DEPARTMENT OF PHARMACEUTICAL SCIENCES & TECHNOLOGY

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(Internal Assessment I)

CLASS: B. PHARM **SEMESTER: I**
BRANCH: PHARMACY **SESSION: MO 2024**

SUBJECT: BP102T PHARMACEUTICAL ANALYSIS-I

TIME: 2.00 Hour **FULL MARK: 30**

PART I

A. Objective-type questions (Answer all questions) (5 x 02=10 marks)

1. In the titration of Strong Acid Vs. Strong Base, _____ and _____ can be used as indicators.
2. What volume of 6 N (Normal) Na_2CO_3 should be diluted to prepare 500 mL of a 0.6 M (Molar) solution?
3. Calculate the amount (g) of sodium hydroxide required to prepare 100 mL of the following solutions:
   a) 0.1 M b) 0.2 N
4. Define accuracy and precision.
5. Mention various properties an ideal primary standard should possess.

PART II

B. Long Answers (Answer any one out of two) (01x10=10 marks)

1. Explain the Titration Curve of Strong Acid Vs. Strong Base.
2. a) Define errors and discuss various types of errors in pharmaceutical analysis. (6 marks)
   b) Find out the average deviation and % relative average deviation of 15.40; 15.45; 16.10 (4 marks)

PART III

C. Short Answers (Answer any two out of three) (02x05=10 marks)

1. Discuss the Quinoid theory of indicator, taking suitable examples.
2. Describe various types of acid-base titrations with suitable chemical equations for each.
3. Mention various techniques of pharmaceutical analysis.

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