

Roll No. :

Total No. of Questions : 11]

[Total No. of Printed Pages : 3

BPG–1082

M.Sc. (Previous) Examination, 2021

BOTANY

Paper – II

(Bryology, Pteridology and Gymnosperms)

Time : 1½ 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

2 each

1. (i) What is Pseudopodium ?
- (ii) Define Gamme.

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- (iii) Differentiate between Apogamy and Apospory.
- (iv) What do you know about Stele ?
- (v) General account of Lycopsidea.
- (vi) Common distinguished features between Gymnosperms and Pteridophytes.
- (vii) Main features of Cycadiodea.
- (viii) Systematic position of *Glossopteris*.
- (ix) Peculiar features in male flower of *Gnetum*.
- (x) Geological Time Scale.

Section-B

5 each

2. Discuss briefly the primitive versus advanced features of Bryophytes.

Or

Explain briefly the comparative studies of gametophytes and sporophytes of Takakiales.

3. Briefly discuss pollution indicators and monitoring geobotanical prospects in respect to Bryophytes.

Or

Discuss the evolution of Stele in brief.

4. Explain briefly the general account of Salviniales.

Or

Write a brief account on sporophyte of *Tmesipteris*. Illustrate your answer with suitable labelled diagrams.

5. Write a detailed account on the reproduction in Gymnosperms.

Or

Briefly describe the anatomy of *Pentoxylon* stem.

6. Explain the structure of *Taxus* along with its systematic position.

Or

Write a brief account on fossil Gymnosperms in India.

Section–C

10 each

7. With the help of suitable diagrams, briefly describe the life cycle of *Pellia*.
8. Briefly discuss heterospory and seed habit in Pteridophytes.
9. Briefly describe the life cycle of *Gleichenia*.
10. Discuss in detail the classification of Gymnosperm giving main features with regard to its morphology and reproduction.
11. Explain the origin and evolution of Gymnosperms, citing suitable diagrams.