



K23P 3070

Reg. No. :

Name :

I Semester M.Sc. Degree (CBCSS – OBE – Regular)

Examination, October 2023

(2023 Admission)

BOTANY

MSBOT01 C03 : Bryophytes, Pteridophytes and Gymnosperms

Time : 3 Hours

Max. Marks : 60

PART – A

Answer **any five** questions. **Each** question carries **3** marks.

1. Explain the cytological significance of *Ophioglossum reticulatum*.
2. Give an account on the salient features of *Gleicheniaceae*.
3. Highlight the relevance of the majestic *Araucaria* as Avenue tree.
4. Describe the general characters of Gnetales.
5. Write an account on the bryophyte spore dehiscence and dispersal.
6. Why is *Targionia* considered to be an ornamental ?

PART – B

Answer **any three** questions. **Each** question carries **6** marks.

7. What is Phylogenomics ? Discuss the applications of Phylogenomics in classification.
8. What are the characteristic features of Cupressaceae ? Give a brief description on the life cycle of the genus cupressus.
9. How is it possible to distinguish species of *Agathis* from closely related *Wollemia* ?

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10. Justify the role of haplodiplobiontic life cycle in Bryophyte evolution.
11. Give your expert opinion in distinguishing between hepaticopsida and anthocerotopsida members of Bryophytes.

PART – C

Answer **any three** questions. **Each** question carries **9** marks.

12. What is Herbarium ? Give a step by step account on the herbarium preparation and preservation.
13. Elucidate the basic difference between Angiosperms and Gymnosperms. Name any four Indian Gymnospermous taxa along with short descriptions.
14. Describe the characteristics of Cycadaceae. Specify the economic utility of the Cycads.
15. What are extant Pteridophytes ? Explain why Osmundales are considered the most ancient surviving lineage of leptosporangiate ferns.
16. What are Lycophytes ? What are the common names and major characteristics of Lycophytes ?