GIRLS' HIGH SCHOOL AND COLLEGE

2020-2021

Class XII A & B

CHEMISTRY

WORKSHEET NO. –6

Note: - Parents please ensure that your ward refers to the given reference books and website at least for two days.

Reference Books – Nootan ISC Chemistry- Vol II Class XII - H.C. Srivastava

ISC Chemistry Vol II Class XII - K.L. Chugh

Chapter - a). Alcohols, Phenols and Ethers

b). Polymers

Q1). How will you convert the following? Give balanced equations.

a). Chlorobenzene to phenol.

b). Phenol to acetophenone.

c). Phenol to salicyaldehyde.

d). Diethyl ether to ethanol.

e). Ethyl iodide to diethyl ether.

Q2). What happens when

a). Diethyl ether is heated with excess of hydrogen iodide.

b). Phenol is treated with conc. HNO_3 in presence of conc. H_2SO_4

c). Phenol is treated with bromine water

d). Conc. H_2SO_4 is added to ethyl alcohol.

e). Phenol is treated with dilute HNO_3

Q3). Account for the following.

a). Phenol is more acidic than ethanol.

b). Boiling points of ethers are much lower than those of the alcohols of comparable molecular mass.

c). Electrophilic substitution in phenol takes place at ortho and para position.

d). Phenol has smaller dipole moment than ethanol.

e). Reactivity of halogen acid with ethers is HI > HBr > HCl.

Q4). Write complete balanced equations for the following named reactions

a). Reimer-Tiemann reaction

b). Williamson's synthesis

c). Kolbe's reaction

d). Friedel Craft's reaction

Q5). How will you obtain?

a). Picric acid from phenol

b). Benzene from phenol

c). Ethyl Chloride from diethyl ether

d). Ethyl acetate from diethyl ether

e). Ethyl alcohol from diethyl ether

Q6). How will you distinguish between?

a). Phenol and ethanol

b). Diethyl ether and phenol

Q7). Distinguish between

a). Thermosetting and thermoplastics

b). Elastomers and fibres

c). Homopolymer and copolymer

Give one example of each kind.

Q8). Name the monomers and type of polymerization in each of the following polymers.

a). Polyester

b). Dacron

c). Glyptal

d). Bakelite

e). Teflon

f). Nylon 6,6

g). Buna-s

h). Nylon 2 Nylon 6

Q9). a). Draw resonance structure of phenol.

b). Give two examples each of natural polymers and synthetic polymers.
