Set 1 – Anatomy of Flowering Plants

1. The study of internal structure of plants is called —

B) Anatomy C) Histology
D) Cytology
2. The term "Anatomy" was coined by —
A) Grew
B) Malpighi
C) Linnaeus
D) Hooke
3. The branch of botany dealing with tissues is called — A) Histology B) Cytology C) Morphology D) Embryology
 4. The study of different kinds of plant tissues was first done by — A) Nehemiah Grew B) Marcello Malpighi C) Both A and B D) Robert Brown

C) Group of organs performing same function D) A single cell

A) Morphology

- 6. Simple permanent tissues are made up of —
- A) One type of cell
- B) Two types of cells

5. Tissue is defined as —

- C) Three types of cells
- D) Different types of cells
- 7. Parenchyma, collenchyma and sclerenchyma are —

A) Group of similar cells performing a specific function B) Group of different cells performing different functions

- A) Simple permanent tissues
- B) Complex permanent tissues
- C) Meristematic tissues
- D) Secretory tissues
- 8. The meristematic tissue responsible for increase in length is —
- A) Apical meristem
- B) Lateral meristem

- C) Intercalary meristem
- D) Secondary meristem
- 9. The meristematic tissue responsible for increase in girth is —
- A) Lateral meristem
- B) Apical meristem
- C) Intercalary meristem
- D) Primary meristem
- Intercalary meristem occurs —
- A) At the base of leaves or internodes
- B) At the apex of stem
- C) At the tip of root
- D) On surface of stem
- 11. The cells of meristematic tissue are —
- A) Thin-walled, living, actively dividing
- B) Thick-walled and dead
- C) Elongated with intercellular spaces
- D) Dead and lignified
- 12. Permanent tissues develop from —
- A) Meristematic tissues
- B) Ground tissues
- C) Protective tissues
- D) Secondary tissues
- 13. Parenchyma cells are —
- A) Living and thin-walled
- B) Dead and lignified
- C) Thick-walled and dead
- D) Dead with pits
- 14. Function of parenchyma is —
- A) Storage, photosynthesis, secretion
- B) Transport
- C) Mechanical support only
- D) Protection
- 15. Chlorenchyma is —
- A) Parenchyma containing chloroplasts
- B) Collenchyma with chloroplasts
- C) Sclerenchyma with chloroplasts
- D) None
- 16. Collenchyma provides —
- A) Mechanical support and elasticity
- B) Conduction
- C) Storage
- D) Photosynthesis

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 17. Collenchyma is found in —
 A) Young stems and petioles
 B) Xylem
 C) Phloem
 D) Roots
- 18. Sclerenchyma cells are —
- A) Dead and lignified
- B) Living and thick-walled
- C) Living with chloroplasts
- D) Thin-walled and elastic
- 19. Sclerenchyma fibres are —
- A) Elongated, tapering and dead
- B) Round and living
- C) Irregular and parenchymatous
- D) None
- 20. Stone cells or sclereids are found in -
- A) Pulp of pear
- B) Mango seed
- C) Coconut
- D) All of these
- 21. Complex permanent tissues are —
- A) Xylem and Phloem
- B) Parenchyma and Collenchyma
- C) Cambium and Cork
- D) Cortex and Pith
- 22. Xylem is responsible for transport of —
- A) Water and minerals
- B) Food
- C) Hormones
- D) Gases
- 23. Phloem is responsible for transport of —
- A) Food
- B) Water
- C) Minerals
- D) Hormones
- 24. Xylem consists of —
- A) Tracheids, vessels, xylem parenchyma and xylem fibres
- B) Sieve tubes and companion cells
- C) Vessels only
- D) Parenchyma and collenchyma
- 25. Phloem consists of —
- A) Sieve tubes, companion cells, phloem parenchyma, phloem fibres

B) Tracheids and vessels C) Xylem fibres D) Collenchyma
 26. Xylem elements with thick lignified walls are — A) Tracheids and vessels B) Parenchyma and fibres C) Phloem cells D) Collenchyma
27. The only living component of xylem is — A) Xylem parenchyma B) Vessels C) Tracheids D) Xylem fibres
28. The only dead element in phloem is — A) Phloem fibres B) Sieve tube C) Companion cells D) Parenchyma
29. Companion cells are found only in — A) Angiosperms B) Gymnosperms C) Pteridophytes D) Bryophytes
 30. The vascular bundle having xylem and phloem on same radius is called — A) Conjoint B) Radial C) Collateral D) Bicollateral
31. Vascular bundles in roots are — A) Radial B) Conjoint C) Collateral D) Bicollateral
32. Vascular bundles in stems are — A) Conjoint and collateral B) Radial C) Concentric D) Scattered
33. The vascular bundles in dicot stems are —A) Open and collateral

B) Closed and collateral

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C) Radial D) Concentric
 34. The vascular bundles in monocot stems are — A) Closed and scattered B) Open and arranged in a ring C) Radial D) Concentric
35. The outermost layer of stem or root is —A) EpidermisB) CortexC) EndodermisD) Pericycle
36. Cuticle is secreted by — A) Epidermal cells B) Cortex C) Phloem D) Xylem
37. Guard cells are found in — A) Stomata B) Trichomes C) Root hairs D) Cork
38. Root hairs are extension of —A) Epidermal cellsB) Cortex

C) Pericycle D) Endodermis

B) Pith C) Cortex D) Epiblema

C) Pectin D) Chitin

A) Lateral roots B) Endodermis C) Cortex D) Xylem

A) Starch sheath

A) Suberin and lignin B) Cutin and cellulose

41. Pericycle gives rise to —

39. Endodermis is also called —

40. Casparian strips are made up of —

- 42. Pith is made up of —
- A) Parenchyma cells
- B) Collenchyma cells
- C) Sclerenchyma cells
- D) Xylem cells
- 43. Xylem and phloem together form —
- A) Vascular bundle
- B) Ground tissue
- C) Epidermis
- D) Cortex
- 44. Cambium helps in —
- A) Secondary growth
- B) Primary growth
- C) Photosynthesis
- D) Protection
- 45. Cork cells are dead because —
- A) They are filled with suberin
- B) They contain lignin
- C) They have chloroplast
- D) They have thin walls
- 46. Lenticels help in —
- A) Gaseous exchange
- B) Water absorption
- C) Transpiration
- D) Photosynthesis
- 47. Secondary growth occurs in —
- A) Dicot stem and root
- B) Monocot stem
- C) Monocot root
- D) Leaves
- 48. Vascular cambium in dicot stem is —
- A) Partly primary and partly secondary
- B) Entirely primary
- C) Entirely secondary
- D) Apical
- **49.** Wood is formed by —
- A) Secondary xylem
- B) Secondary phloem
- C) Cork
- D) Pith
- **50.** Annual rings are formed due to —
- A) Activity of vascular cambium

- B) Cork cambium
- C) Apical meristem
- D) Pericycle

Answer Key – Set 1

1-B, 2-B, 3-A, 4-C, 5-A, 6-A, 7-A, 8-A, 9-A, 10-A, 11-A, 12-A, 13-A, 14-A, 15-A, 16-A, 17-A, 18-A, 19-A, 20-D, 21-A, 22-A, 23-A, 24-A, 25-A, 26-A, 27-A, 28-A, 29-A, 30-A, 31-A, 32-A, 33-A, 34-A, 35-A, 36-A, 37-A, 38-A, 39-A, 40-A, 41-A, 42-A, 43-A, 44-A, 45-A, 46-A, 47-A, 48-A, 49-A, 50-A.