



QP CODE: 23003104



23003104

Reg No :

Name :

M Sc DEGREE (CSS) EXAMINATION, APRIL 2023

First Semester

M Sc FOOD TECHNOLOGY AND QUALITY ASSURANCE

CORE - FQ010104 - FOOD CHEMISTRY

2019 ADMISSION ONWARDS

C56B1181

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Discuss the basic components of food
2. Draw the structure of isomaltose
3. Illustrate the reaction of fermentation of glucose
4. Discuss on peptide bond
5. Explain the hydrolysis reaction of proteins
6. Discuss the role of enzymes in clarification of juice
7. Name the fatty acids in coconut oil and nutmeg
8. Justify the statement that oleic acid and other saturated fatty acids are not affected by lipoxygenases
9. Define antioxidants with two examples
10. Explain the reason of deficiency of sodium occurs during hot weather or as a result of heavy work in hot climate

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Explain structure of water
12. Explain about the classification of monosaccharides with its structure





13. Discuss on gelation of starch and explain the theory of gel formation
14. Explain the solubility of protein
15. Explain the foaming properties of protein along with the factors affecting it
16. Discuss effect of moderate heat treatment on nutritional quality of protein
17. Explain the reaction along with significance and method of iodine value
18. Explain interesterification of fat

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Explain in detail about enzymatic and non enzymatic browning reactions and its method of control
20. Explain the functional properties of protein
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)

