

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech. (Food Technology) (Sem.-6)**  
**TECHNOLOGY OF MILK AND MILK PRODUCTS**

Subject Code : BTFT-321-19

M.Code : 91967

Date of Examination : 07-07-22

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

**SECTION-A**

**1. Write briefly :**

- a) Enlist the factors affecting acidity of fresh milk.
- b) What do you understand by the term 'Vacreation'?
- c) Explain the term 'Irradiated milk'?
- d) State the difference between kumiss and kefir.
- e) Mention the protein and fat content of cow milk and buffalo milk.
- f) Explain the role of rennet in cheese making.
- g) Enlist the rapid platform tests of raw milk.
- h) What do you understand by standardization of milk?
- i) State the difference between evaporated and concentrated milk.
- j) What is an ice cream overrun?

## SECTION-B

2. Write short note on the major chemical constituents present in milk.
3. What is the basis of selection of ingredients for the manufacture of ice cream? Draw the flowchart of ice cream manufacturing process.
4. Write short notes on the following with reference to cheese manufacturing :
  - a) Changes during curing of cheese
  - b) Defects in cheese.
5. What are the steps taken for Clean-In-Place (CIP) operation in a dairy industry?
6. In context with milk drying system, explain the principle of the following:
  - a) Drum drying system
  - b) Spray drying system.

## SECTION-C

7. Explain in brief the chemical properties of milk. How is HTST advantageous over LTLT method of pasteurization?
8. Discuss the manufacturing process of processed cheese and butter alongwith the neatly labelled flowchart.
9.
  - a) What do you understand by milk fortification? State its health benefits.
  - b) Discuss briefly about the utilization of whey.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**