



QP CODE: 26019360



Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, MARCH 2026

Fourth Semester

M Sc PHARMACEUTICAL CHEMISTRY

ELECTIVE - CH860401 - BACTERIOLOGY AND BIOCHEMISTRY

2019 Admission Onwards

A6C1E1F6

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Why cannot anaerobic bacteria survive in presence of oxygen?
2. Explain FAME analysis used for analysis of metabolic products of microorganisms.
3. Describe the term 'Inflammation'.
4. List the essential amino acids.
5. What are nucleic acids? Name the two different nucleic acids.
6. What are the types of lipids or fats in our blood?
7. How does ATP carry energy? Give the energetics.
8. What is respiratory quotient? What is the respiratory quotient of a mixed diet?
9. Which blood type is a universal donor and why?
10. List the hormones produced by kidney and its role.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. What do you know about viral morphology and chemical composition?
12. Describe three types of functions assigned to T lymphocytes.





13. What are the important types of vaccines?
14. Explain Solid Phase Peptide Synthesis.
15. Explain the biochemical importance of thyroid hormones.
16. Describe glycogenesis.
17. Explain ornithine cycle.
18. What are blood coagulants? Mention any two coagulants and its mode of action.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Give an account of viral replication, cultivation and detection.
20. Explain in detail the different steps involved in the biosynthesis of proteins.
21. a. How are enzymes classified?
b. Explain the mechanism of action of enzymes.
22. Discuss in detail the oxidation of fatty acids.

(2×5=10 weightage)

