

ED-317

M.Sc. 1st Semester Examination, March-April 2021

BOTANY

Paper - IV

Bryophyta, Pteridophyta and Gymnosperms

<i>Time</i> : Three Hours]	[Maximum	Marks	:	80
	[Minimum Pass	Marks	:	16

Note : Answer **all** questions. All questions carry equal marks.

Unit-I

1. Give a comparative account of the sporophytes of Marchantia, Anthoceros and Funaria.

OR

Write notes on the any two of the following :

- (a) Vegetative reproduction in Bryophytes
- (b) Spore dispersal mechanism in Bryophytes
- (c) Sporophyte of Polytrichum

DRG_225_(3)

(Turn Over)

(2)

Unit-II

2. What are Stele? Describe the evolution of stele in Pteridophytes?

OR

Write notes on any two of the following :

- (a) Concept of first vascular plants
- (b) Structure of mature archegonium of psilotum
- (c) Prothallus organization in pteridophytes

Unit-III

3. Gymnosperms are a connecting link between angiosperm and pteridophytes? Explain it.

OR

Write notes on any two of the following :

- (a) Distribution of Gymnosperm in India
- (b) Classification of Gymnosperm
- (c) Endosperm in Gymnosperm

Unit-IV

4. Give an account on the affinities of Gnetum and show how it is closely related to Angiosperm.

OR

DRG_225_(3)

(Continued)

(3)

Write notes on any two of the following :

- (a) Account of Glossopteris
- (b) Female cone of Pinus
- (c) Male strobillus of Welwitschia

DRG_225_(3)

560