Very Short Answer Type Questions

Q. 1. Name the cells that regulates the opening and closing of stomata.
[KVS Mumbai 2016]

Ans. Guard cells.

Q.2. Define tissues.

Ans. These are groups of cells having a common origin and common function. e.g., parenchyma, xylem.

Q.3. Which industry depends on the knowledge of wood anatomy?

Ans. Plywood industry.

Q. 4. Which meristem leads to growth in length?

Ans. Primary meristem.

Q.5. What is axillary bud?

Ans. Each leaf primordia has an axillary zone of meristematic activity called axillary meristem or axillary bud.

Q.6. What are the meristematic regions that arises from root apical meristem?

Ans. The meristematic regions that arises from root apical meristems are:
(i) Protoderm, (ii) Procambium, (iii) Ground meristerm.

Q. 7. From where does the lateral root originate?

Ans. Pericycle of mature zone.

Q. 8. Name the tissues which provides mechanical strength to the plant organs.

Ans. Sclerenchyma tissues.

Q. 9. What is conjunctive tissue?

Ans. It is a narrow strip of tissue (parenchyma or sclerenchyma) that lies between xylem and phloem bundles of root.

Q. 10. What is the economic use of phloem fibres?

Ans. They are used for making threads, ropes and coarse textiles.

Q. 11. Name the tissue represented by the jute fibres that are used for making the ropes.

Ans. Bast fibre (Phloem fibre).

Q. 12. What are stomata?

Ans. Minute pores present on the surface of leaves are called stomata. They are meant for exchange of gases.

Q. 13. What are cotton fibres?

Ans. Cotton fibres are unicellular epidermal hair of seed of *Gossypium sps.*

Q. 14. What is a bark?

Ans. Bark is the dead tissue, lying outside the cork cambium.

Q. 15. Define promeristem.

Ans. It is a part of apical meristem made up of actively dividing cells and their immediate derivatives.

Q. 16. Why is the root apical meristem sub-terminal?

Ans. Root apical meristem is sub-terminal because of the presence of a protective terminal root cap over it.

Q. 17. Name two types of parenchyma present in leaf?

Ans. Palisade and spongy parenchyma.

Q. 18. Name the cells that surround vascular bundles in dicot leaf. [DDE Practice Paper]

Ans. Vascular bundles are surrounded by a bundle sheath of parenchymatous cells.

Q. 19. Define calyptrogen.

Ans. It is a special meristematic region at the end of the root that given rise to cap.

Q. 20. What is quiescent centre?

Ans. It is a small region with low mitotic activity in the centre of the root apex.

Q. 21. What are casparian strips?

Ans. These are the thickenings of lignin and suberin formed around the anticlinal walls of endodermis to prevent plasmolysis.

Q. 22. What is an annual ring?

Ans. It is also called growth ring. A single growth ring formed each year is called annual ring.

Q. 23. What is the function of cock in plants?

Ans. Cork insulates the tree against heat and cold.

Q. 24. When do you refer a vascular bundle as a closed bundle?

Ans. When cambium is absent.

Q. 25. What forms the cambial ring in a dicot stem during the secondary growth?

Ans. Fascicular and interfascicular strips of meristems.

Q. 26. What are collateral vascular bundles?

Ans. Conjoint bundles with xylem towards the inner side and phloem towards the outer side.

Q. 27. Name the plant I which bicollateral vascular bundles are found.

Ans. *Cucurbita maxima* (Kaddu).

Q. 28. What are the cells included in a stele?

Ans. The cells included in a stele are Pericycle, vascular strands and pith.

Q. 29. What is the function of pith cells?

Ans. Pith cells store food in the form of starch.

Q. 30. What is Lysogineous cavity?

Ans. In a mature vascular bundle, some of the protoxylem vessels and the xylem parenchyma cells dissolve or separate to form a water containing cavity Lysogineous cavity.