TEST PAPER: CHEMISTRY

Time: 50 Minutes **Class:** ICSE 10th

Max. Marks: 30 Marks **Date:** 13th June, 2018

Marking Scheme: *Three questions carry 10 marks each. Questions have 3 subparts each. Subparts (a) and (b) carry 3 marks each and subpart (c) carries 4 marks.*

Question 1:

A. Give the condensed structural formula of the following organic compounds:

a. Pent-2-ene
b. 2-butanol
c. 2-methyl-prop-1-ene
d. 1,1,2,2 tetra-bromoethane
e. Propanoic acid
f. 3-Pentanone

B. Give the IUPAC names of the following organic compounds:

a. $CH_3CH_2C(CH_3)_2CH_2CH_3$
b. $CH_3OCH_2CH_2CH_3$
c. $CH_3CH(Br)CH_2CH(Cl)CH_3$
d. $CH_3CH(CH_3)CH_2CH(OH)CH_3$
e. $CH_3CH_2CH(CH_3)CH(C_2H_5)CH_2CH_2CH_3$
f. $CH_3CH_2CH_2CH_2CHO$

C. Write a balanced chemical equation for the following:

a. Reaction of ethane and oxygen in presence of Molybdenum oxide.
b. Preparation of methane from sodium ethanoate and sodalime.
c. Reaction of heating ethanol at 170^0C in the presence of conc. H_2SO_4.
d. Preparation of carbon tetrachloride from methane.

Question 2:

A. State 3 differences between saturated and unsaturated hydrocarbons.

B. Explain Wurtz reaction taking an examples of :

a. Iodoethane
b. 2-iodo propane
c. Iodomethane

C. Write the equations for the following laboratory preparations:

a. Ethene from iodoethane
b. Ethyne from calcium carbide

Question 3:

A. Define the following terms:

a. Pyrolysis
b. Catenation
c. Paraffins

B. Write the balanced chemical equations for following:

a. Dehydro halogenation of ethyl bromide
b. Halogenation of ethene
c. Oxidation of methane using acidified potassium dichromate

C. Name the following:

a. IUPAC name for acetic acid
b. IUPAC name for acetylene
c. IUPAC name for glycol
d. IUPAC name for chloroform