

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – VIII • EXAMINATION – SUMMER 2013

Subject Code: 280004

Date: 20-05-2013

Subject Name: Pharmaceutical Analysis -IV

Time: 10.30 am - 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.**

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|-------------|---|-----------|
| Q.1 | (a) Describe applications of X-ray diffraction. | 06 |
| | (b) Write a brief note Raman spectroscopy. | 05 |
| | (c) Give a brief account on ELISA technique. | 05 |
| | | |
| Q.2 | (a) Explain the principle of Gas chromatography. Give overview of GC-MS. | 06 |
| | (b) Write a note on stationary phases in normal and reversed phase HPLC | 05 |
| | (c) Give brief account on GATT and TRIPS | 05 |
| | | |
| Q.3 | (a) Explain the principle of affinity chromatography and Super critical fluid chromatography. | 06 |
| | (b) Give advantage and limitation of HPTLC. | 05 |
| | (c) Write in short about ISO 9001:2000. | 05 |
| | | |
| Q.4 | (a) Write in detail about any three validation parameters as per ICH guideline. | 06 |
| | (b) Explain the units for measurement of radio activity | 05 |
| | (c) Explain the terms (i) Size exclusion chromatography | 05 |
| | (ii) Bragg's Law | |
| | | |
| Q.5 | (a) Describe applications of HPLC | 06 |
| | (b) Give brief introduction to GLP | 05 |
| | (c) Explain the principle and applications of Nephelometry | 05 |
| | | |
| Q. 6 | (a) Describe Radio immuno assay. | 06 |
| | (b) Write a brief note on Liquid scintillation systems. | 05 |
| | (c) What are the applications of radionuclides? | 05 |
| | | |
| Q.7 | (a) Write in detail on detectors of HPLC. | 06 |
| | (b) Write a short note on Ion Exchange chromatography. | 05 |
| | (c) Explain the terms (i) GSC (ii) GLC. | 05 |
