

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VII(NEW) • EXAMINATION – WINTER 2016

Subject Code:2171408**Date:23/11/2016****Subject Name:Market Milk and Processing****Time:10.30 AM to 1.00 PM****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) State the legal requirements for ice cream and explain briefly the flow diagram for ice cream preparation. **07**
(b) Discuss the characteristics of major nutrients present in milk. **07**
- Q.2** (a) What do you mean by special milk? Describe the flow diagram for preparation of recombined and sterilized milk. **07**
(b) Describe briefly the process of butter preparation. **07**
- OR**
- (b) State the different types of cream and describe the methods of separation of cream with their principle. **07**
- Q.3** (a) Discuss the factors affecting the composition and yield of milk. **07**
(b) State the legal specifications for cheddar cheese and describe the two steps i.e. 'addition of rennet' and 'cheddaring' in preparation of cheddar cheese. **07**
- OR**
- Q.3** (a) What is Operation flood? Describe the phases of operation flood. **07**
(b) Write the advantages of processed cheese preparation and explain the process of manufacture of processed cheese. **07**
- Q.4** (a) Write short notes on : **07**
 i) Milk composition
 ii) Standardized milk
(b) Classify the traditional Indian milk products and describe the method of preparation of any two products. **07**
- OR**
- Q.4** (a) Write short notes on : **07**
 i) Abnormal milk
 ii) Fermented milk
(b) State the different types of khoa and discuss the various physicochemical changes occurred in milk on conversation into khoa. **07**
- Q.5** (a) Enlist the important ingredients in ice cream preparation and state the role of any three ingredients. **07**
(b) What are sweetened and unsweetened condensed milk? Explain the general flow diagram for preparation of condensed milk. **07**
- OR**
- Q.5** (a) Write advantages and disadvantages of spray drying over roller drying. Explain line diagram for production of spray dried milk powder. **07**
(b) Discuss the common defects observed in ice cream with their causes. **07**
