First B.Pharm (Ayurveda) Degree Regular/Supplementary Examinations November 2019

Pharmaceutical Analysis

Time: 3 Hours Max Marks: 100

Answer all questions

Essay (2x10=20)

1. Derive Henderson-Hasselbach equation. Explain the theory of indicators.

2. What are the advantages of gravimetric analysis over volumetry. Explain thermogravimetric analysis in brief.

Short Notes (10x5=50)

- 3. What is precipitation titrations and explain the types of precipitation.
- 4. Explain Karl Fischer method.
- 5. Calcium assay by gravimetry.
- 6. Explain Arrhenius concept of acids and bases. What are its advantages.
- 7. Principle and procedure involved in volhard's method.
- 8. Explain Gay lussac method.
- 9. Explain the preparation and standardization of 0.1 N AgNO₃ solution.
- 10. Explain Mohr's method
- 11. Role of digestion washing of the precipitates
- 12. Precision, accuracy and standard deviation

Answer Briefly (10x3=30)

- 13. Redox indicators
- 14. Buffers
- 15. Define quality control
- 16. Expression of concentrations.
- 17. How will you determine pH of a solution. Enumerate different methods.
- 18.Argentometric titrations
- 19. Why starch indicator is added near the end point in iodine titration.
- 20. Preparation of 0.1 N KMnO₄ solution.
- 21. How to estimate magnesium as "magnesium pyrophosphate"
- 22. Give one example of each of non-aqueous titration and complex metric titration
