

Second Semester B. Sc. Examination

BOTANY

Paper - I

(Pteridophyta and Gymnosperms)

Time : Three Hours]

[Max. Marks : 50

- N. B. : (1) All questions are compulsory and carry equal marks.
(2) Illustrate your answers with suitable examples and diagrams wherever necessary.

1. Write on :—

- (a) L.S. strobilus of Selaginella.
- (b) General characters of Psilopsida and Lycopside. 5X2

OR

Write short notes on :—

- (c) T.S. Stem of Rhynia.
- (d) T.S. rhizophore of Selaginella.
- (e) T.S. stem of selaginella (Diagram only).
- (f) General characters of sphenopsida. 2.5X4

2. Write on :—

- (a) Heterospory and seed habit.
- (b) L.S. strobilus of Equisetum. 5X2

OR

Write short notes on :—

- (c) T.S. petiole of Marsilea (Diagram only).
- (d) T.S. stem of Equisetum through internode (Diagram only).
- (e) Sporocarp of Marsilea.
- (f) Gametophyte of Equisetum. 2.5x4

3. Write on :—

- (a) Cycadeoidea flower.
- (b) T.S. Leaflet of Cycas. 5x2

OR

Write short notes on :—

- (c) L.S. Ovule of Cycas (Diagram only).
- (d) T.S. coralloid root of Cycas (Diagram only).
- (e) General characters of Gymnosperms.
- (f) Economic importance of Gymnosperms. 2.5x4

4. Write on :—

- (a) T.S. stem of Ephedra.
- (b) L.S. female cone of Pinus. 5x2

OR

Write short notes on :—

- (c) T.S. needle of Pinus (Diagram only).

- (d) Male flower of Ephedra.
- (e) Pollen grains of Pinus.
- (f) L.S. ovule of Ephedra (Diagram only). 2.5x4

5. Write in two or three lines on each (any ten) Diagrams are not necessary :—

- (a) Pteropsida.
- (b) Ligule.
- (c) Trabeculae.
- (d) Homospory.
- (e) Carinal canal.
- (f) Siphonostele.
- (g) Circinate veneration.
- (h) Gymnosperm.
- (i) Megasporophyll.
- (j) Dwarf shoot.
- (k) Resin canal.
- (l) Ephedrine.

1x10