

I B. Pharmacy I Semester Regular Examinations, Jan/Feb - 2018
PHARMACEUTICAL INORGANIC CHEMISTRY-I

Time: 3 hours

Max. Marks: 75

- Note: 1. Question Paper consists of three parts (**Part-I, Part-II & Part-III**)
 2. Answer **ALL** Questions from **Part-I**
 3. Answer any **TWO** Questions from **Part-II**
 4. Answer any **SEVEN** Questions from **Part-III**

PART - I

1. (i) First edition of Indian pharmacopoeia was published in the year of (1M)
 (a) 1953 (b) 1954 (c) 1955 (d) 1956
- (ii) The agents which neutralizes the stomach acidity are (1M)
 (a) Acidifiers (b) Antacids (c) cathartics (d) Emetics
- (iii) Example of desensitizing agents is (1M)
 (a) Strontium chloride (b) zinc chloride
 (c) both a and (d) none of the above
- (iv) Electrolytes used in the replacement therapy is (1M)
 (a) Na I (b) NaCl (c) Na Br (d) Na F
- (v) Dentifrices means (1M)
 (a) Cleaning of teeth & adjacent gums (b) cleaning of mouth
 (c) cleaning of nose (d) cleaning of eye
- (vi) Agents used for precipitation of proteins are (1M)
 (a) Astringents (b) Expectorants (c) Poisons (d) Antidote
- (vii) Agents which are neutralizing poisons (1M)
 (a) Cathartics (b) Antidote (c) Emetics (d) Antacids
- (viii) Use of potash alum (1M)
 (a) Anti microbial agents (b) cathartic (c) Astringents (d) Acidifier
- (ix) Roselle's salt is (1M)
 (a) Potassium tartar ate (b) sodium tartarate
 (c) sodium potassium tartarate (d) none of the above
- (x) Formula of half life of Radio active substances is (1M)
 (a) $t_{1/2} = 0.693/k$ (b) $t_{1/2} = 0.396/k$ (c) $t_{1/2} = 0.936/k$ (d) $t_{1/2} = 0.936/k$
- (xi) Example of Haemanetics is (1M)
 (a) Ferrous sulphate (b) Ferrous oxide (c) Ferric sulphite (d) Ferric oxide
- (xii) Example of Bulk forming cathartics (1M)
 (a) Senna extract (b) castor oil
 (c) Sodium carboxy methyl cellulose (d) mineral oil
- (xiii) Zinc eugenol cement is (1M)
 (a) Haematinic (b) Antidote (c) Dental product (d) Emetic
- (xiv) Example of disinfectants is (1M)
 (a) Zinc chloride (b) Potassium chloride (c) both a&b (d) none of the above
- (xv) Synonym of Lugol's solution is (1M)
 (a) Strong iodine solution (b) Weak iodine solution
 (c) Aqueous iodine solution (d) Povidone iodine solution

- (xvi) Mechanism of antimicrobial agents (1M)
(a) Oxidation (b) Halogenation (c) Protein precipitation (d) All of the above
- (xvii) CTZ means (1M)
(a) Chemoreceptor trigger zone (b) clinical trial zone
(c) Chemotherapy trigger zone (d) none of the above
- (xviii) Example of Expectorant is (1M)
(a) ammonium chloride (b) potassium iodide
(c) sodium iodide (d) all of the above
- (xix) Example of mechanical Antidote is (1M)
(a) Tannic acid (b) Sodium Calcium Edetate
(c) Finely powdered activated charcoal (d) Dimercaprol
- (xx) Gut-Zeit Apparatus is used for (1M)
(a) Limit test for Lead (b) Limit test for chlorides
(c) Limit test for Arsenic (d) Limit test for Sulphates

PART -II

2. a) Describe the limit test for Arsenic with a neat labelled diagram. (5M)
b) How do you conduct limit test for Iron? (5M)
3. a) Describe the methods used for adjusting isotonicity of a substance. (5M)
b) Write Buffer equations. Write the preparation of one alkaline buffer solution. (5M)
4. a) Discuss the functions of major extracellular ions in acid base balance of body. (5M)
b) Write the preparation and uses of Potassium chloride. (5M)

PART -III

5. Define hematinics. Write the structure and uses of Ferrous gluconate. (5M)
6. Explain the procedure and principle present in the assay of Hydrogen peroxide. (5M)
7. Explain the methods used for the detection and measurement of Radioactivity. (5M)
8. Define dentifrices and write the uses of Calcium carbonate. (5M)
9. Define antimicrobials. Explain the mechanism of action of Iodine and Iodine preparations. (5M)
10. Define and classify Antidotes with examples. (5M)
11. Discuss the functions of major intracellular ions in body. (5M)
12. What are Expectorants? Write the properties and uses of Zinc sulphate. (5M)
13. What are Astringents? Explain the assay of Copper sulphate. (5M)