

BSc. Semester-I (Honours) Examination, 2021 (CBCS)

Subject: Botany

Paper : CC-I

(Microbiology and Phycology)

Time: 2 Hours

Full Marks: 40

Answer any eight of the following questions:

5 x 8 = 40

- 1) Write the mechanism of $F^+ \times F^-$ conjugation in bacteria.
- 2) Briefly discuss the structure of Gram (-) bacterial flagella with suitable diagram.
- 3) What are the common pigments present in algae? State the importance of these pigments in the classification of algae.
- 4) Explain the origin of algal plasmids in light of endosymbiosis theory.
- 5) Briefly describe the structure of conceptacle of *Fucus* with suitable diagram.
- 6) Write the structure of bacterial endospore with suitable diagram.
- 7) Mention the salient features of Phaeophyceae.
- 8) Describe the mode of sexual reproduction of a coenocytic, siphonaceous alga with neat sketches.
- 9) How does lytic cycle of bacteriophage differ from lysogenic cycle?
- 10) Describe briefly the structure of a Gram (+) bacterial cell wall with suitable sketches.
