

Seat No.: _____

Enrolment No. _____

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.

- 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**
