Total No. of Questions—6] [Total No. of Printed Pages—2

Seat No.	

[5345]-2006

First Year B.Pharmacy (II Sem.) EXAMINATION, 2018
PHARMACEUTICAL ANALYSIS—I
(2015 PATTERN)

Time : Three Hours **Maximum Marks : 60**

N.B. :— (*i*) *All* questions are compulsory.
(*ii*) Answers to the two sections should be written in separate answer-books.
(*iii*) Neat diagrams must be drawn wherever necessary.
(*iv*) Figures to the right indicate full marks.

SECTION-I

Q1 Explain theoretical considerations, limitations and Non-aqueous solvents in non-aqueous titration **[10]**

OR

What are neutralization titrations? Explain in detail Neutralization curves with suitable examples.

Q2) Answer the following **(any four)** **[12]**

a) Define Primary standard. Enlist requirements of primary standards.
b) Write about T-test.
c) Calculate equivalent weight of Sodium oxalate, Potassium permanganate and Aluminium hydroxide
d) Explain effect of temperature on non-aqueous titrations.
e) What is buffer index? Write equation to calculate buffer index.
f) Discuss in brief Ostwald's theory.
g) Explain the terms Molarity, Normality and Molality.

Q3) Write short notes on **(any two)** **[8]**

a) Primary and secondary standards.
b) Indicators in Non-aqueous titrations.
c) Types of errors.
d) Titration of amino acid

P.T.O.

SECTION-II

Q4) What is co-precipitation and how it is reduced? Give the applications of Gravimetric analysis **[10]**

OR

Differentiate between Iodimetric and Iodimetric titrations. Explain importance of pH conditions for each of them. Add a note on Ceriometry.

Q5) Answer the following **(any four)** **[12]**

a) How will you prepare and standardize 0.1 N $AgNO_3$ solution.
b) Differentiate between co-precipitation and post precipitation.
c) Explain the term Ligand and Sequestering agent.
d) Compare Mohr's method and Volhard's method.
e) "Sulphuric acid is used in redox titrations" Give reason.
f) Explain Assay of calcium gluconate as per I.P.
g) Explain common ion effect. How is it utilized for controlling the concentration of weak electrolyte.

Q6) Write short notes on **(any two)** **[8]**

a) Sodium Nitrite Titration.
b) Organic precipitants.
c) Pharmaceutical Applications of Complexometric titrations
d) Adsorption indicators.