

FIRST YEAR PHARM. D : SUMMER - 2018
SUBJECT : PHARMACEUTICAL INORGANIC CHEMISTRY

Day : **Monday**
Date : **16/04/2018**

Time : **10.00 AM to 01.00 PM**
Max. Marks : **70**

S-2018-4023

N. B. :

- 1) **Q.No.1** and **Q. No.5** are **COMPULSORY**. Out of the remaining questions attempt **Any TWO** from each section.
- 2) Answers to both the sections should be written in **SEPARATE** answer book.
- 3) Figures to the right indicate **FULL** marks.

SECTION - I

- Q.1** A) Solve **Any FOUR** of the following : **(08)**
- i) What do you mean by volumetric titrations? Classify them with suitable examples.
 - ii) Explain in brief dissociation constant of weak acid.
 - iii) Give the principle and reaction involved in the assay of Hydrogen peroxide.
 - iv) Write the chemical reaction involved in the limit test for Iron.
 - v) What do you mean by Radioisotope?
- B) Give various conditions required by a substance to be primary standard. **(03)**
- Q.2** a) Give the source, physiological importance and deficiency symptoms of Iodine and Copper. **(07)**
- b) Describe in detail ideal properties of antioxidant. **(05)**
- Q.3** What do you mean by errors? Classify them with suitable example. Add a note on salt hydrolysis. **(12)**
- Q.4** Write short notes on **Any THREE** of the following : **(12)**
- a) Redox indicators
 - b) Neutralization curves
 - c) Limit test for Arsenic
 - d) Electrolyte combination therapy

P.T.O.

SECTION – II

- Q.5 A)** Solve **Any FOUR** of the following : **(08)**
- i)** Give the ideal properties of antacids.
 - ii)** Give the properties, uses and storage conditions of nitrogen gas.
 - iii)** What is non-aqueous titration and classify non-aqueous solvents.
 - iv)** Give the chemical reaction and principle involved in assay of sodium bicarbonate.
 - v)** Why the magnesium sulphate is added in the assay of calcium gluconate?
- B)** Give the preparation and standardization procedure of 0.1 M silver nitrate solution. **(03)**
- Q.6 a)** Discuss the different methods of end point detection in precipitation titrations. **(07)**
- b)** Explain in detail metallochrome indicator used in complexometric titrations. **(05)**
- Q.7** What is Gravimetric analysis? Discuss in detail the unit operation of Gravimetric analysis. **(12)**
- Q.8** Write short notes on **Any THREE** of the following : **(12)**
- a)** Co- precipitation and post precipitation
 - b)** Dentifrices
 - c)** Assay of sodium chloride injection
 - d)** Combination antacid therapy

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