

U.G. 2nd Semester Examination - 2021

BOTANY

[HONOURS]

Course Code : BOT-H-CC-T-03

Full Marks : 20

Time : 1 Hour

The figures in the right-hand margin indicate marks.

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

1. Answer any **five** questions: 1×5=5
- a) What do you mean by viroid?
 - b) What is mycoplasma?
 - c) What is F-factor?
 - d) What is flagellin?
 - e) Mention two pigments solely found in Cyanophyta.
 - f) What is coenozoospore?
 - g) What is nucleolus?
 - h) What is pyrenoid?
2. Answer any **one** question: 5×1=5
- a) Describe the structure of a T₄ phage with neat labelled sketches.

- b) Write a short note on bacterial growth.
- c) Draw and describe the ultrastructure of a cyanophycean cell.

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

- a) What is transduction? Mention the differences between generalized and specialized transduction. Draw and describe the process of generalized transduction in bacteria.

2+2+6

- b) Mention the salient features of Phaeophyta. Draw and describe the life-cycle of *Ectocarpus*.

3+7

- c) Describe the sexual reproduction in *Polysiphonia*. With suitable diagram illustrate the post fertilization changes observed in *Polysiphonia*.

4+6
