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T – 2555

Reg. No. :

Name :

Fourth Semester B.Sc Degree Examination, July 2024

First Degree Programme under CBCSS

Botany

Core Course

**BO 1441 : BRYOLOGY, PTERIDOLOGY, GYMNOSPERMS AND
PALEOBOTANY**

(2022 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION – A

- I. Answer **all** questions in **one** word or **two** sentences. Each question carries 1 mark.
1. What are horsetails?
 2. What is eustele?
 3. Define coenosorus.
 4. What is prothallus?
 5. What are pseudoelaters?
 6. What is an era?

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7. List the uses of Cedar deodar.
8. List any two Indian species of *Cycas*.
9. What is a spur shoot?
10. What is a compression?

(10 × 1 = 10 Marks)

SECTION – B

II. Answer any **eight** of the following. Each question carries 2 marks.

11. What is siphonogamy?
12. Explain the structure of *Equisetum* sporangiophore.
13. List the two types of rhizoids found in *Riccia*.
14. List the various methods of vegetative reproduction in *Selaginella*.
15. Differentiate between annulus and stomium.
16. What is a ligule?
17. What is trabeculae?
18. List the features of *Cycas* male gametes.
19. List the identifying features of *Gnetum* female cone.
20. What are girdle traces?
21. What is petrification?
22. List any two morphological features of *Rhynia*.

(8 × 2 = 16 Marks)

SECTION – C

- III. Answer any **six** of the following. Each question carries **4** marks.
23. Explain the structure of *Funaria* gametophyte.
 24. Discuss the features of antheridium and archegonium of *Riccia*.
 25. Describe internal anatomy of *Anthoceros* thallus.
 26. Write a brief account of morphological features of *Equisetum* stem.
 27. Explain the morphological features of *Pteris* sporophyte.
 28. Describe the theories associated with the morphological nature of *Selaginella* rhizophore.
 29. Discuss the anomalous secondary growth of *Gnetum* stem.
 30. Draw a neat labelled diagram of *Cycas* ovule L.S.
 31. Explain the characteristics features of *Lepidocarpon*.

(6 × 4 = 24 Marks)

SECTION – D

- IV. Write essay on any **two** of the following. Each question carries **15** marks.
32. Explain life cycle of *Marchantia*.
 33. With a labelled diagrams explain reproduction in *Pinus*.
 34. Explain the life cycle of *Psilotum*.
 35. Discuss the economic importance of bryophytes.

(2 × 15 = 30 Marks)