

CARBOXYLIC ACID & DERIVATIVES

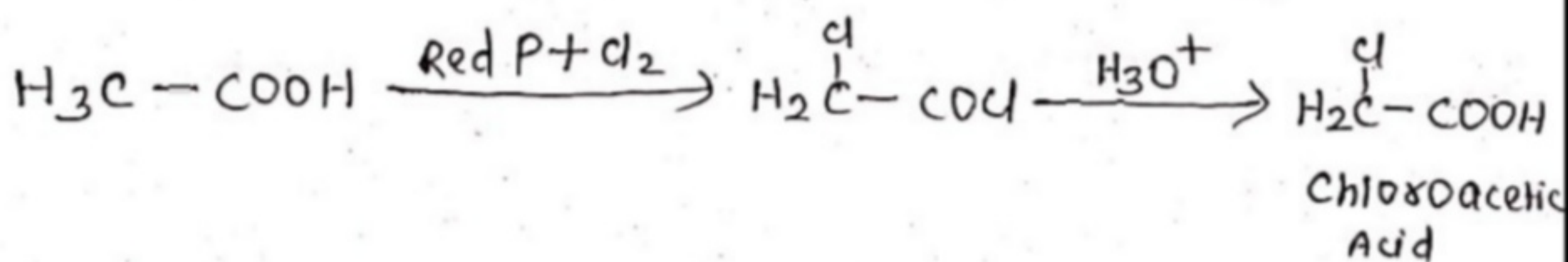
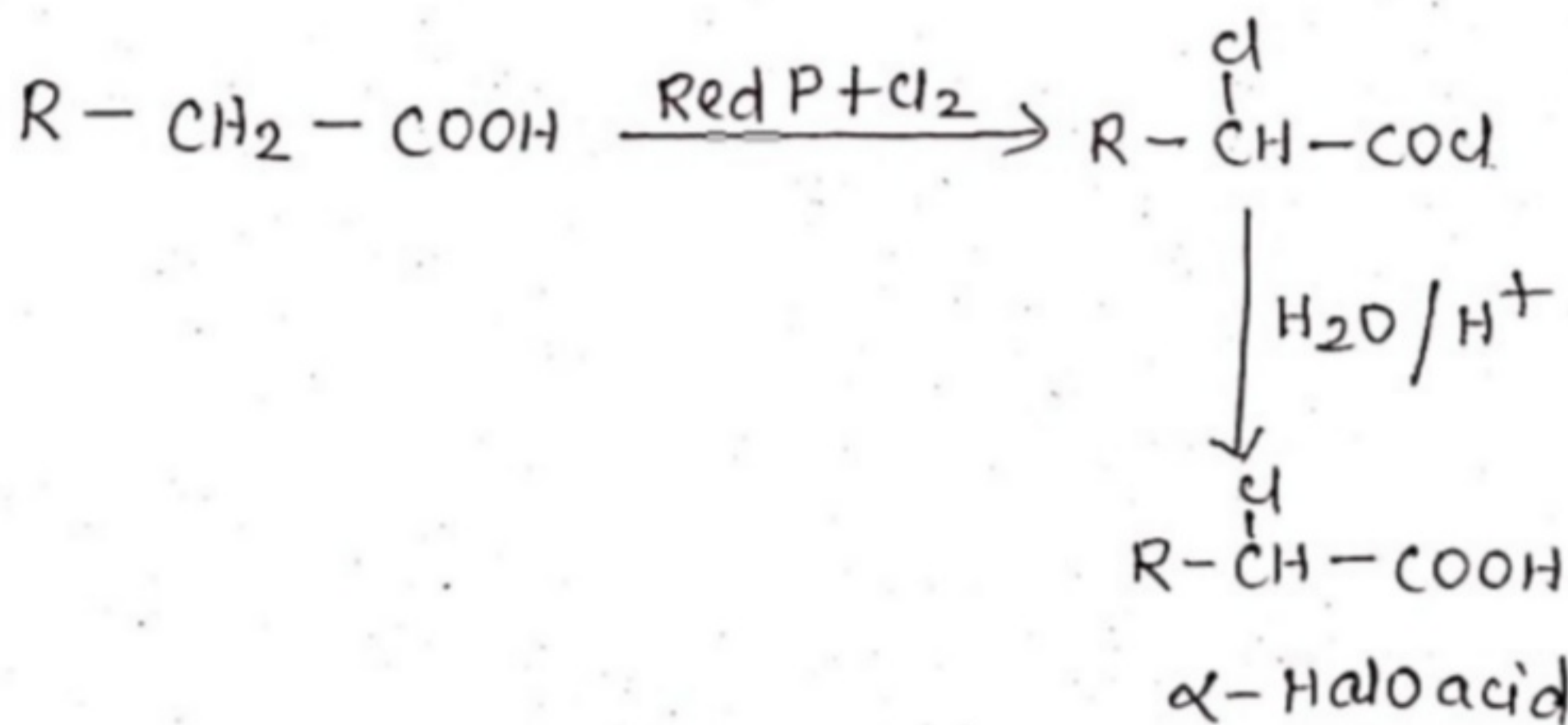
06/11/2020

Topic - Hell Volhard Zelinsky Reaction (Deg-I Hons.)

HELL VOLHARD ZELINSKY REACTION (HVZ Reaction)

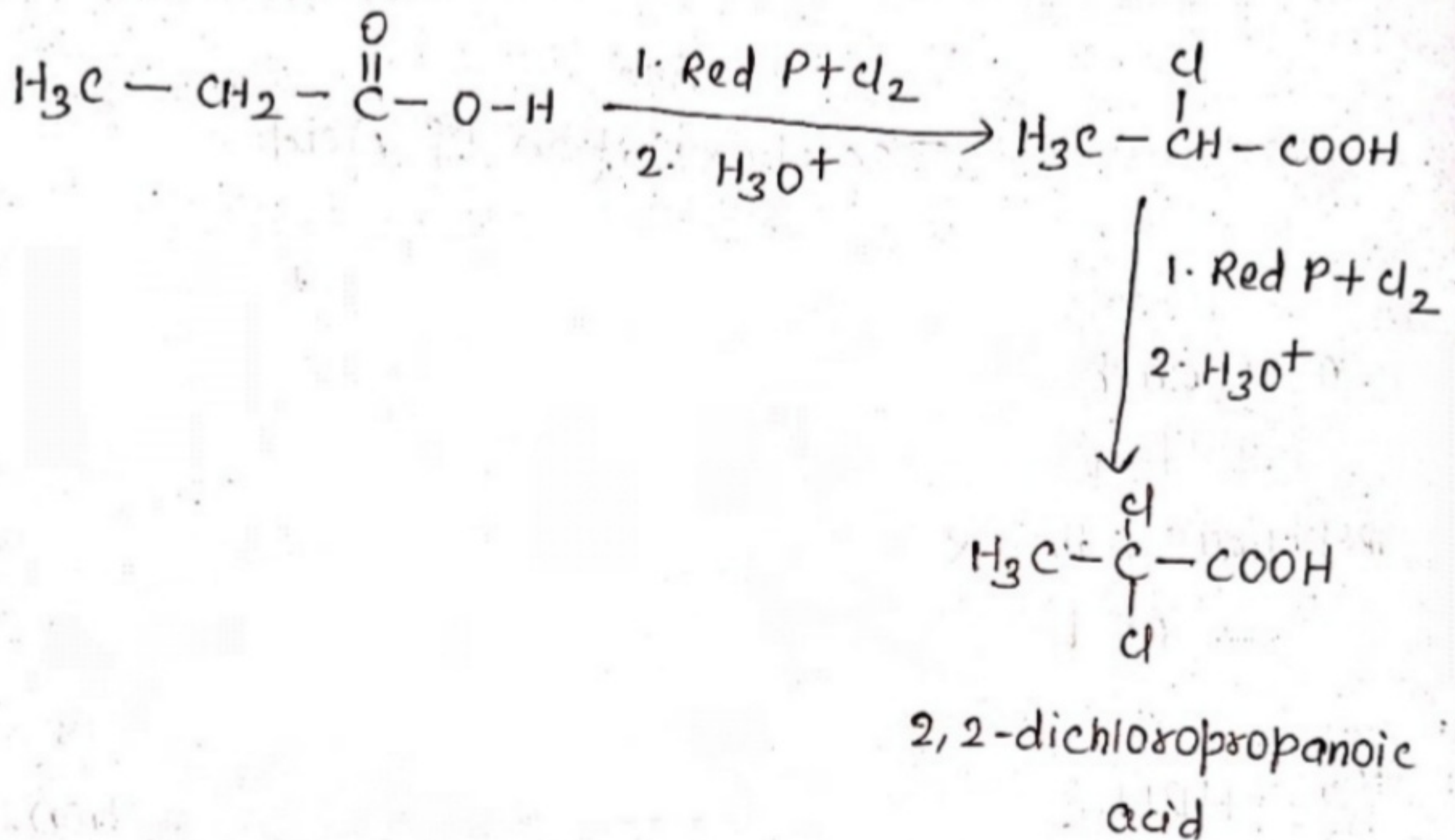
When a carboxylic acid that contains α -hydrogens is treated with Cl_2 or Br_2 in the presence of Red Phosphorus, the α -hydrogen atoms are replaced by chlorine, or bromine atoms.

This reaction is known as the HELL VOLHARD ZELINSKY (HVZ) reaction.



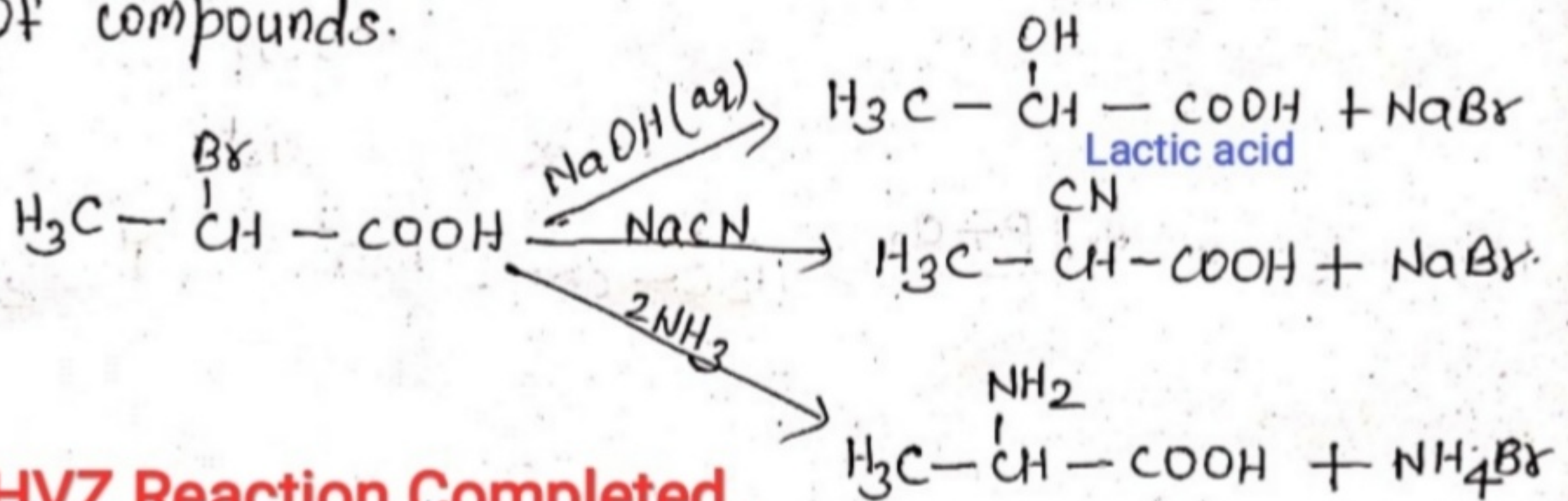
If more than one α -hydrogen is present, it may also be substituted by halogen.

For example;



The degree of substitution can be controlled experimentally, so it is possible to stop the reaction at either the mono or disubstitution stage.

α -Haloacid can be converted into many different types of compounds.



HVZ Reaction Completed..