

TOPICS : Anatomy of Flowering Plants

1. During formation of leaves and elongation of stem, some cells 'left behind' from the shoot apical meristem, constitute _____
 - (a) Lateral meristem
 - (b) Axillary bud
 - (c) Cork cambium
 - (d) Fascicular cambium
2. Function of companion cells is
 - (a) providing energy to sieve element for active transport.
 - (b) providing water to phloem
 - (c) loading of sucrose into sieve elements by passive transport
 - (d) loading of sucrose into sieve elements..
3. The cork cambium, cork and secondary cortex are collectively called
 - (a) phelloderm (b) phellogen
 - (c) periderm (d) phellem
4. Which of the following does not have stomata?
 - (a) Hydrophytes
 - (b) Mesophytes
 - (c) Xerophytes
 - (d) Submerged hydrophytes
5. The chief water conducting elements of xylem in gymnosperms are :
 - (a) vessels
 - (b) fibres
 - (c) transfusion tissue
 - (d) tracheids
6. Which of the following statements is true?
 - (a) Vessels are multicellular with narrow lumen.
 - (b) Tracheids are multicellular with narrow lumen.
 - (c) Vessels are unicellular with wide lumen.
 - (d) Tracheids are unicellular with wide lumen.
7. Root hair arises from
 - (a) pericycle (b) endodermis
 - (c) cortex (d) epiblema
8. A vascular bundle in which the protoxylem is pointing to the periphery is called
 - (a) endarch (b) exarch
 - (c) radial (d) closed
9. Collenchyma differs from parenchyma is having
 - (a) living protoplasm
 - (b) cellulose walls
 - (c) vacuoles
 - (d) pectin deposits at corners
10. Which one of the following statement is false?
 - (i) Epidermal cell has small amount of cytoplasm and a large vacuole
 - (ii) Waxy cuticle layer is absent in roots.
 - (iii) Root hairs are unicellular while stem hairs/trichomes are multicellular
 - (iv) Trichomes may be branched or unbranched, soft or stiff and prevent transpiration.
 - (v) Guard cells are dumbbell shaped in dicot and bean-shaped in monocots.
 - (a) (i) only (b) (iv) only
 - (c) (iii) only (d) (v) only