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H-2115

Reg. No. :

Name :

First Semester B.Sc. Degree Examination, November 2019

First Degree Programme Under CBCSS

Botany

Core Course I

BO 1141 : ANGIOSPERM ANATOMY, REPRODUCTIVE BOTANY AND
PALYNOLOGY

(2019 Admission)

Time : 3 Hours

Max. Marks : 80

(Draw diagrams wherever necessary)

SECTION A

I. Answer **ALL** questions. Each question carries **1** mark.

Write short notes on :

1. Name the secretory tissue present in Nepenthes.
2. What are Radial Vascular bundle?
3. Explain the functions of parenchyma in plants.
4. What are pits?
5. What are lenticles?
6. Mention the type of vascular bundle in Dracaena.

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7. What is anomocytic stomata?
8. What is Tapetum?
9. Comment on Anatroous ovule.
10. What is Pollen allergy?

(10 × 1 = 10 Marks)

SECTION B

II. Answer any **EIGHT** questions. Each question carries **2** marks.

11. What is symplast and apoplast
12. What are Cystolith and Raphides?
13. Differentiate ring porous and diffuse porous wood.
14. What is Apical cell theory?
15. What is Periderm?
16. How could you differentiate dors-ventral leaves and isobilateral leaves?
17. What are hydathodes?
18. What is Casparian strips? Where it is prominent?
19. Explain nuclear endosperm.
20. What is polyembryony? Mention its types.
21. What is parthenocarpy? Explain its significance.
22. Explain the economic importance of pollen grains.

(8 × 2 = 16 Marks)

SECTION C

- III. Answer any **SIX** questions. Each question carries **4** marks.
23. Differentiate the nitrogenous and non-nitrogenous products found in plants.
 24. Explain the extra cell wall materials in plants.
 25. What is meristem? How it is classified?
 26. Explain the difference between protoxylem and metaxylem.
 27. Write note on the extra-stelar secondary growth in stem.
 28. With the help of diagram describe the structure of mature anther.
 29. Explain monosporic type embryo sac with polygonum type development.
 30. Explain the most important features of pollen.
 31. Explain the organization of shoot apex.

(6 × 4 = 24 Marks)

SECTION D

- IV. Answer any **TWO** questions. Each question carries **15** marks.
32. Explain the Anomalous secondary growth in *Bignonia* stem, with neat labelled diagram.
 33. What are the different types of permanent tissues? Explain with diagram.
 34. What is pollination? Explain different types and Contrivances.
 35. Compare the primary structure of Dicot stem and dicot root with ground plan.

(2 × 15 = 30 Marks)