

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm – SEMESTER VIII • EXAMINATION – WINTER-2016

Subject Code: 280004**Date: 28/11/2016****Subject Name: PHARMACEUTICAL ANALYSIS-IV****Time: 02.30 pm – 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) Comment the following sentences. **06**
1. Chemically bonded silica gel is more selective than unmodified silica gel.
2. Hydrogen and Helium is choice of carrier gas for Thermal Conductivity Detector.
- (b) Write a note on Electron Capture Detector. **05**
(c) Explain principle of Raman Spectroscopy. **05**
- Q.2** (a) Describe merits of HPTLC over HPLC. **06**
(b) Differentiate Nephelometry and Turbidimetry methods. **05**
(c) Define: Bragg's law and explain the origin of X-rays. **05**
- Q.3** (a) Write a note on Super Critical Fluid Chromatography. **06**
(b) Explain the Loop Injection System. **05**
(c) Write advantage and limitation of HPTLC. **05**
- Q.4** (a) Enlist HPLC detector and explain Universal Detector for HPLC. **06**
(b) Describe block diagram of HPLC. **05**
(c) Explain the significance of Guard Column. **05**
- Q.5** (a) Write a note on GC-MS. **06**
(b) Write about principle and theory of Size Exclusion Chromatography. **05**
(c) Discuss Open Tubular Column for GC. **05**
- Q. 6** (a) Write on Analytical Method Validation parameters. **06**
(b) Write a note on Quality Management System. **05**
(c) Write a note on Liquid Scintillation system. **05**
- Q.7** (a) Write in Brief about IPR. **06**
(b) Write a note on ELISA. **05**
(c) Explain: 1) HETP 2) Calibration **05**
