Seat No.: Enrolment No.
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## **GUJARAT TECHNOLOGICAL UNIVERSITY**

B. Pharm. - SEMESTER-8 • EXAMINATION - SUMMER -2018

Subject Code: 2280009	Date: 09/05/2018
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Subject Name: Food Analysis Time: 10:30 AM TO 01:30 PM

**Total Marks: 80** 

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1.	Attemnt	any five	questions.
1.	Aucumpt	any my	questions.

- Make suitable assumptions wherever necessary.
   Figures to the right indicate full marks.

Q.1	(a) (b) (c)	Write short note on Gel electrophoresis. Give its applications. Write Short note on analysis of pesticides in food. Write Short note on ultra centrifugation technique. Give its applications.		
Q.2	(a)	Define spectroscopy. Explain Beer-Lambert law. Give applications of UV spectroscopy in food analysis.		
	(b) (c)	How the Mass spectroscopy & NMR spectroscopy are useful in food analysis? Write a note on standards for food additives	05 05	
Q.3	(a)	Explain the techniques used to determine starch products and preservatives in food products.	06	
	(b) (c)	Describe the various methods for analyzing various proteins in food products Write short note on stability study of food products.	05 05	
Q.4	(a) (b)	Define chromatography. Explain HPLC. How it is useful in food analysis? What is genetically modified food? Write short note on how genetically modified food is analysed?	06 05	
	<b>(c)</b>	Write short note on flash chromatography.	05	
Q.5	(a) (b)	Explain responsibilities of food business operator.  Define the following as per food safety and standard act:  1. Food 4. Food additive  2. Extraneous matter 5. Misbranded food  3. Adulterant 6. Ingredients  Write short note on Scientific committee. Explain procedure for Scientific Committee and Scientific Panel.	06 05 05	
Q. 6	(a) (b)	Write short note on Duties and functions of Food Authority.  Write short note on detection of toxic trace metals & insect infestation in food sample.  0		
	(c)	Define moisture content. Enlist different techniques used for determination of moisture content. Explain evaporation technique in detail.	05	
Q.7	(a) (b)	Define ash content. Explain how the ash content is determined in food sample.  Enlist general chemical and instrumental methods food analysis. Explain any one method in detail with its application.		
	(c)	Write short note on food contaminants	05	

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