

## ENGG CHEMISTRY PRACTICAL

Periods/Weeks : 04 Periods End Exam. : 25 Marks

Total Periods : 60 Periods Sessional : 25

Examination : 04 Hours.

1. Preparation and Study of Carbon dioxide and Ammonia Gas.
2. Identification of Basic Radicals: Magnesium Zinc, Ammonium, Copper, Aluminum Copper, Sodium, Calcium, Lead, Cadmium.  
  
Identification of Acid Radicals : Carbonate Chloride, Sulphide, Sulphate, Nitrate.
3. Identification of unknown salt in –
  - a) Lime stone (Calcium Carbonate)
  - b) Pollutant (Lead Nitrate or Cadmium Carbonate).
  - c) Fertilizer (Ammonium Sulphate).
  - d) Electrolyte (Ammonium Chloride).
  - e) Fungicide (Copper sulphate)
  - f) Co-agulant (Aluminium Sulphate).
  - g) Mordant (Zinc Sulphate)
  - h) Gypsum (Calcium sulphate)
  - i) Epsom (Magnesium sulphate)
  - j) Washing soda (Sodium carbonate).
4. Titration of N/10 solution of an alkali with a standard solution of an acid.
5. Estimation of calcium present in water with EDTA (Ethylene Diamine Tetra Acetic Acid).
6. Determine the Acid value of Lubricant (Demonstration).

7. Determination of pH value of water by pH meter (Demonstration purpose).
8. Estimation of Ferrous-Ion in Mohr's Salt (Demonstration purpose).

**Books Recommended :**

1. Practical Intermediate Chemistry By Dr. Bichitrananda Nanda.
2. Laboratory Manual on Engineering Chemistry By Dr. Sudharani, Dhanpat Rai Publication Company.