

(LD 4257)

AUGUST 2013

Sub. Code: 4257

SECOND YEAR B.PHARM. EXAM
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. Elaborate on:** (1 x 20 =20)
- 1.a) What is buffer solution and explain about the buffer mixture of a weak acid and weak base and its salts.
 - b) Explain in detail about the Non aqueous titrations.
- II. Write Notes on:** (4 x 5 =20)
1. Write a note on diazotization titrations.
 2. Explain complexometric titrations.
 3. Write a note on Mohr's method and Fajan's method.
 4. Write a note on standardization of perchloric acid.
- III. Short Answers:** (5 x 2 =10)
1. Define precision.
 2. Define iodimetry.
 3. Define law of mass action.
 4. Calibration of volumetric apparatus.
 5. Choice of indicators.

SECTION-B
(Physical Chemistry)

- I. Elaborate on:** (1 x 20 =20)
1. a) Define rate of reaction clarify with suitable examples and derive the equation for first order reaction.
 - b) Explain Hess's law of constant heat of summation.
- II. Write Notes on:** (4 x 5 =20)
1. Define Colligative properties.
 2. Joule-Thomson effect.
 3. Define solutions with its types.
 4. Write about the factors affecting the rate of chemical reaction.
- III. Short Answers:** (5 x 2 =10)
1. Trouton's rule.
 2. Define Phase rule.
 3. Freundlich adsorption isotherm.
 4. Enthalpy of combustion.
 5. Second law of thermodynamics.
