

Seat No.: _____

Enrolment No. _____

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.

- 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 4. Food additive
2. Extraneous matter 5. Misbranded food
3. Adulterant 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**
