

2015 (A)
INTERMEDIATE PART-II (12th CLASS)

Roll No: _____

CHEMISTRY PAPER-II (NEW SCHEME)

TIME ALLOWED: 3.10 Hours

GROUP-I

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 ionization energy values decrease down the group?
- (ii) Why the oxidation state of noble gases is usually zero?
- (iii) Write two reactions in which $NO_{2(g)}$ acts as strong oxidizing agent.
- (iv) How red phosphorous is obtained from white phosphorous?
- (v) What are Carbocyclic Compounds? Give two examples.
- (vi) Define Tautomerism. Give an example.
- (vii) What are Wurtz Synthesis for the preparation of Alkanes?
- (viii) Explain the reactivity of Grignard's reagent.
- (ix) Write four uses of Acetic Acid.
- (x) Write the structural formulas of (i) Oxalic acid (ii) Malonic acid
- (xi) Give the names of four non woody raw materials used in paper industry.
- (xii) How urea is obtained from Ammonium Carbonate?

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

- (i) Write chemical formulae of (a) Halite (b) Natron
- (ii) How do LiH and Na_2O_2 react with water?
- (iii) What are the uses of Helium gas?
- (iv) How $HClO_4$ is prepared? Give its uses.
- (v) What is Wolf-Kishner reduction?
- (vi) Prepare Chloroprene from Acetylene.
- (vii) What is Williamson's synthesis?
- (viii) Give stepwise synthesis of Ethanol from Molasses.
- (ix) What is meant by Rancidity of fats?
- (x) Give the uses of LIPIDS.
- (xi) What is the composition of Atmosphere?
- (xii) Explain the term BOD.

4. Attempt any Six parts. 6 × 2 = 12

- (i) Give any four properties of Vitreous Silica.
- (ii) Write any two uses of Boric Acid.
- (iii) Explain the term GALVAIZING or Zinc Coating.
- (iv) Explain is mild steel and Medium Carbon Steel.
- (v) Give X – rays study of Benzene. Draw its structure.
- (vi) Give mechanism of Nitration of Benzene.

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- (vii) What is Formalin? Give its composition.
- (viii) Give four uses of Acetaldehyde.
- (ix) How will you distinguish between Ethene and Ethanol? Give equations.

SECTION-II

NOTE: - Attempt any three questions.

8 × 3 = 24

- 5.(a) How Sodium metal is produced commercially by down cell? Give advantages also. 4
- (b) How Alkanes are prepared? Write down four methods. 4

- 6.(a) Give eight uses of Aluminium. 4
- (b) Give four methods for the preparation of Benzene. 4

- 7.(a) Write four chemical reactions of Nitrogen Oxide. 4
- (b) Explain *SN1* mechanism of reaction of Alkyl Halides. 4

- 8.(a) How bleaching powder is prepared commercially? Give its uses. 4
- (b) What are Alcohols? How will you distinguish between primary, secondary and tertiary alcohols? 4

- 9.(a) Write a note on *sp*³ hybridization. 4
- (b) Give uses of Formaldehyde. 4

SECTION-III (PRACTICAL)

10. Attempt any three parts.

- (i) Write the qualitative analysis of Al^{3+} in a systematic manner. 5

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

- (iii) (i) Write the qualitative analysis of HCO_3^- in a systematic manner. 4
- (ii) Describe ring test. 1

- (iv) How will you identify aldehydic group in an organic compound. 5

- (v) Write the material required, equation and procedure for preparation of Phenyl Glucosazone. 5