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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 HCl?
- 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.