	Roll No										
--	---------	--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 02

Total No. of Questions : 13

B.Pharma (Sem.–1) PHARMACEUTICAL ANALYSIS-I Subject Code : BP-102T M.Code : 74645 Date of Examination: 12-01-2023

Time: 3 Hrs.

Max. Marks : 75

INSTRUCTIONS TO CANDIDATES :

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains THREE questions carrying TEN marks each and student has to attempt any TWO questions.
- 3. SECTION-C contains NINE questions carrying FIVE marks each and student has to attempt any SEVEN questions.

SECTION-A

1. Explain briefly :

- (a) Define as amphiprotic solvent. Give its example.
- (b) What is the pH of a 0.01 N solution of NaOH?
- (c) What is a mixed indicator? Give an example.
- (d) Write the primary standard and indicator used in diazotization titration.
- (e) Differentiate between iodometery and iodimetery.
- (f) What is co-precipitation and post-precipitation?
- (g) What is peptisation in gravimetry?
- (h) Differentiate between accuracy and precision.
- (i) You are provided a 35% w/v solution of HC1. Calculate the volume of this solution to prepare a 500 ml of N/20 solution of HCI.
- (j) Define error.

1 M-74645

SECTION-B

- 2. What is the principle of potentiometric titrations? Explain the construction, working, merits and demerits of various reference electrodes used in this method.
- 3. Classify complexometric titrations. Give examples in each category.
- 4. (a) 'Comment upon various solvents used in non-aqueous titrations.' Give examples.
 - (b) Plot the neutralization curve for the titration of a strong acid with a weak base.

SECTION-C

- 5. Enumerate various steps involved in estimation of Barium sulphate via gravimetry.
- 6. Explain in detail the different theories of acid base indicators.
- 7. Write a note on primary and secondary standard. Give examples.
- 8. How do you prepare a 0.1 M solution of Ceric ammonium sulfate? Explain its standardization giving balanced chemical equations and general calculation.
- 9. Comment upon different types of errors and their sources.
- 10. Give a detailed account on assay of sodium benzoate.
- 11. What is the principle of polarography? Explain their applications.
- 12. Give the construction and working of calomel electrode with the help of neat diagram.
- 13. Comment upon the concept of oxidation and reduction.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.