

**B. PHARM.
FIRST SEMESTER
PHARMACEUTICAL INORGANIC CHEMISTRY
BP104T**

**SET
A**

[USE OMR FOR OBJECTIVE PART]

Duration : 3 hrs.

Full Marks : 75

Time : 30 min.

(PART-A: Objective)

Marks : 20

1×20=20

Choose the correct answer from the following:

- Sodium nitrite is an antidote for
 - Arsenic poisoning
 - Cyanide poisoning
 - Heavy metal poisoning
 - Lead poisoning
- Which of the following isn't a hematinic
 - Folic acid
 - Vitamin B12
 - Iron
 - Calcium
- Potash alum is assayed by _____ method
 - Oxidation-reductions
 - Complexometric
 - Gravimetric
 - Precipitations
- Which of the following is prepared by Solvay process
 - Sodium bicarbonate
 - Dil. HCL
 - Magnesium sulphate
 - Sodium orthophosphate
- Calcium gluconate can be used as
 - Antacid
 - Electrolyte replenisher
 - Laxative
 - Astringent
- _____ is prepared when rock is mined
 - Bismuth subcarbonate
 - Sodium bicarbonate
 - Kaolin
 - Sodium hydroxide
- In the limit test of sulphate alcohol prevents
 - Saturation
 - Super saturation
 - Less saturation
 - Precipitation
- Which one of these is used as isotonicity adjuster
 - Boric acid
 - Dextrose
 - Sodium chloride
 - All of them
- In limit test of iron purple colour formation is due to
 - Ferrous sulphate
 - Glycolate
 - Ferric glycolate
 - Glycolic acid

10. Limit test of chloride is performed in
 - a. Measuring cylinder
 - b. Nessler cylinder
 - c. Iodine flask
 - d. Gutzeit
11. Amphoteric is a substance behaves as
 - a. Acid
 - b. Base
 - c. Both acid and base
 - d. Strong base
12. The first Indian edition of pharmacopeia was published in the year
 - a. 1956
 - b. 1959
 - c. 1955
 - d. 1948
13. Which radiation is the least penetrating?
 - a. Alpha
 - b. Beta
 - c. Gama
 - d. Delta
14. Which of the following statement is not correct?
 - a. Isotope has the same proton number but different neutron number
 - b. Isotope has different mass
 - c. All the isotope are radioactive
 - d. None of the above
15. Containers that are used to safely store and transport radioisotopes must be made of which metal?
 - a. Iron
 - b. Aluminium
 - c. Copper
 - d. Lead
16. Scintigraphy is used to detect radioisotopes that emit which kind of radiation?
 - a. Alpha
 - b. Beta
 - c. Gama
 - d. Delta
17. Replacement therapy is needed when
 - a. Heavy loss of water
 - b. Prolonged fever
 - c. Diarrhoea
 - d. All of the above
18. Which of the following is not a type of impurity in pharmaceutical substances?
 - a. Organic impurities
 - b. Inorganic impurities
 - c. Residual solvent
 - d. Microbial impurities
19. Buffer solution are usually made by
 - a. Weak acid and weak base
 - b. Weak acid and its salt
 - c. Strong acid and its salt
 - d. Strong acid and base
20. Which of the following is used as acidifier
 - a. Dil. HCl
 - b. Sodium bicarbonate
 - c. Magnesium sulphate
 - d. Potassium permanganate

(PART-B: Descriptive)

Time : 2 hrs. 30 min.

Marks : 35

[Answer any seven (7) questions]

1. What are cathartics? How magnesium sulphate is prepared in laboratory and write its uses. 1+4=5
2. Explain the role of fluoride in the treatment of dental caries. 5
3. Derive Henderson-Hasselbalch equation for basic buffer. 5
4. What is the difference between limit and limit test? Write the principle involve in limit test of arsenic with the reaction? 2+3=5
5. What is an astringent? Write notes on potash alum? 1+4=5
6. What is radioactivity? Discuss the properties of α , β and γ radioactive rays 1+4=5
7. Discuss Geiger-muller counter for the measurement of radioactivity? 5
8. Define haematinics? Discuss the preparation and assay of ferrous sulphate. 1+4=5
9. Explain the various source of impurities in pharmaceuticals industry. 5

PART-C : Long type questions

[Answer any two (2) questions]

1. What is antacid? Write the classification of antacid? Why combination of antacid are important for better action of drugs? 1+5+4
=10
2. Define the following term (i) osmotic pressure (ii) isotonic solution (iii) buffer capacity. Describe the methods used to adjust isotonicity? 1+1+1+
7=10
3. Write the classification of antidote based on their mechanism of action? Discuss any two-antidote used for cyanide poisoning 3+7=10

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