Chapter 9

Question 1:

What is a habitat?

Answer:

A habitat is a natural environment where an organism lives. It is basically the address of an organism. Different plants and animals live in different habitats. For example, the habitat of a frog species is fresh water, while the habitat of a camel is a desert.

Question 2:

How is a cactus adapted to survive in a desert?

Answer:

A cactus is able to survive in the desert as it is adapted to the hot and humid conditions of the desert. To survive in a desert, the cactus has the following adaptations:

(i) It has long roots that go deep inside the soil for absorbing water.

(ii) Its leaves are present in the form of spines to prevent water loss through transpiration.

(iii) Its stem is covered with a thick waxy layer to retain water.

Question 3:

Fill in the blanks:

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

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

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

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

(e) Changes in our surrounding that makes us respond to them are called _____.

Answer:

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

(b) The habitats of plants and animals that live on land are called __terrestrial__ habitat.
(c) The habitats of plants and animals that live in water are called __aquatic__ habitat.
(d) Soil, water, and air are __abiotic__ factors of a habitat.
(e) Changes in our surrounding that makes us respond to them are called __stimuli__.

Question 4:

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

Plough, Mushroom, Sewing Machine, Radio, Boat, Water Hyacinth, Earthworm

Answer:

In the given list, the non-living things are plough, sewing machine, radio, and boat. On the other hand, mushroom, water hyacinth, and earthworms are living things.

Question 5:

Give an example of a non-living thing that shows any two characteristics of living things.

Answer:

Car is an example of a non-living thing that shows two characteristics of living things. A car can move from one place to another. Also, it requires energy just like living things.

Question 6:

Among the non-living things listed below, which things were once a part of living things?

Butter, Leather, Soil, Wool, Electric Bulb, Cooking Oil, Salt, Apple, Rubber

Answer:

The non-living things which were once a part of living things are butter, leather, wool, cooking oil, apple, and rubber. The sources of these non- living things are given below:

(a) Butter is made by churning milk, which is obtained from dairy animals.

(b) Leather is obtained from animal skin.

(c) Wool is a fabric made from the hair of sheep.

(d) Cooking oil is obtained from the seeds of the some plants.

(e) Apple is a fruit obtained from apple tree.

(f) Rubber is obtained from the latex of rubber tree.

Soil, electric bulb, and salt are non-living things which were never a part of any living thing.

Question 7:

List the common characteristics of living things.

Answer:

Some common characteristics of living things are that they

(a) require food

(b) respire and excrete waste material

(c) respond to stimuli in their environment

(d) reproduce to maintain their number

(e) move from one place to another

(f) grow and die

Question 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 habitat).

Answer:

In grasslands, mainly grasses are found. Trees are very few in number. Predators such as lion, tiger, etc. that feed upon other animals are commonly found in these regions. It is very easy for these predators to locate their prey in the grass. Therefore, to protect themselves from these predators, animals adapt themselves by increasing their speed. The increased speed of the animal helps the weaker animals to escape their predator, thereby protecting themselves and increasing the chances of their survival.