Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. – SEMESTER – VIII • EXAMINATION – WINTER • 2016

Subject Code: 2280009 **Date: 02-12-2016**
Subject Name: Food Analysis
Time: 02:30 pm - 05:30 pm **Total Marks: 80**

Instructions:

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

Q.1	**(a)**	Write a note on adulteration of hydrogenated fat in Ghee.	**06**
	(b)	Explain the various methods for estimation of Nitrogen in food products.	**05**
	(c)	Describe the role of food analysis in prevention of adulteration.	**05**
Q.2	**(a)**	Write down the principle of Iodometric titration.	**06**
	(b)	Write down the method of determination of protein content by Biuret method.	**05**
	(c)	Write a note on food standards.	**05**
Q.3	**(a)**	Describe the methods to estimate trace elements in food products.	**06**
	(b)	Write down the method to determine rancidity in oil.	**05**
	(c)	Write down the laboratory test to detect adulteration of starch in milk.	**05**
Q.4	**(a)**	Write down the laboratory test to determine brick powder in chili powder.	**06**
	(b)	Write short note on stability of food products.	**05**
	(c)	Explain Beer- Lambert law. How the spectroscopic techniques are useful in food analysis.	**05**
Q.5	**(a)**	What is genetically modified food? Write short note on how genetically modified food is analyzed?	**06**
	(b)	Describe the various methods for analyzing various carbohydrates in food products.	**05**
	(c)	Write a note on effects and control of pesticides in food products.	**05**
Q. 6	**(a)**	Define chromatography. Explain HPTLC. How it is useful in food analysis?	**06**
	(b)	What are the responsibilities of authorities of food safety and standards?	**05**
	(c)	Describe the application of centrifuge technique in food analysis.	**05**
Q.7	**(a)**	Write in brief about gel electrophoresis and its importance in food analysis.	**06**
	(b)	Discuss the SFC method for analysis of food and additives.	**05**
	(c)	Explain the method of determination of alkalinity of soluble ash in coffee.	**05**

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