



QP CODE: 22001443



Reg No : .....

Name : .....

**M Sc DEGREE (CSS) EXAMINATION, JULY 2022**

**First Semester**

M Sc FOOD TECHNOLOGY AND QUALITY ASSURANCE

**CORE - FQ010104 - FOOD CHEMISTRY**

2019 ADMISSION ONWARDS

D9C85205

Time: 3 Hours

Weightage: 30

**Part A (Short Answer Questions)**

*Answer any **eight** questions.*

*Weight **1** each.*

1. Discuss the proximate composition of food.
2. Define anomers with an example.
3. Discuss on the significance of caramalisation reaction.
4. Distinguish between salting in and salting out effect of protein.
5. Distinguish on foamability and foam stability.
6. Justify the statement that the glucose oxidase enzyme is associated with catalase in food applications.
7. Name the principle fatty acid in olive oil with its structure.
8. Explain plasticity of fat.
9. Define reversion.
10. Illustrate the structure of Retinol.

(8×1=8 weightage)

**Part B (Short Essay/Problems)**

*Answer any **six** questions.*

*Weight **2** each.*

11. Explain how water activity is related to food stability.
12. Distinguish between starch and cellulose with its structure.
13. Discuss on osazone formation in carbohydrate with its importance.
14. Discuss on denaturation of protein and agents causing it.
15. Explain viscosity of protein.





16. Explain protein crosslinking.
17. Explain about antioxidants and their mechanism of action.
18. Explain hydrogenation of fat.

(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 structure of protein.
21. Explain any five chemical properties of fat along with its significance.
22. Define trace elements and briefly explain their sources along with their functions and deficiency diseases.

(2×5=10 weightage)

