**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU -27**

Registration Number:

Date & Session:

**MSc. FOOD SCIENCE & TECHNOLOGY – III SEMESTER**

**SEMESTER EXAMINATION: OCTOBER 2022**

**(Examination conducted in December 2022)**

**FST 3322 : FOOD ADDITIVES, CONTAMINATS AND TOXICOLOGY**

**Time: 2 ½ Hours Max Marks: 70**

**This paper contains 2 printed pages and FOUR parts**

 **I. Answer any Five of the following 5x3=15**

1. Mention the importance of firming agents in food processing with examples.

2. What are nonnutritive sweeteners? Give examples.

3. Define anti browning agents with examples.

 4. Define oil in water and water in oil emulsion. Give examples.

5. What are food allergens? Write the symptoms of food allergy.

6. Mention the name of diseases associated with synthetic preservatives and their symptoms.

7. Define Class II preservatives with examples.

**II Answer any Five of the following 5x5=25**

8. Mention the role of sequestering agents used in food industry.

9. Write a brief note on artificial flavoring agents used in food processing.

10. Explain various bulking agents used in food processing.

11. Discuss briefly about dioxin and its related compounds.

12. Write a brief note on animal drug residues found in food.

13. Write the steps of Acrylamide formation during food processing and comment on its toxicity.

14. Give notes on persistent organic pollutants.

**III Answer any Two of the following 10x2=20**

15. Discuss the various leavening and humectants used as flour improvers.

16. Write detailed notes on pesticide residues present in fruits and vegetables.

17. Discuss the various naturally occurring toxins found in Bacteria, Fungi and Seafood.

**IV Answer the following 10x1=10**

18. It is a type of substance which is fine oil/water or water/oil dispersion stabilized by an interfacial film of surfactant molecules having droplet size range of 0.02- 0.6 micrometres.

Identify the substance and explain the properties and preparation of the same.