

Total No. of Questions : 6]

SEAT No. :

P3148

[Total No. of Pages : 2

[5245]-206

**First Year B. Pharmacy (Semester - II)**

**PHARMACEUTICAL ANALYSIS - I**

**(2013 Pattern)**

*Time : 3 Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *All questions are compulsory.*
- 2) *Answers to the two sections should be written in separate answer books.*
- 3) *Figures to the right side indicate full marks.*

**SECTION - I**

**Q1)** Explain different types of nonaqueous solvents. Discuss on leveling effect & differentiating effect of those solvent. **[10]**

OR

Discuss various test of significance in statistical analysis. Define the terms significant figure, correlation coefficient & coefficient of determination.

**Q2)** Attempt any five of following **[15]**

- a) Discuss properties and preparation of primary standard substance.
- b) Define the term equivalent weight & molecule weight for acid or base substances.
- c) Explain titration of polyprotic acid.
- d) What is buffer index significance.
- e) Differentiate between quantitative and qualitative analysis.
- f) Explain preparation and standardization of 0.1 N perchloric acid.
- g) What is buffer.

**Q3)** Write a note on any two of following **[10]**

- a) Types of titration curve in acid base titration. Explain any one.
- b) Theories of acid base indicators.
- c) Errors and its types.
- d) Estimation of aspirin.

**P.T.O.**

## SECTION - II

**Q4)** What are unit operations of gravimetry analysis. Explain co-precipitation and post precipitation. **[10]**

OR

Explain methods for calculating equivalent weight in redox substances.

**Q5)** Attempt any five of the following: **[15]**

- a) Discuss concept of fractional precipitation.
- b) What are organic precipitant.
- c) Define the terms chelate & metal indicators.
- d) Explain nerst equation.
- e) Discuss fajans method.
- f) What is external redox indicators.
- g) Explain non indicators precipitation titration.

**Q6)** Write a note on any two of following: **[10]**

- a) Types of complexometry titration.
- b) Factor affecting solubility of precipitate under precipitation titration.
- c) Titration curve for redox titration.
- d) Permagnometry method.

