

QP CODE: 25020199

Reg No	:	
Name	:	

B.Sc DEGREE (CBCS)) REGULAR/ IMPROVEMENT/ REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025

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

0815CDA7

Time: 3 Hours

Max. Marks : 60

Part A

Answer any **ten** questions.

Each question carries **1** mark.

- 1. Define Sporangium.
- 2. Which is the reproductive structure in Psilotum?
- 3. Name the pteridophyte considered as an indicator of gold.
- 4. Name an aquatic pteridophyte.
- 5. What is Actinostele?
- 6. What is megasporophyll?
- 7. What are Seed Ferns?
- 8. Name the two types of branching in Pinus.
- 9. Name a species of Gnetum.
- 10. Which gymnosperm yields 'canada balsam'?
- 11. What is an amber?
- 12. Where is Shivalik Fossil Park located?

(10×1=10)



Part B

Answer any **six** questions.

Each question carries 5 marks.

- 13. Explain the structure of sporophyte in *Lycopodium*.
- 14. Describe the structure of sporophyte of Selaginella.
- 15. Describe asexual reproduction in Equisetum.
- 16. Describe the anatomy of sporocarp of Marsilea.
- 17. Briefly outline Christenhusz system of gymnosperm classification.
- 18. Explain the anatomy of Coralloid root in Cycas.
- 19. Describe the structure of ovule in Cycas.
- 20. Describe external features of Rhynia.
- 21. Write an account on role and activities of Birbal Sahni Institute of Palaeobotany.

(6×5=30)

Part C

Answer any **two** questions. Each question carries **10** marks.

- 22. Explain alternation of generations in Lycopodium.
- 23. With the help of schematic diagram, explain the life cycle of Pteris.
- 24. Explain the economic importance of pteridophytes.
- 25. Comment on the affinities of gymnosperms with angiosperms.

(2×10=20)