

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.PHARM - SEMESTER- VIII- EXAMINATION – SUMMER-2016**

**Subject Code: 2280009**

**Date:10/05/2016**

**Subject Name: Food Analysis**

**Time: 10:30 AM to 1:30 PM**

**Total Marks: 80**

**Instructions:**

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

<b>Q.1</b>	(a)	Define spectroscopy. Explain beer- lambert law. How the spectroscopic techniques are useful in food analysis.	<b>06</b>
	(b)	Write short note on capillary electrophoresis. Give its applications.	<b>05</b>
	(c)	Write Short note on ultra centrifugation technique. Give its applications.	<b>05</b>
<b>Q.2</b>	(a)	Define moisture content. Enlist different techniques used for determination of moisture content. Explain evaporation technique in detail.	<b>06</b>
	(b)	Define ash content. Explain how the ash content is determined in food sample.	<b>05</b>
	(c)	What is lipid? Write short note on determination of total lipid concentrate.	<b>05</b>
<b>Q.3</b>	(a)	What is genetically modified food? Write short note on how genetically modified food is analysed?	<b>06</b>
	(b)	Enlist the techniques of microscopic food analysis. Explain enzymatic technique in detail with its application.	<b>05</b>
	(c)	Write Short note on analysis of pesticides in food.	<b>05</b>
<b>Q.4</b>	(a)	Define chromatography. Explain GLC. How it is useful in food analysis?	<b>06</b>
	(b)	Write short note on SFC.	<b>05</b>
	(c)	Write short note on Flash chromatography.	<b>05</b>
<b>Q.5</b>	(a)	Define the following as per food safety and standard act: 1. Food 2. Infant food 3. Adulterant 4. Food package 5. Food safety audit 6. Ingredients	<b>06</b>
	(b)	Write short note on unsafe food according to food safety and standards act.	<b>05</b>
	(c)	Give the composition of food safety and standards authority. Explain the duties and responsibilities of it.	<b>05</b>
<b>Q. 6</b>	(a)	Write short note on central advisory committee. Explain its functions.	<b>06</b>
	(b)	Write short note on food contaminants.	<b>05</b>
	(c)	Explain responsibilities of food business operator.	<b>05</b>
<b>Q.7</b>	(a)	Explain the techniques used to determine sugar and preservatives in food products.	<b>06</b>
	(b)	Write short note on detection of microbial contaminants in food sample.	<b>05</b>
	(c)	Write short note on stability of food products.	<b>05</b>

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