

Roll No. :

Total No. of Questions : 11]

[Total No. of Printed Pages : 3

BPP-1071

M.Sc. (Previous) Examination, 2022

BOTANY

Paper - II

(Bryology, Pteridology and Gymnosperms)

Time : 3 Hours]

[Maximum Marks : 75

Section-A

(Marks : 2 × 10 = 20)

Note :- Answer all *ten* questions (Answer limit **50** words). Each question carries **2** marks.

Section-B

(Marks : 5 × 5 = 25)

Note :- Answer all *five* questions. Each question has internal choice (Answer limit **200** words). Each question carries **5** marks.

Section-C

(Marks : 10 × 3 = 30)

Note :- Answer any *three* questions out of five (Answer limit **500** words). Each question carries **10** marks.

Section-A

1. (i) Write the name of the Bryophyte which have retart cells.
- (ii) Write the function of Pseudoelaters in Anthoceros.
- (iii) What is the role of Bryophytes in Forest Ecosystem ?

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- (iv) Formation of gametophyte directly from spore mother cell without meiosis is called.
- (v) Write the name of the aquatic fern, which is an excellent biofertilizer.
- (vi) What do you understand by the term vascular cryptogams ?
- (vii) Define living fossil. Give examples.
- (viii) Write the systematic position of Ginkgo.
- (ix) How many integuments are found in ovule of *Taxus* ?
- (x) Which species of *Taxus* is commonly found in India ?

Section-B

2. Briefly discuss the development and structure of the sporophyte of *Anthoceros*.

Or

Briefly describe the gametophyte of *Pellia*.

3. What is Heterospory ? Which characters are necessary for seed formation ?

Or

Give a brief account on the alternation of generation in pteridophytic plants.

4. Explain briefly the sporophyte of *Isoetes*.

Or

Write a short note on *Imesipteris*.

5. Write a short note on the classification of Gymnosperm.

Or

Write a general account on the *Williamsonia*.

6. Write a short note on Geological Time Scale.

Or

Explain the structure of *Welwitschia*.

Section–C

7. With the help of diagrams briefly explain the life-cycle of *Notothylas*.
8. Write a detailed note on the evolution of stele.
9. Briefly describe the life-cycle of *Azolla*.
10. Explain briefly the morphology of *Cycadioidea*.
11. Explain the morphology and Internal structures of *Gnetum* in detail.