

Botany [Major]

[NEP]

B.Sc. First Semester End Examination-2024

PAPER-BOT-H-MJ-101T

Plant and Microbial diversity and its evolution

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) What type of life cycle is seen in Polysiphonia?
- b) What are crustose lichens?
- c) What are carinal canals?
- d) Write down two importance of Sphagnum.
- e) What are peristome teeth?
- f) What are the components of the fungal cell wall?
- g) What are globules and nucleoli?
- h) What is lysogenic phage?

(2)

Group – B

2. Answer any four of the following:

5x4=20

- a) Write a short note on Whittaker's five kingdom system of classification.
- b) Write short notes on:
 - i) Enveloped virus.
 - ii) Prion.
- c) Discuss the similarities of Gnetum with angiosperms.
Discuss the structure of female cone of Pinus. 2.5+2.5
- d) Write a note on origin of land plants. Which angiosperm appeared first? 4+1
- e) What is the function of heterocyst? What is a nannandrous male filament? 2.5+2.5
- f) Discuss the factors affecting fossilization. What is petrification? 3+2

Group – C

3. Answer any one of the followings:

10x1=10

- a) Give the outline classification of fungi by Ainsworth up to subdivision. Describe the sporophyte of Anthoceros. 5+5

(3)

- b) Discuss about range of thallus structures in algae with diagrams. Write down four advanced characters of chara.

6+4
