

TB205100V

Reg. No :

Name :

B. Sc. DEGREE (C.B.C.S.) EXAMINATION, NOVEMBER 2022
2020 ADMISSIONS REGULAR AND 2019, 2018 ADMISSIONS SUPPLEMENTARY
SEMESTER V - CORE COURSE (BOTANY)
BO5B08B18 - ANATOMY, REPRODUCTIVE BOTANY AND MICROTECHNIQUE

Time : 3 Hours

Maximum Marks : 60

Part A

I. Answer any Ten questions. Each question carries 1 mark

(10x1=10)

1. What are bulliform cells?
2. What type of vascular arrangement is seen in roots?
3. What is calyptrogen?
4. What are the components of cambium?
5. What are tyloses?
6. What is the significance of the micropyle?
7. What is crassinucleate type of megasporogenesis?
8. Distinguish between unitegmic and bitegmic ovules.
9. What is triple fusion?
10. What is the source of hematoxylin stain?
11. Name a natural dye.
12. Name a temporary mounting medium.

Part B

II. Answer any Six questions. Each question carries 5 marks

(6x5=30)

13. Explain the theories on the growth of cell wall.
14. What are lysigenous and schizigenous cavities?
15. Explain the structure and function of plasmodesmata.
16. Write an account on heartwood and sapwood.
17. Explain the process of secondary growth in dicot roots.
18. With suitable diagrams, describe the different types of ovules.
19. With emphasis on the ploidy levels, describe the cells within the embryo sac. Add a note on their significance.
20. Enlist the characteristic features of anemophilous flowers. Cite an example.
21. What is the significance of dehydration in the preparation of specimen? Name two dehydrating agents.

Part C

III. Answer any Two questions. Each question carries 10 marks

(2x10=20)

22. Explain in detail the structure and function of xylem.
23. Explain anomalous secondary growth in Boerhaavia stem with diagrams.
24. With illustrations, describe monosporic, bisporic and tetrasporic embryo sac development.
25. What are the different methods of sectioning materials for study?