



Reg. No. :

Name :

I Semester M.A./M.Sc./M.Com. Degree (Reg./Sup./Imp.)
Examination, November 2014
(2014 Admn. under CBSS)
BOTANY

BOT 1C03 : 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 stelar evolution in Pteridophytes.

OR

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

2. a) Explain the origin and evolution of Bryophytes.

OR

b) Write on the phylogeny of sphagnales and the structure of the sporophyte of sphagnum. **(2×8=16)**

SECTION – B

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

3. a) Describe the morphology of Sphaerocarpus.

b) Give the anatomical characters of Lunuraria.

c) Contributions of any two Indian Bryologists.



4. a) Apogamy.
 b) Pteridophytes can be troublesome weeds – Explain.
 c) Stem anatomy of Osmunda.
5. a) What are living fossils ?
 b) Morphological peculiarities of Welwitschia.
 c) Distribution of Cycadales.

(2×6=12)

SECTION – C

Answer **any six** :

6. Economic importance of Bryophytes.
 7. Morphology of Polytrichum.
 8. Pteridophytes as epiphytes.
 9. Vascular tissues in Pteridophytes.
 10. Leaf in Isoetes.
 11. Cones in Pinus.
 12. Ovule in Gnetum.
 13. Pentoxylales – A Brief Account.

(6×3=18)

SECTION – D

Answer **any seven** :

14. Gemmae.
 15. Types of rhizoids.



16. Archosporium.
 17. Seed habit.
 18. Edible pteridophytes.
 19. Biofertilizer.
 20. Suspensor.
 21. Malegametophyte in Gymnosperms.
 22. Spur shoot.

(7×2=14)