

WORKSHEET-1

Q.1. Tick the correct option :

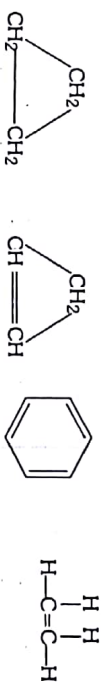
- Compounds of carbon and hydrogen are known as
 - Hydrocarbons
 - Organic compounds
 - Catenated compounds
 - None of above
- Which of the following is an insecticide
 - CNG
 - PVC
 - TNT
 - DDT
- Name the common fuel which is used in Delhi automobiles
 - LPG
 - CNG
 - Gasoline
 - Diesel
- Which of the following is an organic compound
 - Bleaching powder
 - Washing soda
 - Urea
 - Baking powder
- Which of the following is an aromatic hydrocarbon
 - Benzene
 - Cyclopropane
 - Cyclobutane
 - None of above
- General formula of alkenes is
 - C_nH_{2n+2}
 - C_nH_{2n}
 - C_nH_{2n-2}
 - C_nH_{2n+1}
- Which of the following is an unsaturated compound
 - Ethane
 - Ethene
 - Propane
 - None of above
- Organic compounds containing closed ring of atoms are called
 - Aliphatic compounds
 - Acylic compounds
 - Alicyclic compounds
 - None of the above
- Triple bond is present in
 - Alkanes
 - Alkenes
 - Alkynes
 - Alkyls
- Heptane contains carbon atoms in chain
 - Six
 - Seven
 - Eight
 - Nine

Q.2. Fill in the blanks with appropriate words :

- Organic compounds are generally whereas inorganic compounds are non-inflammable.
- Organic compounds are conductors of electricity.
- Organic compounds are in polar solvents.
- Organic compounds have melting and boiling points.
- Polythene, PVC, bakelite are
- Organic compounds undergo reaction whereas inorganic compounds undergo reactions.
- Open chain compounds are also known as compounds.
- A saturated compound having six carbon atoms will be known as
- Molecular formula of butane is
- Ethene is an hydrocarbon.

Q.3. Write (i) Molecular formula (ii) Condensed formula (iii) Structural formula of butane.

Q.4. Name the following :



Q.5. Write word root for the following :

- | | | | |
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| 7 | <input type="text"/> | 6 | <input type="text"/> |
| 9 | <input type="text"/> | 4 | <input type="text"/> |

Q.6. Write the formula for n = 6 for

- alkane
- alkene
- alkyne

Q.7. What is the formula for fifth member of

- alkane
- alkene
- alkyne

WORKSHEET-2

Q.1. Fill in the blanks with appropriate words :

- Two adjacent members of homologous series differ by units and a.m.u.
- Homologous series helps in study of organic compounds.
- A carbon atom linked with two carbon atoms is known as carbon.
- The alkanes in which carbon atoms are not a continuous chain are called
- The name of alkene and alkyne structure depends upon the presence of a
- COOH gp represents an
- Ketones have group in them.
- Category of compounds containing —OH group are known as
- Amines owes its properties due to the functional group
- C_3H_7 is named as radical.

Q.2. Complete the following table with respect to functional groups :

S.No.	Class	Functional group	Structure	prefix / suffix
1.	Acid			Oic acid
2.		—CHO	$\begin{array}{c} \text{O} \\ \parallel \\ \text{—C—H} \end{array}$	
3.	Ether		—OR	alkoxy alkane
4.	Amino			
5.		—CO		One

Q.3. Explain : (1) Chain isomerism
(2) Position isomerism

Q.4. Write all isomers of pentane and write its IUPAC and common names.

Q.5. Following are the isomers of butane. Write both common and IUPAC names for it.

S.No.	Isomers	Common Names	IUPAC Names
1.	$\text{CH}_3\text{—CH}_2\text{—CH}_2\text{—CH}_3$		
2.	$\begin{array}{c} \text{H}_3\text{C—H}_2\text{C—CH}_3 \\ \\ \text{CH}_3 \end{array}$		

WORKSHEET-3

Q.1. Complete the following table :

S.No.	Molecular formula	Condensed formula	Structural formula	Common name
1.	HCHO			
2.	CH_3COOH			
3.	CH_3OH			
4.	CH_3CHO			
5.	$\text{C}_2\text{H}_5\text{OH}$			
6.	C_2H_2			

Q.2. Match the IUPAC with common names.

IUPAC Name	Common Name
1. Ethanal	1. Acetic acid
2. Methanoic acid	2. Ethylene/
3. Chloro methane	3. Formaldehyde
4. Methanal	4. Acetaldehyde
5. Ethene	5. Formic acid
6. Ethanoic acid	6. Methyl chloride

Q.3. Fill in the blanks with appropriate word :

- An aldehyde contains functional group.
- An acid contains functional group.
- Hydroxy (OH) group is present in
- Ethene and ethyne are compounds.
- Vinegar is the commercial name of

Q.4. Write IUPAC names for the following :

- $\text{H}_3\text{C—HC(CH}_3\text{)—CH}_2\text{—CH}_3$
- $\text{CH}_3\text{—CH}_2\text{—C}\equiv\text{CH}$
- $\begin{array}{c} \text{CH}_3 \\ | \\ \text{CH}_3\text{—CH}_2\text{—CH}_2\text{—CH—CH}_3 \\ | \\ \text{COOH} \end{array}$
- $\text{CH}_3\text{—CH}_2\text{—CH(Cl)—CH}_2\text{—CHO}$
- $\begin{array}{c} \text{CH}_3 \\ | \\ \text{CH}_3\text{—CH—CH—CH}_3 \\ | \quad | \\ \text{OH} \quad \text{Cl} \end{array}$
- $\text{CH}_3\text{—CH}_2\text{—C(=O)—H}$
- $\text{CH}_3\text{—O—C}_2\text{H}_5$
- $\begin{array}{c} \text{H}_3\text{C—C(Cl)—CH}_2\text{—CH—CH}_2\text{—C(=O)—OH} \\ | \quad | \\ \text{Cl} \quad \text{CH}_3 \end{array}$