



## TEXTBOOK EXERCISES



### I. Choose the correct answer.

- All the factors of biosphere which affect the ability of organisms to survive and reproduce are called as \_\_\_\_\_.
  - biological factors
  - abiotic factors
  - biotic factors
  - physical factors
- The ice sheets from the north and south poles and the icecaps on the mountains, get converted into water vapour through the process of \_\_\_\_\_.
  - evaporation
  - condensation
  - sublimation
  - infiltration
- The atmospheric carbon dioxide enters into the plants through the process of \_\_\_\_\_.
  - photosynthesis
  - assimilation
  - respiration
  - decomposition
- Increased amount of \_\_\_\_\_ in the atmosphere, results in greenhouse effect and global warming.
  - carbon monoxide
  - sulphur dioxide
  - nitrogen dioxide
  - carbon dioxide

### II. Match the following.

Microorganism	Role Played
<i>Nitrosomonas</i>	Nitrogen fixation
<i>Azotobacter</i>	Ammonification
<i>Pseudomonas</i> species	Nitrification
Putrefying bacteria	Denitrification

### III. State whether true or false. If false, correct the statement.

- Nitrogen is a greenhouse gas.
- Poorly developed root is an adaptation of mesophytes.
- Bats are the only mammals that can fly.

- Earthworms use the remarkable high frequency system called echoes.
- Aestivation is an adaptation to overcome cold condition.

### IV. Give reason for the following.

- Roots grow very deep and reach the layers where water is available. Which type of plants develops the above adaptation? Why?
- Why streamlined bodies and presence of setae is considered as adaptations of earthworm?
- Why is it impossible for all farmers to construct farm ponds in their fields?

### V. Answer briefly.

- What are the two factors of biosphere?
- How do human activities affect nitrogen cycle?
- What is adaptation?
- What are the challenges faced by hydrophytes in their habitat?
- Why is it important to conserve water?
- List some of the ways in which you could save water in your home and school.
- What are the uses of recycled water?
- What is IUCN? What is the vision of IUCN?

### VI. Answer in detail.

- Describe the processes involved in the water cycle.
- Explain carbon cycle with the help of a flow chart.
- List out the adaptations of xerophytes.
- How does a bat adapt itself to its habitat?
- What is water recycling? Explain the conventional wastewater recycling treatment methods.