NEET : CHAPTER WISE TEST-6

SUBJECT :- BIOLOGY **DATE.....**
CLASS :- 11th **NAME.....**
CHAPTER :- ANATOMY OF FLOWERING PLANTST **SECTION.....**

(SECTION-A)

1. The tissue is a group of cells that
(A) Have a common origin.
(B) Are always structurally similar.
(C) Perform a common function.
(A) Only (A) is correct.
(B) (B) and (C) are correct.
(C) (A) and (C) are correct..
(D) (A), (B), and (C) are correct.

2. Select the incorrect statements with respect to meristem.
(A) It is a group of small, isodiametric immature cells.
(B) It is the area of active cell division in plants.
(C) Cells possess dense cytoplasm and large prominent nucleus.
(D) Cells show very low metabolic activities.

3. During the formation of leaves and elongation of stem, some cells left behind from the shoot apical meristem constitute
(A) Lateral meristem.
(B) Axillary bud.
(C) Intercalary meristem.
(D) Apical bud.

4. A branch or a flower is developed in the axial of leaves by
(A) Axillary bud.
(B) Intercalary meristem.
(C) Shoot apical meristem.
(D) Accessory bud.

5. The tissue that occurs in grasses and regenerates parts removed by grazing herbivores is
(A) Axillary meristem.
(B) Apical meristem.
(C) Intercalary meristem.
(D) Lateral meristem.

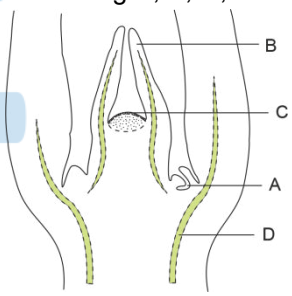
6. Which of the following features given below are exhibited by primary meristems (A) and secondary meristems (B)?
(i) Develop at the later stage of life by dedifferentiation of permanent tissue.
(ii) Appear early in the life of plant.
(iii) Cells found in the active state of division.
(iv) Their activity results in increase in the diameter of plant organ.

	A	B
(A)	(ii), (iii), (iv)	(i)
(B)	(ii), (iii)	(i), (iii), (iv)
(C)	(i), (ii), (iv)	(iii), (iv)
(D)	(ii), (iv)	(i), (iii)

7. Intercalary meristems
(A) Are found in between mature tissues.
(B) Are lateral meristem.
(C) Are primary meristem.
(D) More than one option is correct.

8. Identify the lateral meristem that is not secondary in origin.
(A) Cork cambium
(B) Intrafascicular cambium
(C) Interfascicular cambium
(D) Wound meristem

9. Examine the figure given below and select the correct option that represents the correct labelling A, B, C, and D.



	A	B	C	D
(A)	Leaf primordium	Meristematic zone	Axillary bud	Intercalary meristem
(B)	Leaf primordium	Short optical Meristem	Axillary bud	Cork cambium
(C)	Axillary bud	Leaf primordium	Shoot apical meristem	Differentiating vascular tissue
(D)	Axillary bud	Shoot apical meristem	Meristematic zone	Leaf primordia

10. In some plants such as sugarcane, the length of the internode is variable due to the activity of
(A) Intercalary meristem.
(B) Shoot apical meristem.
(C) Position of axillary buds.
(D) Size of leaf lamina at the node below each internode.

11. Quiescent centre is present in
(A) Root apex. (B) Shoot apex.
(C) Vegetative apex. (D) Leaf base.

12. Root cap in monocot is generated from
(A) Dermatogen. (B) Protoderm.
(C) Calyptrogen. (D) Plerome.

13. Consider the following statements and select the option that correctly fills the blank.
(i) The growth of the root and stem in length with the help of apical meristem is called "A".
(ii) Both apical and intercalary meristems are "B" meristems.
(iii) "C" meristems occur in the mature region of root and shoot of plants that produce woody axis.
(iv) Vascular cambium and cork cambium are examples of "D" meristem.

	A	B	C	D
(A)	Secondary growth	Pro	Lateral	Secondary
(B)	Primary growth	Primary	Secondary	Lateral
(C)	Lateral growth	Primary	Intercalary	Secondary
(D)	Primary growth	Secondary	Lateral	Primary

14. Cells of permanent tissue are specialised
(A) Only functionally.
(B) Only structurally.
(C) Both functionally and structurally.
(D) For meristematic activity.

15. Select the *correct* difference between the given types of simple parenchyma tissue.

	Parenchyma	Sclerenchyma
(i)	Possesses thin cellulosic cell wall	Possesses thick lignified cell wall
(ii)	Cells are usually living and isodiametric	Cells are usually dead and without protoplast
(iii)	Provides mechanical strength to the plant	Performs the function of storage and secretion

(A) (i) and (ii) (B) (i) only
(C) (ii) only (D) (i), (ii), and (iii)

16. The gritty texture of fruits such as guava, pear, and sapota is due to the presence of
(A) Sclerosis. (B) Collenchyma.
(C) Prosenchyma. (D) Parenchyma.

17. Tracheids differ from vessels in
(A) Having lignified cell wall.
(B) Absence of protoplast.
(C) Having perforations in their common walls.
(D) Possessing oblique and tapering ends.

18. _____ lack sieve tubes and companion cells.
(A) Pteridophytes
(B) Angiosperms
(C) Gymnosperms
(D) Both (A) and (C)

19. Hardness of legume seed coats is due to the presence of
(A) Collenchyma.
(B) Suberin.
(C) Sclereids,
(D) Hemicellulose and pectin.

20. Vessels are characterised by all of these, except
(A) Multicellular.
(B) Perforations in their end walls.
(C) Dead at maturity.
(D) Obliterated lumen.

21. Phloem in gymnosperm is composed of
(A) Sieve tube elements, companion cells, phloem parenchyma, and phloem fibres.
(B) Sieve cells, albuminous cells, phloem parenchyma, and phloem fibres.
(C) Sieve tube elements, albuminous cells, phloem parenchyma, and phloem fibres.
(D) Sieve cells, companion cells, phloem parenchyma, and phloem fibres.

22. The mature sieve tube element lacks a nucleus. So its function is controlled by the nucleus of the
(A) Adjacent xylem vessels.
(B) Companion cells.
(C) Phloem parenchyma.
(D) Ray parenchyma.

23. Find the mismatched pair.
(A) Companion cells-Maintain the pressure gradient in sieve tube
(B) Phloem fibres-Absent in secondary phloem
(C) Vessels-Absent in gymnosperms
(D) Sieve tubes-Perforations in their end walls

24. Tracheid vessel and sclereids are similar in that they all
(A) Lack secondary cell walls.
(B) Translocate water and minerals.
(C) Function when dead.
(D) Are primary permanent tissue.

25. Read the following statements carefully.
A. The presence of vessels is a characteristic feature of angiosperms.
B. Xylem fibres have highly thickened wells and obliterate central lumens.
C. Xylem parenchyma cells are living and thin walled, and their cell walls are made up of cellulose.
D. Xylem parenchyma store food material in the form of starch, fat, and other substances such as tannins.
How many statements are correct?
(A) Three (B) Four
(C) Two (D) One

26. Which of the following events is concerned with the loss of nucleus and perforations in their end wall in sieve tube members?
(A) Differentiation
(B) Dedifferentiation
(C) Redifferentiation
(D) Regeneration

27. The epidermal tissue system is characterised by all of these, except
(A) Parenchymatous cells without intercellular space.
(B) Unicellular root hairs.
(C) Thick cuticle on epiblema.
(D) Trichomes in stem epidermis.

28. Which of the dorsiventral leaf has a multi-layered epidermis?
(A) Mulberry (B) Banyan
(C) *Nerium* (D) Eucalyptus

29. In grasses, guard cells of stomata are
(A) Kidney shaped.
(B) Dumbbell shaped.
(C) Sickle shaped.
(D) Bran shaped.

30. The stomatal apparatus includes
(A) Only stomatal aperture.
(B) Stomatal aperture and guard cells.
(C) Guard cells and subsidiary cells.
(D) Stomatal aperture, guard cells, and subsidiary cells.

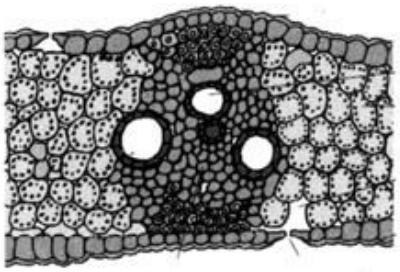
31. Select the incorrectly matched pair.
(A) Dumbbell-shaped guard cells–Grasses
(B) Trichomes–Reduces water loss
(C) Piliferous layer–Root epidermis
(D) Starch sheath –Endodermis of dicot root

32. Y-shaped arrangement of xylem vessels is found in
(A) Monocot root. (B) Monocot stem.
(C) Dicot stem. (D) Dicot root.

33. Find the incorrectly matched pair.
(A) Casparian strip–Root endodermis
(B) Well-developed pith–Dicot stem
(C) Closed vascular bundle–Cambium absent
(D) Isobilateral leaf–Hypostomatic

34. The following anatomical features are related with
(a) Presence of sclerenchymatous hypodermis.
(b) Presence of water-containing cavities within vascular bundles.
(c) Presence of atactostele.
(A) Maize stem (B) Wheat root
(C) Mustard stem (D) Cucurbita root

35. Identify the given figure and select the incorrect statement.

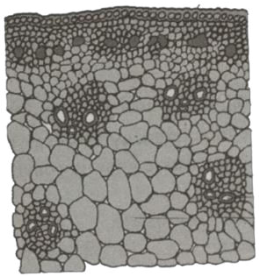


(A) Stomata present on both leaf surface.
(B) Differentiated leaf mesophyll.
(C) Presence of similar size of vascular bundles.
(D) Both the leaf surfaces are equally green.

(SECTION-B)

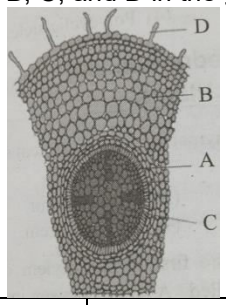
36. Read the following statements with respect to dicot stem and select the correct option.
(A) Epidermis is covered with a thin layer of cuticle, may bear trichomes and few stomata.
(B) Ring arrangement of conjoint, collateral, and open vascular bundles.
(C) Presence of semilunar patches of sclerenchyma above the phloem.
(D) Presence of conjunctive tissue between the xylem and the phloem.
(A) Only (A) and (B) are correct.
(B) (B), (C), and (D) are correct.
(C) (A), (B), (C), and (D) are correct.
(D) Only (D) is incorrect.

37. Identify the given figure and select the incorrect option.



(A) Collenchymatous hypodermics below epidermis.
(B) Water-containing cavity in vascular bundles.
(C) Undifferentiated ground tissue.
(D) Vascular bundles are conjoint closed with endarch xylem.

38. Mark A, B, C, and D in the given figure.



	A	B	C	D
(A)	Pericycle	Cortex	Metaxylem	Trichome
(B)	Endodermis	Cortex	Metaxylem	Unicellular root Hair
(C)	Endodermis	Cortex	Protoxylem	Unicellular root hair
(D)	Pericycle	Cortex	Protoxylem	Multicellular root hair

39. Leaves of monocotyledonous plants generally do not possess
(A) Differentiated leaf mesophyll.
(B) Reticulate venation.
(C) Open vascular bundles.
(D) All of these.

40. A transverse section of a typical monocot root shows
(A) Barrel-shaped endodermal cells with casparian strips.
(B) Diarch to hexarch vascular bundles.
(C) Protoxylem towards centre and metaxylem towards periphery.
(D) Large well-developed parenchymatous path in centre.
(A) A+D only (B) A+B+D
(C) B+C+D (D) A+C+D

41. Identify the mismatched pair.
(A) Phelloderm-Secondary cortex
(B) Phellem-Cork
(C) Spring wood-Lighter in colour
(D) Intrafascicular cambium-Secondary in origin

42. During secondary growth in dicot stem, at certain regions cork cambium cuts off parenchymatous cell on the outer side instead of_____
(A) Cork cells
(B) Phelloderm
(C) Phellogen
(D) Secondary phloem

43. Lenticel and its complementary cells are developed through the activity of
(A) Phellogen.
(B) Vascular cambium.
(C) Intercalary meristem.
(D) Dermatogen.

44. Balloon-like structure formed by adjacent parenchyma cells into xylem vessels through pits are
(A) Nectaries. (B) Callose plugs.
(C) Tyloses. (D) Tylosoids.

45. Bark includes
(A) All tissues exterior to vascular cambium.
(B) Periderm and secondary phloem.
(C) Both living and dead tissues.
(D) All of these.

46. All the tissues exterior to the vascular cambium
(a) Constitute the bark.
(b) Bark that is formed early in the season is called hard bark.
(A) Only (a) is correct.
(B) Only (b) is correct.
(C) Both (a) and (b) are correct.
(D) Both (a) and (b) are incorrect.

47. Continuous activity of vascular cambium results in
(A) Accumulation of more secondary xylem than secondary phloem.
(B) Crushing of primary phloem only.
(C) Crushing of primary phloem and primary xylem.
(D) All except (B).

48. Secondary growth in dicot roots is not characterised by
(A) Wavy ring of vascular cambium.
(B) Dedifferentiation of cells just below the phloem bundles.
(C) Vascular cambium is half in primary and half in secondary origin.
(D) Purely secondary origin of cork cambium.

49. Annual rings are bands of
(A) Secondary xylem and vascular rays.
(B) Secondary xylem and vascular rays.
(C) Secondary xylem, secondary phloem, and vascular rays.
(D) Cork and vascular cambium.

50. An annual ring refers to
(A) Spring ring and autumn ring of 2 years.
(B) Early wood and late wood of 1 year.
(C) Spring wood of 1 year.
(D) Autumn wood of 1 year.