

(LG 4257)

FEBRUARY 2015

Sub. Code: 4257

**B.PHARM. EXAMINATION
SECOND YEAR
PAPER II – PHARMACEUTICAL ANALYSIS & PHYSICAL CHEMISTRY
Q.P. Code: 564257**

Time: Three hours

Maximum: 100 marks

**Answer All Questions
Answer Section-A and B in separate Answer Book**

**SECTION-A
(Pharmaceutical Analysis)**

I. Essay: **(2 x 10 = 20)**

1. a) Give an account on theory of non-aqueous titration and also mention about its application in pharmacy.
- b) Write note on Iodimetry and Iodometry titration.

II. Short notes: **(4 x 5 = 20)**

1. Write notes on error
2. Law of mass action
3. Assay of calcium gluconate
4. Volhard's methods

III. Short answers: **(5 x 2 = 10)**

1. Precision
2. Indicators
3. Co-precipitation
4. Iodine value
5. Ligands

**SECTION-B
(Physical Chemistry)**

I. Essay: **(2 x 10 = 20)**

1. a) Give an account on determination methods of osmotic pressure.
- b) Factors affecting adsorption and application of adsorption in pharmacy.

II. Short notes: **(4 x 5 = 20)**

1. Phase rule and its application
2. Hess's law of constant heat of summation
3. Entropy and its significance
4. Explain the principle involved in polarimetry

III. Short answers: **(5 x 2 = 10)**

1. Third law of thermodynamics
2. Adsorption isotherm
3. Rate of reaction
4. Auto catalyst
5. Molecularity of reaction
