

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LP 4257)

AUGUST 2019

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. Elaborate on: (1 x 20 = 20)

1. Define Precipitation Titration. Briefly explain each type with indicators used in the titration.

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

1. Write a note on Masking and Demasking agents.
2. Explain about Diazotization titration.
3. Write a note on Volhards method.
4. Write a note on various steps involved in Gravimetric Analysis.

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

1. Buffer solution.
2. Law of Mass action.
3. Acid value.
4. Define Precision.
5. Redox Potential.

SECTION-B

(PHYSICAL CHEMISTRY)

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

1. a) Explain in detail about the determination of the elevation of boiling point.
b) Explain the factors affecting adsorption and its applications in pharmacy.

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

1. Write a note on Catalysts.
2. Explain the principle involved in Polarimetry.
3. Give a short note on phase rule and its applications.
4. Define order and molecularity of reaction and explain the factors affecting rate of chemical reaction.

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

1. Ideal solution.
2. Second law of thermodynamics.
3. Exo and Endo thermic reactions.
4. Parachor.
5. Enthalpy.
