

# **2010 Scheme**

**QP CODE: 202006**

**Reg. No: .....**

## **Second Year B.Pharm Degree Supplementary Examinations January 2023**

### **Pharmaceutical Analysis I**

**Time: 3 Hours**

**Total 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*
- *Write equations wherever necessary.*

#### **Essay**

**(3x10=30)**

1. Define normality and molarity with suitable examples. Add a note on errors in analysis.
2. Explain the theory of redox titration. List out various types of redox titrations based on titrant and give one example in each type.
3. Explain gravimetric analysis. Outline various techniques involved in gravimetric analysis.

#### **Short notes**

**(14x5=70)**

4. Accuracy and precision.
5. Explain the theories of acid-base indicators.
6. How do you prepare and standardize 0.1N KMnO<sub>4</sub> solution
7. Define ligands. Classify them with example.
8. Karl-Fisher titrations.
9. Discuss about the preparation and standardization of sodium – 2,6 – dichlorophenol – indophenol.
10. "Importance of buffers in complexometric titrations"
11. Explain about masking and demasking agents.
12. What are the ideal properties for the solvent used in non-aqueous titration
13. Explain briefly modified Volhard's method.
14. Neutralization curves and its application.
15. Explain with reactions the principle involved in Mohr's method.
16. Kjeldhal method of nitrogen estimation.
17. Explain the significance of Nernst equation.

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