Roll No. | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 22

B.Pharma (2017 & Onwards) (Sem.–1)

PHARMACEUTICAL ANALYSIS-I

Subject Code : BP-102T

M.Code : 74645

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

Explain briefly :

1. What is the pH of a 0.01 M solution of NaOH?
2. Why an aqueous solution of NH_4C1 is acidic?
3. What is common ion effect? Give its application in gravimetry.
4. Define standard reduction potential.
5. Why glycerol is used in assay of boric acid?
6. What is an equivalence point? Name the methods to locate it during a titration.
7. Differentiate between iodometery and iodimetery.
8. Define a colloidal system. Give an example.
9. Define precision. How you can maximize it in an experiment?
10. What is peptisation in gravimetry?

SECTION-B

11. Plot the titration curve for titration of 0.1 M CH_3COOH with 0.1 M NaOH by calculating pH at different points before the equivalence point, at the equivalence point and after the equivalence point. Suggest any two suitable indicators for this titrations.

12. Write a detailed account on KIO_3 titrations.

13. Enumerate various methods of detecting endpoint in precipitation titrations. Discuss the principle, theoretical considerations and applications of any one method.

SECTION-C

14. Name various factors affecting solubility of precipitates. Explain any one.

15. Give the principle, balanced chemical equations and general calculations for standardization of $NaNO_2$.

16. What is the principle of potentiometric titrations? Name various indicator electrodes used in it. Explain any one indicator electrode.

17. How do you prepare a 0.1 M solution of sodium methoxide? Explain its standardization giving balanced chemical equations and general calculation.

18. Write a note on metal ion indicators.

19. Differentiate between co-precipitation and post-precipitation with examples. Explain the methods to minimize these.

20. What is the principle of conductometric titrations? Explain their applications.

21. Give the construction and working of dropping mercury electrode with the help of neat diagram.

22. Write an account on various sources and types of impurities in medicinal agents.

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.