



K19P 1475

Reg. No. :

Name :

I Semester M.Sc. Degree(CBSS - Reg./Suppl./Imp.)

Examination, October -2019

(2014 Admission Onwards)

BOTANY

BOT 1C03 : BRYOLOGY, PTERIDOLOGY AND GYMNOSPERMS

Time : 3 Hours

Max. Marks : 60

Section - A

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

(2 × 8 = 16)

1. a) Explain the salient features of gymnosperms and write their affinity towards angiosperms.

(OR)

- b) Discuss on origin and evolutionary aspects of bryophytes.

2. a) Write the contribution any four Indian bryologists.

(OR)

- b) Write the classification of pteridophytes and add salient features of major classes.

Section - B

(Answer any Two)

(2 × 6 = 12)

3. a) Leaves in sphagnum

- b) Siphonostele

- c) Anatomical character of pinus stem.

(1+2+3)

4. a) Microsporophyll of cycas

- b) Archegonia of marchantia

- c) Heterospory and seed habit

(1+2+3)

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(2)



5. a) Pseudoelaters
b) Fossil pteridophytes
c) Leaves in porella (1+2+3)

Section - C

(Answer any Six) (6 × 3 = 18)

6. Gametophyte structure in takakia .
7. Impression
8. Polytrichum sporangia
9. Female gametophyte in Ephedra.
10. Spore germination stages in marchantia
11. Centrifugal xylem.
12. Phloem structure in gymnosperms.
13. Strobili of cordaitales.

Section - D

(Answer any Seven) (7 × 2 = 14)

14. Protonema
15. Apospory
16. Edible ferns
17. Suspensor Tier
18. Living fossils
19. Peristomial teeth
20. Archosporium
21. Stellar system in pteridophytes
22. Leptosporangiate development
23. Salvinia
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