

• Chapter 9

The Living Organisms and Their Surroundings

1. What is a habitat?

Ans: The surroundings where animals live is called their habitat. The organisms depend on their habitat for their food, water, air, shelter and other needs. Habitat means a dwelling place.

2. How are cactus adapted to survive in a desert?

Ans: Cactus are adapted to survive in a desert as they have

- (i) No leaves or spiny leaves to prevent water loss through transpiration.
- (ii) Stem is modified in such a way that it performs photosynthesis and conserves water.
- (iii) Their roots go very deep into the soil for absorbing water.

3. Fill in the blanks:

(a) The presence of specific features which enables a plant or an animal to live in a particular habitat is called _____ .

(b) The habitats of the plants and animals that live on land are called _____ habitats.

(c) The habitats of plants and animals that live in water are called _____ habitats.

(d) Soil, water and air are the _____ factors of a habitats.

(e) Changes in our surroundings that make us respond to them are called

Ans:

- (a) adaptation
- (b) terrestrial
- (c) aquatic
- (d) abiotic
- (e) stimuli

4. Which of the things in the following list are non-living?

Ans: Plough, Mushrooms, Sewing machine, Radio, Boat, Water, Hyacinth, Earthworm. Plough, Sewing machine, Radio, Boat and water are non-living.

5. Give an example of a non-living thing which shows any two characteristics of living thing.

Ans: Example of non-living thing is cloud which shows following two characteristics of living things:

- (i) It grows in size
- (ii) It shows movement.

**6. Which of the following non-living things were once part of a living thing?
Butter, Leather, Soil, Wool, Electric Bulb, Cooking Oil, Salt, Apple, Rubber.**

Ans: Butter, Leather, Wool, Cooking oil, Apple and Rubber are the non-living things which were once part of a living thing.

7. List the common characteristics of living things.

Ans There are following characteristics of living organisms

- (i) All living organisms require food. The food gives energy for growth and to maintain other life processes.
- (ii) All living organisms show growth. Young ones of animals grow into adults. Plants also grow.
- (iii) All living organisms respire. In respiration oxygen is used for the oxidation of food and carbon dioxide is produced.
- (iv) All living organisms respond to stimuli. All plants and animal respond to light, heat and the changes around them.
- (v) All living organisms show excretion. The process of getting rid of waste product by the living organisms is called excretion. Plants also remove their wastes.
- (vi) All living organisms reproduce. The process by which plants and animals produce their own kind is called reproduction

8. Explain why speed is important for survival in the grasslands for animals that live there. (Hint: There are few trees or places for animals to hide in grasslands habitats).

Ans: In grasslands habitats, there are few trees or places for animals to hide. When their enemy attacks they have to run faster so as to reach a safe place. If they fail, they lose their life. So, the speed is very important for survival of grassland animals.

Explain the features of fish which help it to adapt to live in water.

Ans:

- (i) The shape of the fish is streamlined which help in the movement.
- (ii) The slippery scales/skin on their bodies to protect them.
- (iii) They have flat fins and tails which help them to swim, change direction and to keep the body balanced.
- (iv) They have gills which help in breathing in water.

How are camels adapted to live in desert?

Ans: (i) The feet of the camels have thick, flat large soles which help them in the movement on sand.

(ii) They can live without water for a long time. When water is available, it drinks large amount of water at a time.

(iii) They release very little urine to prevent loss of water.

- (iv) Their dung is also dry which also helps to prevent loss of water.
- (v) The long legs of camel helps to keep the body away from the heat of the sand.

Write the features of desert plants.

li:

- (i) The leaves in desert plants are either absent or very small.
- (ii) Leaves are converted into spines which help to reduce loss of water.
- (iii) The stems become thick, flat and green which help in photosynthesis.
- (iv) The stem is covered with waxy layer which helps to retain water. In some plants stem is spongy and stores water.
- (v) The roots go very deep in the soil to absorb water.

2. Write the difference between living and non-living things.

Ans.

<i>Living things</i>	<i>Non-living things</i>
1. Living organisms need food, air and water.	1. Non-living things do not need food, air and water.
2. Living organisms grow.	2. Non-living things do not grow.
3. Living organisms can move on their own.	3. Non-living things cannot move on their own.
4. Living organisms are sensitive. They respond to changes around them.	4. Non-living things are not sensitive. They do not respond to changes around them.
5. Living organisms reproduce themselves.	5. Non-living things do not reproduce.
6. Living organisms respire. They release energy from food.	6. Non-living things do not respire.
7. Living organisms excrete. They get rid of waste materials from their body.	7. Non-living things do not excrete. their body.
8. Living organisms have a definite life span after which they die, i.e. they have a definite life cycle.	8. Non-living things do not have definite life cycle.
9. Living things are made up of living cells.	9. Non-living things are not made up of cells.