

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
M. Pharm. – SEMESTER – II • EXAMINATION – SUMMER • 2015

Subject Code: 2920107

Date: 14-05-2015

Subject Name: Pharmaceutical Analysis - II

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.**

- | | | | |
|-------------|-----|--|-----------|
| Q.1 | (a) | Discuss various methods for the sample preparation for analysis. | 06 |
| | (b) | Write in detail about Size exclusion chromatography | 05 |
| | (c) | Discuss instrumentation and application of super critical fluid chromatography. | 05 |
| Q.2 | (a) | What are Protein? Discuss primary structure determination of Proteins. | 06 |
| | (b) | Write note on Counter current chromatography. | 05 |
| | (c) | Discuss Electrophoretic methods used in the analysis of peptides and proteins. | 05 |
| Q.3 | (a) | Write note on HPLC method used in the analysis of biomolecules. | 06 |
| | (b) | Discuss analytical methods used for the analysis of analgesics and antipyretics. | 05 |
| | (c) | Write note on GC-MS method used for the analysis of biological samples. | 05 |
| Q.4 | (a) | Write note on analytical methods used for the estimation of sedatives. | 06 |
| | (b) | What is related substance and impurity? Discuss solid state analysis of drug substance. | 05 |
| | (c) | What are residual solvent? Discuss ICH guideline for residual solvent. | 05 |
| Q.5 | (a) | Discuss the ICH guideline for impurity in new drug substance. | 06 |
| | (b) | Write different quality control test used for analysis of Churna. | 05 |
| | (c) | What are different analytical methods used for the analysis of cardiovascular drugs. | 05 |
| Q. 6 | (a) | What are different quality control test performed for the analysis of raw material used in herbal formulation? Discuss in brief. | 06 |
| | (b) | Write note on Tryptic mapping method used for analysis of proteins. | 05 |
| | (c) | How isolation and characterization of impurities are carried out? | 05 |
| Q.7 | (a) | Discuss in detail: Different extraction techniques used for extraction of Phyto constituents. | 06 |
| | (b) | Write brief note on Automated methods of analysis. | 05 |
| | (c) | Write different quality control test used for analysis of Asava. | 05 |
