

Chemistry Worksheet Grade XII

Aldehydes, Ketones and Carboxylic Acid

- Write chemical reactions to affect the following transformations:
 - Butan-1-ol to butanoic acid
 - Benzyl alcohol to phenylethanoic acid
 - 3-Nitrobromobenzene to 3-Nitrobenzoic acid
 - Cyclohexene to hexane-1,6-dioic acid
 - Butanol to butanoic acid
- Arrange the following compounds in increasing order of their reactivity in nucleophilic addition reactions: Ethanal, propanal, propanone, butanone.
- Give names of the reagents to bring about the following transformations:
 - Hexan-1-ol to hexanal
 - P-fluorotoluene to p-fluorobenzaldehyde
 - Alkyl alcohol to propenal
 - Cyclohexanol to cyclohexanone
- Describe the following:
 - Acetylation
 - Decarboxylation
 - Cannizzaro reaction
 - Aldol condensation
 - cross aldol condensation
- What is Tollen's reagent? Write one usefulness of this reagent.
- Explain the mechanism of a nucleophilic attack on the carbonyl group of an aldehyde or a ketone.
- Write the equations involved in the following reactions:
 - Wolff-Kishner reduction
 - Etard reaction
- How will you convert ethanal into the following compounds?
 - Butane-1,3-diol
 - But-2-enoic acid
 - But-2-enal
- Write the IUPAC name of the following compounds:

