**ST JOSEPH’S UNIVERSITY, BENGALURU -27**

Registration Number:

Date & session:

**M.Sc (MICROBIOLOGY) – 2nd SEMESTER**

**SEMESTER EXAMINATION: APRIL 2024**

**(Examination conducted in May / June 2024)**

**MB 8421 – FOOD MICROBIOLOGY**

**(For current batch students only)**

**Time: 2 Hours Max Marks: 50**

**This question paper contains 1 printed page and 4 parts**

 **I. Answer any Five of the following 5X3=15**

1. Comment on the influence of R-H potential on microbial growth in food.

2. Define food adulterants. List the adulterants used in milk.

3. Relate the role of microbes in yoghurt production.

4. List the applications of SCP.

5. Differentiate Probiotics, prebiotics and nutraceuticals.

6. Tabulate the different types of pasteurization techniques used in food preservation*.*

7. Write a flow chart of *Salmonella* pathogenesis.

1. **Answer any Two of the following 2X5=10**

8. Name the toxin produced by Aspergillus flavus and discuss its mode of action.

9. Describe the impact of Low temperature in food preservation.

10. Write a short note on the effect of food on normal gut flora.

**III. Answer any Two of the following 2X10=20**

11. Explain the role of biosensors in pathogen detection.

12. a. Write a short note on how to determine the efficiency of milk pasteurization. **(5 marks)**

 b. Illustrate MPN test and mention its significance. **(5 marks)**

13. Describe canned food spoilage.

1. **Answer the following 1X5=5**

14. You are working as a quality control officer in a food industry and your role is to maintain the quality of the entire production unit. Name a suitable technique that could be followed and construct a flow chart to implement the quality control technique in all the possible stages of your industry.