Registration Number:

Date & session:10-12-2022 ( 1pm )

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

**M.Sc. (FOOD SCIENCE AND TECHNOLOGY) – I SEMESTER**

**SEMESTER EXAMINATION: OCTOBER 2022**

**(Examination conducted in December 2022)**

**FST1422 – TECHNOLOGY OF MILK AND MILK PRODUCTS**

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

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

1. **Answer any FOUR of the following 3×4=12**
2. Give legal standards for Toned and Double Toned Milk.
3. Write a note on Quality Assessment of Milk.
4. Highlight the concept of A2 Cow Ghee.
5. What are the methods of preservation of Milk?
6. Write notes on the method of Preparation of Yoghurt.
7. What is HTST? Give its Advantages and Disadvantages.

**II. Answer any TWO of the following 5×2=10**

1. Discuss various types of packaging materials used for Milk and Milk Based Products.
2. What are Synbiotics? Mention the types of Microorganisms associated with Milk.
3. Describe the methods of Preparation of Cheese.

**III. Answer any TWO of the following 10×2=20**

1. Give a detailed description of Physical and Chemical Properties of Milk
2. .Discuss in Detail the Process of Bactofugation and Antimicrobial Systems in Milk.
3. Explain in detail the Advances in Milk Processing with respect to Transportation and Storage of Milk.

**IV. Answer the following 8×1=8**

1. A type of Packaging concept patented by J. Nielson in 1913 enables delicious and nutritious UHT milk to reach more consumers, using less energy and without depending on cold-chain. The system is still used today as the most widely used packaging technique.

Name the technique; write the basic operations, characteristics, advantages and disadvantages of the same.