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R – 6262

Reg. No. : .....

Name : .....

**First Semester M.Sc. Degree Examination, May 2023**

**Botany**

**BO212 : BRYOPHYTA, PTERIDOPHYTA AND GYMNOSPERMS**

**(2019 Admission Onwards)**

Time : Three Hours

Max. Marks : 75

I. Write short notes on the following questions.

1. Peristome
2. Apospory
3. Girdling leaf traces
4. Fossilization
5. Perigynium
6. Circinate Ptyxis
7. Leptosporangium
8. Pseudofossils
9. Transfusion tissue
10. Diploxylic condition

**(10 × 1 = 10 Marks)**

P.T.O.

II. Answer the following questions in not more than **50** words.

11. (a) Comment on the types of rhizoids in Bryophytes.

OR

(b) Why are Bryophytes considered as bioindicators?

12. (a) Explain the demerits of telome theory.

OR

(b) Enlist the diagnostic features of Sphenopsida.

13. (a) What is soft wood? Give example.

OR

(b) What are coralloid roots? Comment on their function.

14. (a) Describe the structure of pollen in *Pinus* at the time of dispersal.

OR

(b) Comment on the significance of studying fossils.

15. (a) What is protonema? Give example.

OR

(b) What is coenosorus? Give example.

**(5 × 2 = 10 Marks)**

III. Answer the following question in not more than **150** words.

16. (a) Explain the general characters of Bryophytes.

OR

(b) Comment on the salient features of Polytrichales.

17. (a) Explain the external features of *Salvinia* sporophyte.

OR

(b) Give the important characters of *Lycopsidea*.

18. (a) Write the external morphology of *Isoetes*.

OR

(b) Comment on the importance of *Acrostichum*.

19. (a) Describe the external morphology of *Zamia*.

OR

(b) Explain the Characteristics of *Cycadopsida*.

20. (a) Give a brief account on different types of fossil.

OR

(b) Write a brief account on the sporophyte of *Rhynia*.

21. (a) Give an account on fossil bryophytes.

OR

(b) List out the resemblances of pteridophytes with spermatophyta

22. (a) Explain the salient features of *Caytoniales*.

OR

(b) Comment on the contributions of Prof. Bribal Sahni.

**(7 × 5 = 35 Marks)**

IV. Answer the following questions in not more than **250** words.

23. (a) Write an account on the economic importance of Gymnosperms.

OR

(b) Describe the structure and reproduction in *Lunularia*.

24. (a) Give an account on the structure and reproduction in *Ephedra*.

OR

(b) Write an account on the stelar types in Pteridophytes.

**(2 × 10 = 20 Marks)**

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