

# ALDEHYDES KETONES AND 1.

02 Dec.2020 CARBOXYLIC ACIDS Lecture-2

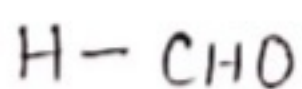
## CHEMISTRY, CLASS-XII, UNIT-12

### NOMENCLATURE & STRUCTURE OF

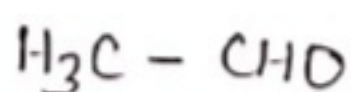
### Aldehydes and ketones

- \* The common names of most aldehydes are derived from the common names of the corresponding carboxylic acid by replacing the ending (-ic acid) with aldehyde.
- \* The location of the substituents in the carbon chain is indicated by Greek letters  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$  etc.
- \* The  $\alpha$ -carbon being the one directly linked to the aldehyde group,  $\beta$ -carbon the next and so on.

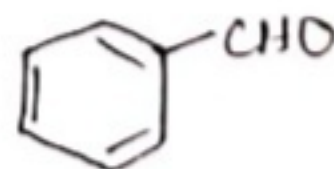
examples,



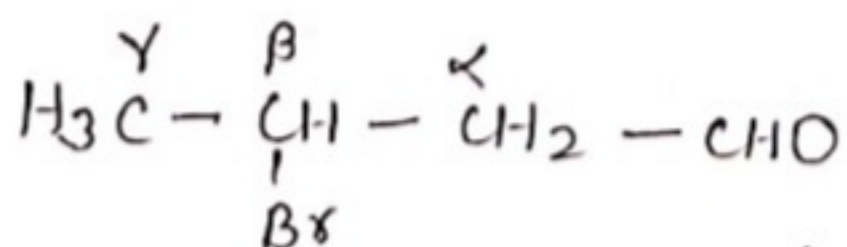
Formaldehyde



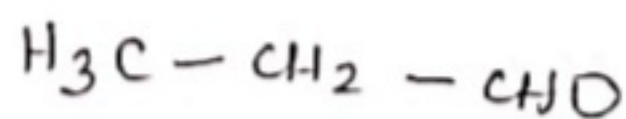
Acetaldehyde



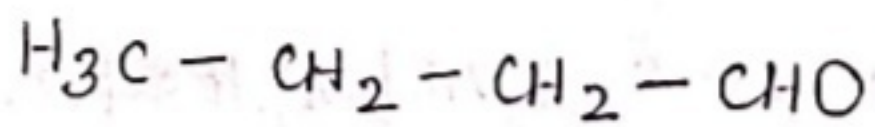
Benzaldehyde



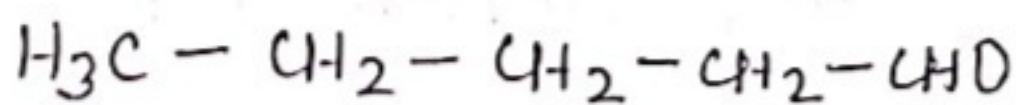
$\beta$ -Bromobutyraldehyde



Propionaldehyde



Butyraldehyde



Valeraldehyde

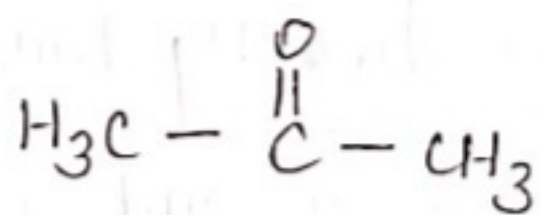
## Common Name of Ketones

Simplest ketone is  $\text{H}_3\text{C} - \overset{\text{O}}{\parallel}{\text{C}} - \text{CH}_3$

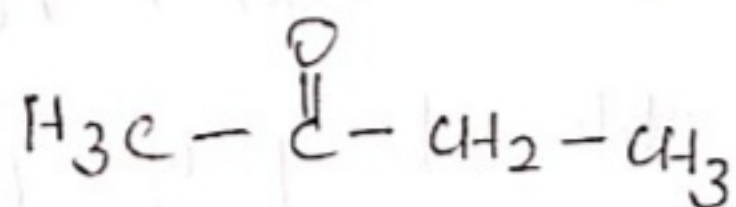
\* Name of ketone is written as :- Name of alkyl group in alphabetical order followed by ketone.

\* If both alkyl groups are same, then di - prefix is written before the name of alkyl group.

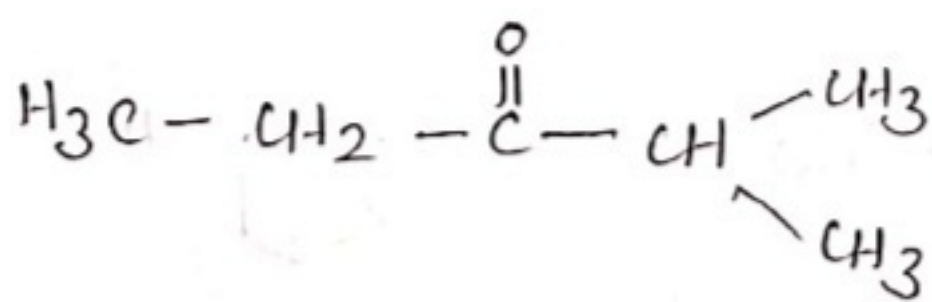
For example ;



Dimethyl ketone

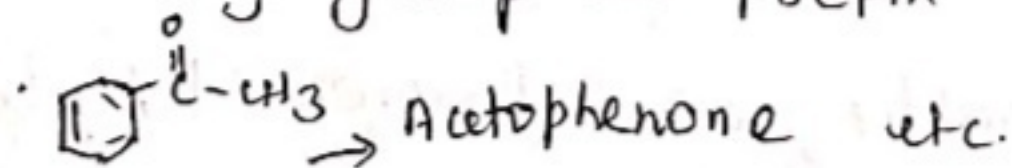


Ethyl methyl ketone



ethylisopropyl ketone etc.

\* Common name of alkyl phenyl ketones are written by adding the acyl group as prefix to phenone. eg;  $\text{H}_3\text{C} - \overset{\text{O}}{\parallel}{\text{C}} - \text{CH}_3$   
Acetone



Continued..