QP CODE: 22101569

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Reg No : .....

Name : .....

B.Sc DEGREE (CBCS) IMPROVEMENT / REAPPEARANCE EXAMINATIONS, MAY 2022

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

C368FB33

Time: 3 Hours Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. Name the Gametophytic generation in Pteridophytes?
2. What is alternation of generation?
3. Which type of stele is present in Equisetum stem?
4. Mention the speciality of sorus in Pteris.
5. What is a stele?
6. What is integument?
7. What are Seed Ferns?
8. What is a coralloid root?
9. Name a species of Gnetum.
10. Name the gymnosperm which yield the drug 'Ephedrine.'
11. Name a fossil Bryophyte.
12. Name a Plant Fossil National Park in India.

(10×1=10)

Part B

*Answer any **six** questions.*

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

13. Write a note on Synangium of *Psilotum*.
14. Describe the structure of strobilus in *Selaginella*.
15. Comment on the significance of heterospory on the evolution of seed habit.
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. Write notes on the morphology of Ovuliferous scale.
20. Give an account on fructifications in Calamites.
21. Write a brief account on the contribution of Dr. Birbal Sahni.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Explain the structure of different type of gametophytes in *Lycopodium* with illustration.
23. Give an illustrated account on the life history of Equisetum.
24. Explain the economic importance of pteridophytes.
25. Comment on the affinities of gymnosperms with angiosperms.

(2×10=20)