



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 1st Semester Examination, 2019
BOTACOR01T-BOTANY (CC1)

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.

1. Answer **all** questions briefly from the following: 1×5 = 5
- Who proposed three domain system concept of classification?
 - What is the causal organism of AIDS?
 - What is Prophage?
 - What is Corona?
 - Why Phaeophyceae are brown in colour?

2. Answer any **five** questions from the following: (At least **two** questions from each Group) 3×5 = 15

GROUP-A

- Draw and describe the structure of T4 phage. 1 $\frac{1}{2}$ + 1 $\frac{1}{2}$
- Write short notes on Mycoplasma.
- Write a note on different type of plasmids with their function.
- Differentiate between Virulent and Temperate phage.

GROUP-B

- What is 'dwarf male'? State its function.
- Write a note on *Prochloron*.
- Mention the characteristic features of Xanthophyceae.
- Describe the cellwall structure of Cyanophyceae.

3. Answer any **four** questions from the following: (At least **two** questions from each Group) 5×4 = 20

GROUP-A

- Write down the characteristic features of Archaea.
- Draw and describe the bacterial Growth Curve. 1 $\frac{1}{2}$ + 3 $\frac{1}{2}$
- Draw and describe the process of transformation in any bacteria. 2+3

GROUP-B

- Elucidate the ultrastructure of algal flagella.
- With labelled diagram describe the external and internal structure of *Fucus*. 2 $\frac{1}{2}$ + 2 $\frac{1}{2}$
- What is Cystocarp? Describe its structure. Name two economically important Rhodophyceae and mention its importance. 1+2+2

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