

6. Write illustrated notes on the following:
- (a) Stem anatomy of *Equisetum*
 - (b) Aquatic ferns.
7. Elucidate the occurrence of heterospory in Pteridophytes. Discuss the relation of the phenomenon with the development of seed habit.
8. Write illustrated notes on the following:
- (a) Apogamy
 - (b) Ferns in phytoremediation.

Exam. Code : 210002
Subject Code : 4920

M.Sc. Botany 2nd Semester
PTERIDOLOGY
Paper: BOTC-528

Time Allowed—2 Hours] [Maximum Marks—50

Note :— There are **eight** questions of equal marks. Candidates are required to attempt any **four** questions.

1. Elucidate various theories about the origin of Pteridophytes with supporting evidences from the types included in your syllabus.
2. Write illustrated notes on the following:
 - (a) Antithetic theory
 - (b) Land flora.
3. Give a comparative account of the organography and morphology of *Psilotum* and *Lycopodium* with a comment on their relative advancement.
4. Elucidate the classification of Pteridophytes upto order level giving diagnostic characters of the types included in your syllabus.
5. What is a sorus ? Discuss the evolutionary changes in its location and organization among ferns with particular reference to types included in your syllabus.