

**QP Code: 102329**

**Reg No: .....**

**-first Year M.Pharm Degree Examinations (Supplementary)- November 2012  
(Pharmaceutical Analysis)**

**Paper II - Advanced Pharmaceutical Analysis**

**Time: 3 hrs**

**Maximum Marks: 100**

- *Answer all questions*
- *Draw diagrams wherever necessary*

**Essays: (2x20 =40)**

1. Explain the steps involved in calibration and validation of HPLC, GC and IR spectrophotometer.
2. Explain the various tests carried out for analysis of personnel hygiene products, baby care products and color cosmetics. Explain the analysis of drugs and excipients in solid state with reference to particle size analysis and X-Ray diffraction.

**Short Essays: (6x10=60)**

3. Describe in detail various extractive procedures used and its application in estimation of drugs in multidrug dosage formulation.
4. Explain the usefulness of PDMAC and Braton Marshall reagent in analysis of drugs.
5. Describe how genetically engineered drugs and vaccines are analyzed.
6. Explain how preservatives, antioxidants and stabilizers are analyzed and quantified.
7. Describe how common adulterants are identified. Explain various methods of analysis of pesticides in water.
8. Explain the principle and uses of ELISA and radiotracer techniques in pharmaceutical analysis.

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