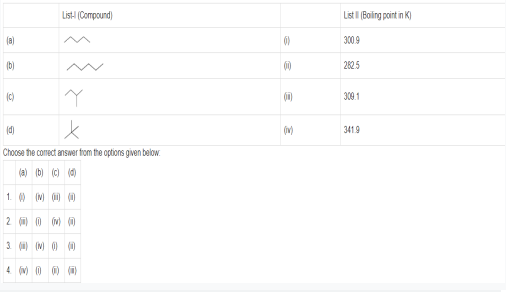
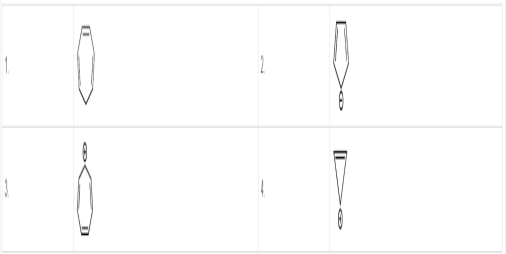
COMPETENCY BASED ASSESSMENT
FEBRUARY 2024
CLASS XI

Q NO	CHAPTER	QUESTION	ANSWER	EXPLANATION
1	HYDROCARBON	The dihedral angle in the staggered conformation of C2H6 is	60 Degree	As per the Arrangement for maximum angle
2	HYDROCARBON	Bond length of (I) ethane, (II) ethene, (III) acetylene and (IV) benzene follows the order:	I > IV > II > III	Greater the Bond Order Lesser is the Bond Length
3	HYDROCARBON	Which of the following is NOT a aromatic compound I. Benzene ii. Napthalene iii Hexene iv Antracene	Hexene	Donot follow Aromaticity rule
4	HYDROCARBON	Assertion : Acetylene is acidic in nature. Reason : Acetylene is sp hybridised.	Both Assertion and Reason are True but not correct explanation	Acetylene is acidic in nature due to easily replaceable Hydrogen
5	HYDROCARBON	Assertion : Sodium acetate on Kolbe's electrolysis gives methane. Reason : Methyl free radical is formed at anode.	Assertion is False But Reason is true	In Kolbe's Electrolysis Even Carbon Compounds are formed
6	HYDROCARBON	Assertion : All the hydrogen atoms in CH2 =C= CH2 are attached to sp2 hybridised carbon atom. Reason : All the carbon atoms in its are sp2 hybridized.	Assertion is True but Reason is False	Middle Carbon is sp Hybridized
7	HYDROCARBON	Assertion : Methane cannot be obtained by Wurtz reaction. Reason : Wurtz reaction leads to the formation of symmetrical alkane having an even number of carbon atoms.	ASSERTION AND REASON ARE CORRECT BUT REASON IS NOT CORRECT EXPLAINATION	Follows Symmetrical Alkane formation in presence of Na in Dry Ether

8	**Hydrocarbon**	**Match the following:** Match the bond line structure of hydrocarbon given in List I with the corresponding boiling point given in List II.  List-I (Compound) / List II (Boiling point in K) (a) — (i) 300.9 (b) — (ii) 282.5 (c) — (iii) 309.1 (d) — (iv) 341.9 Choose the correct answer from the options given below: 1. (a)(i) (b)(iv) (c)(iii) (d)(ii) 2. (a)(iii) (b)(i) (c)(iv) (d)(ii) 3. (a)(iii) (b)(iv) (c)(i) (d)(ii) 4. (a)(iv) (b)(i) (c)(ii) (d)(iii)	**Option No - 3**	**More the chain length and Lesser the branching leads to High Boiling Point**
9	**HYDROCARBON**	**9. Which of the following is NOT an aromatic compound** Which compound amongst the following is not an aromatic compound? 	**Option - 1**	**Not following Huckel Rule and Conjugated syste**
10	**HYDROCARBON**	Which amongst the following compounds will show geometrical isomerism? 1. Pent-1-ene 2. 2,3-Dimethylbut-2-ene 3. 2-Methylprop-1-ene 4. 3,4-Dimethylhex-3-ene	**Option 4**	**Presence of Different Groups make cis trans relationship**