

GSM/D-21 **936**
BIOLOGY & DIVERSITY OF SEED PLANTS

Paper–I

Time Allowed : 3 Hours]

[Maximum Marks : 40

Note : Attempt **five** questions in all, selecting **two** question from each Unit.
Question No. **1** is compulsory. All questions carry equal marks.

Compulsory Question

1. Shortly answer the following
 - (a) Describe the term Pseudo fossils. 1
 - (b) Name some angiosperms whose fossils have been found. 1
 - (c) Does Ephedra show poly embryony? How? 1
 - (d) Name the group of Gymnosperms that does not have any fossil record. 1
 - (e) What is meant by diploxylic condition. 1
 - (f) What are dwarf shoots. 1
 - (g) Define conjoint and open vascular bundle. 1
 - (h) What is Mycorrhiza. 1

UNIT-I

2. What are the major differences and similarities between Angiosperm and Gymnosperms. 8
3. Describe the characteristic features of Gymnosperm in details. 8
4. Write a note on :
 - (a) Evolution of seed habit in Gymnosperms. 4
 - (b) Process of fossilization. 4
5. Describe the different types of fossils with its importance. 8

UNIT-II

6. Explain the following:
- (a) Economic importance of Gymnosperms. 4
 - (b) Draw a diagram of L.S. of ovule in *Cycas*. 4
7. Write important features of:
- (a) Amentiferae. 4
 - (b) Magnoliales. 4
8. Draw a well labelled diagram of:
- (a) T.S of root in *Ephedra*. 4
 - (b) T.S of Rachis in *Cycas*. 4
9. Give the diagrammatic life cycle of *pinus*. 8