



CHEMISTRY


CH: 11 ALDEHYDES, KETONES & CARBOXYLLIC ACIDS

Name: _____

Date: _____

Class: XII Sec: ____

Answer the following

- Write IUPAC names.
 - $\text{CH}_3\text{COCH}_2\text{COCH}_3$
 - $\text{CH}_3 - \text{COCH}=\text{C} - (\text{CH}_3)$
 - $\text{CH}_3\text{CH}_2\text{COCH}_2\text{CHO}$
 - 
- Write the structure of the following compounds.
 - 2-hydroxy benzaldehyde
 - 2-chloro, 3-methyl pentanal.
 - 1-phenylpropanone.
 - Hex-4-en-2-one.
- Give chemical tests to distinguish between the following pairs of compounds
 - Benzaldehyde and benzoic acid.
 - Propanoylchloride and propanoic acid.
 - Benzaldehyde and ethanal
- Give reasons for the following.
 - Monochloro ethanoic acid has a higher pKa value than dichloroethanoic acid.
 - Ethanoic acid is weaker than benzoic acid.
 - Aldehydes are more reactive than ketones towards nucleophiles.

Or

Ethanal is more reactive than acetone towards nucleophilic addition reactions.

Or

 CH_3CHO is more reactive than CH_3COCH_3 towards reaction with HCN.
 - The aldehydes and ketones undergo a number of addition reactions.
 - The boiling points of aldehydes and ketones are lower than corresponding acids.
 - $(\text{CH}_3)_3\text{C-CHO}$ does not undergo aldol condensation.
 - Carboxylic acids are higher boiling liquids than alcohols.
- An alkene with molecular formula C_5H_{10} on ozonolysis gives a mixture of two compounds, B & C. Compound B gives positive Fehling test and also reacts with iodine & NaOH solution. Compound C does not give Fehling solution test, but forms iodoform. Identify the compounds A, B and C.