

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 6 EXAMINATION – SUMMER -2019

Subject Code: 2260003**Date: 08-05-2019****Subject Name: Pharmaceutical Analysis IV****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) | Explain Bragg's law and write a note on different method for x-ray diffraction study. | 06 |
| | (b) | Write a note on GLP. | 05 |
| | (c) | Explain the Principle of Ion exchange and Super critical Fluid chromatography. | 05 |
| Q.2 | (a) | Explain the Principle of Gas Chromatography. Enlist the detectors used in GC and explain any one. | 06 |
| | (b) | Explain the Various steps involved in Patent filling. | 05 |
| | (c) | Give the application of X-ray diffraction study. | 05 |
| Q.3 | (a) | Discuss the Principle and application of HPLC. | 06 |
| | (b) | Write a note on Raman spectroscopy. | 05 |
| | (c) | Give an overview of LC-MS/MS. | 05 |
| Q.4 | (a) | Write a short note on Affinity chromatography. | 06 |
| | (b) | Give a brief note on GC-MS. | 05 |
| | (c) | Write a note on ISO 9001:2000. | 05 |
| Q.5 | (a) | Write a note on RIA. | 06 |
| | (b) | Give brief idea about HETP, Peak asymmetry factor, Resolution. | 05 |
| | (c) | Write a note on GATT and TRIPS. | 05 |
| Q. 6 | (a) | Discuss in detail on HPLC instrumentation. | 06 |
| | (b) | Explain principle, methodology and application of ELISA. | 05 |
| | (c) | Write a note on Isotope dilution analysis. | 05 |
| Q.7 | (a) | Discuss the Principle and Instrumentation of HPTLC. | 06 |
| | (b) | Write a note on Neutron Activation Analysis. | 05 |
| | (c) | Enlist the parameters for Analytical Method Validation as per ICH guidelines and discuss on Accuracy and Precision. | 05 |
