

GUJARAT TECHNOLOGICAL UNIVERSITY
M.PHARM – SEMESTER -1 - EXAMINATION –WINTER - 2018

Subject Code: MPA104T**Date: 07/01/2019****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 different methods of analysis of food carbohydrates. | 06 |
| | (b) | Discuss different methods used for the measurement of spoilage of fats and fatty foods. | 05 |
| | (c) | Discuss general methods of analysis for milk and milk products. | 05 |
| Q.2 | (a) | Define vitamins. Give detailed classification of vitamins. | 06 |
| | (b) | Discuss application of food carbohydrates. | 05 |
| | (c) | Discuss in detail permitted and non-permitted synthetic dyes used in food industries. | 05 |
| Q.3 | (a) | Define pesticides. Explain effect of pest and insects on various foods. | 06 |
| | (b) | Explain methods of analysis of vitamins. | 05 |
| | (c) | Explain in detail metabolism of dietary fiber and crude fiber. | 05 |
| Q.4 | (a) | How to determine pesticide residue in fruits and vegetables? | 06 |
| | (b) | Discuss principles of microbial assay of vitamin B6 and vitamin B12. | 05 |
| | (c) | Explain chemistry and physicochemical properties of proteins. | 05 |
| Q.5 | (a) | Explain pesticide analysis on organophosphorus and organochlorine. | 06 |
| | (b) | Discuss methods of analysis of proteins. | 05 |
| | (c) | What are food additives? Explain methods of analysis of preservatives. | 05 |
| Q. 6 | (a) | Explain USFDA guideline on regulation of food products. | 06 |
| | (b) | Explain general methods of analysis of lipids. | 05 |
| | (c) | Explain methods of analysis of artificial sweeteners and stabilizers. | 05 |
| Q.7 | (a) | Explain the changes occurred in food carbohydrates during processing, digestion and absorption. | 06 |
| | (b) | Give a short note on determination of adulteration in fats and oils. | 05 |
| | (c) | Define natural pigments. Explain their occurrence and characteristic properties. | 05 |
