

(Pages : 3)

N – 4240

Reg. No. :

Name :

First Semester B.Sc. Degree Examination, June 2022
Career Related First Degree Programme under CBCSS
Group 2(a) – Botany and Biotechnology
BB 1141 : ANGIOSPERM ANATOMY AND REPRODUCTIVE BOTANY
(2019 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer **all** the questions in word or sentences. **Each** question carries **1** mark.

1. What are ergastic substances?
2. What is heart wood?
3. Define embryology.
4. What is dehydration?
5. What are tyloses?
6. What is the function of plasmodesmata?
7. Expand FAA.
8. What are antipodal?
9. Define a root hair.
10. What is an apical meristem?

(10 × 1 = 10 Marks)

P.T.O.

SECTION – B

Answer any **eight** questions. Answer not to exceed one paragraph. **Each** question carries **2** marks.

11. Distinguish between collateral and bicollateral vascular bundle.
12. What are pits? Mention the major types.
13. Comment on the arrangement of vascular bundles in root.
14. What are medullary bundles? Give example.
15. Explain the role of bulliform cells.
16. What is triple fusion?
17. Write short notes on mounting media.
18. Mention the objectives of Plant Anatomy.
19. Explain the structure of pollen grain.
20. What are passage cells? Mention their function.
21. Write a brief note on pollen allergy.
22. What are synergids? Mention their role.

(8 × 2 = 16 Marks)

SECTION – C

Answer any **six** questions. Answer not to exceed 120 words. **Each** question carries **4** marks.

23. Comment on the methods of viability test for pollen grains.
24. Write a brief account on killing and fixing agents.
25. Describe the structure and function of vascular cambium.

26. Write notes on endosperm and its function. -
27. Comment on the anomaly in *Dracaena*.
28. Give the salient features of dicot roots.
29. Describe the structure of a monosporic embryo sac.
30. Draw labelled diagram of a typical angiosperm ovule and highlight its structure.
31. Explain pollination and its types.

(6 × 4 = 24 Marks)

SECTION – D

Answer any **two** questions. Answer not to exceed three pages. **Each** question carries **15** marks.

32. Describe the stelar and extra stelar secondary thickening in dicot stem.
33. Give a detailed account on permanent tissues.
34. Describe the internal structure of a mature anther and explain microsporogenesis.
35. Explain the internal structure of a monocot leaf with labelled diagram.

(2 × 15 = 30 Marks)
