

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 8 EXAMINATION – SUMMER -2019

Subject Code: 2280009**Date: 18-05-2019****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) Explain ultra-centrifugation techniques and their applications. | 06 |
| | (b) Describe the SFC method for analysis of food and additives. | 05 |
| | (c) Write note on application of Electrophoresis. | 05 |
| Q.2 | (a) Define spectroscopy. Explain beer- lambert law. How the spectroscopic techniques are useful in food analysis. | 06 |
| | (b) Explain UV–VIS spectroscopy. | 05 |
| | (c) Write note on mass spectroscopy. | 05 |
| Q.3 | (a) Define chromatography. Explain HPLC. How it is useful in food analysis? | 06 |
| | (b) Discuss Analysis of vitamins & pigments. | 05 |
| | (c) Write note on immunoassays. | 05 |
| Q.4 | (a) What is Electrophoresis? Explain gel electrophoresis. | 06 |
| | (b) Explain the Food safety act. | 05 |
| | (c) Write general chemical and instrumental methods for food analysis. | 05 |
| Q.5 | (a) Explain SFC and Flash chromatography. | 06 |
| | (b) Discuss contaminants in food material and food additives. | 05 |
| | (c) Write Standards for food additives. | 05 |
| Q. 6 | (a) Explain Analysis of sugar, preservatives & starch products. | 06 |
| | (b) Describe microbial contamination in food products. | 05 |
| | (c) Write a note on effects and control of pesticides in food products. | 05 |
| Q.7 | (a) Explain Analysis of herbs, spices & cereals. | 06 |
| | (b) Discuss Stability studies of food products. | 05 |
| | (c) Describe the application of centrifuge technique in food analysis. | 05 |
