QP Code: 105008 **Reg. No.: ……**

First B.Pharm (Ayurveda) Degree Regular/Supplementary Examinations April 2021

Pharmaceutical Analysis

Time: 3 Hours **Max Marks: 100**

- ***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***

Essay **(2x10=20)**

1. Define hydrolysis. Derive equation for finding pH of aqueous solution of salt of weak acid and strong base
2. Give the types of redox titration. Enumerate end point detection method for redox titration.

Short Notes **(10x5=50)**

3. Fajan's method of argentometric titration.
4. Describe PM indicators in details
5. Explain common ion effect with example.
6. What are the different factors affecting the solubility of precipitate.
7. Gravimetric method of analysis.
8. Explain in detail about iodometry and iodimetry titration.
9. Explain back titration with suitable example.
10. Explain the method for the determination of nitrogen.
11. Define errors and write how to minimize errors.
12. Define buffer, types of buffer and application of buffer solutions

Answer Briefly **(10x3=30)**

13. Explain co-precipitation in gravimetric analysis.
14. Preparation of 0.05 M sodium EDTA solution.
15. Define primary standard substances and its characteristics.
16. Differentiate aqueous and non-aqueous titration.
17. Define molarity, indicator and sampling.
18. Explain different types of crucible used in gravimetric analysis.
19. Discuss applications of complexometric titrations.
20. Why nitrobenzene is used in Volhard's method of halogen estimation.
21. Give comment on: equivalent weight of $KMnO_4$ changes with the media.
22. Discuss the importance of quality control in formulation analysis.

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