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 students have to attempt any TWO questions.**
3. **SECTION-C contains NINE questions carrying FIVE marks each and students have to attempt any SEVEN questions.**

SECTION-A

Explain briefly :

Q1. Give the primary and secondary standards for: sodium thiosulphate and NaOH.

Q2. What is specific conductance? How is it related to observed conductance?

Q3. What is pK_a? What is its importance?

Q4. Give chemical reactions for standardization of sodium nitrite.

Q5. Explain glass electrode in brief.

Q6. What is specific conductance?

Q7. Calculate and express the result to correct number of significant figures : $[(205.0 + 10.025) \times 0.0500] + 10.0124$

Q8. Give pH range of phenolphthalein and methyl orange.

Q9. Define Chelating Agent and sequestering agent.

Q10. Why is water boiled before preparing sodium thiosulphate solution?

SECTION-B

Q11. Give a detailed account of titrants, solvents, indicators and chemistry involved in titration of any weakly basic drug by non-aqueous titrimetry.

Q12. Classify argentimetric titrations. Discuss the chemical equations, titration conditions and applications of Mohr's method.

Q13. What are potentiometric titrations? Discuss in detail various types of potentiometric titration curves.

SECTION-C

Q14. Explain calibration of conductance cell.

Q15. What is a dropping mercury electrode? Explain its construction and working.

Q16. Explain the working of a calomel electrode.

Q17. How can you minimize errors in pharmaceutical analysis?

Q18. What type of conductometric titration curve is obtained for NaOH *vs* HC1?

Q19. Discuss the concept and chemistry involved in permanganate titrations.

Q20. Draw a polarographic wave and explain its various components.

Q21. Discuss in brief the factors affecting the solubility of precipitates.

Q22. Taking appropriate examples, explain masking and demasking 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.