



QP CODE: 25022394



Reg No : .....

Name : .....

**M.Sc DEGREE (CSS) SPECIAL REAPPEARANCE EXAMINATION, APRIL 2025**

**Third Semester**

M.Sc MICROBIOLOGY

**CORE - MG030302 - ENVIRONMENTAL AND AGRICULTURAL MICROBIOLOGY**

2019 ADMISSION ONWARDS

6FE37F5F

Time: 3 Hours

Weightage: 30

**Part A (Short Answer Questions)**

*Answer any **eight** questions.*

*Weight **1** each.*

1. What are the means of dispersal of microbes in air?
2. How can one achieve air sanitation by radiation?
3. Explain Algal bloom.
4. Define Biofouling.
5. What are cyanophyceae?
6. How is chitin decomposed in soil?
7. Define spermosphere.
8. What are the characteristics of Ectendomycorrhiza?
9. Analyze the structure of Nitrogenase enzyme system.
10. Write about Methanotrophic bacteria .

(8×1=8 weightage)

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

*Answer any **six** questions.*

*Weight **2** each.*

11. Draw, label the parts and explain the working principle of lemon sampler.
12. Explain the air samplig technique using millipore filter.
13. How household waste water treatment can be done?
14. Explain the steps involved in nitrification in nitrogen cycle.
15. Comment on commensalism in microbes.





16. Explain production of cyanobacterial biofertilizer.
17. Cite in detail about Degradation of Xenobiotics.
18. Write a short essay about Degradation of Petroleum products.

(6×2=12 weightage)

**Part C (Essay Type Questions)**

*Answer any **two** questions.*

*Weight 5 each.*

19. Explain the treatment of municipal water supplies.
20. Explain sulphur cycle with suitable diagram.
21. Discuss the pathogenicity and symptoms of Fungal Phytopathogens
22. Explain about biogas production and methanogenesis.

(2×5=10 weightage)

