

A. Multiple Choice Questions.**1x 3=3**

1. The category of plants is most likely to be used as seasonal vegetables like spinach or coriander is

- a. Herbs
- b. Trees
- c. Creepers
- d. Shrubs

2. Find a mismatched pair from the following.

- a. Creepers-Watermelon, pumpkin
- b. Climbers -Pea, grapevine
- c. Fibrous roots- Wheat, barley
- d. Taproot-Grass, maize

3. **Assertion (A):** Many xerophytes have leaves that are reduced to spines.

Reason (R): Spines help the plant by increasing the rate of transpiration to keep the plant cool in the hot sun.

- a. Both A and R are true and R is the correct explanation of A.
- b. Both A and R are true but R is NOT the correct explanation of A.
- c. A is true but R is false.
- d. A is false but R is true.

B. Subjective questions**Marks -7**

4. Imagine you have been given a mystery plant that you cannot uproot. You observe that the leaves are long and narrow, with all veins running parallel to each other from the base to the tip.

- a. With the help of a neat labelled diagram describe its root system. (2)
- b. If this plant produces seeds, how many cotyledons would those seeds likely have? (1/2)
- c. The stem of this mystery plant is soft and green instead of thick and woody. Give one advantage of having a soft green stem. (1/2)

5. A student uproots a small aquatic plant and notices that the roots are very short and small. When she touches the stem, it feels "spongy" and soft rather than hard and woody.

- a. Why do water plants not need a deep, strong root system like land plants? (1)
- b. What is the purpose of the "spongy" tissue inside the stems of these type of plants? Justify your answer. (1)

6. Observe the plant shown in the diagram.

- a. Which features in the diagram help to identify it as a shrub ,herb or tree? (1)
- b. Explain two structural features that help them survive strong winds. (1)



