## **GUJARAT TECHNOLOGICAL UNIVERSITY**

BE - SEMESTER-III • EXAMINATION - WINTER 2013

Subject Code: 131401  Subject Name: Food Chemistry  Time: 02.30 pm - 05.00 pm  Total Marks  Instructions:			2-2013	
			: 70	
	1. 2.	Attempt all questions.  Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.		
Q.1	(a) (b)	State the role of following food additives.  a. Leavening agent b. Anticaking agent  Define proteins and describe chemical properties of proteins.	07 07	
Q.2	(a) (b)		07 07	
	<b>(b)</b>		07	
Q.3	(a)	State the deficiency diseases caused by any two of the following minerals and suggest the remedies to overcome these diseases.  a. Iron b. Iodine c. Zinc	07	
	<b>(b)</b>		07	
Q.3	(a) (b)	What is dextrin? Explain the role of maltodextrin in food processing. Explain the relationship existed between water activity and shelf life of food with appropriate examples.	07 07	
Q.4	(a) (b)	Write in detail about simple lipids.  Describe protein denaturation with it's effects and factors affecting on it.  OR	07 07	
Q.4	(a) (b)	What are various chemical properties of food lipids? Explain the classification of food proteins.	07 07	
Q.5	(a)	Explain the various scientific measures taken to control the water activity of food.	07	
	<b>(b)</b>	Write detailed note on levels of protein structure.  OR	07	
Q.5	(a)		07	
	<b>(b)</b>	Describe the process of edible oil refining.	07	

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