

**I B. Pharmacy I Semester Supplementary Examinations, February - 2019**  
**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 (Multiple Choice) Questions from **Part-I**  
3. Answer any **TWO** Questions from **Part-II**  
4. Answer any **SEVEN** Questions from **Part-III**
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**PART - I**

1. (i) Latest edition of IP is published in (1M)  
(a) 1956 (b) 1996 (c) 2006 (d) 2018
- (ii) Antidotes neutralize (1M)  
(a) Poisons (b) Food (c) Acids (d) salts
- (iii) The tests used to identify and control small quantities of possible impurities present in a desired substance are (1M)  
(a) Safety tests (b) Potency tests (c) Limit tests (d) Assay tests
- (iv) The following is not an astringent (1M)  
(a) NaCl (b) AgNO<sub>3</sub> (c) ZnO (d) AlCl<sub>3</sub>
- (v) The following is a radioactive isotope (1M)  
(a) Sodium iodide I 131 (b) Potassium iodide  
(c) Sodium iodide (d) Calcium iodide
- (vi) The composition of turbid substance formed in limit test for sulphate is (1M)  
(a) CaSO<sub>4</sub> (b) ZnSO<sub>4</sub> (c) BaSO<sub>4</sub> (d) MgSO<sub>4</sub>
- (vii) In limit test for Arsenic the function of cotton plug dipped in lead acetate solution is to trap gaseous impurities of (1M)  
(a) Sulphur (b) Mercury (c) Carbon dioxide (d) Nitrogen
- (viii) Electrolyte and fluid imbalance can be corrected by administering (1M)  
(a) Bordeaux mixture (b) ORS mixture  
(c) Antidote mixture (d) Astringent mixture

- (ix) Which of the following is a Gastric antacid? (1M)  
(a) Milk of Magnesia (b) Sodium hydroxide  
(c) Potassium hydroxide (d) Ammonium hydroxide
- (x) The penetration power of 'γ' rays is (1M)  
(a) Equal to α (b) Equal to β (c) Greater than α and β (d) Less than β
- (xi) Compounds that resist change in pH of solutions upon the addition of small quantities of acid or alkali are (1M)  
(a) Buffers (b) Acids (c) Bases (d) Salts
- (xii) The following is an expectorant (1M)  
(a) KCl (b) NH<sub>4</sub>Cl (c) NaCl (d) MgCl<sub>2</sub>
- (xiii) The following is a dental desensitizing agent (1M)  
(a) NaNO<sub>3</sub> (b) NaCl (c) Na<sub>2</sub>SO<sub>4</sub> (d) NaF
- (xiv) The pH of Hydrochloric acid buffer is (1M)  
(a) 1.2-2.2 (b) 3.0-6.0 (c) 4.0-7.0 (d) 1.0-7.0
- (xv) Copper sulphate is used as an (1M)  
(a) emetic (b) expectorant (c) antacid (d) anticaries agent
- (xvi) Potassium permanganate acts as an Antimicrobial by (1M)  
(a) Protein precipitation (b) Oxidation (c) Reduction (d) Hydrolysis
- (xvii) The function of Sodium citrate in ORS mixture is to treat (1M)  
(a) Systemic acidosis (b) Systemic alkalosis  
(c) Gastric acidosis (d) Renal alkalosis
- (xviii) Major extracellular cation is (1M)  
(a) Na<sup>+</sup> (b) K<sup>+</sup> (c) Mg<sup>2+</sup> (d) Ca<sup>2+</sup>
- (xix) Drawback of Aluminium antacids is (1M)  
(a) Constipation (b) Diarrhea (c) Vomiting (d) Drowsiness
- (xx) What concentration of NaCl is isotonic? (1M)  
(a) 1.9%w/v (b) 0.9%w/v (c) 0.69%w/v (d) 1.99%w/v

**PART -II**

2. a) Define and classify Cathartics with suitable examples. (5M)  
b) What is modified limit test for Chloride? (5M)
3. a) Write the assay and uses of Ferrous sulphate. (5M)  
b) Explain the treatment for cyanide poisoning. (5M)
4. a) What are the applications of Radiopharmaceuticals? (5M)  
b) Write the WHO recommended formula of ORS mixture and explain the function of each ingredient. (5M)

**PART -III**

5. What is the role of dilute Nitric acid in limit test for chloride? (5M)
6. Write the preparation and uses of Sodium bicarbonate. (5M)
7. Differentiate acidifiers and antacids. (5M)
8. Write the procedure, principle present in the assay of Sodium chloride. (5M)
9. What are impurities? Explain different sources of impurities. (5M)
10. Write the principle and reaction involved in the assay of Sodium thiosulphate. (5M)
11. Differentiate  $\alpha$  and  $\beta$  radiations. (5M)
12. Write the preparation and uses of Alkaline Borate buffer (5M)
13. Write the handling and storage of radiopharmaceuticals. (5M)