(Academic Session: 2025-26) Div: A / B / C

Date: \_\_\_\_\_ Class: 4

Chapter 2

Roll No: \_\_\_\_\_ Sub: Science

Name: \_\_\_\_\_

<u>Adaptations in Plants</u> Textbook Answers

#### Short Question & Answer:

### (a) Why do the roots of mangroves grow out of the soil?

**Ans:** Mangroves grow in marshes where the soil is covered with water So the roots do not get enough air to breath and hence, they grow out of soil and water.

## (b) Why do inder water plants have long thin leaves?

**Ans:** Underwater plants have long thin, ribbon-like leaves so that they can move easily with the flow of water.

## (c) How do plants living in saline soil removes extra salts from their bodies?

**Ans:** Plants living in saline soils remove the extra salts in their bodies by depositing them in the leaves which later dry up and fall off plant.

#### Long Answer Questions:

## (a) Discuss the adaptations seen in coniferous trees to survive in mountains?

**Ans:** Coniferous trees are straight and tall plants found in mountain areas. Some of the popular coniferous trees are pines, deodars and firs.

The various adaptations that help them to survive in freezing weather conditions are:

(i) They have long needle-like leaves from which snow slips off easily.

(ii) These trees do not bear leaves but bear cones which can withstand cold.

(iii) Thick, woody and straight stems of these trees with drooping branches keep them from breaking away by heavy snowfall.

### (b) List the features that help a cactus plant to survive in deserts.

**Ans**: The following features help the cactus plants to survive in desert:

i) It has spines instead of leaves to prevent the loss of water.

ii) The green stem helps in the process of photosynthesis.

iii) The roots are developed to reach under groundwater.

### **Competency Based Questions:**

# (a) Why do you think the trees bear lesser number of fruits every alternate year?

**Ans:** Trees like mango often bear fewer fruits every alternate year due to a natural cycle called alternate bearing.

(b) Can you guess the geographic area that Sanjay lives in?

Ans: Sanjay is likely living in a tropical or subtropical region of India, such as:-

Maharashtra, Gujarat, West Bengal, Kerala

### (c) Name few more trees found in such areas.

**Ans:** A few more trees commonly found in such areas:

Guava, Banana, Papaya, Coconut, Jackfruit, Neem, Tamarind

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