

Time: 2.45 hours	Essay Type	Marks = 63
---------------------	------------	------------

**Part-I**

- 2.** Write short answers to any Five (5) questions : 10
- Differentiate between Homo atomic and Hetero atomic molecules.
  - Write the chemical formulae of Aluminium Sulphate and Calcium Phosphate.
  - Define Avogadro's Number.
  - Write down the Electronic Configuration of Chloride ion.
  - What is meant by carbon dating?
  - Write any two properties of canal rays.
  - State Mendeleev's Periodic Law.
  - Why the second ionization energy of an element is higher than first one?
- 3.** Write short answers to any Six (6) questions : 12
- Write down general electronic configuration of carbon family.
  - What is meant by Lone Pair and Bond Pair of electron in molecule?
  - Define the term boiling point.
  - Evaporation causes cooling. Explain.
  - Define the term vapour pressure.
  - Define solute and solvent.
  - How can distinguish between solution and pure solvent?
  - Define the term Un-saturated solution.
  - Give two examples of colloids.
- 4.** Write short answers to any Five (5) questions : 10
- Define Electroplating.
  - What are non-electrolytes, give example?
  - What are redox reactions?
  - Write the names of Electro chemical cells.
  - What is the difference between Anode and Cathode?
  - Define metal give two examples.
  - Write any two uses of Silver.
  - Give chemical reaction between methane ( $\text{CH}_4$ ) and chlorine ( $\text{Cl}_2$ ) in the presence of diffused light.

**Part-II**

**Note: Attempt any THREE questions.**

- (a) State any three difference between compound and mixture. 3  
(b) State any four properties of Cathode rays. 4
- (a) Discuss any three important features of modern periodic table. 3  
(b) Describe the properties of ionic compounds. 4
- (a) A gas at pressure 912 mm of Hg has volume  $450\text{cm}^3$ . what will be its volume at 0.4 atm? 3  
(b) What are the effects of temperature on solubility? Explain. 4
- (a) How electroplating of chromium is carried out? 3  
(b) Write down four uses of silver in daily life. 4
- (a) Give comparison of Electrolytic and Galvanic Cell. 3  
(b) Differentiate between electrolytes and non-electrolytes with examples. 4

**Part-III**

**(Practical Part)**

**Note: Attempt any TWO questions.**

- (i) Write the materials required to determine the boiling point of Acetone. 2  
(ii) Write the procedure to determine the boiling point of Ethyl Alcohol. 3
- (i) Write the apparatus to make  $100\text{ cm}^3$  of 0.1M Sodium hydroxide solution. 2  
(ii) Write the procedure to prepare  $250\text{ cm}^3$  of 0.1 M Hydrochloric Acid solution. 3
- (i) Write down the material for the experiment that temperature affects the solubility of solids in water. 2  
(ii) Write the procedure to check the conductivity of different solutions. 3