QP Code: 105008 **Reg. No.: ……**

First B. Pharm (Ayurveda) Degree Supplementary Examinations
September 2022
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. What are the different theories of acid base concept. Add a note on common ion effect and ionic product of water
2. Explain the different methods to detect the end points in precipitation titration. What is the effect of acid, temperature and solvent upon the solubility of a precipitate.

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

3. Explain the use of masking and demasking agents in complexometric analysis.
4. What is Nernst equation and add a note on different types of indicators used in redox titrations along with examples.
5. Explain briefly titanous chloride titrations.
6. Briefly describe organic precipitants used in gravimetric analysis.
7. Explain the theory of indicators in neutralization titrations.
8. How do drugs containing primary aromatic amines assayed.
9. Derive Henderson Hassel Bach equation.
10. Explain the method of preparation and standardization of of 0.1N potassium dichromate.
11. Describe the Kjeldhal method of nitrogen estimation.
12. Preparation and standardization of 0.1 M Perchloric acid.

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

13. Enlist factors affecting stability of complexes.
14. What is meant by levelling effect in non-aqueous titrations.
15. Define accuracy and precision.
16. What are the criteria of primary and secondary standards.
17. How will you select a suitable indicator in the titration of strong acid and weak base.
18. Explain mixed indicators and its significance.
19. Explain about thermogravimetric curves.
20. Solvents used in non-aqueous titration.
21. Explain why calibration of analytical instruments is necessary.
22. State and explain law of mass action.

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