



K15P 0277

Reg. No. :

Name :

I Semester M.Sc. Degree (Reg./Sup./Imp.) Examination, November 2015
BOTANY
(2014 Admn. Onwards)
BOT 1C 03 – Bryology, Pteridology and Gymnosperms

Time : 3 Hours

Max.Marks : 60

Instruction : Draw diagrams *wherever* needed.

SECTION – A

Answer **any two** (Either **a** or **b**)

1. a) Write on the development and evolution of sorus and sporangia in pteridophytes.

OR

b) Give an account of the morphological and anatomical features of Isoetes.

2. a) Explain the classification of Bryophytes with the important features of major classes.

OR

b) Write on the sporophyte of Polytrichum Add a note on its off inities. **(2x 8=16)**

SECTION – B

Answer **any two**. 1 mark for Part **a**. 2 marks for Part **b**. 3 marks for Part **c**.

3. a) Give the morphology of Lunuraria.

b) Contributions of any two Indian Bryologists.

c) Fossil Bryophytes.

4. a) Sporophyll.

b) Significance of heterospory.

c) Write on the advanced type of stele in Pteridophytes.

P.T.O.



5. a) Spur shoot.
- b) Pteridophytic features in Cycadales.
- c) Gnetales is a connecting link between Gymnosperms and Angiosperms – Justify. (2x 6=12)

SECTION – C

Answer any six.

6. Bryophytes as pollution indicators.
7. Gametophyte of Sporocarpus.
8. Steles in Lycopsidea.
9. Hydrophytic pteridophytes.
10. Pteridophytes as ecological indicators.
11. Structure of male gametophyte of Ephedra.
12. Economic importance of Gymnosperms.
13. Cones in Pinus. (6x 3=18)

SECTION – D

Answer any seven.

14. Protonema.
15. Columella.
16. Archegoniophore.
17. Petrifications.
18. Apospory.
19. Contributions of Indian Pteridologists.
20. Ginkgo biloba – Morphological peculiarities.
21. Living fossils.
22. Polyembryony. (7x 2=14)