

GUJARAT TECHNOLOGICAL UNIVERSITY
BE SEMESTER-VI • EXAMINATION – SUMMER 2015

Subject Code: 161405**Date: 12/05/2015****Subject Name: Milk and Milk Products Technology****Time: 10.30am-01.00pm****Total Marks: 70****Instructions:**

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

- Q.1** (a) Discuss the following steps in the preparation of cheddar cheese: **07**
i) Addition of starter culture ii) Renneting
- (b) Define Special milk and Write the advantages of preparation of: **07**
i) Homogenized milk ii) Flavoured milk iii) Recombined Milk
- Q.2** (a) What do you mean by 'Platform Tests'? Explain briefly the important platform tests useful for quality evaluation of milk. **07**
- (b) Write down the characteristics of the 'Major Constituents' present in milk. **07**
- OR**
- (b) Write short notes on: **07**
i) Role of NDDB in dairy development in India
ii) Milk- A complete food
- Q.3** (a) Describe the important characteristics of 'Spray drying' as a milk drying system. **07**
- (b) What is chhana? Discuss the method of preparation of chhana and any one chhana based sweet. **07**
- OR**
- Q.3** (a) Define Condensed milk and briefly explain the process of its production. **07**
- (b) Define khoa according to PFA rules. Discuss the physico-chemical changes occur in milk on conversion into khoa. **07**
- Q.4** (a) Explain the following steps in butter preparation: **07**
i) Ripening of cream
ii) Churning of cream during preparation of butter
- (b) Explain the 'freezing' step in ice-cream with respect to its: **07**
i) Importance ii) Types of freezers
- OR**
- Q.4** (a) Which are the common defects occur in butter? State their possible causes and prevention. **07**
- (b) Discuss the importance of dairy ingredients/products used in the preparation of ice-cream. **07**
- Q.5** (a) What is processed cheese and how it is prepared? **07**
- (b) Write down the PFA specifications for: **07**
i) Whole milk powder ii) Skim milk powder iii) Ice-cream iv) Toned milk
- OR**
- Q.5** (a) Explain the maturing/curing step in detail in the preparation of cheddar cheese. **07**
- (b) Write short notes on: **07**
i) Overrun in butter
ii) Abnormal milk
