



QP CODE: 25050554



25050554

Reg No :

Name :

MSc DEGREE (CSS) EXAMINATION DECEMBER 2025

First Semester

M Sc BIOTECHNOLOGY

Core Courses - BT020101 - GENERAL BIOCHEMISTRY

2019 Admission Onwards

8452C110

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Differentiate between aldose and ketose.
2. Write structure and functions of hemicellulose.
3. What is rancidity?
4. Atherosclerosis.
5. What do Ramachandran angles determine?
6. What are the methods to cleave disulphide bonds present in a protein.
7. List the active forms of Vitamin A.
8. Which vitamin acts as the most powerful natural antioxidant?
9. Distinguish between hairpins and cruciforms.
10. Classify the Glucocorticoid hormones.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Name major sugar derivatives and their biological function.
12. Explain hetero oligosaccharides and homo oligosaccharides.
13. Write notes on Thromboxanes.
14. What is the relationship between primary structure and folded structure of a protein?
15. Summarize the structure and functions of vitamin Pantothenic acid.





16. Prove that nucleic acids are polyanions at physiological PH.
17. Explain the unctions of Epinephrine.
18. Elaborate the clinical manifestations of Diabetes Mellitus.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Describe how polysaccharides can be purified and characterised.
20. Discuss in detail about the classification and functions of lipids with suitable examples.
21. Give the classification, structure, properties and functions of aminoacids. How do they make up proteins.
22. Discuss the coenzyme role of TPP, NAD, FAD.

(2×5=10 weightage)

