

FIRST YEAR PHARM. D (SUPPLEMENTARY) : SUMMER - 2018

SUBJECT : PHARMACEUTICAL INORGANIC CHEMISTRY

Day : **Friday**
Date : **06/07/2018**

S-2018-4052

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

N.B.:

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

SECTION – I

- Q.1** A) Attempt **ANY FOUR** of the following: [08]
- i) How to observe the colour intensity in heavy metal limit test?
 - ii) What is the source and biological importance of Iron?
 - iii) How will you standardized 0.1N KMnO₄ solution?
 - iv) Discuss the important functions of chloride and bicarbonate ion in the body.
 - v) State the uses of citric acid and ammonia solution in limit test of Iron.
- B) What do you mean by expectorants? Classify them with suitable examples. [03]
- Q.2** Explain in detail theories of Indicator in acid-base titration. Add a note on assay of Ammonium Chloride and Ferrous Sulphate. [12]
- Q.3** a) Describe various acid-base neutralization curves in detail. [07]
b) Compare between Determinate and Indeterminate error. [05]
- Q.4** Write a note on **ANY THREE** of the following: [12]
- a) Limit test for Arsenic
 - b) Antimicrobial agents
 - c) Antidote
 - d) Electron balance method for calculating equivalent weight

SECTION – II

- Q.5** A) Attempt **ANY FOUR** of the following: [08]
- i) Classify antacids with suitable examples.
 - ii) Enlist Organic and Inorganic precipitants.
 - iii) What are non-aqueous titrations? Enlist two drugs analysed by non-aqueous method.
 - iv) Enlist different types of dental products.
 - v) Define and classify acidifying agents.
- B) Give advantages, limitations and indicators of non-aqueous titrations. [03]
- Q.6** What are the different applications of precipitation titrations? Explain Mohr's method of end point detection. Give preparation and standardization of 0.1M AgNO₃. [12]
- Q.7** a) Discuss leveling and differentiating effect of non-aqueous solvents. [07]
b) Explain determination of sodium chloride by Volhard's method. [05]
- Q.8** Write notes on **ANY THREE** of the following: [12]
- a) Role of fluoride in dental products
 - b) Preparation and assay of aluminium Hydroxide Gel
 - c) Adsorption indicator in precipitation titration
 - d) Metalochrome indicators in complexometric titration