



QP CODE: 26019180



Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, MARCH 2026

Fourth Semester

M Sc MICROBIOLOGY

Core Courses - MG030401 - SYSTEMATIC BACTERIOLOGY

2019 Admission Onwards

15C97FF8

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Explain β -hemolysis with suitable examples.
2. Comment on the cultural characteristics of *Streptococcus pneumoniae*.
3. What are the clinical manifestations of anthrax?
4. What is meant by significant bacteriuria?
5. What is the principle and application of WIDAL?
6. Write a short note on the medias used for culturing *Leptospira*.
7. Give an account on *Ureaplasma urealyticum*.
8. Comment on the chemoprophylaxis of tuberculosis
9. What is meant by Erythema Nodosum Leprosum?
10. Write a short note on actinomycosis.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Describe the salient features *Neisseria gonorrhoeae*.
12. What is diphtheria toxin? Explain its mode of action.





13. Explain the clinical manifestation of Gas gangrene.
14. Classify tribe Proteaceae. Explain the distinguishing features of different genus belonging the tribe.
15. Write on the identifying characteristics of *Yersinia pestis*.
16. Explain the different species of genus *Chlamydia*. Comment on the differentiation of species.
17. Write a short note on infections caused by *Campylobacter jejuni*.
18. Explain the different approaches of metagenomic analysis.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Explain in detail the toxin produced and toxin associated diseases caused by *Staphylococcus aureus*.
20. Explain the pathogenesis, lab diagnosis and prophylaxis of Pertussis.
21. Explain the pathogenesis, lab identification, prophylaxis and treatment of Q fever.
22. Discuss in detail the pathogenesis, lab identification, prophylaxis and treatment of infection caused by *Actinomyces*.

(2×5=10 weightage)

