

Exam. Code : 210002

Subject Code : 8437

M.Sc. (Botany) Semester—II

**BOTC-522 : DIVERSITY AND BIOLOGY OF  
GYMNOSPERMS**

Time Allowed—3 Hours]

[Maximum Marks—50

**SECTION—A**

1. Attempt **all** parts :

- (a) Differentiate Gymnosperms from Angiosperms.
- (b) What is meant by Manxlylic wood ?
- (c) Name two extant gymnosperms.
- (d) How Bennettiales differed from Cycadales ?
- (e) Define seed scale complex.
- (f) Explain leptosporangiate development.
- (g) What is the age of Gymnosperms ?
- (h) Name the Gymnosperm having largest ovule.

1×8=8

**SECTION—B**

**Note** :— Attempt any **SEVEN** questions.

2. Why are gymnosperms called as first seed plants ? 3
3. Classify the rocks according to chronostratigraphy. 3

4. Write a brief note on *Archaeopterix*. 3
5. Give important features of Cordaitales. 3
6. Explain the affinities of Ginkgoales. 3
7. Write a note on *Welwitschia*. 3
8. Enumerate differences between Taxales and Gnetales. 3
9. Compare the embryogeny of Cycadales and Coniferales. 3
10. Briefly explain the distribution of Gymnosperms in India. 3
11. Describe in brief the affinities of Pentoxylaes. 3

### SECTION—C

**Note :—** Attempt any **THREE** questions.

12. Give a detailed account on recent system of classification of Gymnosperms. 7
13. Discuss in brief morphology, structures and reproduction in Coniferales. 7
14. Describe evolutionary tendencies in reproductive structure of Gymnosperms. 7
15. Give a detailed account of cytology of Gymnosperms. 7
16. Discuss morphology, structure and reproduction in Ephedrales. 7