

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

**DIPLOMA IN PHARMACY EXAMINATION – April 2019**  
**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. Define radioactivity. Explain the Geiger muller counter methods.
2. Explain the principle, reaction and procedure involved in the limit test for iron.
3. Give an account of a. Rochelle Salt b. Zinc chloride.
4. Discuss the preparation, properties, assay, storage and uses of official compounds of calcium.
5. a) Define buffer capacity. Enumerate the uses of buffer. b) What are antacids? Write the preparation, assay and uses of aluminum hydroxide gel.
6. Define the following terms with examples.
  - a) Respiratory stimulant
  - b) Expectorant
  - c) Antidote
  - d) Astringents
  - e) Saline Cathartic.
7. Write the identification test for following :
  - a) Calcium
  - b) Sulphate
  - c) Nitrate
  - d) Ammonium.
8. Write the preparation and assay of following
  - a) Hydrogen peroxide
  - b) Zinc sulphate.
9. Write the preparation and uses of following :
  - a) Boric acid
  - b) Selenium sulphide
  - c) Sodium nitrate
  - d) Potassium Iodide.
10. Write note on a) Calcium carbonate b) Yellow mercuric oxide.

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