

Chapter – 6 | Anatomy of Flowering Plants**QUIZ
PART-04**

1. Dorsiventral leaf is generally found in —

- A. Monocot plants
- B. Dicot plants
- C. Fungi
- D. Roots (B)

Explanation : Dorsiventral leaf refers to dicotyledonous leaf.

2. A dorsiventral leaf has three main parts: epidermis, mesophyll and —

- A. Pericycle
- B. Vascular system
- C. Root cap
- D. Cambium ring only (B)

Explanation : The three main parts are epidermis, mesophyll and vascular system.

3. In dicot leaves, stomata are more numerous on the —

- A. Upper epidermis
- B. Lower epidermis
- C. Pith
- D. Xylem (B)

Explanation : Lower epidermis has more stomata than upper epidermis.

4. Mesophyll tissue is mainly responsible for —

- A. Photosynthesis
- B. Absorption of minerals
- C. Formation of root hairs
- D. Transport of water only (A)

Explanation : Mesophyll contains chloroplasts and helps in photosynthesis.

5. Palisade parenchyma is located —

- A. Just below upper epidermis
- B. Only around root hairs
- C. Below lower epidermis only
- D. Inside xylem (A)

Explanation : Palisade parenchyma lies just below the adaxial or upper epidermis.

6. Spongy parenchyma has —

- A. No intercellular spaces
- B. Air cavities and spaces between cells
- C. Only thick dead cells
- D. Only guard cells (B)

Explanation : Spongy parenchyma cells are loosely arranged with air spaces.

7. In dicot leaves, vascular bundles are visible in —

- A. Veins and midrib
- B. Root hairs
- C. Epidermal hairs only
- D. Cortex only (A)

Explanation : Vascular bundles are present in the veins and midrib.

8. In monocot leaves, mesophyll is —

- A. Differentiated into palisade and spongy tissues
- B. Undifferentiated
- C. Completely absent
- D. Made of sclerenchyma only (B)

Explanation : In isobilateral monocot leaves, mesophyll is not divided into palisade and spongy parenchyma.

9. Bulliform cells help in —

- A. Rolling and unrolling of leaves
- B. Formation of flowers
- C. Transport of food
- D. Formation of cambium (A)

Explanation : During water stress, bulliform cells become flaccid and cause leaves to curl inward.

10. Grass leaves generally show —

- A. Reticulate venation
- B. Parallel venation
- C. No venation
- D. Circular venation (B)

Explanation : Monocot leaves such as grass show parallel venation.