



BIOLOGY

BOOKS - NEET PREVIOUS YEAR (YEARWISE + CHAPTERWISE)

ANATOMY OF FLOWERING PLANTS

Exercise

1. Root hairs develop from

A. maturation

B. elongation

C. root cap

D. meristematic activity

Answer: a



Watch Video Solution

2. Identify the wrong statement in context of heartwood

- A. Organic compounds are deposited in it
- B. It is highly durable
- C. It conduct water and minerals effciently
- D. It comprises dead elements with highly lignified walls

Answer: c



Watch Video Solution

3. Which of the following is made up of dead cells

A. Xylem parenchyma

B. Collenchyma

C. Phellem

D. Phloem

Answer: c



Watch Video Solution

4. The vascular cambium normally gives rise to

- A. phelloderm
- B. primary phloem
- C. secondary xylem
- D. perderm

Answer: c



Watch Video Solution

5. Specialised epidermal cells surrounding the guards cells are called

A. Subsidiary cells

B. bulliform cells

C. lenticels

D. complementary

Answer: a



Watch Video Solution

6. the balloon- shaped structures called tyloses
- A. originate in the lumen of vessels
 - B. characterise the sapwood
 - C. are extensions of xylem parenchyma cells into vessels
 - D. are linked to the ascent of sap through xylem vessels

Answer: c



Watch Video Solution

7. Cortex is the region found between

A. epidermis and stele

B. pericycle and endodermis

C. endodermis and pith

D. endodermis and vascular bundle

Answer: A



Watch Video Solution

8. Read the different components from (A) to (D) in the list given below and tell the correct order of the components with reference to their arrangement from outer side to inner side in a woody dicot stem

(A) Secondary cortex , (B) Wood

(C) Secondary phloem , (D) Phelllem

A. III, IV, II,I

B. I,II,IV,III

C. IV,I,III,II

D. IV,III,I,II

Answer: C



Watch Video Solution

9. you are given a fairly old piece of dicot stem and a dicot root. Which of the following anatomical structures will you use to distinguish between the two.

A. Secondary xylem

B. Secondary phloem

C. Protoxylem

D. Cortical cells

Answer: C



Watch Video Solution

10. Tracheids differ from other tracheary elements in

A. having casparian strips

B. being imperforate

C. lacking nucleus

D. being lignified

Answer: B



Watch Video Solution

11. Interfascicular cambium develops from the cells of

A. medullary rays

B. xylem parenchyma

C. endodermis

D. pericycle

Answer: A



Watch Video Solution

12. Age of tree can be estimated by

A. its height and girth

B. biomass

C. number of annual rings

D. diameter of its heartwood

Answer: C



Watch Video Solution

13. cork/bottle cork is formed from

A. dermatogen

B. phellogen

C. xylem

D. vascular cambium

Answer: b



Watch Video Solution

14. Companion cells are closely associated with

Or

Transport of food material in higher plants
takes place through

A. sieve elements

B. vessel elements

C. trichomes

D. guard cells

Answer: a



Watch Video Solution

15. Water containing cavities in vascular bundles are found in

A. sunflower

B. maize

C. Cycas

D. Pinus

Answer: b



Watch Video Solution

16. Closed vascular bundles lack

A. ground tissue

B. conjunctive tissue

C. cambium

D. pith

Answer: c



Watch Video Solution

17. The cork cambium, cork and secondary cortex are collectively called

A. phellogen

B. periderm

C. Phellem

D. phelloderm

Answer: b



Watch Video Solution

18. Ground tissue 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

Answer: a



Watch Video Solution

19. The chief water conducting elements of xylem in gymnosperms are

A. vessels

B. fibres

C. transfusion tissue

D. tracheids

Answer: d



Watch Video Solution

20. Which one of the following is not a lateral meristem

A. Intrafascicular cambium

B. interfascicular cambium

C. Phellogen

D. Intercalary meristem

Answer: D



Watch Video Solution

21. heart wood differs from sapwood in

A. presence of rays and fibres

B. absence of vessels and parenchyma

C. having dead and non - conducting elements

D. being susceptible to pests and pathogens

Answer: c



Watch Video Solution

22. Palisade parenchyma is absent in leaves of

A. Sorghum

B. mustard

C. soyabean

D. gram

Answer: a



Watch Video Solution

23. Anatomically fairly old dicotyledonous root is distinguished from the dicotyledonous stem by

A. absence of secondary xylem

B. absence of secondary phloem

C. presence of cortex

D. position of protoxylem

Answer: d



Watch Video Solution

24. The annular and spirally thickened conducting elements generally develop in the protoxylem when the root or stem is

A. maturing

B. elongating

C. widening

D. differentiating

Answer: c



Watch Video Solution

25. In barley stem vascular bundles are

A. open and scattered

B. closed and scattered

C. open and in a ring

D. closed and radial

Answer: b



Watch Video Solution

26. The length of different internodes in a culm of sugarcane is variable because

A. shoot apical meristem

B. position of axillary buds

C. size of leaf lamina at the node below
each internode

D. Intercalary meristem

Answer: d



Watch Video Solution

**27. Vascular tissues in flowering plants develop
from**

A. phellogen

B. plerome

C. peribelm

D. dermatogen

Answer: a



Watch Video Solution

28. Passage cells are thin walled cells found in

A. endodermis of roots facilitating rapid transport of water from cortex to pericycle

B. phloem elements that serve as entry points for substances for transport to other plant parts

C. testa of seeds to enable emergence of growing embryonic axis during seed germination

D. central region of style through which
the pollen tube grows towards the ovary

Answer: a



Watch Video Solution

29. For a critical study of secondary growth in plants, which one of the following pairs is suitable

A. Sugarcane and sunflower

B. Teak and pine

C. Deodar and fern

D. Wheat and maiden hair fern

Answer: b



Watch Video Solution

30. A common structural feature of vessel elements and sieve tube elements is

A. pores on lateral walls

B. presence of p - protein

C. enucleate condition

D. thick secondary walls

Answer: a



Watch Video Solution

31. In a woody dicotyledonous tree, which of the following parts wall mainly consist of primary tissues

A. All parts

B. Stem and root

C. Flowers , fruits and leaves

D. Shoot tips and root tip

Answer: d



Watch Video Solution

32. In a longitudinal section of a root, starting from the tip upward, the four zones occur in the following order

A. root cap , cell division , cell enlargement ,
cell maturation

B. root cap , cell division , cell maturation ,
cell enlargement

C. cell division , cell enlargement , cell
maturation, root cap

D. cell division , cell maturation , cell
enlargement, root cap

Answer: a



Watch Video Solution

33. Chlorenchyma is known to develop in the

A. pollen tube of Pinus

B. cytoplasm of Chlorella

C. mycelium of a mould such as Aspergillus

D. spore capsule of moss

Answer: d



Watch Video Solution

34. Apical meristem of root is present

- A. in all the roots
- B. only in radicals
- C. only in tap roots
- D. only in adventitious roots

Answer: a



Watch Video Solution

35. The cells of the quiescent centre are characterised by

- A. dividing regularly to add to tunica
- B. having dense cytoplasm and prominent nuclei
- C. having light cytoplasm and small nuclei
- D. dividing regularly to add to the corpus

Answer: c



Watch Video Solution

36. Main function of lenticles is

- A. transpiration
- B. guttation
- C. gaseous exchange
- D. bleeding

Answer: c



Watch Video Solution

37. Vessels are found in

A. all angiosperms and some gymnosperms

B. most of angiosperms and few gymnosperms

C. all angiosperms and few gymnosperms and some pteridophytes

D. all pteridophytes

Answer: b



Watch Video Solution

38. three radial vascular bundles are present in

A. dicot root

B. monocot root

C. dicot stem

D. monocot stem

Answer: a



Watch Video Solution

39. Axillary bud and terminal bud are derived from the activity of

- A. lateral meristem
- B. intercalary meristem
- C. apical meristem
- D. parenchyma

Answer: c



Watch Video Solution

40. Which of the following statement is true ?

A. Vessels are multicellular with wide lumen

B. Tracheids are multicellular with narrow
lumen

C. Vessels are unicellular with wide lumen

D. Tracheids are unicellular with wide
lumen

Answer: a



Watch Video Solution

41. Loading of phloem is related to

- A. increases of suger in phloem
- B. elongation of phloem cell
- C. separation of phloem parenchyma
- D. strengthening of phloem fibre

Answer: a



Watch Video Solution

42. What happens during vascularisation in plants ?

A. Differentiation of procambium is immediately followed by the development of secondary xylem and phloem

B. Differentiation of procambium followed by the development of xylem and phloem

C. Differentiation of procambium , xylem and phloem is simultaneous

D. Differentiation of procambium followed by the development of primary phloem and then by primary xylem

Answer: c



Watch Video Solution

43. Which of the following meristems is responsible for extrastelar secondary growth in dicotyledonous stem

A. Intrafascicular cambium

B. interfascicular cambium

C. Intercalary meristem

D. Phellogen

Answer: d



Watch Video Solution

44. A leaf primordium grows into the adult leaf lamina by means of

A. apical meristem

B. lateral meristem

C. marginal meristem

D. at first by apical meristem and later
largely by marginal meristem

Answer: d



Watch Video Solution

45. At maturity which of the following is enucleate ?

A. Sieve cell

B. Companion cell

C. Palisade cell

D. Cortical cells

Answer: a



Watch Video Solution

46. What is not true about sclereids ?

A. These are sclerenchyma cells with thickened lignified walls

B. These are elongated and flexible with tapered ends

C. These are commonly found in the shells of nuts and in the pulp of guava , pear , etc

D. These are also called the stone cells

Answer: b



Watch Video Solution

47. As secondary growth proceeds, in a dicot stem, the thickness of

- A. heartwood increases
- B. sapwood increases
- C. both increase
- D. both remain the same

Answer: a



Watch Video Solution

48. Procambium forms

- A. only primary vascular bundles
- B. only vascular cambium
- C. only cork cambium
- D. primary vascular bundles and vascular cambium

Answer: d



Watch Video Solution

49. Plants showing anomalous secondary growth include

A. Draceana

B. ginger

C. wheat

D. sunflower

Answer: a



Watch Video Solution

50. Bordered pits are found in

- A. sieve cells
- B. vessel wall
- C. companion cells
- D. sieve tube wall

Answer: b



Watch Video Solution

51. A narrow layer of thin-walled cells found between phloem/bark and wood of a dicot is

- A. cork cambium
- B. vascular cambium
- C. endodermis
- D. pericycle

Answer: b



52. periderm is produced by

- A. vascular cambium
- B. fascicular cambium
- C. phellogen
- D. intrafascicular cmabium

Answer: c



53. Which will decay faster if exposed freely

A. Sapwood

B. Soffwood

C. Wood with lot of fibres

D. Heartwood

Answer: a



Watch Video Solution

54. A bicollateral vascular bundle is characterised by

A. Phloem being sandwiched between xylem

B. transverse splitting of vascular bundle

C. longitudinal splitting of vascular bundle
xylem being sandwiched between phloem

D. Bicollateral vascular bundles are
conjoint bundles having phloem both on

the outer and inner side of xylem

Answer: d



Watch Video Solution

55. Which is correct about transport or conduction of substances

- A. Organic food moves up through phloem
- B. Organic food moves up through xylem

C. Inorganic food moves upwardly and downwardly through xylem

D. Organic food moves upwardly upwardly and downwardly through phloem

Answer: d



Watch Video Solution

56. Angular collenchyma occurs in

A. Cucurbita

B. Tagetes

C. Althaea

D. Salvia

Answer: b



Watch Video Solution

57. Commercial cork is obtained from

A. Berberis/ Barberry

B. Salix/ Willow

C. Quercus/Oak

D. Betula/ Birch

Answer: c



Watch Video Solution

58. An organised and differentiated cellular structure having cytoplasm but no nucleus is

A. vessels

B. xylem parenchyma

C. sieve tubes

D. tracheids

Answer: c



Watch Video Solution

59. Collenchyma occurs in the stem and petioles of

A. xerophytes

B. monocots

C. dicot herbs

D. hydrophytes

Answer: c



Watch Video Solution

60. Vascular cambium and cork cambium are

A. parts of secondary xylem and phloem

B. parts of pericycle

C. lateral meristems

D. apical merstems

Answer: c



Watch Video Solution

61. Monocot leaves posses

A. intercalary meristem

B. lateral merstem

C. apical meristem

D. mass meristem

Answer: a



Watch Video Solution

62. what is true about a monocot leaf

A. Reticulate venation

B. Absence of bulliform cells from
epidermis

C. Mesophyll not differentiated into
palisade and spongy tissues

D. Well differentiated mesophyll

Answer: c



Watch Video Solution

63. pericycle of roots produces

A. mechanical support

B. lateral meristem

C. vascular bundles

D. adventitious buds

Answer: b



Watch Video Solution

64. For union between stock and scion in grafting which one is the first to occur ?

- A. Formation of callus
- B. Production of plasmodesmata
- C. Differentiation of new vascular tissues
- D. Regeneration of cortex and epidermis

Answer: a



Watch Video Solution

65. vascular cambium produces

- A. primary xylem and primary phloem
- B. secondary xylem and secondary phloem
- C. primary xylem and secondary phloem
- D. secondary xylem and primary phloem

Answer: b



[Watch Video Solution](#)

66. where do the casparian bands occur

- A. Epidermis
- B. Endodermis
- C. Pericycle
- D. Phloem

Answer: b



[Watch Video Solution](#)

67. Organisation of stem apex into corpus and tunica is determined mainly by

- A. planes of cell division
- B. regions of meristematic activity
- C. rate of cell growth
- D. rate of shoot tip growth

Answer: a



Watch Video Solution

68. Sieve tubes are better suited for translocation, because

A. bordered pits

B. no ends walls

C. broader lumen and perforated cross walls

D. no protoplasm

Answer: c



Watch Video Solution

69. Death of protoplasm is a prerequisite for a vital function like

- A. transport of sap
- B. transport of food
- C. absorption of water
- D. gaseous exchange

Answer: a



Watch Video Solution

70. Out of diffuse porous and ring porous woods, which is correct ?

A. Ring porous wood , carries more water for short period

B. Diffuse porous wood carries more water

C. Ring porous wood carries more water when need is higher

D. Diffuse porous wood is less specialised but conducts water rapidly through out

Answer: c



[Watch Video Solution](#)

71. Which meristem helps in increasing girth?

- A. lateral meristem
- B. intercalary meristem
- C. Primary meristem
- D. Apical merstems

Answer: A



[Watch Video Solution](#)

72. Tunica corpus theory is related with

A. root apex

B. root cap

C. shoot apex

D. secondary growth

Answer: c



Watch Video Solution

73. cork/bottle cork is formed from

A. cork cambium (phellogen)

B. vascular cambium

C. phloem

D. xylem

Answer: a



Watch Video Solution

74. Pith and cortex do not differentiate in

A. monocot stem

B. dicot stem

C. monocot root

D. dicot root

Answer: a



Watch Video Solution

75. Which one yields fiber ?

A. Coconut

B. Oak

C. Teak

D. Sissoo

Answer: a



Watch Video Solution