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# SB-1154

## Second Year B. Pharm. Examination

### March / April – 2011

## PH - 204 : Pharmaceutical Analysis - I

Time : **3** Hours] [Total Marks : **70**

**Instructions :**

(1)

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
**Fillup strictly the details of ☛ signs on your answer book.**

Name of the Examination :

☛ **Second Year B. Pharm.**

Name of the Subject :

☛ **PH - 204 : Pharmaceutical Analysis - 1**

☛ Subject Code No. : **1 1 5 4** ☛ Section No. (1, 2,.....) : **1&2**

Seat No. :

Student's Signature

## SECTION - I

**1** Attempt any **five** : **10**

(1) Define and classify volumetric analysis.

(2) Explain Lowry-Bronsted concept of Acid-Base with examples.

(3) Classify the solvents used in non-aqueous titrations with examples.

(4) Explain Warner's coordination numbers.

(5) Comment on the statement "Aqueous solution of Sodium acetate is neutral".

(6) Calculate pH and pOH of a $5.0 \times 10^{-2}$ M solution of NaOH.

**2** Attempt any **three** : **9**

(1) Explain various types of complexometric titrations.

(2) Explain various factors affecting solubility product constant.

(3) What is co-precipitation ? How will you minimize co-precipitation ?

(4) Explain Volhard's method of precipitation titration.

**3** Attempt any **four** : **16**

(1) Explain leveling and differentiating effects of solvents.

(2) Discuss permanganate titration in acidic and basic condition using suitable example.

(3) Define and Classify errors in pharmaceutical analysis.
(4) Write a brief note on a acid base indicators.
(5) Write a note on adsorption indicator.

## SECTION - II

**4** (a) Explain following terms with examples : (any **four**) **8**
(1) Iodometry
(2) Buffer capacity
(3) Solubility product constant
(4) Primary standard compound
(5) Common ion effect
(6) Post precipitation.
(b) Explain accuracy and precision with suitable examples. **3**

**5** Attempt any **three** : **12**
(1) Application of masking agent.
(2) Discuss the factors affecting solubility of precipitate.
(3) Distinguish between back titration and blank titration.
(4) Define buffers and give its applications in pharmacy.

**6** Attempt any **two** : **12**
(1) Write a note on Oxygen flask combustion method.
(2) Write a note on diazotization titration.
(3) Discuss Kjeldahl method of nitrogen estimation in detail.