

CBSE NCERT Solutions for Class 8 Science Chapter 7

Back of Chapter Questions

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.

Solution:

- (a) sanctuary

Wildlife sanctuaries are areas where animals are protected in their natural habitat. Activities such as plantation, cultivation, grazing, deforestation, hunting, and poaching are strictly prohibited in these areas.

- (b) endemic

Endemic species are plants and animals that exist only in one geographic region. Species can be endemic to large or small areas of the earth: some are endemic to a particular continent, some to part of a continent, and others to a single island. Sal, wild mango, bison, Indian giant squirrel, and flying squirrel are endemic species found in Pachmarhi Biosphere Reserve.

- (c) climatic

Birds migrate to other places to lay eggs at a particular time in a year. Extreme climatic conditions are difficult to survive, hence birds cover long distances to find hospitable environments to lay eggs and hatch them. This process is called migration and the birds are migratory birds.

2. Compare and contrast the following:

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

(d) Flora and fauna

Solution:

(a)

Wildlife sanctuary	Biosphere Reserve
1. Protected areas to conserve animals in their natural habitat.	1. Large protected area constructed to conserve biodiversity.
2. Plantation, cultivation, grazing, deforestation, hunting, poaching and living are strictly prohibited.	2. Plantation, cultivation, grazing, deforestation, hunting, and poaching are strictly prohibited. However, tribal groups still exist in these reserves.
Example: Broad level forests in India	Example: Pachmarhi biosphere reserve in India

(b)

Zoo	Wildlife sanctuary
1. Animals live in an artificially made constructed environment.	1. Animals are conserved in their natural habitat.
2. Open for public view.	2. Inaccessible to the public.

(c)

Endangered species	Extinct species
1. Animals that are prone to extinction.	1. Extinct species are no longer living on this earth.
2. The number of these animals are drastically reducing.	2. The number of these animals is nil on this earth..
3. Destruction of natural habitat makes a species endangered.	3. The cause extinction of a species can be due to pollution, habitat destruction, introduction of invasive species (such as new predators and food competitors), overhunting, and other influences.

4. Small animals are more endangered than large animals.	4. Large animals are more extinct than small animals.
5. Example: Tiger, Wild buffalo	5. Example: Dinosaur

(d)

Flora	Fauna
1. Plants of a particular area.	1. Animals of a particular area.
2. Plantation and cultivation are avoided to conserve flora.	2. Poaching and hunting are prohibited to conserve animals.

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

Solution:

(a) Effect of deforestation on wild animals:

Animals living in forests lose their natural habitat due to deforestation. This affects the population or number of animals living in that region.

(b) Effect of deforestation on the environment:

- (i) increase in temperature
- (ii) increase in the level of carbon dioxide in the atmosphere leading to global warming.
- (iii) decrease in the groundwater level
- (iv) imbalance in nature
- (v) reduced soil fertility

- (vi) decrease in rainfall
- (vii) disrupted water cycle
- (c) Effect of deforestation on villages:

Deforestation alters the properties of soil: The roots of trees hold the topsoil. Due to deforestation, the nutrient-rich top soil is more prone to soil erosion which results in the exposure of lower, hard, rocky layers. This layer is almost unfertile turning once fertile land into a desert.

- (d) Effect of deforestation on cities:
 - (i) more prone to natural calamities
 - (ii) increase in the level of carbon dioxide in the atmosphere leading to global warming
 - (iii) high risk of soil erosion
 - (iv) increase in temperature affects the water cycle
- (e) Effect of deforestation on earth:
 - (i) Decline in the number of forests
 - (ii) Imbalance in ecology
 - (iii) Imbalance in the level of oxygen and carbon dioxide in the atmosphere.
 - (iv) Reduced rainfall
 - (v) Disrupted water cycle
 - (vi) decrease in groundwater cycle.

- (f) Effect of deforestation on the next generation:

Deforestation alters our environmental condition and causes global warming, soil erosion, greenhouse effect, droughts, floods, and many other global problems.

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.

Solution:

- (a) We go on cutting trees

Cutting down trees or deforestation will lead to the following consequences:

- (i) imbalance in ecology
 - (ii) affects biodiversity
 - (iii) increase in temperature leading to global warming and disrupts the water cycle
 - (iv) increased risks of soil erosion, desertification, and natural calamities.
- (b) The habitat of an animal is disturbed

Habitat provides food, shelter, and a comfortable environment for animals to thrive. When a habitat is disturbed or destroyed, the resident animal is forced to leave the environment and enter a new habitat. This might end up dangerous to the animals thereby disrupting the biodiversity.

- (c) The top layer is exposed

Due to deforestation, the nutrient rich topsoil is more prone to soil erosion which results in the exposure of lower, hard, rocky layers. This layer is almost unfertile, and the infiltration rate of water reduces which results in desertification.

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?

Solution:

- (a) Conservation of biodiversity

Biodiversity refers to the variety of plants, animals, and microbes in an area. All these organisms depend on each other for their survival. Destruction in the habitat of one of them will leave its impact on the other creating an imbalance in nature. Hence, it is important to conserve biodiversity.

- (b) Protected forests are also not completely safe for wild animals.

Protected forests allow tribals to continue living their traditional life in the jungle. They use forests resources and at times kill animals for protection and to meet their daily needs. This reduces the number of animals in the area and threatens the survival of wild animals.

- (c) Tribals in jungle

Tribals depend on the jungle to meet their daily needs. The jungles provide shelter, food, and medicine to them.

- (d) Causes of deforestation:

- (i) Acquiring land for cultivation.
- (ii) Constructing building in forest area
- (iii) Overconsumption of forest products: using wood as fuel

Consequences of deforestation:

- (i) increase in temperature
- (ii) increase in the level of carbon dioxide in the atmosphere leading to global warming
- (iii) the decrease in the groundwater level
- (iv) imbalance in nature
- (v) reduced soil fertility
- (vi) decrease in rainfall
- (vii) disrupted water cycle

- (e) Red data book

- (i) Records data of endangered animals and plants.
- (ii) it is maintained by IUCN-International Union for the conservation of nature and natural resources

(f) Migration

The movement of organisms or a group of organisms from one place to another at a particular time of the year is called migration. Organisms migrate when the environment becomes inhabitable and affects breeding.

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.

Solution:

Increasing demands of the human population don't justify cutting down of trees. Reduction in the number of trees has the following consequences on the environment:

- (i) Trees maintain the balance of oxygen and carbon dioxide in the atmosphere. Deforestation results in elevated levels of carbon dioxide in the atmosphere. Increase in the average temperature of the atmosphere or global warming, disrupted water cycle, reduced rainfall, and drought are the after-effects of increase in the levels of CO_2 in the atmosphere.
- (ii) Deforestation alters the properties of soil: The roots of trees hold the topsoil. Due to deforestation, the nutrient rich topsoil is more prone to soil erosion which results in the exposure of lower, hard, rocky layers. This layer is almost unfertile, and the infiltration rate of water reduces which results in desertification.

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

Solution:

Following actions might help in the maintenance of green wealth:

- (i) Planting more trees
- (ii) Raising awareness about deforestation among adults and children.
- (iii) Maintaining trees and plants in the area by regularly watering them.

8. Explain how deforestation leads to reduced rainfall.

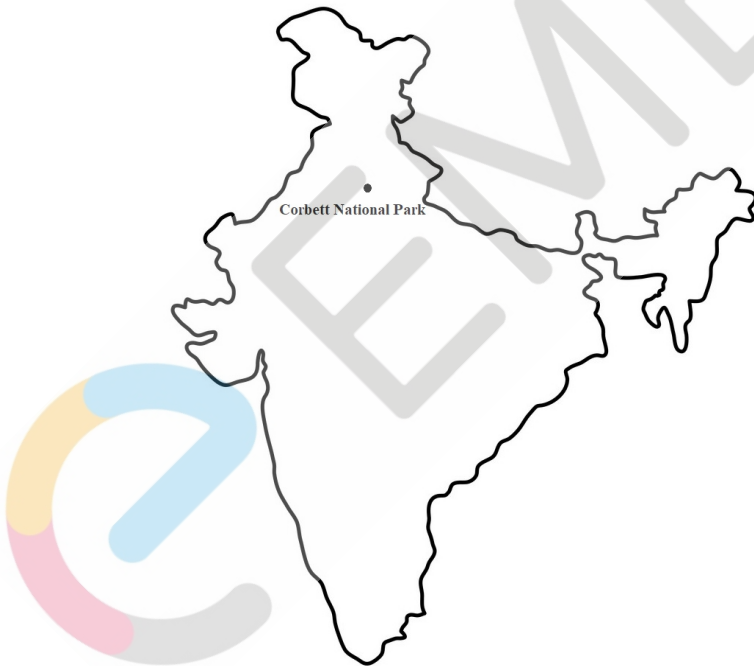
Solution:

Deforestation is the action of cutting down of trees to meet the growing demands of the human population. Trees play a vital role in maintaining the balance of carbon dioxide and oxygen in the atmosphere. Reduction in the number of trees directly affects the level of carbon dioxide in the air. Carbon dioxide is a greenhouse gas which absorbs and retains heat radiations in the atmosphere causing global warming. The increase in the average temperature of the atmosphere affects the water cycle and alters rainfall patterns. This decline in rainfall might cause drought.

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

Solution:

National parks are areas reserved to protect the flora and fauna of the region. Corbett national park is one of the national parks in India, located in Delhi.



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

Solution:

Paper is recycled to reduce the impact of the paper industry over the environment. Paper can be recycled about 5-7 times in total which saves loads of energy and water required in the production of paper. Data claims that around 17 full grown trees are required to make one tonne of paper.

Ways to save paper:

- (i) Recycling papers
- (ii) using both sides of the paper
- (iii) raising awareness of saving paper
- (iv) using paper intelligently

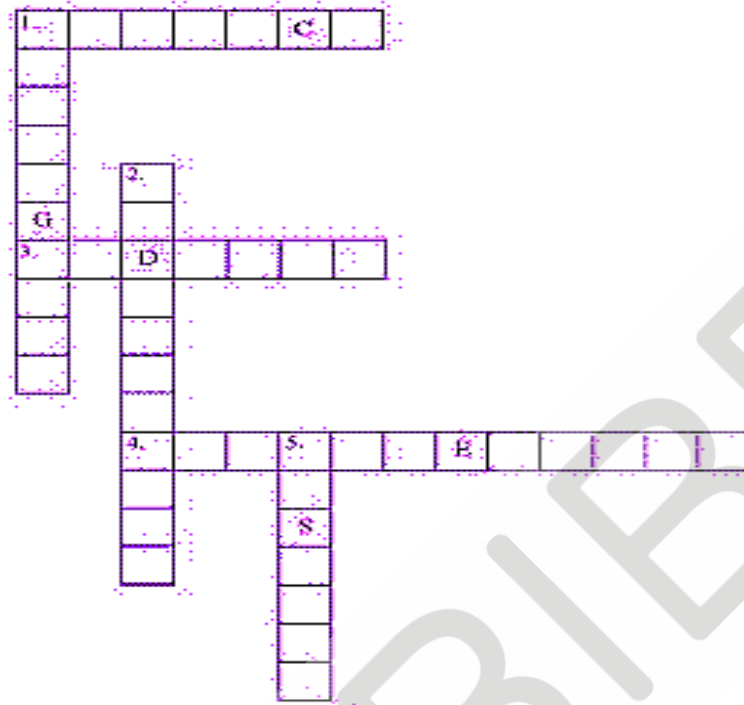
11. Complete the word puzzle

Down

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

**Solution:**

Down

1. ENDANGERED
2. RED DATA BOOK
5. DROUGHT

Across

1. EXTINCT
3. ENDEMIC
4. BIODIVERSITY

