

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. - SEMESTER-6 • EXAMINATION – SUMMER -2018

Subject Code: 2260003**Date: 03/05/2018****Subject Name: Pharmaceutical Analysis IV****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.

- Q.1** (a) Discuss the instrumentation of Gas chromatography. Add a special note on detectors used in gas chromatography. **06**
- (b) What is the application of radio nuclides. **05**
- (c) Write a note on ion exchange and size exclusion Chromatography. **05**
- Q.2** (a) Write principle and instrumentation of HPTLC. **06**
- (b) Describe advantages and limitations of HPTLC. **05**
- (c) Compare HPLC with HPTLC. **05**
- Q.3** (a) Explain principal of gas chromatography in detail. **06**
- (b) Describe application of GC in Pharmacy in detail. **05**
- (c) Describe different steps of filling patent in detail. **05**
- Q.4** (a) **06**
Explain Classification and Principle of HPLC and Mobile phase, Stationary phases used in HPLC.
- (b) What is Radio Immuno Assay? Write a brief note on ELISA. **05**
- (c) Write a brief note on LC-MS. **05**
- Q.5** (a) Write basic principle and theory of affinity Chromatography and adsorption Chromatography. **06**
- (b) Comparison of HPLC with GC **05**
- (c) Explain super critical fluid Chromatography **05**
- Q. 6** (a) Write detail not on Radio chemical techniques **06**
- (b) What is GLP? Explain it in detail. **05**
- (c) Write a note on Raman spectroscopy. **05**
- Q.7** (a) What is analytical method validation? Describe different validation parameters according to ICH guideline. **06**
- (b) What are the elements, requirements and interpretation of ISO 9001;2000 **05**
- (c) Describe application of X-ray crystallography in detail. **05**
