OUR OWN HIGH SCHOOL, AL WARQA'A

Grade :X 21-01-12

CHEMISTRY FA 4 - REVISION WORK SHEET

Portion- Carbon and Its Compounds (till pg 69 ---chemical properties not included)

1. In an organic compound, which part largely determines it's physical and chemical properties?
2. Draw the structures of the following compounds:
   (a)bromo-pentane (b) hexanal (c) 2-pentanol (d) ethnoic acid (e) cyclobutane.
3. What is structural isomerism? Draw all the possible isomers of pentane.
4. Draw the electron dot structures of the following carbon compounds. Also give their molecular formula.
   (a) Ethyne (b) benzene (c) propanoic acid
5. Give the IUPAC name and molecular formula of the next homologue of:
   (a) chloro-ethane (b) pentyne (c) butanoic acid (d) pentanal.
6. Draw the structure and name the cyclo-alkane with molecular formula C_6H_{12}
7. Name the simplest: Ketone, Aldehyde and Carboxylic acid.
8. What are the unique properties of Carbon?
9. How is covalent bond formed? Discuss the significance of single, double and triple bonds?
10. What are the various possible structural formulae of a compound having molecular formula C_3H_6O. Give their IUPAC names.
11. What is a homologous series of compounds? List any two characteristics of a homologous series?
12. Name a functional group which can never occupy a terminal position? CHO group cannot be present in the middle of a chain. Justify.

13 Why do atoms take part in the bond formation?

14. C_4H_6, C_7H_{14}, C_5H_{12}, C_2H_2, C_3H_6 and C_9H_{20} belong to three homologous series. Name and classify the compounds in their respective homologous series and state the general formula for each series.

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