

**Subject Code: PAQA31A/R13**

**M. Pharm I Semester Regular Examinations, March, 2014**

**ADVANCED PHARMACEUTICAL ANALYSIS - I**

**(Common to PA&QA and PA &QC)**

**Time: 3 Hours**

**Max Marks: 60**

**Answer any FIVE questions  
All questions carry EQUAL marks**

**\*\*\*\***

1. Explain the following terms:- (6+6) M
  - a) Validation of analytical Method.
  - b) Good Laboratory Practice
2. a) Write about chromophores and auxochromes and their applications in structures analysis. 6 M  
b) Write the principle and theory involved in IR spectroscopy. 6 M
3. a) Write the factors affecting fluorescence intensity of drug molecules. 8 M  
b) Write the applications of nephelometry and turbidometry. 4 M
4. Write the theory and applications of following instruments. 6+6) M
  - a) Polarography
  - b) Atomic emission spectroscopy
5. a) Define and classify the thermal analysis. 4 M  
b) Write detailed note on principle, instrumentation and applications of any thermal analytical method. 8 M
6. Give any two official methods of assay for the following (6+6) M
  - a) Back titration with EDTA.
  - b) Titration involving the displacement of one complex by another.
7. a) Mention the different types of redox methods. 6 M  
b) Write the principle and applications of potassium iodate / bromated titrations. 6 M
8. Write notes on (6+6) M
  - a) Aquametry
  - b) Thermo Mechanical Analysis(TMA)

**\*\*\*\*\***