

# Bankura University

## B.Sc 1st SEMESTER(Honours) EXAMINATIONS, 2021

Subject: BOTANY

Course ID: 11311

Course Code: SHBOT/101/C-1

Course Title: Phycology & Microbiology

Full Marks: 25

Time: 1h 15 min

The figures in the margin indicate full marks

Answer all the questions.

### UNIT I

1. Answer *any five* of the following questions: (5X1=5)

- a) Example one dsRNA virus.
- b) What is batch culture?
- c) Example any two industrially important bacteria with their roles.
- d) What is capsomere?
- e) Mention the principal role of heterocyst.
- f) Name one alga possesses c-phycoyanin.
- g) Example any two edible algae.
- h) What is pyrenoid?

### UNIT II

2. Answer *any two* of the following questions: (2X5=10)

- a) Describe the lysogenic cycle with proper sketch.
- b) Make a short note about bacterial conjugation with proper diagram.
- c) Discuss the distinguish characters of Cyanophyceae. Why this group is also called 'cyanobacteria'?
- d) Draw the sexual cycle of *Chara*. Name one Indian species of *Chara*.

### UNIT III

3. Answer *any one* of the following questions: (1X10=10)

- a) Give a brief account of the structure of endospore. Describe the detailed structure of TMV.
- b) Describe with proper diagram the post-fertilization changes in *Polysiphonia*. Mention the economic values of diatomite.