

ALDEHYDES KETONES AND 1.

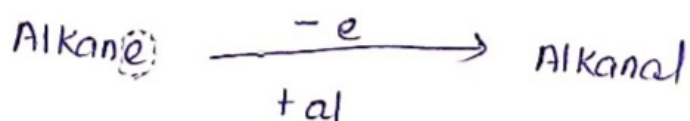
Lecture-3 CARBOXYLIC ACIDS 10/12/2020

CHEMISTRY, CLASS-XII, UNIT-12

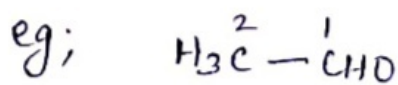
NOMENCLATURE & STRUCTURE OF ALDEHYDES

IUPAC names & KETONES CONTINUED..

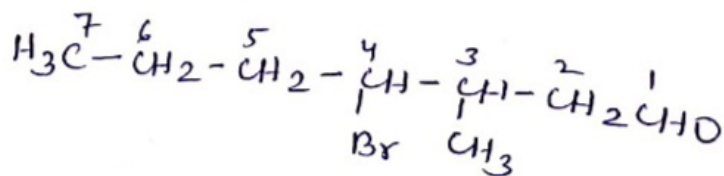
- * The IUPAC names of open chain aliphatic aldehydes are derived from the names of the corresponding alkanes by replacing the ending -e with -al.



- * In case of aldehydes the longest carbon chain is numbered starting from the carbon of the aldehyde group.
- * The substituents are prefixed in alphabetical order along with numerals indicating the position in the carbon chain.



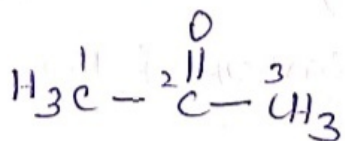
Ethanal



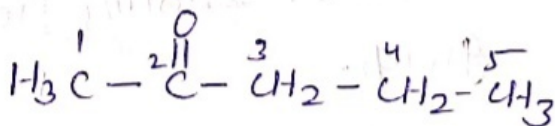
2.

- * The IUPAC names of open chain aliphatic ketones are derived from the names of the corresponding alkanes by replacing the ending 'e' with -one.
- * Numbering of carbon in chain begins from the end nearer to the carbonyl group.
- * In cyclic ketones, the carbonyl carbon is numbered one.

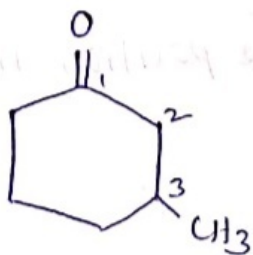
eg;



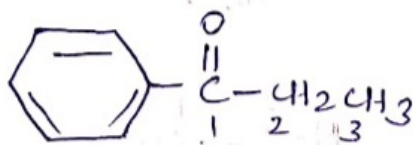
Propanone



Pentan-2-one



3-methylcyclopentanone

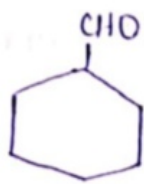


1-Phenylpropan-1-one

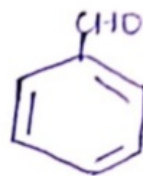
* When the aldehyde group is attached to a ring the suffix carbaldehyde is added after the full name of the cycloalkane.

* The numbering of the ring carbon atoms start from the carbon atom attached to the aldehyde group.

example;



Cyclohexanecarbaldehyde

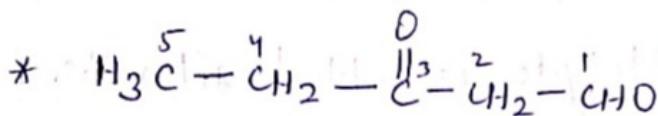


Benzenecarbaldehyde

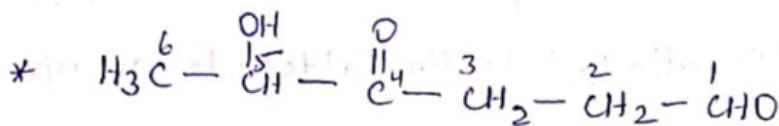
Name of some functional group as prefix :



eg;



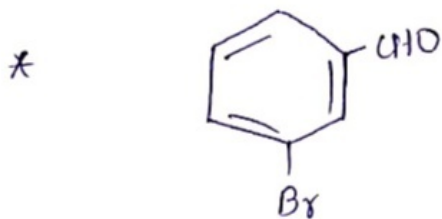
3-oxopentanal



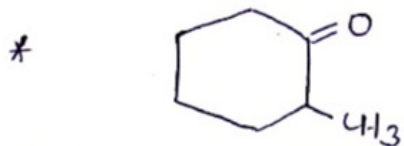
5-Hydroxy-4-oxo-hexanal



Benzene-1,2-dicarbaldehyde



3-bromobenzenecarbaldehyde



2-methylcyclohexanone

**Nomenclature
Completed**