



QP CODE: 24021505



24021505

Reg No :

Name :

B.Sc DEGREE (CBCS) REGULAR EXAMINATIONS, APRIL 2024

Fourth Semester

Core Course - BO4CRT04 - PTERIDOLOGY, GYMNOSPERMS AND PALEOBOTANY

(Common for B.Sc Botany and Biotechnology Model III Double Main, B.Sc Botany Model I, B.Sc Botany Model II Environmental Monitoring and Management, B.Sc Botany Model II Food Microbiology, B.Sc Botany Model II Horticulture and Nursery Management & B.Sc Botany Model II Plant Biotechnology)

2017 Admission Onwards

7D84644B

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Define Sporangium.
2. What is alternation of generation?
3. What is rhizophore?
4. Name the pteridophyte known as 'horsetail'.
5. Define siphonostele.
6. What are Seed Ferns?
7. Name the four sub classes of gymnosperms in Christenhusz classification system.
8. What is the function of transfusion tissue?
9. Distinguish between Microsporophyll and Megasporophyll.
10. Write the name of two resins produced by conifers.
11. Comment on Cingularia.
12. Who is the father of Indian Palaeobotany?

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*





13. Give an account on sexual reproduction in *Lycopodium*.
14. Explain the structure of spore bearing organ in *Equisetum*.
15. Describe the morphology of sporophyte of *Pteris*.
16. Describe the morphology of sporophyte of *Marsilea*.
17. Write an account of the general life cycle in gymnosperms.
18. Explain with diagram the structure of male cone in *Pinus*.
19. Describe the structure of male strobilus in *Gnetum* with a labelled diagram.
20. Describe external features of *Rhynia*.
21. Give an account on the fossil deposits in India.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **10** marks.

22. Explain the sexual reproduction in *Psilotum*.
23. With necessary diagrams, explain the sexual reproduction in *Marsilea*.
24. Explain the economic importance of pteridophytes.
25. Comment on the affinities of gymnosperms with angiosperms.

(2×10=20)

