CHAPTER – 5
Anatomy of Flowering Plants

1. The primary function of xylem in plants is:
   a) Transport of water
   b) Transport of food
   c) Photosynthesis
   d) Reproduction

2. Phloem is responsible for transporting:
   a) Water
   b) Minerals
   c) Sugars
   d) Gases

3. Which tissue is responsible for the secondarygrowth of plants?
   a) Xylem
   b) Phloem
   c) Cambium
   d) Epidermis

4. The vascular bundles in monocot stems are:
   a) Open and scattered
   b) Closed and scattered
   c) Open and arranged in a ring
   d) Closed and arranged in a ring

5. In dicot stems, vascular bundles are:
   a) Closed
   b) Scattered
   c) Arranged in a ring
   d) Absent

6. Which of the following is not a part of the xylem?
   b) Tracheids Sieve tubes
   c) Vessels
   d) Xylem parenchyma

7. Which of the following is the water-conductingtissue in plants?
   a) Xylem
   b) Phloem
   c) Cambium
   d) Epidermis

8. Cork cambium is responsible for the formation of:
   a) Secondary xylem
   b) Secondary phloem
   c) Cork
   d) Primary phloem

9. The cells of parenchyma are:
   a) Dead and lignified
   b) Living and thin-walled
   c) Dead and thick-walled
   d) Living and lignified

10. Which tissue provides mechanical support toyoung parts of the plant?
   a) Parenchyma
   b) Collenchyma
   c) Sclerenchyma
   d) Xylem

11. The vascular cambium is responsible for:
   a) Primary growth

b) Secondary growth

c) Photosynthesis

d) Water absorption

12. Which of the following tissues is involved in foodstorage?

a) Parenchyma

b) Collenchyma

c) Sclerenchyma

d) Xylem

13. The epidermis of the plant is covered with a waxylayer called the:

a) Cuticle

b) Cork

c) Bark

d) Cambium

14. What is the function of guard cells in stomata?

a) Water absorption

b) Gas exchange

c) Photosynthesis

d) Transport of food

15. Which of the following tissues is dead atmaturity?

a) Parenchyma

b) Collenchyma

c) Sclerenchyma

d) Phloem

16. In a dicot root, the xylem and phloem are arrangedin the form of:

a) Concentric circles

b) Radial bundles

c) Scattered bundles

d) None of the above

17. Which tissue forms the bulk of the stem and root?

a) Parenchyma

b) Collenchyma

c) Xylem

d) Phloem

18. The pericycle is found in:

a) Leaves

b) Stems

c) Roots

d) Flowers

19. The bundle sheath in monocots surrounds the:

a) Epidermis

b) Vascular bundles

c) Pith

d) Cortex

20. Which of the following tissues is involved in thetransport of organic nutrients?

a) Xylem

b) Phloem

c) Sclerenchyma

d) Cambium

21. The main function of collenchyma is:

a) Food storage

b) Photosynthesis

c) Mechanical support

d) Water transport

22. The casparian strip is found in the:

a) Cortex

b) Endodermis

c) Epidermis

d) Phloem

23. Secondary growth in plants is due to the activityof:

a) Vascular cambium and cork cambium
b) Apical meristem

c) Lateral roots

d) Pith

24. The apical meristem is located at the:

a) Tips of roots and shoots

b) Base of the stem

c) Between the nodes

d) Along the leaf margins

25. Which of the following tissues is responsible forthe flexibility of plant stems?

a) Collenchyma

b) Parenchyma

c) Xylem

d) Sclerenchyma

26. The tracheids in xylem are mainly involved in:

a) Transport of water

b) Transport of food

c) Photosynthesis

d) Growth

27. The hard outer layer of the plant stem is formedby:

a) Xylem

b) Phloem

c) Epidermis

d) Cork

28. Which of the following is a meristematic tissue?

a) Collenchyma

b) Parenchyma

c) Sclerenchyma

d) Apical meristem

29. The cambium is an example of:

a) Primary tissue

b) Meristematic tissue

c) Permanent tissue

d) Dermal tissue

30. The cambium that forms secondary xylem andphloem is called:

a) Cork cambium

b) Intercalary cambium

c) Vascular cambium

d) Apical cambium

31. In monocot roots, vascular bundles are arrangedin:

a) Radial arrangement

b) Concentric rings

c) Scattered bundles

d) Absent

32. Lenticels in the stem are involved in:

a) Water absorption

b) Gaseous exchange

c) Food transport

d) Photosynthesis

33. The cells responsible for the conduction of food inplants are:

a) Tracheids

b) Vessels

c) Sieve tubes

d) Guard cells

34. The innermost layer of the cortex is called the:

a) Epidermis

b) Endodermis

c) Pericycle

d) Pith

35. Which of the following tissues is responsible forthe formation of bark?

a) Phloem

b) Cork cambium

c) Xylem

d) Epidermis

36. Sclerenchyma cells are characterized by:

a) Thin cell walls

b) Thick lignified cell walls

c) Living protoplasm

d) Being part of the xylem

37. The vascular bundles in monocots are:

a) Scattered throughout the stem

b) Arranged in a ring

c) Open and continuous

d) Absent

38. In which part of the plant does the periderm form?

a) Root

b) Leaf

c) Stem

d) Flower

39. Which of the following is a non-living componentof xylem?

a) Sieve tubes

b) Vessels

c) Companion cells

d) Phloem fibers

40. Which of the following is not part of phloem?

a) Sieve tubes

b) Companion cells

c) Tracheids

d) Phloem parenchyma

41. Which tissue is commonly referred to as wood?

a) Phloem

b) Xylem

c) Cork

d) Parenchyma

42. The vascular cambium divides to form:

a) Xylem only

b) Phloem only

c) Both xylem and phloem

d) Epidermis

43. Which of the following tissues is responsible forwater transport in plants?

a) Phloem

b) Xylem

c) Collenchyma

d) Sclerenchyma

44. The structure that forms the outer protective layerof the plant is the:

a) Xylem

b) Phloem

c) Epidermis

d) Pericycle

45. Lateral meristem is responsible for:

a) Growth in length

b) Growth in thickness

c) Leaf formation

d) Flower development

46. Which tissue is responsible for the mechanicalsupport of mature plants?

a) Collenchyma

b) Sclerenchyma

c) Parenchyma

d) Xylem

47. The cork cells of the periderm are dead andcontain:

a) Lignin

b) Pectin

c) Suberin

d) Chlorophyll

48. Which tissue helps in the transportation of organicnutrients in plants?

a) Xylem

b) Phloem

c) Collenchyma

d) Sclerenchyma

49. Which of the following cells are dead at maturityand provide structural support?

a) Parenchyma

b) Collenchyma

c) Sclerenchyma

d) Xylem

50. The formation of annual rings in trees is due to theactivity of:

a) Apical meristem

b) Lateral meristem

c) Vascular cambium

d) Cork cambium

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