

**INTERMEDIATE PART-II (12<sup>th</sup> CLASS)****CHEMISTRY PAPER-II (OLD SCHEME)**

TIME ALLOWED: 2.40 Hours

**GROUP-II****SUBJECTIVE**

MAXIMUM MARKS: 68

**NOTE: - Write same question number and its part number on answer book,  
as given in the question paper.**

**SECTION-I**

- 2. Attempt any eight parts. 8 × 2 = 16**
- Why the oxidation state of noble gases is usually zero?
  - Why diamond is a non conductor and graphite is fairly a good conductor?
  - Why the aqueous solution of  $Na_2CO_3$  is Alkaline in nature?
  - How lime mortar is prepared?
  - Why Alkali and Alkaline earth metals are among the reactive elements of the periodic table?
  - Write two reactions in which  $H_2SO_4$  acts as an oxidizing agent.
  - Write two reactions in which  $H_2SO_4$  acts as a dehydrating agent.
  - Write four similarities between Oxygen and Sulphur.
  - Which types of woody Raw Material are used during manufacturing of paper?
  - What do you mean by Reducing Smog?
  - How will you identify the double bond by Bayer's test?
  - What is Mustard Gas? Where was it used?
- 3. Attempt any eight parts. 8 × 2 = 16**
- Write the Chemistry of the Borax-bead Test.
  - How  $Br_2O$  is prepared? Also write its properties.
  - What are substitutional alloys in Transition metals? Give examples.
  - What is Natural Gas? Where is it used?
  - Write two objections to Kekule's formula of Benzene.
  - What products are formed when " $H_2C=O$ " reacts with Acetaldehyde and Acetone?
  - Write the Iodoform Test with one example.
  - Differentiate between Methanol and Ethanol by one test.
  - Write the uses of Methanol.
  - Draw the structural formulae of Malonic acid and Phthalic acid.
  - How Hydrocarbons are produced by natural sources?
  - How Plastic is depolymerized? Give example.
- 4. Attempt any six parts. 6 × 2 = 12**
- What is "Iodized Salt"?
  - Write the disproportionation reaction of Chlorine.
  - What are Chelates? Give one example.
  - Define Nucleophile and Electrophile. Give one example in each case.
  - How Grignard Reagent reacts with ethylene epoxide to form Alcohol?
  - What factors govern the reactivity of R – X bond?
  - What is Wurtz Synthesis? Give example.
  - What do you mean by the rancidity of Oils and Fats?
  - What is the difference between DNA and RNA?

**SECTION-II**

**NOTE: - Attempt any three questions.**

- Explain the position of hydrogen in I A group. 4
  - Describe the role of Gypsum in industries. 4
- What is  $sp^3$  hybridization? Explain the structure of  $CH_4$  on this basis. 4
  - Describe the mechanism of Nucleophilic addition to a Carbonyl compound. 4
- Bring about the following conversions:- 4
    - Methane to Ethane
    - Ethane to Methane
  - Give reactions of Alkyl Halide with 4
    - Sodium metal
    - Alcoholic  $KOH$
    - Sodium-lead alloy
    - $C\bar{N}$
- Explain the Atomic Orbital Treatment to describe the structure of Benzene. 4
  - What is a Peptide Bond? Write down the formula of a dipeptide. 4
- Write note on Smog. 4
  - What is Steel? Give the classification of Steel briefly. 4