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School of Pharmaceutical Education and Research
B. Pharm. I-Semester Examination (2023-24)

Subject: PHARMACEUTICAL ANALYSIS-I

Time: Three hours

Paper Code: BP 102T

Date: 13-03-24

Maximum Marks: 75

(Write your Roll No. on the top immediately on receipt of this question paper)

Note: This paper has 3 sections A, B and C. Attempt all the three sections.

Section A: Answer all the questions;

Section B: Answer any 2 out of 3 questions;

Section C: Answer any 7 out of 9 questions.

Abbreviations Used:

CO-Course Outcome, PO - Program Outcome, BTL - Bloom Taxonomy Level: BT level 1 - Remember; BT level 2 - Understand; BT level 3 - Apply; BT level 4 - Analyze; BT level 5 - Evaluate; BT level 6 - Create.

SECTION A

Very Short Type Questions (Attempt all)

2x10 = 20 Marks

Q. No	Question	BTL	CO	PO
1.	Enumerate methods of expressing concentration.	1	1	1
2.	Name methods of minimizing errors.	1	1	1
3.	Describe neutralization curve.	1	1	1
4.	Differentiate between equivalence point and end point.	1	2	1
5.	What is Modified Volhard's method? Explain briefly.	2	3	3
6.	What are masking & de-masking agents?	1	1	3
7.	Write the balanced chemical reaction involved in the standardization of KMnO_4 .	1	2	3
8.	Differentiate between Iodo & Iodimetry	2	2	3
9.	What is cell constant? Write its unit.	2	4	1
10.	Write applications of polarography.	3	3	1

SECTION B

Long type Questions (Attempt any 2 out of 3)

10x2= 20 Marks

Q. No	Question	BTL	CO	PO
1.	What is Gravimetry? Write its principle and explain the process of estimation of Barium Sulphate.	2	4	2
2	What is Cerimetry? Explain a method of Standardization <u>OR</u> assay based on Cerimetry.	1	1	3
3	What is pH? How it could be determined? Explain methods to determine end point in a potentiometric titration.	3	2	2

SECTION C

Short-type Questions. (Attempt any 7 out of 9 questions)

5x7= 35 Marks

Q. No	Question	BTL	CO	PO
1.	Write preparation and standardization of $\text{Na}_2\text{S}_2\text{O}_3$ Solution.	1	1	2
2.	Write Preparation & standardization of 0.1 N HCl solution.	1	2	3
3.	Describe the Sources of impurities in medicinal agents.	3	1	1
4.	Describe the assay of ephedrine hydrochloride.	3	2	3
5.	Write a short note on metal ion indicators.	3	2	3
6.	Explain preparation and standardization of M/20 EDTA solution.	1	2	2
7.	Write principle of diazotization. Also write effect of substitution on diazotization reaction.	2	3	2
8.	What is conductivity cell? Explain its use in conductivity titration.	3	4	3
9.	Describe neutralization curve for the titration of 0.1N strong base with 0.1N strong acid.	2	3	3

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