



TEST PAPER: CHEMISTRY

Time: 45 Minutes

Class: I.C.S.E 10

Max. Marks: 30 marks

Date: 2nd May 2018

Marking Scheme: Three questions carry 10 marks each. Each question has 3 sub-parts. Subparts (a) and (b) carry 3 marks each and subpart (c) carries 4 marks.

Question 1

A. Give condensed structures for the following compounds:

- | | |
|------------------------|------------------------|
| a. 1,2-dichloropropane | b. 2-methyl prop-1-ene |
| c. Ethoxy ethane | d. Propanoic acid |
| e. 3-pentanone | f. 1,3-butadiene |

B. Give the chain isomers of pentane with their IUPAC names.

C. Define isomerism. Give Chain and position isomers of pentene.

Question 2

A. Give IUPAC names of the following Compounds:

- | | |
|---|--|
| a. $\text{CH}_3 - \text{CH}(\text{Br}) - \text{CH}(\text{CH}_3) - \text{COOH}$ | b. $\text{CH}_3 - \text{CH}_2 - \text{CO} - \text{CH}_3$ |
| c. $\text{CH}_3 - \text{CH}(\text{CH}_3) - \text{CH}_2 - \text{CH}_2 - \text{OH}$ | d. HCHO |
| e. $\text{CH}_3 - \text{CH}(\text{CH}_3) - \text{CH}_3$ | f. $\text{CH}_2(\text{Cl}) - \text{CH}_2(\text{Cl})$ |

B. Name the following:

- IUPAC name of acetylene
- an acid present in vinegar
- an unsaturated hydrocarbon with general formula $\text{C}_n \text{H}_{2n}$

C. Give the IUPAC names and structure for the following:

- | | |
|--------------|---------------|
| a. Isobutane | b. Neopentane |
|--------------|---------------|

Question 3

A. Give position isomers of pentyne with IUPAC names

B. Explain bonding in ethane with the help of electron dot structure

C. Define following terms with example:

- Homologous series
- Heterocyclic compounds