

Duration: 2½ Hours

Max. Marks: 60

N.B: 1. All questions are compulsory.

2. Figures to the right indicate full marks.

3. Draw neat and labelled diagrams wherever necessary.

1. Give an account of spore bearing organs in Bryophytes with diagrams. 12

OR

1. Discuss on the process of alternation of generations in Bryophytes. 12

2. Describe the applied aspects of Bryophytes. Add a note on its environmental applications. 12

OR

2. Give an account on contribution of Shiv Ram Kashyap and S.C. Srivastava in Bryology. 12

3. Describe External and Internal features of Rhizome of *Psilotum*. 12

OR

3. Describe the classification of Pteridophytes according to G.M Smith. 12

4. Describe of the following fossil Pteridophytes and give their geological time Scale.

a) Coenopteris

b) Cladoxylon

12

OR

4. Explain the causes and cytology of Apospory 12

5. Write short notes on **any three** 12

a) Origin of bryophytes with reference to form

b) *Targionia* Sporophyte

c) Megasporengium of *Azolla*

d) Significance of heterospory

e) Cultivation process of ornamental ferns

f) Ethnomedicinal uses of Pteridophytes
