

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

1. a) Explain the calibration of volumetric Apparatus.
- b) Explain oxygen flask combustion method for the determination of Sulphur.

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

1. Write a note on Significant figure.
2. Preparation & standardization of Perchloric acid.
3. P^M Indicators.
4. Organic Precipitants in gravimetry.

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

1. Accuracy.
2. Saponification value.
3. Iodometry.
4. Argentometry.
5. Co-precipitation.

**SECTION-B
(PHYSICAL CHEMISTRY)**

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

1. a) Explain Hess's law of constant heat of summation.
- b) Write in detail about theories of order of Reaction.

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

1. Explain about Bomb Calorimeter.
2. Write a note on Partition coefficient with limitations.
3. Define solutions with its types.
4. State and explain Joule – Thomson Effect.

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

1. Enzyme Catalyst.
2. Eutectic Point.
3. Entropy.
4. Adsorption isotherm.
5. Refractive index.
