REV-01
BPH/99/50/55

2023/01

SET B

B. PHARM.
FIRST SEMESTER
PHARMACEUTICAL INORGANIC CHEMISTRY
BP104T

[USE OMR SHEET FOR OBJECTIVE PART]

Duration : 3 hrs. **Full Marks : 75**

[PART-A : Objective]

Time : 30 min. **Marks : 20**

Choose the correct answer from the following:. ***1×20=20***

1. The hardest substance in the human body is-
   a. Cementum b. Bone
   c. Enamel d. Dentine

2. Calcium carbonate is also known as-
   a. Precipitated chalk b. Precipitated salt
   c. Precipitated powder d. Precipitated paste

3. Soluble sulphate and barium chloride will form insoluble sulphate in presence of-
   a. H_2SO_4 b. HNO_3
   c. HCl d. H_2S

4. Concentration of bicarbonates in extra-cellular fluid is -
   a. 75 mEq/L b. 58 mEq/L
   c. 28 mEq/L d. 10 mEq/L

5. Plasma sodium concentration is-
   a. 130-140 mEq/L b. 134-140 mEq/L
   c. 135-145 mEq/L d. 136-142 mEq/L

6. What is the volume of interstitial fluid in body fluid compartments?
   a. 30L b. 20L
   c. 10L d. 40L

7. What is the molecular weight of sodium fluoride?
   a. 41.99 b. 43.99
   c. 42.99 d. 44.99

8. In Pharmacopoeia, Pharmakon means 'a drug' and poiein means
   a. To take b. To break
   c. To make d. Both a &b

9. Which of the following is not the use of Ammonium chloride?
   a. Acid-base balance b. Astringent
   c. Diuretics d. Expectorant

10. How much percentage of interstitial fluid constitute body weight?
    a. 12-15% b. 11-15%
    c. 13-15% d. 10-15%

11. The normality of iodine solution used in assay of sodium thiosulphate is-
    a. 0.5 N
    b. 0.1 N
    c. 0.2N
    d. 0.3N

12. Molecular weight of ammonium chloride is-
    a. 52.49 g/mol
    b. 53.49 g/mol
    c. 51.49 g/mol
    d. 54.49 g/mol

13. Copper sulphate exists in the form of _____ crystalline granule-
    a. Green
    b. Blue
    c. Reddish
    d. Pink

14. Zinc sulphate is insoluble in-
    a. Distilled water
    b. Alcohol
    c. Glycerine
    d. All of the above

15. The active inorganic compound present in bleaching powder is-
    a. Calcium monochloride
    b. Calcium chloride
    c. Calcium dichloride
    d. Calcium chlorite

16. An example of stimulant expectorant-
    a. Senega
    b. Lemon
    c. Indian squill
    d. Both a & c

17. An example of macrolide antibiotics-
    a. Penicillin
    b. Erythromycin
    c. Streptomycin
    d. Lincomycin

18. Hydrogen peroxide can be obtained from the paste of-
    a. Barium oxide
    b. Barium peroxide
    c. Barium dioxide
    d. Barium

19. Ferrous sulphate is soluble in-
    a. Ethanol
    b. Distilled water
    c. Chloroform
    d. All of the above

20. Boric acid having ___ mol.wt.
    a. 50.33 g/mol
    b. 61.83 g/mol
    c. 62.77g/mol
    d. 58.87g/mol

-- --- --

PART-B : Descriptive

Time : 2 hrs. 30 min. Marks : 35

[Answer any seven (7) questions]

1. What are antacids? Claasify them with suitable examples? Write preparation method used for sodium bicarbonate? 1+2+2 =5

2. Define limit test? Write down the principle and method involved in limit test for chloride ? 1+2+2 =5

3. Describe the principle and method involved in limit test for iron? 2.5+2.5 =5

4. Define dentifrices ? Describe the role of fluoride in the treatment of dental caries? Write about preparation and uses of sodium fluoride? 1+2+2 =5

5. What is pH? Calculate the pH of alkaline buffer solution with example? Define Lewis concept for acid and base with example? 1+2+2 =5

6. Define expectorants? Claasify them with example? Write two uses of ammonium chloride? 1+3+1 =5

7. What are antidotes? Write a note on oral rehydration salt (ORS)? 1+4=5

8. Define cathartics, purgatives and laxatives? Write preparation and properties of magnesium sulphate? 3+2=5

9. Define emetics? Write a note on prepation and uses of copper sulphate? 1+4=5

(PART-C : Long type questions)

[Answer any two (2) questions]

1. Define antimicrobial agent? Classify them with examples? Describe the mechanism of action for antimicrobial agent? Write two preparation method of hydrogen peroxide? **1+4+3+2 =10**

2. Define impurities? Write down the types and sources of impurities with example? **1+3+6 =10**

3. What is buffer solution? Write down the types of buffer solution with example? Explain about buffer action by giving example of acidic buffer solution? Write four physiological function of Mg^{2+} ? **2+3+3+2 =10**

-- --- --