

SELF ASSESSMENT TEST-2

CLASS 12

CHEMISTRY

Time – 45 min

F.M.- 20 marks

Q1. Fill in the blanks: [5]

a) Alcohols on treatment with thionyl chloride in presence of pyridine yield _____. This reaction is known as _____ process.

b) During electrophilic substitution of chlorobenzene _____ product usually dominates over the _____ product.

c) Chlorobenzene reacts with Mg in presence of ether and forms _____ which is a _____ compound.

d) Alkyl halide on heating with KCN solution gives _____ but on reaction with alcoholic AgCN gives _____.

e) 2-chlorobutane on heating with alcoholic KOH gives _____ as a major product and is an example of _____ reactions.

Q2. MULTIPLE CHOICE QUESTIONS: [5]

i) Which of the following is likely to decompose on standing in presence of sunlight?

a. Ethyl chloride **b.** Ethyl Iodide **c.** Ethyl Bromide **d.** Ethyl Fluoride

ii) Which of the following compounds forms an addition compound with CH_3MgBr which on hydrolysis produces a secondary alcohol?

a. HCHO **b.** CH_3CHO **c.** CH_3COCH_3 **d.** $\text{CH}_3\text{COOCH}_3$

iii) Methyl Bromide is converted to ethane by heating it in ether medium with

a. Al **b.** Zn **c.** Na **d.** Cu

iv) The reaction between 2-Bromobutane and alcoholic KOH gives But-2ene as major product and But-1ene as minor product according to:

- a. Markownikoff's rule
- b. Saytzeff's rule
- c. Hoffmann's rule
- d. Kharasch effect

v) Chloropicrin is obtained by the reaction of

- a. Nitric acid on chloroform
- b. steam on CCl_4
- c. Nitric acid on chlorobenzene
- d. chlorine on Picric acid

Q3. What is DDT? Write balanced equation for the preparation of DDT from chlorobenzene. [2]

Q4. Carry out the following conversions: [2x3=6]

- a. Benzene to Cyanobenzene
- b. Chlorobenzene to Phenol
- c. Aniline to Chlorobenzene

Q5. Why chlorobenzene is ortho-para orienting towards electrophilic substitution reaction? [2]