

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

**BOTANY**

**Course ID : 11314 Course Code : SH/BOT/103/GE-1**

**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 algal bloom?

(b) Name one homosporous and heterosporous pteridophytes.

- (c) Why bryophytes are called the amphibian in plant kingdom?
- (d) State the bacterial features of Cyanophycian algae.
- (e) State the difference between zoospores and aplanospores.
- (f) State the four general features of Pteridophytes.
- (g) Name the fruiting bodies of Ascomycetes and Basidiomycetes group of fungi.
- (h) Name two species of *Rhynia*.

### Unit-II

2. Answer **any two** questions : 5×2=10
- (a) Describe the structure of heterocyst. State its function in agriculture. 4+1
- (b) Draw a labelled sketch of the transverse section of *Pinus* leaf.
- (c) Draw and describe the ascocarp of *Ascobolous*.
- (d) Describe the structure of cystocarp of *Polysiphonia*.

### Unit-III

3. Answer **any one** question : 10×1=10
- (a) Describe the range of thallus organization in algae. Describe the prokaryotic features of cyanophycian algae. 8+2
- (b) State the advance characters of *Funaria* capsule. Describe the life cycle of *Funaria* with labelled sketches. 2+8
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