

**GUJARAT TECHNOLOGICAL UNIVERSITY****B. Pharm - SEMESTER-VI- (NEW SYLLABUS) EXAMINATION – SUMMER-2015****Subject Code: 2260003****Date: 05/05/2015****Subject Name: Pharmaceutical Analysis-IV****Time: 10:30 am to 1:30 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) Write a note on Adsorption chromatography. **06**  
(b) Enumerate detectors of HPLC and Explain Fluorescence detector in detail. **05**  
(c) Write a brief note on turbidimetry. **05**
- Q.2** (a) Differentiate HPLC and GC. Discuss applications of HPLC. **06**  
(b) Write a Note on Applications of X ray diffraction spectroscopy. **05**  
(c) Explain methods use for measurement of radioactivity. **05**
- Q.3** (a) Discuss about GLP. **06**  
(b) List out units of radioactivity. Give application of radionuclides. **05**  
(c) Write a note on steps of filling patent. **05**
- Q.4** (a) Draw Schematic diagram of HPTLC. Give its applications. **06**  
(b) Explain requirement and interpretation of ISO 9001:2000. **05**  
(c) Explain working of PID and ECD. **05**
- Q.5** (a) Describe derivatization in GC. **06**  
(b) Explain Ion exchange chromatography. **05**  
(c) Explain in brief about GC-MS. **05**
- Q. 6** (a) Explain following terms. **06**  
1. Retention time      2. Striping      3. GSC  
4. Tailing      5. Radioactivity      6. TRIPS  
(b) Describe different pumps use in HPLC. **05**  
(c) Explain ELISA in detail. **05**
- Q.7** (a) Write a note on supercritical fluid chromatography. **06**  
(b) Enlist various analytical validation parameters as per ICH guideline and Explain any two. **05**  
(c) Write a note on Raman spectroscopy. **05**

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