



QP CODE: 25050767



25050767

Reg No :

Name :

MSc DEGREE (CSS) EXAMINATION DECEMBER 2025

First Semester

M.Sc Fishery Biology and Aquaculture

Core Courses - AQ030103 - BIOCHEMISTRY

2019 Admission Onwards

C81BE686

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. How hydrogen bonds are formed? Give an example.
2. Distinguish between fats and oils?
3. Give the structure of a nucleotide?
4. Define Induced fit hypothesis.
5. Write a note on key enzymes.
6. What is galactose Metabolism?
7. Fate of carbon Skeletons of Amino Acids.
8. Significance of Omega Oxidation.
9. Excretion of cholesterol.
10. Discuss preventive antioxidants and chain breaking antioxidants.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. Describe the physical and chemical characters of glucose.
12. Explain the secondary structure of protein.
13. What are prostaglandins ? Explain its synthesis?
14. Give a brief account of protein nucleic acid interaction.
15. What are the factors influencing enzyme activity?





16. Glycogenolysis and glycogenesis.
17. Important specialized products derived from Tyrosine.
18. Degradation of Purine Nucleotides.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Explain the chemical nature, structure and properties of biologically important disaccharides.
20. Describe the chemical structure of amino acids and explain how they are classified?
21. Described Gluconeogenesis.
22. Write an essay on general metabolism of amino acids with special reference to transamination, transdeamination and deamination.

(2×5=10 weightage)

