

Botany [Minor]

[NEP]

B.Sc. First Semester End Examination-2024

PAPER-BOT-MI-101T

[Plant Science – I]

Full Marks: 40

Time: 02 Hrs

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

Group - A

1. Answer any five of the following: 2x5=10

- a) Define viroid and virion.
- b) What is mesosome?
- c) What are coraloid roots?
- d) Name one aquatic and xerophytic fern each.
- e) Write the function of peristome teeth.
- f) Mention the store foods of cyuanophyceae and chlorophyceae.
- g) What is transfusion tissue?
- h) What is hornwort? Give example.

Group – B**2. Answer any four of the following: 5x4=20**

- a) Give the life cycle of Volvox. What is pyrenoid? 4+1
- b) Write the cell wall differences between Gm(+)ve and Gm(-)ve bacteria. What is flagellin? 4+1
- c) What is vascular cryptogams? What are the adaptive features of pteridophytes? 1+4
- d) What are the different types of bacteria based on shape? What is meant by atrichous? Give example. 3+1+1
- e) Draw a diagram with proper label of Funaria capsule. Discuss the advance features of capsule of Funaria. 3+2
- f) Discuss about the types of plant fossils. 5

Group – C**3. Answer any one of the followings: 10x1=10**

- a) Give an outline classification of pteridophytes (Sporne 1975) up to class with example of each. Name two Indian species of Lycopodium. 8+2
- b) Discuss the anatomical detail of the ovule of Cycus with diagram. Enumerate the fern characters of cycas. Write the xerophytic characters observed in the leaves of Pinus.

4+3+3