

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. - SEMESTER-8 • EXAMINATION – SUMMER -2018

Subject Code: 2280009**Date: 09/05/2018****Subject Name: Food Analysis****Time: 10:30 AM TO 01:30 PM****Total Marks: 80****Instructions:**

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

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