

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.**

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|-------------|------------|--|-----------|
| 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 |
