

Reg. No .....

Name .....

**B.Sc DEGREE END SEMESTER EXAMINATION - OCTOBER 2019**  
**SEMESTER 1 : BOTANY**  
**COURSE : 19U1CRBOT1 : MICROBIOLOGY AND PHYCOLOGY**  
*(For Regular - 2019 admission)*

Time : Three Hours

Max. Marks: 60

**Section A**

**Answer any 8 (1 marks each)**

1. Name the alga in which compound zoospores are found.
2. Differentiate between virulent and temperate bacteriophages.
3. What do you mean by capsomere?
4. Name any bacteria that helps in antibiotic production.
5. Name an alga that is found in the thalli of *Anthoceros*.
6. Name an alga that produces 'globule'.
7. Name the alga used in the manufacture of lens paper.
8. Define clonal culture.

(1 x 8 = 8)

**Section B**

**Answer any 6 (2 marks each)**

9. Archaeobacteria are now elevated to the rank of Domain Archaea. Comment on it.
10. Differentiate lytic cycle and lysogenic cycle of virus.
11. State the significance of Biogas.
12. Biofertilizers are eco-friendly compared to typical chemical fertilizers. Explain.
13. What are parasitic algae? Give one example.
14. What is diatomaceous earth?
15. What is 'funori'?
16. Comment on the ways in which algae can be preserved.

(2 x 6 = 12)

**Section C**

**Answer any 4 (5 marks each)**

17. Differentiate between flagellar ultra structure of gram positive and gram negative bacteria.
18. State the differences between lytic cycle and lysogenic cycle of bacteriophage.
19. Write a short essay on various types of filamentous algae.
20. Briefly explain variation in chloroplast structure in Chlorophyceae.
21. Explain asexual reproduction in *Cladophora*.
22. Enumerate the role of algae in aquaculture.

(5 x 4 = 20)

**Section D****Answer any 2 (10 marks each)**

23. Explain the applications of microbiology.
24. Three domain system of classification is now considered as more phylogenetic and advanced system of classification than five kingdom system of classification. Justify your answer.
25. Explain the life cycle of *Cladophora glomerata* with suitable illustrations.
26. Explain the structure of a mature antheridium in *Chara*.

(10 x 2 = 20)