



WEST BENGAL STATE UNIVERSITY

B.Sc. Honours 1st Semester Supplementary Examination, 2021

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: $1 \times 5 = 5$

- (a) What are mollicutes?
- (b) What is fertility factor?
- (c) Name the reserve food materials found in members of Rhodophyceae.
- (d) What is Gaidukov Phenomenon?
- (e) What is coenozoospore?

2. Answer any **five** questions from the following: $3 \times 5 = 15$

(At least **two** questions from each Group)

GROUP-A

- (a) Write down the names of three industrially important bacteria and mention their role. 3
- (b) Draw, label and describe the different phases of bacterial growth curve. 1+2
- (c) Classify bacteria on the basis of nutritional requirements with example. 3
- (d) With suitable sketches, describe the process of prophage formation in Lambda phage. 1+2

GROUP-B

- (e) Why cyanophycean members are considered as cyanobacteria? Give reasons. 3
- (f) Mention the salient features of Phaeophyceae. 3
- (g) Discuss the structure of cystocarp in *Polysiphonia*. 3
- (h) Draw and label the male reproductive structure in *Chara* sp. 3

3. Answer any **four** questions from the following: $5 \times 4 = 20$

(At least **two** questions from each Group)

GROUP-A

- (a) With suitable diagram discuss the physiochemical characteristics of TMV. 2+3
- (b) With suitable diagram describe the structure of cell wall of Gram positive bacteria. 2+3

- (c) What is vaccine? Describe the economic importance of virus with special reference to medicine. 1+4

GROUP-B

- (d) Briefly discuss the ultrastructure of flagella found in algae with sketch. 2+3
- (e) Draw and describe the life cycle of a monoecious macrandrous species of *Oedogonium*. 2+3
- (f) Mention the difference between unilocular and plurilocular sporangium. Draw and describe the anatomical details of *Fucus lamina*. 2+3

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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