

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BPHARM 0921]

**SEPTEMBER 2021
(FEBRUARY 2021 EXAM SESSION)**

Sub. Code: 4251

**B. PHARMACY DEGREE EXAMINATION
FIRST YEAR – (NON-SEMESTER)
PAPER I – PHARMACEUTICAL INORGANIC CHEMISTRY
*Q.P. Code: 564251***

Time: Three hours

Answer ALL questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Discuss the sources of impurities in pharmaceutical substances? Add a note on the importance of quality control.
b) Describe the principle involved in the limit test for sulphate.
2. What are antiseptics and disinfectants? Write the method of preparation, properties, assay and storage conditions of (a) Boric acid (b) Potassium permanganate.

II. Write notes on:

(8 x 5 = 40)

1. List out the Medical gases. Write the method of preparation and assay of Carbon dioxide?
2. Write notes on Electrolyte combination therapy?
3. Explain the radioactive standards of $^{58}\text{Cobalt}$.
4. What is Calamine? Write the test for purity, assay and uses of Calamine.
5. Explain the biological role of Coordination compounds.
6. Write the preparation, properties, assay and uses of Sodium fluoride?
7. Write short notes on Antioxidants?
8. What are the ideal qualities of an Antacid? Explain the assay and uses of Magaldrate.

III. Short answers on:

(10 x 2 = 20)

1. Define Isotope and Isobar.
2. What is Epsom salt? Write its uses.
3. What is Iodine tincture?
4. What is the molarity of 245.0g of H_2SO_4 dissolved in one litre of solution?
5. What is the reason of addition of Ammonia in the limit test for iron?
6. Give the uses of Helium.
7. What are Acidifiers? Give examples.
8. What are Chelating agent?
9. What are trace ions?
10. What are Dentifrices?
