



QP CODE: 22001581

Reg No :

Name : .....

# M Sc DEGREE (CSS) EXAMINATION, JULY 2022 First Semester

M Sc BOTANY

### **CORE - BY010101 - MICROBIOLOGY AND PHYCOLOGY**

2019 ADMISSION ONWARDS

7A5EF239

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. Differentiate capsule from slime layer.
- 3. Comment on the application of reference cultures.
- 4. What is meant by complex symmetry of virus?
- 5. Describe the history of algal classification before F.E.Fritsch.
- 6. Differentiate epizoophytes and endozoophytes with suitable examples.
- 7. What are the reserve foods of brown algae and red algae?
- 8. What are the symptoms and toxins of Paralytic Shellfish Poisoning?
- 9. What are the negative influences of allelopathic interactions?
- 10. Write a note on methods of collection of algae from different habitats.

(8×1=8 weightage)

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

Answer any **six** questions.

Weight **2** each.

- 11. Write a short note on mycoplasma.
- 12. Discuss various chemical methods of sterilization.



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- 13. Comment on the genetics of prion infection.
- 14. Explain the contributions of G.S. Venkataraman.
- 15. Discuss the major characteristics of Phaeophyceae.
- 16. Write a short description on Rafatazmia chitrakootensis.
- 17. Describe the role of EPS in aquatic ecosystems.
- 18. Describe various kinds of algal culture.

(6×2=12 weightage)

## Part C (Essay Type Questions)

Answer any two questions.

Weight 5 each.

- 19. Write an account of the various molecular techniques used for the identification of bacteria.
- 20. Describe the symmetry of Viruses with suitable examples.
- 21. Explain triphasic life cycle in algae with schematic diagram.
- 22. Explain the ecological role of algae.

(2×5=10 weightage)

