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Reg. No. : .....

Name : .....

**First Semester B.Sc. Degree Examination, November 2024**

**Career Related First Degree Programme under CBCSS**

**Botany and Biotechnology**

**Core Course**

**BB 1141 — ANGIOSPERM ANATOMY AND REPRODUCTIVE BOTANY**

**(2023 Admission)**

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer **all** questions in **a** word or sentence. Each question carries **1** mark.

1. Give the name of any one mounting medium.
2. What is FAA?
3. What is middle lamella?
4. What is apical meristem?
5. Give the function of collenchyma.
6. What is conjunctive tissue?
7. Where you can find bulliform cells?
8. What are synergids?
9. What is funiculus?
10. What is sporopollenin?

**(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. Differentiate between heart wood and sap wood.
12. Describe the structure of hydathodes.
13. Comment on cambium.
14. Write a note on fibers.
15. What are bicollateral vascular bundles? In which family do you notice bicollateral vascular bundles?
16. What are passage cells? What is their function?
17. Write short notes on lenticels. -
18. Describe the preparation of Carnoy's fluid.
19. Draw a neat labeled diagram of dicot embryo.
20. Explain triple fusion.
21. What is self pollination? Give any two advantages of self pollination.
22. Comment on any one viability test for pollen grains.

**(8 × 2 = 16 Marks)**

## SECTION – C

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

23. How do you anatomically differentiate dicot and monocot root?
24. Briefly explain the theories on apical organization of stem apex.



25. Write notes on plant cell wall.
26. Explain the different types of meristems based on position.
27. Write notes on types of endosperm.
28. Briefly explain the anomalous secondary growth in *Bignonia*.
29. Explain the structure of an angiosperm ovule with the help of a diagram.
30. Write notes on wind pollination.
31. Explain the structure of pollen grain.

**(6 × 4 = 24 Marks)**

SECTION – D

Answer any **two** questions. Answer not to exceed **3** pages. Each question carries **15** marks.

32. With the help of suitable diagrams describe secondary growth in dicot root. Add a note on periderm formation.
33. What is vascular tissue system? Explain in detail various types of vascular arrangements in angiosperms.
34. What is microsporogenesis? Explain microsporogenesis and development of male gametophyte with illustrations.
35. Give the anatomical details of the primary structure of a dicot stem with the help of labeled diagram.

**(2 × 15 = 30 Marks)**

