Seat No: _____ **Enrollment No: _____**

PARUL UNIVERSITY

FACULTY OF PHARMACY

B. Pharm. Summer 2017 - 18 Examination

Semester: 1 **Date: 05/06/2018**
Subject Code: BP104T **Time: 10.00 am to 1.00 pm**
Subject Name: Pharmaceutical Inorganic Chemistry **Total Marks: 75**

Instructions:
1. Figures to the right indicate maximum marks.
2. Make suitable assumptions wherever necessary.

Q.1 Multiple Choice Questions (MCQs) (1 Mark Each) **(20)**

1. Role of Citric acid in the Limit test for Iron
   a) Makes complex with iron
   b) Makes complex with ammonia
   c) Makes complex with Thioglycollic acid
   d) Precipitates with Iron
2. Impurities in pharmaceutical preparation may be due to following sources:
   a) Raw material
   b) Manufacturing process
   c) Chemical instability
   d) All of the above
3. In Bronsted-Lowry concept acid is
   a) proton donor
   b) electron donor
   c) proton accepter
   d) electron accepter
4. The goal of antacid therapy
   a) ↓Concentration of acid in gastric juice
   b) Gastic pH 3.5 and 7
   c) ↑Concentration of acid
   d) Both a and b
5. Full Form of ORS
   a) Oral Replenisher salts
   b) Oral Rehydrating salts
   c) Oral Refreshment salts
   d) Oral Rehydration salts
6. State the reaction for Limit test for Chloride
   a) $2Cl^- + CaCO_3 \rightarrow CaCl_2$
   b) $Cl^- + NaOH \rightarrow NaCl$
   c) $Cl^- + AgNO_3 \rightarrow AgCl$
   d) $2Cl^- + BaSO_4 \rightarrow BaCl_2$
7. Role of Lead acetate Cotton plug in Gutzeit Apparatus
   a) To form Lead sulphide
   b) To form Arsine sulphide
   c) To form Lead Chloride
   d) To form Lead nitrate
8. $Al(OH)_3$ gel is used in
   a) Dentifrices
   b) Radioactive agent
   c) Ulcers
   d) Expectorant
9. Synonym of Magnesium Hydroxide mixture
   a) Compound Magnesium Hydroxide solution
   b) Milk of Magnesia
   c) Ringer's injection
   d) Hartmann's solution for Injection
10. Which of the following is not an example of a weak acid
    a) Lactic acid
    b) Carbonic acid
    c) Sulfuric acid
    d) Pyruvic acid
11. The mechanism of antidote action
    a) by counteracting the effect of poison
    b) by changing chemical nature of poison
    c) by preventing absorption of poison into the body
    d) all of the above
12. Cathartics are the drugs used to
    a) reduce acidity
    b) reduce constipation
    c) reduce gastrointestinal irritations
    d) all of the above
13. Synonym of Chlorinated lime
    a) Bleaching power
    b) Milk of Magnesia
    c) Ringer's injection
    d) Lugol solution

14. What should be ideal property for an antacid prepration?
    a) It should not be absorbable
    b) Not causes systemic alkalosis
    c) Should buffer in the pH range 4–6
    d) All of the above
15. $CuSO_4$ is essential component of
    a) Fehling solution
    b) Benedict solution
    c) Tollens reagent
    d) Molisch reagent
16. Assay of sodium fluoride can be done by
    a) Gravimetric titration
    b) Redox titration
    c) Complexometric titration
    d) Non aqueous titration
17. State the agent that used in cyanide poisoning
    a) Sodium thiosulfate
    b) Activated charcoal
    c) Ferrous gluconate
    d) Sodium Potassium Tartarate
18. Anaemia can be caused by
    a) excessive blood loss
    b)excessive blood formation
    c) both (a) and (b)
    d) none of the above
19. In a radiation change a nucleus usually losses just one particle of α and β, it is frequently accompanied by
    a) X-ray
    b) Gamma ray
    c) both of the above
    d) none of the above
20. Dil.HCl is
    a) Antacid
    b) Expectorant
    c) Acidifiers
    d) Astringents

Q.2 Long Answers (any 2 out of 3) (10 Mark Each) **(20)**

1. List out the sources of impurities in Pharmaceutical substance and Explain each sources with example.
2. Enumerate the various Acid Base theories. Explain each with its limitation in detail.
3. What are gastrointestinal agents? Classify them with examples. Describe about qualities of an ideal antacid and combination therapy of antacids.

Q.3 Short Answers (any 7 out of 9) (5 Mark Each) **(35)**

1. Write in detail about Limit test for Arsenic with diagram.
2. What are dentifrices? Write role of fluoride in the treatment of dental caries.
3. Write short note on electrolyte (I) Sodium (II) Potassium
4. What are radiopharmaceuticals? Write their applications.
5. Define antidote and classify it. Write a note on Sodium thiosulfate.
6. Write a brief note on Buffer capacity and Buffer action.
7. What are antimicrobial agents? Describe it mechanism of action.
8. Write a note on ORS.
9. What are Expectorants? Explain Ammonium Chloride in brief.