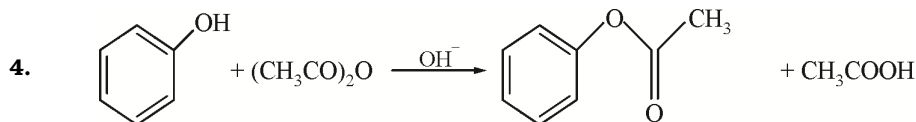
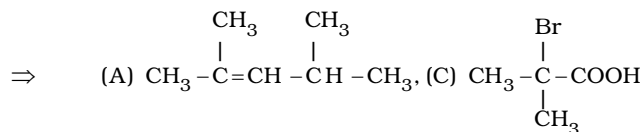
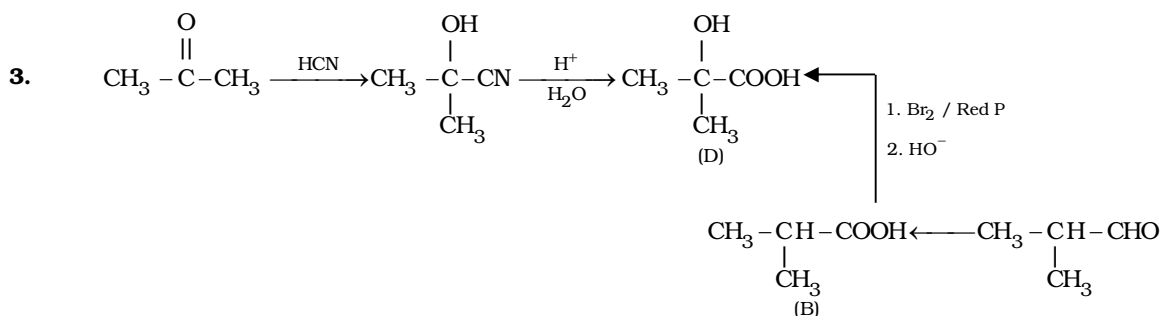
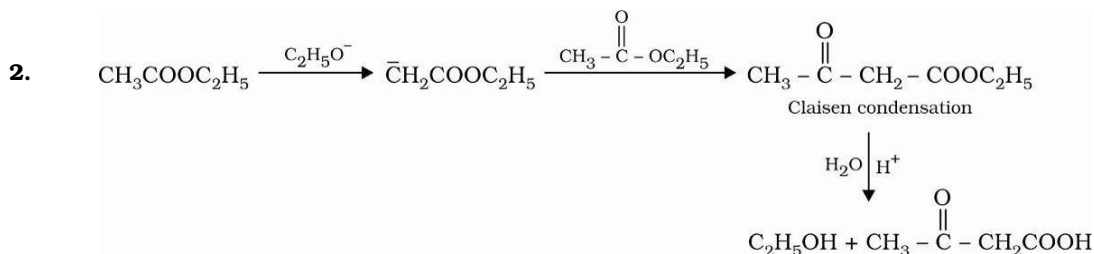
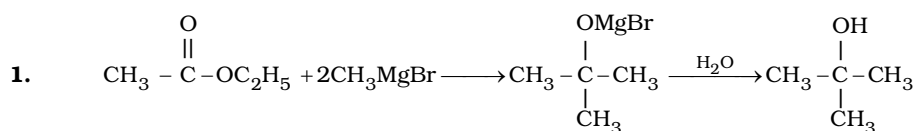


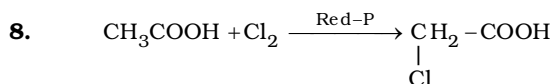
Daily Tutorial Sheet 1

JEE Advanced (Archive)



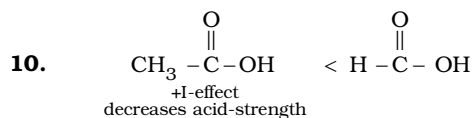
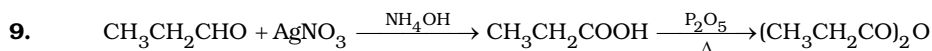
6.(F) Hydrolysis of ester in alkaline medium is known as saponification and used for preparation of soap.

7. H_2O and CO gas

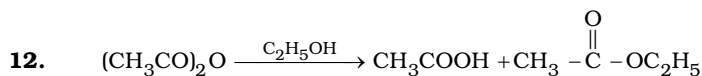
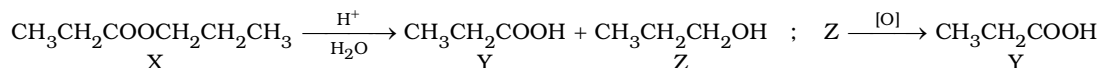


(HVZ reaction)

For this reaction to occur, presence of a α -H is essential requirement. Formic acid does not have any α -H, fails in HVZ reaction.



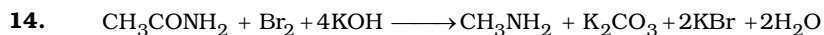
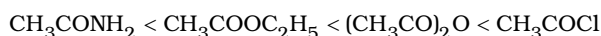
11. X is an ester and both its acid and alcohol fragments have same number of carbons. Hence X is:



13. Among acid derivatives, the reactivity towards nucleophilic acyl substitution is in the order of :

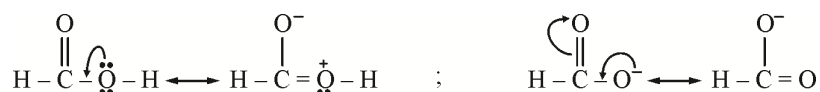
Amide < Ester < Anhydride < Acid chloride

Hydrolysis is an example of nucleophilic acyl substitution, hence the reactivity towards hydrolysis is:



Hoffman bromamide reaction

15. Both formic acid and sodium formate exhibit the phenomenon of resonance as :



In formic acid, the extent of delocalization is less compared to sodium formate because of charge separation in the former case. Due to this reason, the bond length between carbon and sp^3 oxygen in formic acid is slightly greater than the same between carbon and sp^2 oxygen. In formate ion, there is no separation of charge and hence same bond length of both carbon oxygen bonds.