



QP CODE: 25050445



25050445

Reg No :

Name :

MSc DEGREE (CSS) EXAMINATION DECEMBER 2025

First Semester

M Sc FOOD TECHNOLOGY AND QUALITY ASSURANCE

Core Courses - FQ010104 - FOOD CHEMISTRY

2019 Admission Onwards

E067027F

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. Justify the statement that water is found to melt and boil at unusually high temperatures.
2. Draw the straight and ring structure of fructose.
3. Discuss on the significance of maillard reaction.
4. Explain the ion binding capacity of protein.
5. Explain the biuret test of proteins.
6. Explain the reason behind the formation of brown colour in shreaded apple.
7. Give the structure of lecithin with its importance.
8. Define reversion.
9. Give any two examples of synthetic antioxidants.
10. Explain about the bioavailability of Minerals.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. Explain in detail about basic constituents of food.
12. Explain the disaccharides sucrose maltose and lactose with structure.
13. Discuss on gelatinisation of starch.
14. Explain flavour binding of protein.
15. Explain about emulsifying property of protein along with the factors affecting it.





16. Discuss the viscoelastic dough formation of protein.
17. Explain R M P K values with its significance.
18. Explain the behavior of frying oil.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Explain in detail about the classification of carbohydrates with examples.
20. Explain the classification of protein according to the shape along with function and nutritional essentiality.
21. Explain physical properties of fats and oils.
22. Explain fat soluble vitamins and briefly discuss their sources and functions along with their structures.

(2×5=10 weightage)

