

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM – SEMESTER – 8- EXAMINATION –WINTER - 2018

Subject Code:2280009**Date: 28/11/2018****Subject Name: Food Analysis****Time:02:30 PM TO 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) Enlist different techniques used for determination of moisture content. Explain karl fischer method. **06**
- (b) Enlist the various methods for estimation of protein in food products. Explain Biuret method. **05**
- (c) Describe the various methods for analyzing various carbohydrates in food products. **05**
- Q.2** (a) Write in brief about gel electrophoresis and its importance in food analysis. **06**
- (b) Write short note on ultra centrifugation. Give its applications. **05**
- (c) Write a note on thermal analysis of food. **05**
- Q.3** (a) What is spectroscopy? Explain Beer-Lambert law. Give applications of UV spectroscopy in food analysis. **06**
- (b) What is ash ? Explain various method for determination of ash content in food sample. **05**
- (c) What is lipid? Write short note on determination of total lipid concentrate. **05**
- Q.4** (a) Enlist general chemical and instrumental methods food analysis. Explain any one method in detail with its application. **06**
- (b) What is food? Explain duties and functions of food authority. **05**
- (c) Explain responsibilities of food business operator. **05**
- Q.5** (a) What is food contaminants? How many types of food contaminants? Write short note on any one contaminants in food sample. **06**
- (b) What is Adulterant? Write short note on food adulterants. **05**
- (c) Write short note on stability of food products. **05**
- Q. 6** (a) How HPLC method is useful in food analysis? Explain HPLC principle. **06**
- (b) Write short note on SFC. **05**
- (c) Explain GLC and GSC. How it is useful in food analysis? **05**
- Q.7** (a) Write a short note on Genetically modified food. **06**
- (b) Explain various test for identification of adulteration in Ghee **05**
- (c) Write a note on effects and control of pesticides in food products. **05**
