Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER- III (NEW) EXAMINATION - SUMMER 2015

Subject Code: 2131406 Date: 09/06/2015

Subject Name: Food Chemistry

Time: 02.30pm-05.00pm 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)	What is dextrin? Explain the role of maltodextrin in food processing.	07
	(b)	Discuss the rancidity causes and its consequences.	07
Q.2	(a)	Enlist the disaccharides and explain the properties of any one in detail.	07
	(b)	Explain the physical properties of lipids.	07
		OR	
	(b)	Enlist the plant originated pigments and explain the pigments present in green leafy vegetables.	07
Q.3	(a)	Give the classification of proteins with suitable examples.	07
	(b)	Explain the importance of water activity in preservation of foods.	07
		OR	
Q.3	(a)	Enlist various methods of moisture estimation and explain any one in detail.	07
	(b)	Describe the process of edible oil refining.	07
Q.4	(a)	Explain the nutritional importance of carotenoid pigments.	07
	(b)	Explain the role of invert sugar in various foods.	07
		OR	
Q.4	(a)	Define food additives and explain the significance of class – I preservatives.	07
	(b)	Explain the role of firming agents in canned foods.	07
Q.5	(a)	Briefly describe the flour bleaching and maturation process.	07
	(b)	Briefly describe the saturated and unsaturated fatty acids with suitable examples.	07
		OR	
Q.5	(a)	Explain gel formation theories in protein.	
	(b)	Explain the scientific measures to control water activity of foods.	07
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