question. 18 Why are endemic organisms in greater danger of becoming extinct?

Answer. Endemic organisms are confined to a limited geographical area. They cannot adapt or live outside their natural habitat. This means any disturbance to their habitat will adversely affect them. Thus, they are in greater danger of becoming extinct.

Question. 19 How are even small animals important in an ecosystem?

Answer. Small animals might be small in size but their role in ecosystem is very important which cannot be ignored.

They are the part of food chains and food webs which are essential for maintaining balance in nature.

Question. 20 A new species X is introduced in a forest. How is it likely to affect the local species of that area?

Answer. The new species is likely to affect the local species as it poses threats in following manner:

1. Preying on native species.

2. Increasing competition for food or other resources.

3. Cadsing or carrying disease.
4. Preventing native species from reproducing.
5. Altering the structure of food webs.

Question. 21 Does soil erosion affect the fertility of soil? How?

Answer. Yes, soil erosion affects the fertility of the soil. It removes the top layer of soil (i.e. fertile layer) which exposes the hard rocky lower layers which are less fertile.

Question. 22 What is the unique feature of the biodiversity found in Pachmarhi Biosphere Reserve?

Answer. The biodiversity found in Pachmarhi Biosphere Reserve is similar to those of the upper Himalayan peaks and to those belonging to the lower Western Ghats. Thus, making it unique.

Question. 23 Mention the aim of Forest (Conservation) Act.

Answer. The aim of Forest (Conservation) Act is preservation and conservation of natural forests and meeting the basic needs of the people living in or near the forests.

Question. 24 What is biodiversity?

Answer. Biodiversity or Biological diversity refers to the variety of organisms existing on the earth, their interrelationships and their relationship with the environment.

Long Answer Type Questions

Question. 25 Is deforestation associated with global warming? Explain.

Answer. Plants use carbon dioxide gas from the atmosphere for the process of 'photosynthesis'. When a lot of trees are cut down (i.e., deforestation), then lesser number of trees will be left.

The lesser number of trees will use up less carbon dioxide due to which the amount of carbon dioxide in the atmosphere will increase. Thus, deforestation increases the level of carbon dioxide in the atmosphere.

Carbon dioxide gas traps the sun's rays that are reflected by the earth (causing greenhouse effect). Trapping of rays by carbon dioxide increases the temperature of earth's atmosphere. This will lead to global warming.

The gradual increase in the overall temperature of earth's atmosphere due to the greenhouse effect caused by the increased level of carbon dioxide in the atmosphere is called global warming. This explains that deforestation is strongly associated with global warming.

Question. 26 How does deforestation leads to frequent floods and droughts?

Answer. When the forest trees are cut down, then the lesser number of trees put less water vapour into atmosphere through transpiration. Since, less water vapour is put into the atmosphere, there is less rainfall in that area.

When there is less rainfall in an area, then less water percolates into the ground. Due to this, the groundwater level also gets lowered. The shortage of surface water (in ponds, lakes, etc) and groundwater due to persistent low rainfall in an area can lead to droughts.

Deforestation also leads to a decrease in the water holding capacity of the soil. When trees are cut down there are no roots for absorbing rain water. Thus, the movement of water from the soil surface into the ground is reduced.

So, there are floods. Soil erosion caused by cutting of trees also contributes to floods. The eroded soil keeps on collecting river bed, decreasing its depth. This leads to overflow when heavy rains occur.

Question. 27 Why should we save paper?

Answer. Paper should be saved because it produces from our important natural resource, i.e.

trees (around 17 full grown trees are needed to make one tonne of paper).

Therefore, in order to save trees and prevent the impact of their loss on living world, we need to save paper. We can save paper by following ways:

1. Paper should be recycled.
2. Use both side of a paper for writing purpose. .
3. Spread awareness regarding the value of saving paper.