



Register Number:

Date: 09-01-2021

**ST. JOSEPH'S COLLEGE (AUTONOMOUS), BENGALURU-27
M.Sc. FOOD SCIENCE AND TECHNOLOGY - I SEMESTER
SEMESTER EXAMINATION: NOVEMBER 2020
FST 1319 – FOOD CHEMISTRY**

Time- 2 1/2 hrs

Max Marks-70

This paper contains 02 printed pages and 04 parts

I. Answer any FIVE of the following

3×5=15

1. What is Williams-Landel-Ferry equation?
2. Write a note on food emulsions and foams.
3. What are oligosaccharides? Give examples and mention its application.
4. What acylglycerols? Give examples.
5. What is browning of food? Mention the types of browning reactions.
6. What are enzyme co-factors? Give examples.
7. Write a note on enzyme catalysis.

II. Answer any FIVE of the following

5×5=25

8. What are the effects of water activity on shelf life of foods?
9. Discuss the structural analysis of polysaccharides.
10. Discuss the properties of unsaponifiable constituents.
11. What are lipoproteins? Mention the types of lipoproteins.
12. Define peptides? Discuss the physical and sensorial properties of peptides.
13. What are enzymes? Explain the isolation and purification of enzymes.
14. Discuss the chemical and enzyme catalyzed reactions in foods.

III. Answer any **TWO** of the following

10x2=20

15. What are polysaccharides? Write a detailed note on enzymatic degradation of polysaccharides.
16. Explain the biosynthesis of fatty acids?
17. Write in detail the applications of enzymes in food industry.

IV. Answer the following

10x1=10

18. What are amino acids? Discuss in detail the classification, physical and chemical properties of amino acids.