



[LH 4257]

AUGUST 2015

Sub. Code: 4257

B.PHARM. DEGREE EXAMINATION**SECOND YEAR****PAPER II – PHARMACEUTICAL ANALYSIS & PHYSICAL CHEMISTRY*****Q.P. Code: 564257*****Time : Three Hours****Maximum : 100 marks****Answer All Questions****SECTION – A
(PHARMACEUTICAL ANALYSIS)****I. Essay:** (2 x 10 = 20)

1. a) Write in detail about the acid base concepts and buffer solutions with examples.
- b) Explain the determination of carbonates and bicarbonates in a mixture.

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

1. Write a note on common ion effect.
2. Explain the various methods of end point detection in complexometric titration.
3. Write note on nitrogen estimation by Kjeldhal metho
4. Explain with reactions the principle involved in Mohr's metho

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

1. Define accuracy.
2. What is Nernst equation?
3. What is Iodimetry and Iodometry?
4. What is solvent leveling effect?
5. Define acid value and mention its importance.

**SECTION – B
(PHYSICAL CHEMISTRY)****I. Essay:** (2 x 10 = 20)

1. Define Colligative properties? List the various types of Colligative properties.
Explain in detail the determination of the elevation of Boiling point and Osmotic Pressure.

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

1. State and explain Joule-Thomson effect.
2. Describe the various factors affecting adsorption.
3. Define catalyst and explain the characteristics of catalysts.
4. Explain how will you determine the heat of combustion using Bomb calorimete

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

1. Define ideal solution.
2. List the various factors affecting rate of chemical reaction.
3. State Lavoisier-Laplace law.
4. Define plane polarized light.

