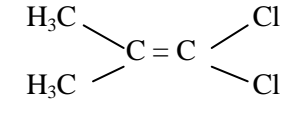
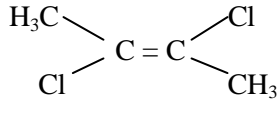
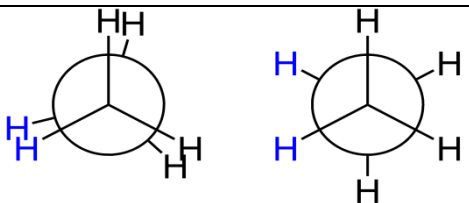
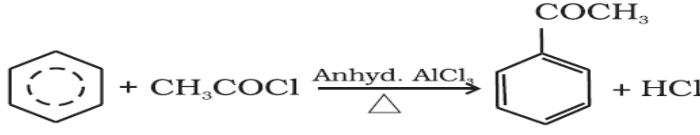


Class: XI	INDIAN SCHOOL MUSCAT SECOND PERIODIC TEST Subject : Chemistry	
	SET - A	
	VALUE POINTS	
1.	Ethene decolourises bromine water but not ethane.	1
2.	Positional isomerism	1
3.	Ethanal and propanone	1
4.	<p>a) </p> <p>Cis</p> <p>b) As it is resonance stabilised.</p> <p>Trans </p>	2
5.	<p>a) It gives a mixture of alkanes.</p> <p>b) Ethyne > Propyne > But-2-yne</p>	2
6.	 <p>Staggered form is more stable than the eclipsed form.</p> <p>In staggered form the C-H bonds are far apart, thus there is minimum repulsive forces, minimum energy and maximum stability.</p>	1+1
7.	<p>a) </p> <p>b) $2\text{CH}_3\text{COONa} + 2\text{H}_2\text{O} \xrightarrow{\text{Electrolysis}} \text{CH}_3\text{-CH}_3 + 2\text{CO}_2 + \text{H}_2 + 2\text{NaOH}$</p>	2
8.	<p>Initiation</p> $\text{Cl}-\text{Cl} \xrightarrow[\text{homolysis}]{h\nu} \dot{\text{Cl}} + \dot{\text{Cl}}$ <p>Propagation</p> $\dot{\text{C}}\text{H}_3 + \text{Cl}-\text{Cl} \xrightarrow{h\nu} \text{CH}_3-\text{Cl} + \dot{\text{Cl}}$ $\text{CH}_4 + \dot{\text{Cl}} \xrightarrow{h\nu} \dot{\text{C}}\text{H}_3 + \text{H}-\text{Cl}$ <p>Termination</p> $\dot{\text{Cl}} + \dot{\text{Cl}} \rightarrow \text{Cl}-\text{Cl}$ $\text{H}_3\dot{\text{C}} + \dot{\text{C}}\text{H}_3 \rightarrow \text{H}_3\text{C}-\text{CH}_3$ $\text{H}_3\dot{\text{C}} + \dot{\text{Cl}} \rightarrow \text{H}_3\text{C}-\text{Cl} \quad (\text{any one})$	3
9.	<p>a) i) $\text{CH}_3\text{-CH}_3 \xrightarrow{\text{Cl}_2, h\nu} \text{CH}_3\text{CH}_2\text{Cl} \xrightarrow{\text{Na, dry ether}} \text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_3$</p> <p>ii) $\text{C}_6\text{H}_6 \xrightarrow[\text{conHNO}_3]{\text{conH}_2\text{SO}_4} \text{nitrobenzene} \xrightarrow[\text{anhyd AlCl}_3]{\text{Cl}_2} \text{nitrochlorobenzene}$</p> <p>b) Toluene will undergo nitration most easily as CH_3 group being electron releasing</p>	3

	increases the electron density on benzene ring.	
10.	a) Benzene b) 1,2- Dibromo-2-methylpropane c) Due to the fact that the H–Cl bond being stronger than H–Br bond is not cleaved by the free radical.	3