

## Forests Our Lifeline

 **Forests: Our Lifeline**

A forest is a dense growth of trees and various plants, covering a large area of land. It, in fact, is an ecosystem wherein the community of plants and animals interacting with each other and with the physical environment. However, only about 30% of the world today is covered by forest. Forests are important for maintaining environmental balance and controlling pollution. Forests play the following roles:

- ❖ **Maintains balance of gases:** Forests maintain the balance of carbon dioxide and oxygen, by absorbing carbon dioxide and releasing oxygen.
- ❖ **Checks pollution:** Forests absorb dust and other pollutants. Forests absorb noise and act as barrier against wind.
- ❖ **Protects soil:** The roots of trees bind soil and prevent it from being washed away by rain water or blown by wind. The leaves of tree protect soil from direct rain showers. The leaves that fall and are decomposed make the soil fertile.
- ❖ **Controls floods and droughts:** Forests prevent water from flowing down fast. Thus prevent floods by preventing rivers in the plains from filling up suddenly. This also prevents drought because the water is held by the forests and seeps into the soil and replenishes the groundwater. The availability of groundwater balances the scarcity of water, in particular after monsoon.
- ❖ **Controls rain and temperature:** The process of transpiration releases water vapour from tree leaves that helps to increase rainfall. The evaporation of water from the leaves also causes cooling.



Deforestation, particularly in the tropical rain forests, has become a major environmental concern, as it can destabilize the earth's temperature, humidity, and carbon dioxide levels. To maintain the environmental balance and to control pollution, deforestation or shrinking of forests should be controlled.

 **Forest – A Natural Habitat**

Forest is a natural habitat for animals and micro-organisms. Plants, animals and micro-organisms are dependent on each other in a complex way. Plants and organisms in forests are linked to each other by the process called food chain. In food chain, different plants and organisms are linked to each other by the process of eating and being eaten. The food chain is complex. One organism can be eaten by many other organisms and then each of these organisms can be eaten by many others. This creates a complicated mesh called food web. This complex interlinking indicates that if any one type of plant or animal disappears due to some reason from forest, then the survival of other types of organisms will be endangered.

## Commonly Asked

### QUESTIONS



**A dense growth of trees, together with other plants, covering a large area of land is called:**

- (a) Forest
- (b) Environment
- (c) Ocean
- (d) All of these
- (e) None of these

**Answer: (a)**



**Which One of the following statement is correct?**

**Statement 1:** To maintain the environmental balance and to control pollution, deforestation or shrinking of forests should be controlled.

**Statement 2:** To maintain the environmental balance and to control pollution, deforestation or shrinking of forests should not be controlled.

- (a) Statement 1
- (b) Statement 2
- (c) Both statements are correct
- (d) Both statements are incorrect
- (e) None of these

**Answer: (a)**

## SUMMARY



- ❖ Forest is a dense growth of trees, together with other plants, covering a large area of land.
- ❖ Only about 30% of the world is covered by forest today.
- ❖ Forests are important for maintaining environmental balance.
- ❖ Forests help in controlling rain and temperature.
- ❖ Forests provide habitat to a number of living organisms.

# Self Evaluation **TEST**



Duration  
10 Minutes

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1. Which one of the following is correct about forest?

- (a) Forest provides habitat for a number of living organisms
- (b) Forest helps in maintaining ecological balance
- (c) Plants and animals are two important components of a forest
- (d) All of these
- (e) None of these

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2. Plants and organisms in forests are linked to each other by the process called \_\_\_\_\_ chain.

- (a) Plants
- (b) Forest
- (c) Food
- (d) All of these
- (e) None of these

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3. Which one of the following statements is true?

**Statement 1:** Forest helps in preventing soil erosion

**Statement 2:** Forest helps in keeping water cycle continue

- (a) Statement 1
- (b) Statement 2
- (c) Both statements are correct
- (d) Both statements are incorrect
- (e) None of these

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4. The ultimate source of energy in the nature is :

- (a) Plants
- (b) Oceans
- (c) Sun
- (d) Animals
- (e) None of these

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5. Which one of the following process performed by plants helps in rainfall?

- (a) Photosynthesis
- (b) Transpiration
- (c) Respiration
- (d) All of these
- (e) None of these

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6. Which one of the following is correct?

- (a) Plants → grasshopper → frog → snake → eagle
- (b) Plants → grasshopper → snake → frog → eagle
- (c) Plants → eagle → snake → frog → grasshopper
- (d) Plants → grasshopper → frog → eagle → snake
- (e) None of these

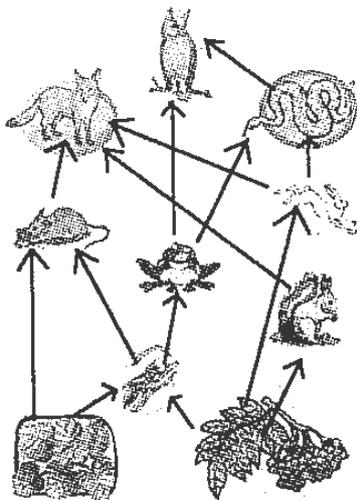
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7. Which one of the following is the primary consumer in the given food chain?

Green plants → Deer → lion

- (a) Green plants
  - (b) Deer
  - (c) Lion
  - (d) All of these
  - (e) None of these
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8. Look at the following figure carefully:



What has been shown in the above figure?

- (a) Food web
  - (b) Food chain
  - (c) Water cycle
  - (d) All of these
  - (e) None of these
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9. Which one of the following works is not done by forests?

- (a) Forests prevent floods
  - (b) Forests prevent soil erosion
  - (c) They supply carbon dioxide to the atmosphere
  - (d) They supply oxygen to the atmosphere
  - (e) None of these
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10. Which one of the following animals is called scavenger?

- (a) Tiger
  - (b) Elephant
  - (c) Bear
  - (d) Vulture
  - (e) None of these
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Answers – Self Evaluation Test

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|------|------|------|------|------|------|------|------|------|-------|
| 1. D | 2. C | 3. C | 4. C | 5. B | 6. A | 7. B | 8. A | 9. C | 10. D |
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