

MSc Sem.-1 Examination

402

Botany

February-2025

Time : 2-30 Hours]

[Max. Marks : 70

- Q-1. Give the classification of bryophytes by Rothmaler and Proskauer in detail. [14]
- OR
- Q-1(A) Give the ecological and economic importance of bryophytes. [07]
- Q-1(B) Explain the distribution of bryophytes in India and Gujarat. [07]
- Q-2 Explain the Origin and evolution of pteridophytes. [14]
- OR
- Q-2(A) Give the documentation and preservation methods for pteridophytes. [07]
- Q-2(B) Write a note on the origin of seed habit. [07]
- Q-3 Explain the female gametophyte and embryo development in gymnosperms. [14]
- OR
- Q-3(A) Give the general characters of gymnosperms. [07]
- Q-3(B) Write a note on pteridospermales. [07]
- Q-4 Describe the evidence and theories of organic evolutions. [14]
- OR
- Q-4(A) Explain the evolution of photosynthetic pathways. [07]
- Q-4(B) Write a note on isolating mechanisms. [07]
- Q-5 Attempt any seven out of twelve. [14]
- 1) Give any two characteristics of the order 'Polytrichales'.
 - 2) Give examples of parasitic bryophytes.
 - 3) Name any two methods of vegetative propagation in liverworts.
 - 4) Give the difference between microphyllous and megaphyllous.
 - 5) Define Plectostele with the appropriate figure.
 - 6) What is prothallus? Explain it.
 - 7) Name the different parts of the female reproductive organ of Ginkgo.
 - 8) Give any two economic importance of gymnosperms.
 - 9) Define the process of fossilization.
 - 10) Write two points of the theory of Lamarkism.
 - 11) Name the different sources of variation.
 - 12) Give two examples of analogous organs.
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