



Paper id: 253106

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Subject Code: BP102T

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BPHARM
(SEM I) THEORY EXAMINATION 2024-25
PHARMACEUTICAL ANALYSIS I – THEORY

TIME: 3 HRS**M.MARKS: 75****Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief.****10 x 2 = 20**

a.	Discuss the method of expressing concentration in detail
b.	Discuss Cerimetry titration.
c.	Illustrate electrochemical method of Analysis.
d.	Give Ilkovic equation
e.	Explain masking agent and Demasking Agent.
f.	$\text{Ag}^{++} + \text{SCN}^- \rightarrow \text{AgSCN}$, Predict the given example of reaction is related to which titration.
g.	Explain the levelling and differentiating effect.
h.	Describe the term normality and molarity. Calculate Normality for 100 gm per 500 ml NaOH solution.
i.	Calculate Equivalent weight of KMnO_4 in neutral, acidic and alkaline solution.
j.	Define the principle of diazotization.

SECTION B**2. Attempt any two parts of the following:****2 x 10 = 20**

a.	Explain acid base indicator with example. Describe the acid base indicator theory in brief. Classify different types of redox titrations. Discuss Iodimetry and Iodometry titrations.
b.	Describe the principle of potentiometry titration. Discuss the working of Standard Hydrogen electrode, Standard Calomel electrode, Silver electrode and indicator electrode.
c.	Classify different types of redox titrations. Discuss Iodimetry and Iodometry titrations.

SECTION C**3. Attempt any five parts of the following:****7 x 5 = 35**

a.	Write principle of polarography. Explain the mechanism of Dropping Mercury electrode (DME).
b.	Discuss the detailed account of various steps involved in gravimetric analysis.
c.	Describe Mohr's method, Volhard and Fajan's method in precipitation or Argentometric titration.
d.	Explain the principle, instrumentation and application of conductometry
e.	Describe the estimation of Ephedrine hydrochloride.
f.	Define the term Accuracy, Precision and significant figures. What is Error? Discuss its types and methods for minimizing errors.
g.	Discuss the mechanism of action of buffer. Derive the Henderson- Hasselbalch equation.