1. Complementary cells of lenticels are

(a) Compact and suberised (b) Loose and non suberised
(c) Compact and lignified (d) Loose and lignified

2. Formation of which tissue is example of dedifferentiation

(a) Inter fascicular cambium (b) Apical meristem
(c) Intra fascicular cambium (d) Intercalary meristem

3. Formation of secondary xylem and phloem is respectively

(a) Centrifugal and centripetal (b) Centripetal and centrifugal
(c) Both centripetal (d) Both centrifugal

4. Most conspicuous annual rings form in

(a) Temperate evergreen plants (b) Tropical deciduous
(c) Temperate deciduous plants (d) Tropical evergreen

5. Sap wood differ from heart wood in being

(a) Darker and non conducting (b) Softer and non conducting
(c) Lighter and conducting (d) Hard, darker and less conducting

6. Annual rings are the bands of

(a) Secondary cortex and cork (b) All secondary vascular tissue
(c) Secondary xylem and xylem rays (d) Secondary phloem and medullary rays

7. How many growth rings should be developed per year in a plant grown in Rajasthan with four distinct seasons (Viz, summer rains, winter and spring)

(a) Four (b) Two
(c) one (d) none of the above

8. Select the correct statement

(i) In the spring season vascular cambium is very active
(ii) Wood formed during spring season known as early wood or spring wood
(iii) In winter the vascular cambium is more active
(iv) the autumn wood is lighter in colour and has a lower density

(a) (i) & (iii) only (b) (i), (ii), (iii) (c) (i) & (ii) only (d) All are correct.

9. At certain regions, the phellogen cuts off closely arranged parenchymatous cells on the outer side instead of cork cells, these parenchymatous cells soon rupture the epidermis, forming a lens shaped opening called

(a) complimentary cells (b) lenticels
(c) bark (d) secondary cortex

10. Identify the wrong statement-

(a) Isolilateral leaf have equal stomata on abaxial and adaxial surface.

(b) Bulliform cells are abascial epidermal cells.
(c) In dorsiventral leaf adascial side have more stomata than abaxial.
(d) Bulliform cells are large, empty, colourless cells

11. Intercalary meristem is located in

(a) petiole and internodes (b) stem tip
(c) root (d) latex

12. The differentiation of Palisade tissue and spongy parenchyma is found in

(a) Isobilateral leaf (b) dorsiventral leaf
(c) both (d) none

13. Periderm includes-

(a) Phellem,Phelloderm,Plerome (b) Phellem,Phellogen,Dermatogen
(c) Phellem,Phellogen,Phelloderm (d) Phellem,Phellogen, Cortex

14. Living part of xylem is

(a) Xylem tracheids (b) Xylem vessels
(c) Parenchyma (d) None of the above.

15. Large nearly empty, colourless cells present on upper surface of grass leaf are

(a) Accessory cells (b) Bulliform cells
(c) Palisade parenchyma (d) Passage cells.

16. Xylem produced through centrifugal differentiation is

(a) Exarch (b) Endarch
(c) Mesarch (d) Centrarch.

17. In autumn and winter, cambium produces

(a) Sap wood (b) Heart wood
(c) Early wood (d) Late wood.

18. Identify the plant parts whose transverse section show a clear and prominent pith

(a) Dicot stem and monocot root (b) Dicot stem and monocot stem
(c) Dicot stem and dicot root (d) Dicot root and monocot root.

19. Tyloses are seen in

(a) Collenchyma (b) Phloem cells
(c) Ray parenchyma (d) Ray parenchyma and xylem cells.

20. Kranz anatomy is a feature of

(a) hydrophytes (b) xerophytes
(c) C_3-plants (d) C_4 -plants

21. Outer part of bark consisting of dead cells refers to

(a) rhytidome (b) phellem
(c) phellogen (d) phelloderm

22. Lateral roots develop from primordia originated by the division of

(a) Pericycle cells lying opposite to protoxylem points
(b) Pericycle cells lying between two protoxylem points
(c) Endodermal cells lying between two protoxylem points
(d) Endodermal cells lying opposite to protoxylem points

23. The term 'Bark' refers to

(a) Phellem, Phelloderm and Vascular cambium
(b) Periderm and Secondary xylem
(c) Cork cambium and Cork
(d) Phellogen, Phellem, Phelloderm and Secondary phloem

24. Major part of wood of old dicot stem is filled with tannins, resins and gums. This part is called

(a) heart wood (b) soft wood
(c) sap wood (d) hard wood

25. The major function of sieve tubes in plants is

(a) Mechanical support (b) Translocation of water and minerals
(c) Translocation of organic solutes (d) Food storage

26. Which of the following is primary meristem

(a) Plerome (b) Protoderm
(c) Intercalary meristem (d) All

27. Cambium found in vascular bundles of dicot stem is

(a) Intercalary meristem (b) Fasicular cambium
(c) Secondary meristem (d) All of the above

28. The cells of the quiescent center 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 add to tunica

29. Vascular tissue in flowering plants develops from

(a) Dermatogen (b) Plerome
(c) Periblem (d) Phellogen.

30. Palisade parenchyma is absent in leaves of

(a) Gram (b) Sorghum
(c) Mustard (d) Soybean

1. (b)
2. (a)
3. (b)
4. (c)
5. (c)
6. (c)
7. (b)
8. (c)
9. (b)
10. (b)
11. (a)
12. (b)
13. (c)
14. (c)
15. (b)
16. (b)
17. (d)
18. (a)
19. (d)
20. (d)
21. (a)
22. (b)
23. (d)
24. (a)
25. (c)
26. (d)
27. (b)
28. (b)
29. (b)
30. (b)