

**VINAYAKA MISSION'S RESEARCH FOUNDATION  
(Deemed to be University), SALEM**

**DIPLOMA IN PHARMACY EXAMINATION –October 2021  
First Year**

**PHARMACEUTICAL CHEMISTRY - I**

Time: Three hours

Maximum: 80 marks

Answer **Any EIGHT** questions only  
All questions carry equal marks  
Draw Neat, Labelled Diagram wherever necessary.

1. What are electrolytes? Describe the preparation, properties, assay and storage conditions of sodium acetate and potassium citrate.
2. List the official compounds of Calcium and mention their uses. Give the preparation, properties, assay and use of Iodine.
3. Give the reason for use of the following chemicals
  - a) Ammonia in the limit test for iron.
  - b) Polyhydric alcohol in the assay of Boric acid.
  - c) Lead acetate cotton wool in the limit test for arsenic.
  - d) Nitric acid in the limit test for Chloride.
  - e) Potassium sulphate in the limit test for sulphate.
4. Describe various radiopharmaceutical compounds used in diagnosis and treatment.
5. Outline the preparation of the following compounds
  - a) Chlorinated Lime
  - b) Ammonium chloride
  - c) Ferrous sulphate
  - d) Antimony potassium tartrate.
6. Give the identification tests for following radicals
  - a) Nitrate
  - b) Copper
  - c) Sulphate
  - d) Bicarbonate
  - e) Aluminium

7. Write notes on
  - a) Astringent
  - b) Antacid
8. Write the preparation, properties, storage, assay and uses of Oxygen and Carbon dioxide.
9. a) Describe the principle, reaction and procedure involved in the limit test for Heavy metals.
  - b) Give the preparation, properties, Assay, storage and Uses of Hydrogen peroxide.
10. Write a note on
  - a) Antioxidants.
  - b) Respiratory Stimulants.

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(Sl.No. M21239)