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Reg. No. : .....

Name : .....

First Semester B.Sc. Degree Examination, March 2023

Career Related First Degree Programme Under CBCSS

Group 2 (a) – Botany and Biotechnology

BB 1141 — ANGIOSPERM ANATOMY AND REPRODUCTIVE BOTANY

(2019 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer **all** questions in a word or **one** or **two** sentences. **Each** question carries **1** mark.

1. What is the use of isopropyl alcohol?
2. Name a fixative.
3. What are raphides?
4. Write the function of hemicellulose in plants.
5. Mention the use of a microtome.
6. What are bicollateral vascular bundles?
7. What is exarch condition?
8. What is the function of endodermis?

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9. Mention the role of pollen tube in fertilization.

10. Comment on nucellus.

(10 × 1 = 10 Marks)

SECTION – B

Answer any **eight** questions. **Each** question carries **2** marks.

11. What are laticfers?

12. Draw the diagram of a bordered pit.

13. Describe the structure of a stomata.

14. What are the functions of xylem and phloem?

15. What is a lenticel? Mention its function.

16. What is Tetrazolium test?

17. What is a mountant? Give an example.

18. List the characteristic features of growth rings.

19. What is ring porus wood?

20. What is the function of polar nuclei?

21. What are antipodal cells? Comment on its function.

22. Write short notes on pollen allergy.

(8 × 2 = 16 Marks)

SECTION – C

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

23. Write an account on lateral meristems.

24. What is staining? What is its principle?

25. Brief a note on secretary products in plants.

26. What Is plasmodesmata? Where is it found?

27. Explain periderm formation.

28. Describe the primary structure of dicot stem.

29. Compare dicot and monocot root anatomy.

30. What constitutes the ground tissue system?

31. What is triple fusion? Mention its signiﬁcance.

(6 × 4 = 24 Marks)

SECTION – D

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

32. Write a detailed account on reserve food materials in plants.

33. With the help of diagrams compare the theories on apical organisation.

34. Explain the anomalous secondary growth in *Borehaavia*. Draw diagrams.

35. Compare monosporic and bisporic type of embryo sac development.

(2 × 15 = 30 Marks)