





QP CODE: 19101560

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Name	,	

# BSC DEGREE (CBCS) EXAMINATION, MAY 2019

### **Fourth Semester**

# Core Course - BO4CRT04 - PTERIDOLOGY, GYMNOSPERMS AND PALEOBOTANY

(Common for 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 and Biotechnology Model III Double Main, B.Sc Botany Model II Plant Biotechnology)

#### 2017 ADMISSION ONWARDS

00985973

Maximum Marks: 60

Time: 3 Hours

#### Part A

Answer any ten questions.

Each question carries 1 mark.

- 1. Give an example for genus of class Sphenopsida.
- 2. Name a species of Lycopodium.
- 3. Which pteridophyte is known as Spikemoss?
- 4. Name the sporangium bearing leaves in Pteris.
- 5. What is a Protostele?
- 6. Why Gymnosperms are called as naked seeded plants?
- 7. What are Seed Ferns?
- 8. Name two common species of Cycas in India.
- 9. Describe the structure of a male flower in Gnetum.
- 10. Write the name of two resins produced by conifers.
- 11. What is paper coal?
- 12. Where is Mandla Plant fossil National Park located?

(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 morphology of sporophyte in Equisetum.
- 15. Describe the morphology of sporophyte of Marsilea.
- 16. Describe the anatomy of sporocarp of Marsilea.
- 17. Briefly outline Christenhusz system of gymnosperm classification.
- 18. Describe the structure of ovule in Cycas.
- 19. Explain with diagram the structure of male cone in Pinus.
- 20. Give an account on the morphology of Williamsonia.



21. Write an account on role and activities of Birbal Sahni Institute of Palaeobotany.

## Part C

Answer any two questions.

Each question carries 10 marks.

- 22. Explain a) the morphology of Psilotum, b) stem anatomy of Psilotum with diagram.
- 23. 'Heterospory is the antecedent of seed habit' explain.
- 24. Explain the economic importance of pteridophytes.
- 25. Comment on the affinities of gymnosperms with angiosperms.

(2×10=2

