



## Chapter: 1. More About Plants

### Exercise

A. 1. d) Leaves 2. c) *Bryophyllum* 3. d) a fibrous outer covering

4. a) rice and jute 5. c) pests

B. 1. False (Only the seeds that get favorable conditions grow into new plants.)

2. True

3. False (The seeds of poppy are carried away by explosion.)

4. False (Mustard is an oil-producing crop.)

5. True

C. 1. Seeds, body parts 2. Root, shoot 3. Water, sunlight 4. Jacaranda

5. Lotus 6. Buds 7. Spinach 8. Cauliflower

D. 1. Water 2. Wind 3. Explosion 4. Wind 5. Animal

E. Short answer questions

1. The two different ways by which plants reproduce are:

- through seeds and
- through their body parts such as stem, leaves or root.

2. The process by which a seed develops into a baby plant in the presence of water, air and sunlight is called germination.

3. The process by which seeds are scattered away from their parent plant is called seed dispersal. Wind, water, animals and explosion are the agents of dispersion. ( Draw a diagram given on page no.282 )

4. Some plants like, rose, bougainvillea, hibiscus and sugar cane grow from stem cuttings.(Draw a diagram given on page no. 284)

5. Certain plants such as fungi do not bear flowers and seeds. They have special structures called spores that help them in reproduction. Example: Ferns and mushrooms

6. Crops grown from June to October (summer) are called kharif crops. Example: Rice, maize and jowar

Long answer questions

1. There are three parts of a seed:

- Seed coat
- Embryo
- Cotyledon

(draw a diagram given on page no. 280)

2. If all seeds fall near the mother plant, they would not get enough sunlight, water, nutrients and space to grow. Therefore, dispersal of seeds is necessary. Different agents of dispersal are: Wind, water, animals and explosion.

3. Seeds that are small and light in weight are usually carried by wind. Some seeds have wing-like structures that help them float in the air.
4. Human beings and animals eat fruits and throw away their seeds. Some seeds have hooks, spines or stiff hair. These features help them to get easily stuck to the furry skin of animals, feathers of birds or even to our clothes. In this way, animals help in their dispersal.
5. Examples of seeds which are dispersed by explosion are: peas, geranium and poppy. The seeds in a pod burst open or explode when dry. The force of explosion helps to scatter these seeds. (draw a diagram given on page no. 283)
6. Some plants reproduce from their leaves. The leaves of *Bryophyllum* are thick and fleshy, and also have many buds along their edges. New plants grow from these buds.
7. Tips for growing healthy crops:
  - One must know about the ideal soil, climate and season for growing crops.
  - Manure and fertilizers should be added regularly to the soil in sufficient quantities. This would make the soil fertile.
  - The seeds sown should be mature and of good quality. Also, seeds should not be planted too close to each other or too deep in the soil.
  - Adequate water should be provided at the different stages of plant growth.
8. A plant that is grown in large quantity on a large commercial scale, especially a cereal, fruit or vegetable, is called a crop.
  - a) Food crops
  - b) Fibre crops
  - c) Oil-producing crops

## 2. Animals in Their Surroundings

### Exercise

- A. 1. c) on land and in water 2. b) mammals 3. b) Ostrich 4. c) Fish 5. c) rodent.
- B. 1. lungs 2. Trachea 3. Armadillo 4. Hindlimbs 5. rodents
- C. 1. False (Animals that live on both land and water are called amphibians.)
  2. False (Oysters have shell on their bodies for protection.)
  3. True
  4. False (Whales breathe through lungs.)
- D. Short answer questions
  1. Animals move from one place to another in search of food and water, to protect themselves from enemies and to look for shelter.
  2. A very hard, outer covering is called a shell. It protects the soft bodies of animals such as snails, tortoises and oysters.
  3. Insects such as bees and ants have a waxy and water-resistant outer covering called cuticle.
  4. Camouflage is the way in which some animals are coloured and shaped so that they cannot be easily seen in their natural surroundings.
  5. Trachea is a network of breathing tubes in insects. (draw a diagram given on page no. 297)
  6. Aerial animals are those who have the ability to fly and have wings attached to their body. Ostriches, cassowaries and penguins are some examples of flightless birds.

7. Animals migrate in search of favourable conditions such as temperature, food and breeding grounds.

Long answer questions

1. a) Feathers: Birds have feathers that keep them warm and help them to fly.
  - b) Scales: Fish have overlapping scales that do not let water to enter body.
  - c) Fur and wool: Some animals such as sheep have a special body covering called wool which keeps their body warm. The thick fur protects polar animals from extreme cold.
2. Birds of prey hunt while flying at a height and have sharp, curved claws called talons to catch and grip their prey. Their hooked beak helps them to tear the flesh.(draw a diagram given on page no. 296)
- 3.

S no.	Insect	Fish
1.	Insects breathe through a network of breathing tubes called trachea.	Fish breathe through gills.
2.	Oxygen from the air is absorbed by the tissue of the body.	Oxygen dissolved in the water is absorbed by the blood
3.	Carbon dioxide is removed from the body through the spiracles.	Carbon dioxide passes out of the gills.

4. Whales and dolphins have lungs that can take in oxygen only from air. So, they cannot breathe under water and have to come up to the surface of water to breathe. They have blowhole for breathing. When they breathe in, oxygen from the air enters their body through a blowhole. When they breathe out, carbon dioxide leaves the body through the blowhole along with water. (draw a diagram given on page no. 297)

5. Insects such as butterflies and moths have wings for flying. As insects do not have hollow bones or strong muscles their wings move with the help of their chest muscles.

6. Birds have hollow bones to make the body light and strong chest muscles to provide energy for flying. Bats are the only mammals that can fly.

7. Reptiles such as snakes do not have legs. Instead, they have scales on the underside of their bodies. Their muscles are very strong and they have a flexible backbone. All these features help them to grip the ground and move.

8. a) The Siberian crane: They live in cold regions and migrate to warmer places in winter. They fly thousands of kilometres to reach India.

b) Salmon: Salmon live in the sea. They swim long distances to reach rivers to lay eggs.

c) African antelope: They migrate in large numbers to escape the drought during the summer season.