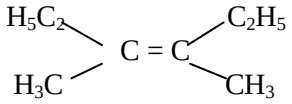
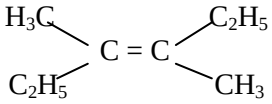
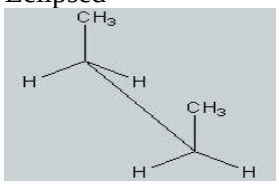
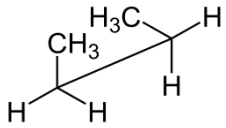
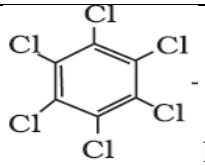
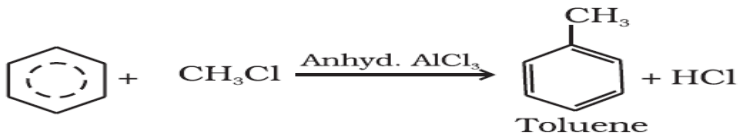
Class: XI	**INDIAN SCHOOL MUSCAT** **SECOND PERIODIC TEST** **Subject : Chemistry**	
	SET - B	
	VALUE POINTS	
1.	Propane < Propene <Propyne	1
2.	Methanal and pentan-3-one	1
3.	Chain isomerism	1
4.	a) n-pentane – greater surface area and has more vander Waal's force of attraction. b) Benzene is formed.	2
5.	a)   Cis Trans b) Compound should satisfy (4n + 2) rule Delocalization of pi electrons Planarity (Any two)	2
6.	a) Trans –isomer being symmetrical, can fit into crystal lattice more readily than cis-isomer. b) 3,3-Dimethylpentane	1+1
7.	Eclipsed  Staggered  Staggered form is more stable than the eclipsed form. In staggered form the C-H bonds are far apart , thus there is minimum repulsive forces, minimum energy and maximum stability	2
8.	i) $2CH_3COO^-Na^+ \rightleftharpoons 2CH_3-\overset{\overset{O}{\|}}{C}-O^- + 2Na^+$ **At anode:** $2CH_3-\overset{\overset{O}{\|}}{C}-O^- \xrightarrow{-2e^-} 2CH_3-\overset{\overset{O}{\|}}{C}-\dot{O}: \longrightarrow 2\dot{C}H_3 + 2CO_2\uparrow$ Acetate ion Acetate free radical Methyl free radical iii) $H_3\dot{C} + \dot{C}H_3 \longrightarrow H_3C-CH_3\uparrow$ iv) **At cathode :** $H_2O + e^- \rightarrow {}^-OH + \dot{H}$ $2\dot{H} \rightarrow H_2\uparrow$	3
9.	a) i) $CH_3\text{-}CH = CH\text{-}CH_3 \xrightarrow{KMnO_4/\ H^+} 2CH_3COOH$	3

	ii) $C_6H_6 + Cl_2 \xrightarrow[\text{Dark, cold}]{\text{Anhy } AlCl_3}$  hexachlorobenzene b) Negative part of the added reagent gets attached to the carbon atom having lesser number of hydrogen atoms.	
10.	a) i) $CH_3Br + 2Na + BrCH_3 \xrightarrow{\text{dry ether}} CH_3 - CH_3 + 2NaBr$ ii)  b) Add Tollens reagent. Ethyne will give a white ppt of silver acetylide but not ethene.	3