

Acc No.

OT-06

MCC/17/M.Sc./Sem.-1/BOT/1

First Semester Examination-2017

M.Sc. BOTANY

Paper Code: BOT-104, Pteridophytes & Gymnosperms

Full Marks : 40

Time: 2 Hours

Write the answer for each unit in separate sheet

Unit -I

Pteridophytes

1. Answer any four of the following: 1×4=4

- a) Name the first vascular plant.
- b) Who transfer Rhynia major into a new taxon? Why?
- c) What is meant by eusporangiate?
- d) What is acroslichoid sorus?
- e) Name two heterosporous pteridophytes.
- f) What is meant by 'telome truss'?
- g) What is meant by 'parichnos'?

2. Write short notes on any two of the following: 3×2=6

- a) Rhynia Gwynne-Vaughanii
- b) Apogamy
- c) Economic importance of Pteridophyte

3. Answer any one of the following: 10×1=10

- a) Characterize Zosterophyllopsida. Name four genera of the group. How the group differ from Rhyniopsida. Why Zosterophyllopsida is regarded as the progenitor of Lycopsidea? 3+2+2+3
- b) Characterize Lycopsidea. How Lycopodiales differ from Selaginellales? Illustrate different types of stele found in both the above mentioned groups. Why some species of Selaginella often referred to as resurrection plant? 3+2+4+1

3+2+4+1

(Turn Over)



Unit –II

Gymnosperms

1. Answer any four of the following: 1×4=4
- a) Why Pteridosperms are often referred to as 'seed fern'?
 - b) What is meant by 'spermanum cortex'?
 - c) Name one parasitic gymnosperm with its host plant?
 - d) Name the male and female fructification of *Pentoxylon*.
 - e) Mention two advanced characters of *Gnetum*.
 - f) What is meant by porpollen?
 - g) What is copal?
2. Write short notes on any two of the following: 3×2=6
- a) Medicinal importance of Gymnosperm.
 - b) Caytonia fruit
 - c) Indian distribution of *Pinus* sp
3. Answer any one of the following: 10×1=10
- a) Characterize cycadales. Name the extant taxa of the group. Discuss the evolution of cycad leaf in rough different ages. 3+3+4
 - b) Illustrate different fossil taxa of glossopteris plant. 10

