

(LK 4257)

FEBRUARY 2017

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

**SECTION-A
(PHARMACEUTICAL ANALYSIS)**

I. Elaborate on: (1 x 20 = 20)

1. a) Define buffer. Give examples. What are applications of buffer solution in pharmacy?
- b) Describe in detail about Henderson-hasselbalch equation.

II. Write notes on: (4 x 5 = 20)

1. Explain the determination of saponification value.
2. Write the note on standardization of perchloric acid.
3. Explain about masking and demasking agents.
4. Explain the mechanism involved in oxidation reduction titration.

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

1. Errors.
2. Nernst equation.
3. Define ligands.
4. Werner's co-ordination number.
5. Define precision.

**SECTION-B
(PHYSICAL CHEMISTRY)**

I. Elaborate on: (1 x 20 = 20)

1. Define and explain the various types of Colligative properties. Explain one method used for determining evaluation of boiling point.

II. Write notes on: (4 x 5 = 20)

1. Explain the construction and use of a polarimeter.
2. Write the relation between ΔH and ΔE .
3. Hess's law of heat summation.
4. Discuss graphically the Freundlich and Langmuir's, isotherms.

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

1. Define order of reaction.
2. Define types of catalyst.
3. Define Joules-Thomson effect.
4. State second law of thermodynamics.
5. Define Entropy.
