



QP CODE: 23003102



23003102

Reg No :

Name :

M Sc DEGREE (CSS) EXAMINATION, APRIL 2023

First Semester

M Sc FOOD TECHNOLOGY AND QUALITY ASSURANCE

CORE - FQ010102 - BASIC BIOCHEMISTRY

2019 ADMISSION ONWARDS

37871DC2

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Draw the fischer and haworth projection of Laevulose
2. Distinguish between amylose and amylopectin
3. Write short note on lecithins
4. Give a brief account of emulsification of lipids in small intestine
5. Narrate the specificity and action of pancreatic proteases
6. What is Un-competitive inhibition? Give examples
7. What are nucleosides?
8. Why is an antisense strand of DNA being transcribed to working copies of mRNA?
9. What are thylakoids?
10. Discuss how calvin cycle is regulated?

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Describe the mechanism of digestion and absorption of carbohydrates
12. Describe the regulation of glycogen metabolism in our body





13. With the help of a neat diagram explain Cori's cycle
14. Give a detailed account on the classification of lipids
15. Discuss the physical and chemical properties of amino acids
16. List the salient features of transamination and also give an account of its mechanism
17. Describe the classification of enzymes
18. Describe the main characteristic features and organization of DNA with a neat diagram

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. With the help of structure explain in detail the reactions of glycolysis and its regulation
20. With the help of structure, explain in detail on the biosynthesis of fatty acids and its regulation
21. Enumerate the structural organization of proteins and describe the bonds involved in protein organization
22. With the help of diagram, explain the following
 - (1) C2 cycle
 - (2) C4 cycle
 - (3) CAM cycle

(2×5=10 weightage)

