Seat No.:	Enrolment No
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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII (NEW) - EXAMINATION - SUMMER 2017

	•	Code: 2171403 Date: 04/05/201	17
Tir	•	Name: Milk & Milk Products Technology 2.30 PM to 05.00 PM Total Marks: '	70
	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a)	Mention the legal specifications for butter and highlight the importance of following steps in butter preparation: i) Neutralization of cream ii) Churning of cream iii) Ripening of cream	07
	(b)	What is market milk? Discuss the nutritional significance of milk and milk products in human diet.	07
Q.2	(a)	State the advantages and process of preparation of Sterilized Milk and Toned Milk.	07
	(b)	Explain the process of extraction of: i) Vanilla flavor ii) Chocolate flavor	07
		OR	
	(b)	Describe the importance of stabilizers and emulsifiers in ice cream preparation with examples.	07
Q.3	(a) (b) (c)	What is Cheddar cheese? Briefly explain the process of its preparation. State the common defects occur in butter with their possible causes. Write the importance of determination of freezing point of milk. OR	07 04 03
Q.3	(a)	Explain the following steps in cheese preparation: i) Renneting ii) Cheddaring iii) Curing	07
	(b) (c)	What do you mean by abnormal milk? State their characteristics. What is overrun in butter? Write its importance.	04 03
Q.4	(a)	Briefly explain the important stages of Dairy Development in India.	07
	(b)	What are the different types of khoa? Briefly discuss the physico-chemical changes occur in milk on conversion into khoa. OR	07
Q.4	(a)	Explain shortly the factors affecting composition and yield of milk.	07
V. -	(b)	Classify the Traditional Indian Milk Products and write their significance in Indian market and economy.	07
Q.5	(a) (b) (c)	Define Condensed milk and briefly explain the process of its production. Write a note on 'Freezing of Ice cream Mix' What is the nutritional significance of cheese?	07 04 03
Q.5	(a)	OR Describe briefly the various milk drying systems.	07
~.	(b)	Comments on 'Common defects in Ice -cream'	04
	(c)	Briefly explain the centrifugal method of cream separation.	03
