

[LD 354]

**OCTOBER 2013**  
**M.PHARM. DEGREE EXAMS**  
**FIRST YEAR**  
**BRANCH V – PHARMACEUTICAL ANALYSIS**  
**PAPER III – ADVANCED PHARMACEUTICAL ANALYSIS**  
*Q.P. Code : 262915*

**Sub. Code: 2915**

**Time : 3 hours**

**Maximum : 100 marks**

**I. Elaborate on :**

**(2x20=40)**

1. (a) Describe the concept of analytical method development while using UV-visible spectrophotometer.  
(b) Explain the methods for the estimation of ester and hydroxyl groups.
2. Give the official methods with principle for the determination of  
(a) Theobromine (b) Testosterone (c) Retinol (d) Digitoxin

**II. Write notes on :**

**(10x6=60)**

1. Give the methods for the validation and calibration of FTIR.
2. Add a detailed note for the determination of penicillin-G.
3. Explain the official methods for the determination of sulfamethoxazole and morphine.
4. How the elements of calcium and sodium are determined?
5. Give the applications of N-1-Naphthyl Ethylene Di-amine as an analytical tool.
6. Describe any two methods for the determination of particle size.
7. Explain the procedure for the microbiological assay of neomycin sulphate.
8. Give the principle and procedures involved in TDM.
9. Describe the biological assay of tetanus antitoxin as per I.P.
10. Explain the usage of 1,2-Naphthoquinone 4-sulphonate reagent with principle.

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