



K26U 1010

Reg. No. :

Name :

IV Semester B.Sc. Degree (C.B.C.S.S. – O.B.E. – Supplementary/Improvement)
Examination, April 2026
(2020 to 2023 Admissions)
CORE COURSE IN BOTANY/PLANT SCIENCE
4B04BOT/PLS : Plant Diversity II – Pteridophytes and Gymnosperms

Time : 3 Hours

Max. Marks :40

Instruction: Draw diagrams wherever specified.

PART – A

Objective type questions. Answer all.

(4×1=4)

1. Spore producing structure of Psilotum
a) Strobilus b) Sori c) Sporocarp d) Synangium
2. The spore producing leaves are called
a) Sporocarp b) Sporangium c) Sporophyll d) Sorus
3. "Bars of Sanio" are character of
a) Gnetum b) Pinus c) Cycas d) Podocarpus
4. A siphonostele with phloem on either side of the xylem
a) Amphiploic b) Ectophloic c) Endophloic d) Actinostele

PART – B

Short essay questions. Answer any Eight.

(8×2=16)

5. What is the spore producing structure of Psilotum ? Is it a homosporous Pteridophyte ?
6. Differentiate actinostele and siphonostele.
7. Write two ecological importances of Pteridophytes.
8. Write a note on the male strobilus of Gnetum.
9. What are elaters ? Write its function.
10. Write a note on rhizophore.

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11. Write short note on the alternation of generation.
12. Write down two xerophytic characters of Pinus needle.
13. What is polyembryony ? Write down one significance.
14. Describe "shower of sulphur".
15. Differentiate homospory and heterospory.
16. What is glossopodium ?

PART – C

Essay questions. Answer any four.

(4×3=12)

17. Describe the anatomy of Psilotum aerial shoot with a diagram.
18. Describe the anatomy of Cycas leaflet with a diagram.
19. Describe the structure of Selaginella strobilus with diagram.
20. Describe a siphonostele with diagram.
21. Describe the rachis anatomy of Pteris.
22. Draw the anatomy of Gnetum stem and label the parts.

PART – D

Long essay questions. Answer any one.

(1×8=8)

23. Explain the classification of Pteridophytes proposed by Reimers, 1954.
24. Explain heterospory and its significance with examples.
25. Explain the economic importance of Gymnosperms.