



QP CODE: 21002166



21002166

Reg No : .....

Name : .....

**M Sc DEGREE (CSS) EXAMINATION, NOVEMBER 2021**

**First Semester**

M Sc BOTANY

**CORE - BY010101 - MICROBIOLOGY AND PHYCOLOGY**

2019 ADMISSION ONWARDS

28E005C0

Time: 3 Hours

Weightage: 30

**Part A (Short Answer Questions)**

*Answer any **eight** questions.*

*Weight 1 each.*

1. Mention the contributions of Robert Koch in the growth of Microbiology.
2. What is the role of gram's iodine in bacterial staining?
3. Differentiate sterilization from disinfection.
4. How endophytes are transmitted from one generation to the next generation?
5. Comment on the classification of algae by Edward Lee (2008).
6. Define frustule with its components.
7. Explain: a) Unilocular sporangia b) Plurilocular sporangia.
8. What is diatomaceous earth?
9. What are the symptoms and toxins of Cyanophycean Poisoning?
10. Briefly discuss commercial cultivation of algae citing suitable examples.

(8×1=8 weightage)

**Part B (Short Essay/Problems)**

*Answer any **six** questions.*

*Weight 2 each.*

11. Give an account on bacterial genome.
12. Comment on preserved cultures.
13. Differentiate between cubic and helical symmetry of viruses.
14. Explain the contributions of G.S. Venkataraman.





15. Discuss the structure and types of eye spot found in various groups of algae.
16. Write a note on fossil algae excavated from India.
17. Write a short note on the significance of live feeds.
18. Write a short note on preservation of seaweeds.

(6×2=12 weightage)

**Part C (Essay Type Questions)**

*Answer any **two** questions.*

*Weight 5 each.*

19. Describe the systematic identification of bacteria using phenotypic, biochemical and molecular characteristics.
20. What are sub-viral particles? Give an account of various sub- viral particles that you studied.
21. Give an account on the thallus organization found in different groups of algae.
22. Explain the ecological role of algae.

(2×5=10 weightage)

