



Class 11 Biology | Anatomy Of Flowering Plants

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. A tissue has living cells thickened at the corners and supports young stems. It is

- A. Sclerenchyma B. Collenchyma
C. Xylem vessel tissue D. Cork

2. Which mature cell is normally dead and lignified?

- A. Guard cell B. Companion cell
C. Sieve-tube element D. Sclereid

3. Which xylem component is living at maturity?

- A. Xylem parenchyma B. Tracheid
C. Xylem fibre D. Vessel element

4. A sieve-tube element chiefly depends on its companion cell because it lacks a mature

- A. Plasma membrane B. Nucleus
C. Cytoplasm entirely D. Cell wall

5. Casparian strips occur in the

- A. Hypodermis of every stem
B. Pith
C. Epidermis
D. Endodermis

6. Lateral roots generally originate from the

- A. Pericycle B. Root cap
C. Pith D. Root epidermis

7. A root section has many xylem bundles and a large pith. It is most likely a

- A. Monocot root
B. Dicot root with two xylem arms
C. Dorsiventral leaf
D. Dicot stem

8. Vascular bundles scattered through ground tissue characterise a

- A. Dicot root B. Dicot stem
C. Monocot stem D. Moss stem

9. A vascular bundle with cambium between xylem and phloem is

- A. Closed B. Exarch necessarily
C. Radial necessarily D. Open

10. In a typical dicot stem, protoxylem is oriented

- A. Within the cuticle
B. Outside the phloem
C. Towards the epidermis
D. Towards the pith

11. In roots, xylem and phloem usually lie

- A. On different radii
B. Only in the epidermis
C. Only in the pith
D. In one conjoint bundle

12. Palisade tissue is most prominent near the upper surface of a

- A. Monocot stem B. Monocot root
C. Dorsiventral leaf D. Bark section

13. Large epidermal bulliform cells in grass leaves help in

- A. Nitrogen fixation
B. Leaf rolling during water stress
C. Pollen release
D. Seed formation

14. Guard cells regulate gas exchange by controlling the

- A. Stomatal pore
B. Lenticel permanently
C. Xylem vessel
D. Sieve plate

15. Which feature best distinguishes collenchyma from sclerenchyma?

- A. Living cells with uneven primary-wall thickening
B. Conducting perforation plates
C. Dead cells with lignified walls
D. No cell wall

ANSWER KEY — check after completing all 15 questions

1.B 2.D 3.A 4.B 5.D 6.A 7.A 8.C 9.D 10.D 11.A 12.C 13.B 14.A 15.A

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper