Very Short Answer Type Questions

Q. 1. What type of phyllotaxy is seen in *Alstonia* and Guava ?

Ans. (i) *Alstonia:* Whorled phyllotaxy

(ii) Guava: Opposite and decussate

Q. 2. How does plant morphology help in classification ?

Ans. Morphology provides distinguishing features of stem type, leaf type, inflorescence, flower structure, fruit type etc., in classification.

Q. 3. How to pneumatophore roots help in gaseous exchange ?

Ans. Pneumatophore roots bear small pores called lenticels (pneumathodes) near their tips, which help in gaseous exchange.

Q. 4. Name the type of roots found in leguminous plants.

Ans. Nodulated roots are found in leguminous plants.

Q. 5. Give the function of root hair.

Ans. Root hair helps in the absorption of water.

Q. 6. What is the main function of leaf lamina ?

Ans. Photosynthesis is the main function of leaf lamina.

Q.7. How is phyllode helpful to a plant ?

Ans. Phyllode is helpful to a plant as it reduces transpiration.

Q.8. What is the function of haustoria?

Ans. Haustoria, arising from parasitic plant in the host tissue, penetrate the vascular tissue of the host and absorb water, minerals and organic compounds.

Q. 9. Name the special tissue present in the epiphytic roots of orchids.

Ans. Velamen tissues. This tissue helps the roots in absorbing atmospheric moisture.

Q. 10. What are epiphytes ?

Ans. Plants which grow on the stem and branches of other plants but do not absorb food from them are called epiphytes.

Q. 11. Give two examples of fasciculated roots.

Ans. *Asparagus* and *Dahlia.*

Q. 12. What are lenticels?

Ans. Small opening in the bark of stem meant for gaseous exchange are called lenticels.

Q. 13. What do you mean by epipetalous ? (KVS Guwahati 2016)

Ans. When stamens are fused with petals, the condition is called epipetalous. *e. g*. *Solanum, Petunia.*

Q. 14. When stamens are called epiphyllous ? (DDE Practice Paper)

Ans. When stamens are attached to the perianth, the condition is called epiphyllous.

Q. 15. What is coleorhiza ?

Ans. Protective covering of the radicle in the cotyledon is called coleorhiza.

Q. 16. What is scutellum ?

Ans. A shielkd shaped cotyledon in monocot plants are called scutellum.

Q. 17. Name the male and female reproductive parts of a flower.

Ans. Male part is androecium and female part is gynoecium.

Q. 18. Where is aleurone layer found in plant material? What does it consist of ?

Ans. The endosperm in maize seed is enclosed by aleurone layer (a sheath of special tissue).It contain proteins.

Q. 19. What are trioecious plants ?

Ans. The plants with three types of individuals: Male, female and hermaphrodite are called trioecious plant.

Q. 20. What do you understand by cotyledon ?

Ans. The first leaf of the embryo of seed plants which is usually simpler in structure than later formed leaves.

Q. 21. Name the smallest and the largest flower.

Ans.

(i) Smallest flower: *Wolffia*
(ii) Largest flower- *Rafflesia.*

Q. 22. In which family, the old sepal is anterior ?

Ans. Fabaceae.

Q. 23. Define pseudocarp.

Ans. Pseudocarp is a false fruit which develops from the ovary along with adjoining accessory floral parts, *e.g.*, apple.

Q. 24. What are monoecious and dioecious plants?

Ans. When male and female flowers are borne on the same plant, they are called monoecious, *e.g.,* mango, guava and when male and female flowers are borne on different plants, they are called dioecious plants. *e.g.,* date palm, papaya.1

Q. 25. Give two examples of false fruits.

Ans. Apple and Guava.

Q. 26. Write the floral formula of Fabaceae.

Ans. Floral formula

$$\%\,\male\,K_{(5)}\ C_{1+2+(2)}A_{1+(9)}G_{1}$$

Q. 27. Can the sepals be caducous ? At what stage?

Ans. Yes, immediately after the opening of flower. *e.g.,* Poppy.

Q. 28. Define composite or multiple fruits.

Ans. A composite or multiple fruits is a group of fruits which develop from the different flowers of an inflorescence. *e.g.,* Pineapple, Mulberry, Fig etc.

Q. 29. What is mother axis ?

Ans. A small circle drawn above the floral diagram represents the mother axis. Position of all the floral parts are drawn in relation to mother axis.