Seat No.:	Enrolment No.
Seat No.:	Enrollient No

Subject Code:161405

GUJARAT TECHNOLOGICAL UNIVERSITY

Date: 10/12/2015

BE - SEMESTER - VI EXAMINATION - WINTER 2015

Subject Name: Milk and Milk Products Technology Total Marks: 70 Time:2:30pm to 5:00pm **Instructions:** 1. Attempt all questions. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. 0.1 (a) Write the significance of: **07** i) Density and Specific gravity of milk ii) Colostrum milk **(b)** What is Toned Milk? State the advantages and process of preparation of 'Toned 07 Milk'. Define Butter and describe briefly the different kinds of butter available in the 07 0.2 (a) (b) State the PFA standards for Ice-cream and briefly discuss the classification of 07 frozen desserts. OR (b) Why stabilizers and emulsifiers are added in ice-cream? Discuss the commonly 07 used stabilizers with their important characteristics. 0.3 Enlist the different types of fermented milk and milk products and explain the 07 method of manufacture of shrikhand. (b) Give the flow diagram for the preparation of butter and explain the 07 'Neutralization' step in detail. OR 0.3 Write short notes on: 07 (a) i) Types of khoa ii) Coagulated milk products (b) Discuss the various pre-treatments given to milk intended for skim milk powder 07 manufacture with their importance. (a) Describe cheese with respect to: 0.4 07 i) Classification criterion ii) Composition and nutritive value (b) Discuss the role of various constituents present in ice-cream. 07 OR Define Cheddar cheese and write the flow diagram of its preparation with all **Q.4** (a) 07 technical details. Describe the process of chocolate flavour extraction from cocoa beans. 07 **Q.5** Describe briefly the various milk drying systems. 07 (a) Enlist the factors affecting quality and quantity of milk and explain any four of **(b)** 07 them. OR Write short notes on: 07 Q.5 (a) i) Types of condensed milk ii) Advantages of spray drying of milk (b) Give the flow diagram with technical details for the preparation of 07 i) Sterilized milk ii) Recombined milk
