First Semester B. Pharm Degree Regular/Supplementary
Examinations June 2023
Pharmaceutical Analysis - I
(2017 Scheme)

Time: 3 Hours   **Max. Marks: 75**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Essay   **(2x10=20)**

1. What are errors in pharmaceutical analysis. Write their types. How can they be minimized.
2. Write principle involved in working of hydrogen ion responsive indicator electrode. How are end points determined in potentiometric titrations.

Short Notes   **(7x5=35)**

3. Explain the principle involved in determination of calcium gluconate.
4. Write method of preparation and standardization of 0.1M potassium permanganate.
5. Explain types of neutralization curves with appropriate examples.
6. What is Ilkovic equation. Explain the differences between migration current and diffusion current.'
7. Explain advantages of non-aqueous titration. Explain the principle involved in non-aqueous titration of sodium benzoate.
8. Describe briefly theory of metal-ion indicators with suitable example.
9. Write steps involved in gravimetric estimation of barium sulphate.

Answer Briefly   **(10x2=20)**

10. Write primary standards used in standardization of
    - Ceric ammonium sulphate   • NaOH
11. Distinguish between precision and accuracy.
12. Define molarity.
13. Explain aprotic solvent. Give examples.
14. Write Nernst equation and explain the terms involved in it.
15. Explain co-precipitation.
16. Explain conductivity cell.
17. Example for diazotization titration.
18. Difference between iodometry and iodimetry.
19. Explain modified volhard's method.

****