



1. Intercalary meristem occurs in
 - (a) Mint
 - (b) Grasses
 - (c) Both (a) and (b)
 - (d) None of these
2. Cells of quiescent center have low amount of
 - (a) RNA
 - (b) Proteins
 - (c) DNA
 - (d) All of these
3. Pith is a central part of ground tissue generally made up of
 - (a) Parenchyma
 - (b) Collenchyma
 - (c) Chlorenchyma
 - (d) Sclerenchyma
4. Vascular bundles in a dicot stem are:
 - (a) Closed, collateral, exarch
 - (b) Closed, collateral, endarch
 - (c) Open, collateral, endarch
 - (d) Open, collateral, exarch
5. In a concentric amphivasal vascular bundle:
 - (a) Xylem is flanked by phloem on both sides
 - (b) Centrally located xylem is surrounded by phloem
 - (c) Centrally located phloem is surrounded by xylem
 - (d) Phloem is absent
6. Fibres associated with phloem are
 - (a) Hard fibres
 - (b) Wood fibres
 - (c) Surface fibres
 - (d) Bast fibres
7. Vessels differ from tracheids:
 - (a) In being living
 - (b) As they help in conduction of water
 - (c) In being derived from single cell
 - (d) In having vertical row of cells with cross walls dissolved
8. Interfascicular cambium is situated:
 - (a) In the pith
 - (b) Between vascular bundles
 - (c) Outside the vascular bundle
 - (d) Inside the vascular bundles
9. Cork cambium and vascular cambium are part of
 - (a) Apical meristem
 - (b) Intercalary meristem
 - (c) Lateral meristem
 - (d) Primary meristem
10. Mesophyll is differentiated into palisade and spongy tissue in:
 - (a) All dorsiventral leaves
 - (b) Some monocot leaves
 - (c) All monocot leaves
 - (d) All the isobilateral leaves

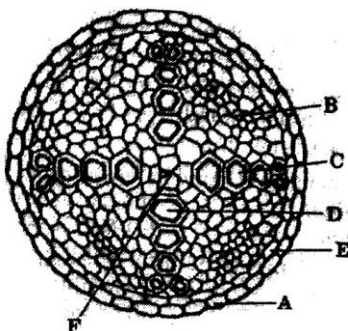


11. Heartwood differs from sapwood in:
- (a) Absence of vessels and parenchyma
 - (b) Having dead and non-conducting elements
 - (c) Being susceptible to pests and pathogens
 - (d) Presence of rays and fibres
12. A monocot stem showing abnormal secondary growth is:
- (a) Cocos
 - (b) Bougainvillea
 - (c) Dracaena
 - (d) Musa
13. Periderm is made up of
- (a) Phellem
 - (b) Phellogen
 - (c) Phelloderm
 - (d) All of these
14. Duramen is present in:
- (a) Inner region of secondary wood
 - (b) Part of sapwood
 - (c) Outer region of secondary wood
 - (d) Region of pericycle
15. Tyloses xylem of a dicot tree is:
- (a) Collenchyma
 - (b) Phloem cells
 - (c) Ray parenchyma
 - (d) Ray parenchyma and xylem cells
16. Growth rings are formed due to activity of
- (a) Extrastelar cambium
 - (b) Intrastelar cambium
 - (c) Interstelar cambium
 - (d) Both (b) and (c)
17. Bark is tissue complex
- (a) Outside cortex
 - (b) Outside endodermis
 - (c) Outside vascular cambium of stem
 - (d) Dead tissue together with cork layer
18. Stomatal opening and closing are due to
- (a) Change in the turgidity of guard cell
 - (b) Cellulose microfibrils of guard cells are oriented radially
 - (c) The inner wall of each guard cell is thick and elastic
 - (d) All of the above
19. Lenticels and hydathodes are small pores with following common attributes
- (a) Their opening and closing are not regulated
 - (b) They allow exchanges of gases
 - (c) They always remain closed
 - (d) They are found on the same organ of the plants
20. The tissue that permits diffusion of gases through a lenticel is called:
- (a) Complementary
 - (b) Periderm
 - (c) Periblem
 - (d) Phellogen



- 21.** Bulliform cells differ from other cells because of being
- (a) Small, thin-walled, contain calcium oxalate
 - (b) Small thick-walled, contains starch
 - (c) Large, thin-walled, vacuolated containing water
 - (d) Large thick-walled contain abundant chloroplasts
- 22.** Motor cells or bulliform cells take part in
- (a) Folding of leaves
 - (b) Providing strength of leaves
 - (c) Drooping of leaves
 - (d) Protection of leaves
- 23.** Passage cells are present in
- (a) Pericycle
 - (b) Endodermis
 - (c) Cortex
 - (d) Pith
- 24.** Casparian strip is made up of
- (a) Lignin
 - (b) Pectin
 - (c) Suberin
 - (d) Cellulose
- 25.** Excessive aerenchyma is characteristics of
- (a) Hydrophyte
 - (b) Xerophyte
 - (c) Mesophyte
 - (d) Heliophyte
- 26.** Epidermal outgrowths are known as
- (a) Stem
 - (b) Buds
 - (c) Stomata
 - (d) Trichomes
- 27.** Which of the following cells are dead at maturity?
- (a) Parenchyma and sclerenchyma cells
 - (b) Collenchyma and sclerenchyma cells
 - (c) Tracheids and companion cells
 - (d) Tracheids and vessels elements
- 28.** Which best describes a characteristic of tracheids?
- (a) They are only found in gymnosperms
 - (b) They are only produced early in the growing season
 - (c) They maximize delivery of water to new expanding leaves
 - (d) They are also called vessel elements
- 29.** The layer that covers the apical meristem of a root is called the _____.
- (a) Root cap
 - (b) Root hair
 - (c) Taproot
 - (d) Apoplast
- 30.** Annual rings in wood are evidence that in climates with a single annual growing season, the _____ divides actively when water is plentiful and temperature are suitable for growth, and ceases to divide when water is scarce and the weather is cold.
- (a) Apical meristem
 - (b) Lateral meristem
 - (c) Vascular cambium
 - (d) Marginal meristem

31. Ground tissues includes
 (a) All tissues except epidermis and vascular bundles
 (b) Epidermis and cortex
 (c) All tissues internal to endodermis
 (d) All tissues external to endodermis
32. In an annual ring, the light-colored part is known as
 (a) Early wood (b) Late wood
 (c) Heart wood (d) Sap wood
33. Vascular bundle having phloem at the centre encircled by xylem is known as
 (a) Bicollateral (b) Conjoint collateral
 (c) Amphivasal (d) Amphicribal
34. Viral infection is usually absent in
 (a) Phloem cells (b) Xylem cells
 (c) Pith cells (d) Apical meristem
35. What are true about heart wood?
 I. It does not help in water conduction
 II. It is also called laburnum
 III. It is dark in color but very soft
 IV. It has tracheary elements, which are filled with tannin, resin, etc.
 (a) II, III and IV (b) I and IV
 (c) II and IV (d) I, II and III
36. Science, which deals with the study of ageing is known as
 (a) Teratology (b) Gerontology
 (c) Limnology (d) Paleontology
37. In the diagram of T.S. of stele of dicot root, the different parts have been indicated by the alphabets. Choose the correct combination.



- (a) A-pericycle B-conjunctive tissue C-metaxylem D-protoxylem E-phloem, F-pith
 (b) A-endodermis B-conjunctive tissue C-protoxylem D-metaxylem E-phloem F-pith
 (c) A-endodermis B-conjunctive tissue C-metaxylem D-protoxylem E-phloem F-pith
 (d) A-endodermis B-pith C-protoxylem D-metaxylem E-phloem F-conjunctive tissue

38. In a woody dicotyledons tree, which of the following parts will mainly consists of primary tissues?
- (a) Stem and root (b) All parts
(c) Shoot tips and root tips (d) Flowers, fruits and leaves
39. Bulliform or motor cells occur in
- (a) Upper epidermis of dicot leaves (b) Upper epidermis of monocot leaves
(c) Lower epidermis of monocot leaves (d) Lower epidermis of dicot leaves
40. Intercalary meristem produces
- (a) Secondary growth (b) Primary growth
(c) Apical growth (d) Secondary thickening
(e) Secondary overgrowth
41. The cells of the quiescent centre are characterized by
- (a) Having dense cytoplasm and prominent nuclei
(b) Having light cytoplasm and small nuclei
(c) Dividing regularly to add to the corpus
(d) Dividing regularly to ass to tunica
42. Wood is a common name of
- (a) Cambium (b) Vascular bundles
(c) Phloem (d) Secondary xylem
43. In a dicotyledonous stem, the sequence of tissues from the outside to the inside is
- (a) Phellem-pericycle-endodermis-phloem
(b) Phellem-phloem-endodermis-pericycle
(c) Phellem-endodermis-pericycle-phloem
(d) Pericycle-phellem-endodermis-phloem
44. Bicollateral vascular bundle is a characteristic feature of
- (a) Cucurbitaceae (b) Solanaceae
(c) Cruciferae (d) None of these
45. Stem of grasses and related plants elongate by the activity of
- (a) Lateral meristem (b) Apical stem
(c) Both apical & intercalary meristem (d) Intercalary meristem
46. Consider the following statements.
- I. In a dicot root, the vascular bundles are collateral and endarch.
II. The inner most layer of cortex in a dicot root is endodermis.
III. In a dicot root, the phloem masses are separated from the xylem by parenchymatous cells that are known as the conjunctive tissue. Of the statements given above
- (a) I is true but II and III are false
(b) II is true but I and III are false
(c) I is false but II and III are true
(d) III is false but I and II are true
(e) III is true but I and II are false



- 47.** Age of a tree can be estimated by
- (a) Diameter of its heartwood (b) Its height and girth
(c) Biomass (d) Number of annual rings
- 48.** Lenticels are involved in
- (a) Photosynthesis (b) Transpiration
(c) Gaseous exchange (d) Food transport
- 49.** A major characteristic of the monocot root is the presence of:
- (a) Scattered vascular bundles
(b) Vasculature without cambium
(c) Cambium sandwiched between phloem and xylem along the radius
(d) Open vascular bundles
- 50.** Cortex is the region found between
- (a) Epidermis and stele (b) Pericycle and endodermis
(c) Endodermis and pith (d) endodermis and vascular bundle