

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

DIPLOMA IN PHARMACY EXAMINATION – October 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. Explain various sources of impurities in Pharmaceuticals with suitable examples.
2. Describe the measurement of Radioactivity and add a note on Biological effects of radiations.
3. What are dental products? Write the methods of preparation and properties of
 - a) Sodium fluoride
 - b) Dicalcium phosphate.
4. Write short notes on :
 - a) Sulphur and its compounds
 - b) Protectives and adsorbents.
5.
 - a) Write the principle and reactions involved in the limit test for iron.
 - b) Write a note on official buffers.
6. Complete the following reactions
 - a) $\text{AgNO}_3 + \text{HCl} \longrightarrow$
 - b) $\text{Na}_2\text{CO}_3 + \text{Ca(OH)}_2 \longrightarrow$
 - c) $2\text{Na}_2\text{S}_2\text{O}_3 + \text{I}_2 \longrightarrow$
 - d) $\text{ZnO} + \text{H}_2\text{SO}_4 \longrightarrow$
 - e) $\text{CaCO}_3 + 2\text{HCl} \longrightarrow$
7. What are Antacids? Describe the preparation, properties, assay and storage conditions of any TWO magnesium compounds used as an antacid.
8. Write identification test for carbonates, iodide, ferrous salts, magnesium and potassium.
9. Write a note on :
 - a) Inhalants
 - b) Expectorants
10. Write briefly on :
 - a) Oral electrolyte powder
 - b) Official Mercury Compounds.