

Chapter – 6 | Anatomy of Flowering Plants

QUIZ-01

1. The study of internal structure of plants is called:
A. Morphology B. Anatomy
C. Taxonomy D. Physiology (B)

Explanation : Anatomy deals with the internal structure and functional organisation of plants.

2. Which of the following is not a part of the epidermal tissue system?
A. Epidermal cells
B. Stomata
C. Trichomes
D. Xylem (D)

Explanation : The epidermal tissue system includes epidermal cells, stomata, trichomes and hairs; xylem belongs to the vascular tissue system.

3. The waxy layer on the outside of epidermis is called:
A. Cuticle B. Cortex
C. Pith D. Pericycle (A)

Explanation : The cuticle is a waxy layer that reduces water loss from the plant surface.

4. Stomatal apparatus includes stomatal aperture, guard cells and:
A. Root hairs
B. Subsidiary cells
C. Xylem vessels
D. Mesophyll cells (B)

Explanation : Stomatal aperture, guard cells and surrounding subsidiary cells together form the stomatal apparatus.

5. In leaves, the ground tissue containing chloroplasts is called:
A. Epiblema B. Mesophyll
C. Cambium D. Endodermis (B)

Explanation : In leaves, the ground tissue is made of thin-walled chloroplast-containing cells called mesophyll.

6. Open vascular bundles are found in dicot stems because they contain:
A. Cuticle
B. Cambium
C. Root hairs
D. Bulliform cells (B)

Explanation : Cambium is present between xylem and phloem in dicot stems, so the vascular bundles are open.

7. Casparian strips are found in the cells of:
A. Epidermis
B. Cortex
C. Endodermis
D. Pith (C)

Explanation : Endodermal cells have water-impermeable suberin deposits called Casparian strips.

8. In monocot roots, xylem bundles are usually:
A. One B. Two
C. Two to four D. More than six (D)

Explanation : Monocot roots usually have more than six xylem bundles, so they are called polyarch.

9. A ring arrangement of vascular bundles is characteristic of:
A. Dicot stem B. Monocot stem
C. Monocot leaf D. Root hair zone (A)

Explanation : In dicot stems, many vascular bundles are arranged in a ring.

10. Bulliform cells in grasses help the leaf to:
A. Produce pollen
B. Curl during water stress
C. Form root hairs
D. Store starch in seeds (B)

Explanation : During water stress, bulliform cells become flaccid and make the leaves curl inward to reduce water loss.