



Register Number:

Date: XX/10/2019

ST. JOSEPH'S COLLEGE (AUTONOMOUS), BENGALURU-27
M.Sc. FOOD SCIENCE AND TECHNOLOGY - I SEMESTER
SEMESTER EXAMINATION - OCTOBER 2019
FST 1419 – TECHNOLOGY OF MILK AND MILK PRODUCTS

Time- 2 1/2 hrs

Max Marks-70

This paper contains 2 printed pages and 4 parts

I. Answer any Five of the following

5x3=15

1. Briefly write on the effect of heat on the following components of milk
 - a. Fats
 - b. Proteins
 - c. Lactose
2. What are the factors affecting the composition of milk and what is the freezing point of milk?
3. What is pasteurization? Mention its types with temperature and duration?
4. Define bactofugation. How is it different from pasteurisation?
5. What is lipolysis? Write the factors that enhance lipolysis.
6. Write a short note on proteins present in milk.
7. Write notes on the different methods of eliminating spore forming bacteria during cheese making.

II. Answer any Five of the following

5x5=25

8. Write notes on the enzymes present in milk.
9. Write notes on the following types of milk
 - a. Toned milk
 - b. Reconstituted milk
 - c. Condensed milk
 - d. Homogenized milk
 - e. Recombined milk
10. What is homogenization? Give its benefits.
11. What is the principle and purpose of separation of milk?
12. Write note on aseptic packaging of milk
13. Mention the purpose of the various packaging mode of milk and list the advantages and limitations of each
14. Classify milk on the basis of its use. What is the difference between A1 and A2 milk? Which of them is good for health? Support your choice with an example.

III. Answer any Two of the following

2x10=20

15. Discuss the use of membrane technology and its applications in milk giving processing with its advantages and limitations
16. Briefly describe each step involved in milk processing, from production to packaging.
17. Describe the processing cheddar cheese and the importance of each step in the process.

IV. Answer the following

1x10=10

18. If you are assigned with a responsibility of dairy plant manager. What will be your approach after processing and packaging of 10,000 litres of milk?