

B.Sc. 1st Semester (Programme) Examination-2022-23

BOTANY

Course ID : 11318 Course Code : SP/BOT/101/C-1A

**Course Title : Plant Biodiversity
(Microbes, Algae, Fungi & Archegoniate)
(New & Old)**

Time : 1 Hour 15 Minutes

Full Marks : 25

The figures in the right hand margin indicate full marks.

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

Unit-I

1. Answer *any five* questions : 1×5=5

(a) What is Mycorrhiza?

(b) Differentiate between flagella and pili.

(c) What is protonema?

- (d) Write down the scientific name of peat moss.
- (e) What are coprophillous fungi?
- (f) Mention two economic importance of pteridophytes.
- (g) State the function of heterocyst.
- (h) Why the vegetative body of algae is called thallus?

Unit-II

2. Answer **any two** questions : 5×2=10

- (a) Describe the internal structure of sporophyte of *Funaria* with suitable sketches. 5
- (b) What is coralloid root? Mention fern characters of *Cycas*. 1+4
- (c) What is archegonium? Why Gnetum does is considered as gymnosperm? 1+4
- (d) Write down the internal organization of apothecium of *Ascobolus* with suitable sketches. 5

Unit-III

3. Answer **any one** question : 10×1=10

- (a) Describe with labelled sketches the structure of TMV. What are Lytic and Lysogenic cycle? 6+4
- (b) Describe the post-fertilization changes and the development of cystocarp in *Polysiphonia*. Discuss its alternation of generation. 7+3