

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.

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| Q.1 | (a) Comment the following sentences.
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. | 06 |
| | (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 |
