Code No: BP104T **PCI** SET - 1

I B. Pharmacy I Semester Supplementary Examinations, May - 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) Astringents precipitate (1M)

(a) Lipids (b) Starch (c) Proteins (d) Oils

(ii) The legally recognized book of standards for the quality of drugs and dosage forms in India is (1M)

(a) BP (b) IP (c) USP (d) EP

(iii) The test used to estimate the quantity of active ingredient in a substance is (1M)

(a) Assay (b) Identification test (c) Qualitative test (d) Toxicity tests

(iv) The substances that are used to neutralize gastric acid are (1M)

(a) Cathartics (b) Laxatives (c) Antidotes (d) Antacids

(v) The following is not a hematinic (1M)

(a) Ferrous sulphate (b) Ferric Ammonium Citrate
(c) Ferrous Fumarate (d) Magnesium sulphate

(vi) The indicator used is in the assay of Ferrous sulphate is (1M)

(a) Phenolphthalein (b) Ferroin (c) Crystal violet (d) Methyl orange

(vii) Boric acid is (1M)

(a) Antimicrobial (b) Antidote (c) Antacid (d) Cathartic

(viii) In limit test for Iron the purple colored substance formed is (1M)

(a) Ferrous sulphate (b) Ferrous fumarate
(c) Ferrous thioglycolate (d) Ferric oxide

(ix) The units used for the measurement of radioactivity are (1M)
(a) Curie (b) Mary (c) Dynes (d) Kgs
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(x) ORS mixture is used to correct (1M)

(a) Acid imbalance (b) Alkali imbalance
(c) Electrolyte imbalance (d) Protein imbalance

(xi) Which of the following is a systemic alkalizer? (1M)

(a) Magnesium oxide (b) Sodium bicarbonate
(c) Aluminium hydroxide (d) Magnesium hydroxide

(xii) The following is not an antidote (1M)

(a) Sodium thiosulphate (b) Sodium nitrite
(c) Activated Charcoal (d) Sodium Iodide

(xiii) Which of the following is not present in the Ringer's solution? (1M)

(a) NaCl (b) KCl (c) $CaCl_2$ (d) $HgCl_2$

(xiv) The function of 10M Ammonia in limit test for iron is to maintain Iron in (1M)

(a) Reduced state (b) Oxidized state
(c) Iron oxide form (d) Precipitate form

(xv) Major intracellular cation is (1M)

(a) Na^+ (b) K^+ (c) Mg^{2+} (d) Ca^{2+}

(xvi) The resistance to a change in pH upon the addition of small quantities of acid or alkali is (1M)

(a) Buffer capacity (b) Buffer (c) Buffer action (d) Neutralization

(xvii) The pH of Alkaline Borate buffer is (1M)

(a) 8.0-10.0 (b) 12.0-14.0 (c) 8.0-14.0 (d) 10.0-14.0

(xviii) The wavelength of 'γ' rays is (1M)

(a) Equal to α (b) Equal to β (c) Greater than α and β (d) Less than α and β

(xix) Sodium iodide I 131 is used to treat (1M)
(a) Hyperthyroidism (b) Hypothyroidism (c) Poisoning (d) Gastric acidity

(xx) The function of an anticaries agent is to prevent (1M)

(a) dental decay (b) bone decay (c) Skin decay (d) hair decay

PART -II

2. a) Write the principle and reaction present in the modified limit test for Sulphate. (5M)

   b) Define antacids. What are the ideal characteristics of an antacid? (5M)

3. a) Write the principle and reaction involved in the assay of Ammonium chloride. (5M)

   b) Explain the preparation and uses of Hydrogen peroxide. (5M)

4. a) Define and classify Radiopharmaceuticals. (5M)

   b) Write the preparation and uses of Phosphate buffer. (5M)

PART -III

5. Define Buffers and write the applications of buffers in pharmacy. (5M)

6. Differentiate primary standard and secondary standard. (5M)

7. Write the procedure and principle involved in the assay of Ferrous sulphate. (5M)

8. Why is it necessary to limit impurities in pharmaceuticals? (5M)

9. Mention different Fluorides used in dental products and write their uses. (5M)

10. How do you treat Cyanide poisoning? (5M)

11. How is half life of a radioisotope calculated? (5M)

12. Write the principle and reaction involved in the assay of Calcium gluconate. (5M)

13. What are Emetics? Write the properties of 'γ' radiations. (5M)