

QP CODE: 20101019



Reg No :

Name :

BSC DEGREE (CBCS) EXAMINATION , MARCH 2020

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

E2939450

Time: 3 Hours

Marks: 60

Part A

*Answer any **ten** questions.*

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

1. What is Homospory?
2. Name the plant known as Clubmoss.
3. What are elaters?
4. Name an aquatic pteridophyte.
5. Define siphonostele.
6. Name the only one living representative of gymnosperm in the order Ginkgoales.
7. Name the four sub classes of gymnosperms in Christenhusz classification system.
8. Distinguish between Microsporophyll and Megasporophyll.
9. Name the two types of leaves in Pinus.
10. Name a gymnosperm showing circinate vernation.
11. Name a fossil Bryophyte.
12. Where is Shivalik Fossil Park located?

(10×1=10)





Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Explain the features of Class Lycopsidea.
14. With the help of a labelled diagram explain the stem anatomy of *Selaginella*.
15. Comment on the significance of heterospory on the evolution of seed habit.
16. List out the xerophytic adaptations of Equisetum.
17. Briefly outline Sporne system of gymnosperm classification.
18. Explain the anatomy of Coralloid root in Cycas.
19. Describe the structure of male strobilus in Gnetum with a labelled diagram.
20. Write an account on the role of Paleobotany in the exploration of fossil fuels.
21. Give an account on the important Paleobotanical Research Institutes in India.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **10** marks.

22. Describe the life history of *Lycopodium*.
23. Describe the morphology and anatomy of sporocarp of Marsilea with a labelled diagram.
24. Explain the economic importance of pteridophytes.
25. Comment on the affinities of gymnosperms with angiosperms.

(2×10=20)

