



K21P 0516

Reg. No. :

Name :

**First Semester M.Sc. Degree (CBSS-Reg./Suppl.(Including Mercy
Chance)/Imp.) Examination, October 2020
(2014 Admission Onwards)**

BOTANY

BOT 1C 03 : Bryology, Pteridology and Gymnosperms

Time : 3 Hours

Max. Marks : 60

SECTION – A

Answer **any two**. Either **a** or **b**.

(2×8=16)

1. a) Give an account of the classification of pteridophytes.

OR

- b) Write the Morphological and anatomical features of cycas.

2. a) Discuss on the origin and evolution of Bryophytes.

OR

- b) Write the contributions on any four Indian Bryologists.

SECTION – B

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

3. a) Microsporophyll of pinus.
b) Ovuliferous scales.
c) Morphology of Ophioglossum.
4. a) Tubular nucleus.
b) Female gametophyte of ephidra.
c) Techniques in fossils study.
5. a) Endosperm of pinus.
b) Bryophytes as pollution indicators.
c) Petrification.

(2×6=12)

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SECTION – C

Answer **any six**.

(6×3=18)

6. Sporophyte of sphagnum.
7. Xeric characters of gymnosperms.
8. Economic importance of bryophytes.
9. Phylogeny of pallavicinia.
10. Bog moss.
11. Gametophores of Andreaea.
12. Anthozoids liberation mechanism in bryophytes.
13. Female gametophyte in polytrichales.

SECTION – D

Answer **any seven**.

(7×2=14)

14. Fossil bryophytes.
15. Telome theory.
16. Stellar evolution.
17. Importance of salvinia.
18. Lithophytic pteridophytes.
19. Morphological characters of Isoetes.
20. Anatomical features of gleicheniales.
21. Ginkgo biloba.
22. Staminate flowers of Gnetales.
23. Protonema.