Reg. No	Name

B. Sc. DEGREE END SEMESTER EXAMINATION - OCTOBER 2019

SEMESTER - 1: BOTANY (CORE COURSE)

COURSE: 15U1CRBOT1: MICROBIOLOGY AND PHYCOLOGY

(Common for Improvement 2018/ Supplementary 2018/2017/2016 /2015 admission)

Time: Three Hours Max. Marks: 60

PART A

- I. Answer **ALL** questions; each question carries **1** mark.
 - 1. Who discovered the bacteria?
 - 2. What are bacteriophages?
 - 3. What are planktons?
 - 4. What is pleomorphism?
 - 5. What is nannandrium?
 - 6. Write an example for parasitic algae.
 - 7. What is an amylum star?
 - 8. What is oogamy? $(1 \times 8 = 8)$

PART B

- II. Answer ANY SIX questions; each question carries 2 marks.
 - 9. What are archaebacteria?
 - 10. What are the chief pigments in blue-green algae?
 - 11. What are retroviruses?
 - 12. What are carotenoids?
 - 13. Write short note on flagella in bacteria?
 - 14. What is the structure of nucule in *Chara*?
 - 15. What are the functions of a heterocyst?
 - 16. Explain the thallus structure of Vaucheria.
 - 17. Write a short note on tetrasporophyte in *Polysiphonia*?
 - 18. What is diatomaceous earth?

 $(2 \times 6 = 12)$

PART C

- III. Answer ANY FOUR questions; each question carries 4 marks.
 - 19. Write short note on economic importance of bacteria.
 - 20. Explain the architecture of Tobacco Mosaic Virus.
 - 21. Explain cap cell formation in *Oedogonium*.

- 22. Explain asexual reproduction in Volvox
- 23. Write short note on the role of algae is pollution indicator and in waste water treatment.
- 24. Explain the thallus structure of Sargassum.

 $(4 \times 4 = 16)$

PART D

- IV. Answer ANY TWO questions; each question carries 12 marks.
 - 25. Explain the general morphology and structure of virus.

OR

- 26. With suitable diagrams, explain the sexual reproduction in bacteria.
- 27. With the help of diagrams describe the morphology and reproduction in *Pinnularia*.

OR

28. Write an essay on the range of thallus structure in algae with suitable examples $(12 \times 2 = 24)$
