

Roll No. ....

(01/22-II)

5204

**B. Sc. EXAMINATION**

(Third Semester)

BOTANY

Paper-I

Biology and Diversity of Seed Plants-I

*Time : Three Hours*

*Maximum Marks : 40*

**Note :** Attempt *Five* questions in all, selecting *two* questions from each Unit. Q. No. 1 is compulsory and has short answer type questions. All questions carry equal marks.

1. Define the following terms : 1×8=8
- (a) Pycnoxylic wood
  - (b) Incrustation or Cast
  - (c) Gametophyte
  - (d) Homosporous

- (e) Era
- (f) Zoodiogamy
- (g) Polyembryony
- (h) Microsporophyll.

### Unit I

- 2. Describe general characters of Gymnosperms. How do they differ from Angiosperms ? 8
- 3. Write notes on the following :
  - (a) Theories of Fossilization 4
  - (b) Mummified Fossils. 4

### Unit II

- 4. Write notes on the following :
  - (a) Reproductive features of Cycadeoidea 4
  - (b) Evolution of seed habit. 4
- 5. Give systematic position, external and reproductive characters of Williamsonia. Give diagrams also. 8

### Unit III

6. Draw labelled diagrams of the following :
- (a) T.S. Needle of Pinus. 4
  - (b) T.S. Coralloid root of Cycas. 4
7. Write notes on the following :
- (a) Female Cone of Pinus 4
  - (b) Megasporophyll of Cycas. 4

### Unit IV

8. Describe structure and development of male and female gametophyte in Ephedra. Give well labelled diagrams also. 8
9. Describe general characters of the following primitive group of Angiosperms in brief :
- (a) Renales 4
  - (b) Magnoliales. 4