

Enrollment No./Seat No.:

GUJARAT TECHNOLOGICAL UNIVERSITY
Bachelor of Vocation - SEMESTER - II EXAMINATION - WINTER 2025

Subject Code: BV02009041

Date: 05-12-2025

Subject Name: Dairy Technology

Time: 02:30 PM to 04:30 PM

Total Marks: 50

Instructions

- 1. Attempt all questions.**
- 2. Make Suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**
- 4. Use of simple calculators and non-programmable scientific calculators are permitted.**

	Marks
Q.1 (a) Define milk. Explain the composition and physicochemical properties of milk.	05
(b) Discuss the grading of milk and factors affecting the composition of milk.	05
Q.2 (a) Explain the flowchart of market milk processing.	05
(b) Describe pasteurization methods: LTLT, HTST and UHT.	05
OR	
(b) Explain cream separation and the working of a centrifugal cream separator. Discuss filtration, clarification and standardization	05
Q.3 (a) Write short notes on skim milk, toned milk and double toned milk.	05
(b) Explain the method of preparation of condensed milk and evaporated milk.	05
OR	
(a) Describe flavoured milk and reconstituted milk with examples.	05
(b) Discuss the process of producing standardized and recombined milk.	05
Q.4 (a) Explain the process of butter and cheese manufacturing.	05
(b) Describe the manufacturing of paneer and khoa.	05
OR	
(a) Write short notes on Channa, Shrikhand and Ghee.	05
(b) Explain spray drying of milk powder and instantization.	05
Q.5 (a) Explain Cleaning-in-Place (CIP) system and cleaning solutions used in dairy.	05
(b) Describe sterilization-in-place (SIP) system and personal hygiene in dairy plants.	05
OR	
(a) Discuss methods of cleaning used in dairy industry.	05
(b) Explain the steps in CIP cleaning procedure and cleaning efficiency.	05
