

Printed Pages– 9

Roll No. ....

**341154(41)**

**B. Pharmacy (First Semester) Examination,  
Nov.-Dec. 2020**

**(PCI Scheme)**

**(Branch : Pharmacy)**

**PHARMACEUTICAL INORGANIC CHEMISTRY**

***Time Allowed : Three hours***

***Maximum Marks : 75***

***Note : Attempt specified number of questions  
from each section.***

**Section-A**

**(Multiple Choice Questions)      20×1=20**

**1. Attempt all questions :**

- (i) Which of the reagent used in limit test of sulphate :
- (a) Silver nitrate
  - (b) Barium chloride
  - (c) Thioglycolic acid

**341154(41)**

**PTO**

[ 2 ]

- (d) None of the above
- (ii) Limit test is performed to find the .....
  - (a) Type of compound
  - (b) Type of reaction
  - (c) Type of reaction condition
  - (d) Impurity
- (iii) How we can determine the pH?
  - (a) By potentiometer
  - (b) By amperometer
  - (c) By conductometer
  - (d) None of the above
- (iv) Which of the following pair is a conjugate acid-base pair?
  - (a)  $\text{CH}_3\text{COOH}$  and  $\text{OH}^-$
  - (b)  $\text{HCN}$  and  $\text{OH}^-$
  - (c)  $\text{HCl}$  and  $\text{OH}^-$
  - (d)  $\text{HCN}$  and  $\text{CN}^-$
- (v) Strong ammonium hydroxide is prepared by ....

341154(41)

[ 3 ]

- (a) Solvay process
- (b) Merck process
- (c) Haber's process
- (d) Ammonia soda process
- (vi) Blood plasma belongs to .....
  - (a) Intracellular fluid
  - (b) Extracellular fluid
  - (c) Interstitial fluid
  - (d) (b) and (c) both
- (vii) Which of the following ions diffuse easily between extracellular and intracellular compartments?
  - (a) Chlorine
  - (b) Magnesium
  - (c) Potassium
  - (d) Sodium
- (viii) Lost of water occurs through :
  - (a) Lungs
  - (b) Skin

341154(41)

PTO

[ 4 ]

- (c) GIT
- (d) All of the above
- (ix) Which of the following used as desensitizers?
- (a) Sodium fluoride
- (b) Calcium carbonate
- (c) Zinc chloride
- (d) Stannous fluoride
- (x) Ammonium chloride can be used as :
- (a) Antacid
- (b) Cathartics
- (c) Acidifiers
- (d) Emetic
- (xi) The condition of insufficient acidity in gastric secretion is known as :
- (a) Achlorhydria
- (b) Hypochloria
- (c) Akalemia
- (d) None of the above

(341154(41)

[ 5 ]

- (xii) Which of the following is systemic antacid?
- (a) Aluminium hydroxide
- (b) Calcium chloride
- (c) Sodium bicarbonate
- (d) Aluminium chloride
- (xiii) Heavy kaolin is .....
- (a) Aluminium silicate
- (b) Aluminium hydroxide
- (c) Aluminium carbonate
- (d) Aluminium chloride
- (xiv) Bismuth subcarbonate is used as .....
- (a) Cathertics
- (b) Adsorbent
- (c) Antacid
- (d) Emetic
- (xv) Which of the following can be used as cathartic :
- (a) Copper sulphate
- (b) Potassium Iodide

(341154(41)

PTO

[ 6 ]

- (c) Ammonium chloride
- (d) Magnesium sulphate
- (xvi) Chemical formula for Sodium Potassium Tartrate is :
- (a)  $C_4H_4KNaO_6 \cdot 4H_2O$
- (b)  $C_4H_4KNaO_4 \cdot 2H_2O$
- (c)  $C_3H_4KNaO_6$
- (d)  $C_4H_4KNaO_5 \cdot H_2O$
- (xvii) Stimulation of chemoreceptor trigger zone causes the :
- (a) Emesis
- (b) Diarrhoea
- (c) Bowel irritation
- (d) Sensitivity
- (xviii) The example of physiological antidote is ....
- (a) Activated charcoal
- (b) Sodium thiocyanate
- (c) Sodium nitrite
- (d) Copper sulphate

341154(41)

[ 7 ]

- (xix) The chemical formula of Alum is .....
- (a)  $KAl(SO_4) \cdot 12H_2O$
- (b)  $K_2SO_4 \cdot 12H_2O$
- (c)  $K(SO_4)_2 \cdot 12H_2O$
- (d)  $KAlSO_4 \cdot 12H_2O$
- (xx) Which is used as common quenching agent?
- (a) Chlorine and bromine
- (b) Methane
- (c) Alcohol
- (d) Argon

### Seciton-B

(Long Answer Type Questions)  $2 \times 10 = 20$

*Note : Attempt any two questions.*

- What is impurity? Explain the principle and procedure for the limit test of sulphate.
- Write the function of different ions present in physiological fluid along with the role of calcium gluconate in

341154(41)

PTO

[ 8 ]

replacement therapy.

4. What is Antacid? Write the ideal characteristics of antacid. Give the properties and assay method of sodium bicarbonate.

### Section-C

(Short Answer Type Questions) 7×5=35

*Note : Attempt any seven questions.*

5. What is buffer? Write the method of measurement of isotonicity.
6. Write a note on dentifrices.
7. Discuss the role of hydrogen peroxide as antimicrobial agent.
8. Discuss the mechanism of sodium thiosulphate as antidote.
9. Give the assay and uses of ferrous sulphate.

[ 9 ]

10. Explain the preparation and role of potash alum as astringents.
11. Write application of radioactive substances.
12. What are the uses of acidifier. Discuss with suitable example.
13. Describe the different sources of impurities.