

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm - SEMESTER– VIII • EXAMINATION – SUMMER 2017

Subject Code: 2280009
Subject Name: Food Analysis
Time: 10:30 AM to 01:30 PM

Date: 09/05/2017
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) Differentiate between the following: **06**
1. Ultra centrifugation and density gradient centrifugation.
2. Gel electrophoresis and paper electrophoresis.
(b) Write short note on zonal centrifugation. Give its applications. **05**
(c) What is isoelectric focusing? Explain in detail with its applications. **05**
- Q.2** (a) What is protein? Explain determination of overall protein concentrate. **06**
(b) Write short note on quantitative analysis of reducing sugar. **05**
(c) Explain X-ray diffraction in food analysis. **05**
- Q.3** (a) Define vitamin. Explain determination of vitamin by HPLC. **06**
(b) Write a note on thermal analysis of food. **05**
(c) Write a note on Genetically modified food. **05**
- Q.4** (a) Define chromatography. Give its applications in food analysis. **06**
(b) Write short note on food additives. **05**
(c) Give applications of immunoassays. **05**
- Q.5** (a) Explain packaging requirements for the followings according to food safety and standards requirements: **06**
1. Milk and milk products
2. Fruits and vegetable products.
(b) Write a note on miss branded food according to food safety act. **05**
(c) Give the composition of food safety and standards authority. Explain the duties and responsibilities of it. **05**
- Q.6** (a) Explain duties and functions of food authority. **06**
(b) Give functions of chief executive officer. **05**
(c) How microbial contaminants can be tested in food sample? **05**
- Q.7** (a) Explain powers given to the food safety officer according to food safety act. **06**
(b) Write short note on food adulterants. When food is declared adulterated? **05**
(c) Explain responsibilities of food business operator. **05**
