

Bachelor of Science (B.Sc.) (Part -I) Second Semester Old
2SBot-T1 - Botany Paper-I (Pteridophyta, Palaeobotany and Gymnosperms)

P. Pages : 2

Time : Three Hours



GUG/W/18/1230

Max. Marks : 50

- Notes :
1. All questions are compulsory and carry equal marks.
 2. Illustrate your answers with suitable examples and draw well labelled diagrams wherever necessary.

1. Describe different types of stele in pteridophytes 10

OR

Write on:

- a) Spore producing Organ of Equisetum. 5
 - b) Seed habit and heterospory 5
2. What is fossil? Describe the theories of fossilization 10

OR

Write on:

- a) Morphological characters of Cycas. 5
 - b) Pinus needle T.S. 5
3. Write short notes on:
- a) Classification of pteridophyta by G.M. Smith. 2½
 - b) T.S. Stem of Selaginella (Dia. only) 2½
 - c) Glossopteris leaf. 2½
 - d) T.S. Stem of Pinus (Dia. only) 2½

OR

- e) Structure of Sporangia in Selaginella. 2½
- f) Telome Theory 2½
- g) Impression 2½
- h) Classification of Gymnosperm by Sporue (1965). 2½

4. Write short notes on:
- a) General characters of pteridophytes 2½
 - b) Spore producing organ in Equisetum. 2½
 - c) L.S. Strobilus of Cycadeoidea. 2½
 - d) Morphological characters of Gymnosperms 2½
- OR**
- e) T.S. Stem of Rhynia (Dia. only) 2½
 - f) T.S. of Marsilea Petiole (Dia. Only) 2½
 - g) T.S. Stem of Cycadeoidea (Dia.Only) 2½
 - h) T.S. Coralloid Root of cycas (Dia. Only) 2½
5. Write answers in two or three lines only **any ten**. Diagrams are not necessary. 10
- a) Glossopodium
 - b) Vascular Cryptogams
 - c) Resurrection plants
 - d) Horsetail
 - e) Sporangiphore
 - f) Indusium
 - g) Pre-cambium
 - h) Compression
 - i) Jurassic era
 - j) Transfusion tissues
 - k) Winged Pollen grains
 - l) Resin canal
