

Enrollment No./Seat No.:

GUJARAT TECHNOLOGICAL UNIVERSITY
Bachelor of Engineering - SEMESTER - VI EXAMINATION - SUMMER 2025

Subject Code: 3165103

Date: 28-05-2025

Subject Name: Dairy Technology

Time: 10:30 AM TO 01:00 PM

Total Marks: 70

Instructions

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

	Marks
Q.1 (a) Define milk and Dairy Technology? explain its importance in the food industry.	03
(b) Describe the composition of milk and the role of different components in processing.	04
(c) Explain the different types of milk processing methods with suitable examples.	07
Q.2 (a) Define homogenization and explain its importance in milk processing.	03
(b) What is pasteurization? Explain the different types of pasteurization methods used in the dairy industry.	04
(c) Discuss the differences between condensed milk, dried milk, and malted milk food in terms of composition and processing.	07
OR	
(c) Discuss the detailed steps involved in the manufacturing of Cheddar Cheese.	07
Q.3 (a) Define the term "Cheese" and explain its basic composition.	03
(b) Describe the process of dried milk production with a flow diagram.	04
(c) Explain the composition and processing of malted milk food.	07
OR	
(a) Define the term "Value-Added Milk Products" with suitable examples.	03
(b) Describe the flow diagram of condensed milk production with key processing steps.	04
(c) Explain the importance of drying in dairy technology and describe the composition of dried milk.	07
Q.4 (a) Define reconstituted milk and recombined milk.	03
(b) Describe the method of cream separation.	04
(c) Explain in detail the physio-chemical properties and flavor defects in milk.	07
OR	
(a) What is overrun in butter? Explain it.	03
(b) Discuss the factors affecting ice cream quality.	04
(c) Compare standardized, toned, and homogenized milk	07

- Q.5 (a)** State the role of any three ingredients in ice cream **03**
- (b)** Write short notes on Cheddar and Processed Cheese. **04**
- (c)** Describe butter manufacturing process with types and fat losses. **07**

OR

- (a)** Give the name of different types of cheese. **03**
- (b)** Draw a simple flow diagram of condensed milk production. **04**
- (c)** Explain the composition and production process of ice cream with overrun calculation. **07**
