Seat No.:	Enrolment No.
-----------	---------------

Subject Code: 161405

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI • EXAMINATION - SUMMER • 2014

Date: 26-05-2014

Subject Name: Milk and Milk Products Technology Time: 10:30 am - 01:00 pm **Total Marks: 70 Instructions:** 1. Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. **Q.1** Describe the following steps in the preparation of butter: 07 i) Pasteurization of cream ii) Churning iii) Washing of butter **(b)** Explain the common quality control tests for milk with their significance. **07 Q.2** Discuss in detail Operation flood with its major achievements. 07 (a) Write short notes on: **(b)** 07 i) Flavours as ice-cream ingredient ii) Toned milk OR **(b)** Write short notes on: 07 i) Sterilized milk ii) Paneer Write detailed composition of milk. Explain the factors affecting the Q.3 07 (a) composition of milk. How processed cheese is different from processed cheese spread? Explain the **(b)** 07 method of manufacture of processed cheese. Explain the various physico-chemical properties of milk. 07 **Q.3** (a) Give the classification of the cheese based on the moisture content and explain 07 **(b)** the flow diagram for manufacturing of cheddar cheese with technical details. Define malted milk food. State the PFA standards and process of preparation of **Q.4** (a) 07 malted milk food. Describe briefly the various milk drying systems. 07 **(b) Q.4** Write advantages and disadvantages of spray drying over roller drying. Explain 07 (a) line diagram for production of spray dried milk powder. Define Khoa according to PFA rules. Discuss the classification and process of **(b) 07** preparation of khoa. Discuss the common defects in butter with their causes and prevention. **Q.5** (a) 07 Describe the role of constituents in ice-cream. 07 **(b)** Q.5 (a) Define Ice-cream. Write the PFA standards, classification and nutritive value of 07 ice-cream. Write short notes on: 07 **(b)** i) Recombined milk ii) Cream separation methods
