

Ecosystem Resources

A. Choose the correct answer:

1. Which of the following is a biotic component of an ecosystem?
 - a) Sunlight
 - b) Water
 - c) Plants
 - d) Soil
2. What is the primary source of energy in an ecosystem?
 - a) Plants
 - b) The Sun
 - c) Animals
 - d) Decomposers
3. Which of the following is an example of a renewable resource?
 - a) Coal
 - b) Petroleum
 - c) Freshwater
 - d) Natural gas

B. Fill in the Blanks:

1. The interaction between living and non-living components in an environment forms an _____.
2. Organisms that produce their own food using sunlight are called _____.
3. The excessive use of natural resources can lead to _____ and environmental degradation.

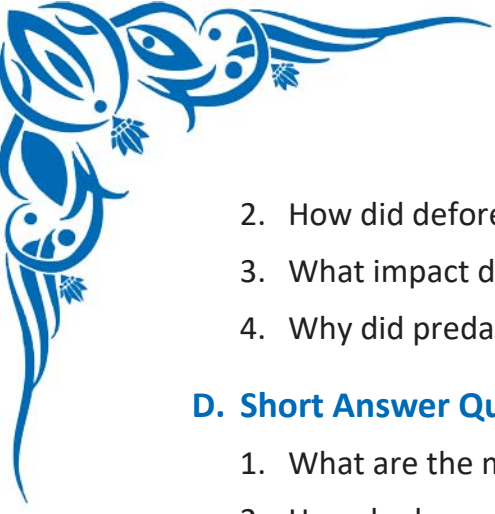
C. Case Study:

A researcher, Dr. Meera, studied the impact of deforestation on a local ecosystem. She observed the following:

- The number of herbivores in the area decreased due to the loss of vegetation.
- The local river's water level dropped as tree cover reduced, leading to increased soil erosion.
- Predator species had to migrate to other regions due to the decline in prey.

Questions & Answers:

1. What was the main environmental issue Dr. Meera studied?



2. How did deforestation affect the herbivore population?
3. What impact did the decrease in vegetation have on the water cycle?
4. Why did predator species migrate to other regions?

D. Short Answer Questions:

1. What are the major components of an ecosystem?
2. How do decomposers help in maintaining the balance of an ecosystem?
3. What is the difference between renewable and non-renewable resources?

E. Long Answer Questions:

1. Explain the role of producers, consumers, and decomposers in an ecosystem.
2. Discuss the impact of human activities on natural resources and suggest ways to conserve them.
3. Describe how ecosystems maintain balance and what happens when this balance is disrupted.