

INTERMEDIATE PART-II (12th CLASS)**CHEMISTRY PAPER-II (NEW SCHEME)**

TIME ALLOWED: 3.10 Hours

GROUP-II**SUBJECTIVE**

MAXIMUM MARKS: 83

**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**

- (i) Why the ionic radii of negative ions are larger than the size of their parent atoms?
- (ii) Why Phosphorus forms PCl_3 and PCl_5 ?
- (iii) What is Carbonization? How Carbonization is carried out?
- (iv) How Primary Alcohols are produced by Grignard reagent? Write two methods.
- (v) Why Carboxylic Acids are soluble in water? Give example.
- (vi) How Micronutrients and Macronutrients differ from each other?
- (vii) Why ionization energy decreases down the group and increases along the period?
- (viii) What happens when Dinitrogen Tetra Oxide is heated?
- (ix) What is Octane Number? How Octane Number is improved?
- (x) How Methane is converted to Propanoic Acid?
- (xi) Write down mechanism of the reaction of $SOCl_2$ with Acetic Acid.
- (xii) What is Cement? Which raw materials are used for its preparation?

3. Attempt any Eight parts. 8 × 2 = 16

- (i) What are the main uses of Plaster of Paris?
- (ii) What is meant by Dead Burnt Gypsum?
- (iii) What happens when I_2O_5 reacts with Carbon Monoxide?
- (iv) Give the balanced equation of reaction of conc. H_2SO_4 with $NaCl$.
- (v) How does Acetylene react with HBr ?
- (vi) Write the structure of 2 – methyl – 2 – butene.
- (vii) Differentiate between Primary and Secondary Alcohols.
- (viii) Define Fermentation.
- (ix) What are the characteristics of Lipids?
- (x) What are Oils and Fats?
- (xi) What is the thickness of Atmosphere?
- (xii) What is the major health effect of Pollutant CO ?

4. Attempt any Six parts. 6 × 2 = 12

- (i) Give first two stages about the effect of heat on H_3BO_3 .
- (ii) Write equations to show, how Borax can be converted to Orthoboric Acid by HCl and H_2SO_4 .
- (iii) What is the reason for the development of colours in the compounds of Transition elements?
- (iv) What are Chelates?
- (v) How Hexane and Heptane can give Benzene and Toluene respectively?
- (vi) Give two reactions which show that Benzene is unsaturated hydrocarbon?

(2)

- (vii) What is meant by Dry Cleaning in Paper Manufacturing?
- (viii) How the reduction process of Aldehydes and Ketones give Alcohols?
- (ix) Why Tollen's Test is also called Silver Mirror Test?

SECTION-II

NOTE: - Attempt any three questions.

8 × 3 = 24

- 5.(a) Describe with diagram the manufacture of Sodium by Down's Cell. 4
- (b) Write a note on the acidity of Ethyne. 4

- 6.(a) Give four uses of Al . 4
- (b) Write a note on Sulphonation of Benzene. 4

- 7.(a) Discuss the various Allotropes of Phosphorus. 4
- (b) What are Grignard Reagents? Give the reaction of Ethyl Chloride with:-
(i) Water (ii) Ammonia (iii) Carbon dioxide 4

- 8.(a) How does Fluorine differ from its family members? 4
- (b) Write equations for the reactions of Phenol with:-
(i) Zn dust (ii) Bromine water (iii) Conc. HNO_3 (iv) $H_3C - \overset{\overset{O}{\parallel}}{C} - Cl$ 4

- 9.(a) What is cracking of Petroleum? Discuss any two ways in which cracking is carried out. 4
- (b) What is Cannizzaro's reaction? Also write its mechanism. 4

SECTION-III (PRACTICAL)

10. Attempt any three parts.

- (i) Write the qualitative analysis of Cu^{+2} radical in the systematic manner. 5

- (ii) Write the qualitative analysis of Ba^{+2} radical in the systematic manner. 5

- (iii) (i) Write the qualitative analysis of Cl^{-1} radical in the systematic manner. 4
(ii) Discuss LAYER TEST for Br^{-1} radical. 1

- (iv) How will you detect 'S' and 'X' in an organic compound? 5

- (v) Write the materials required, equation and procedure for the preparation of ASPIRIN. 5