

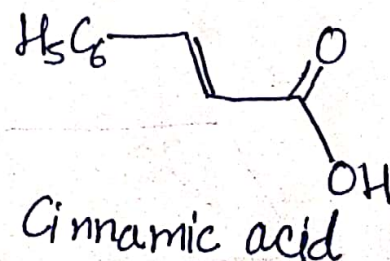
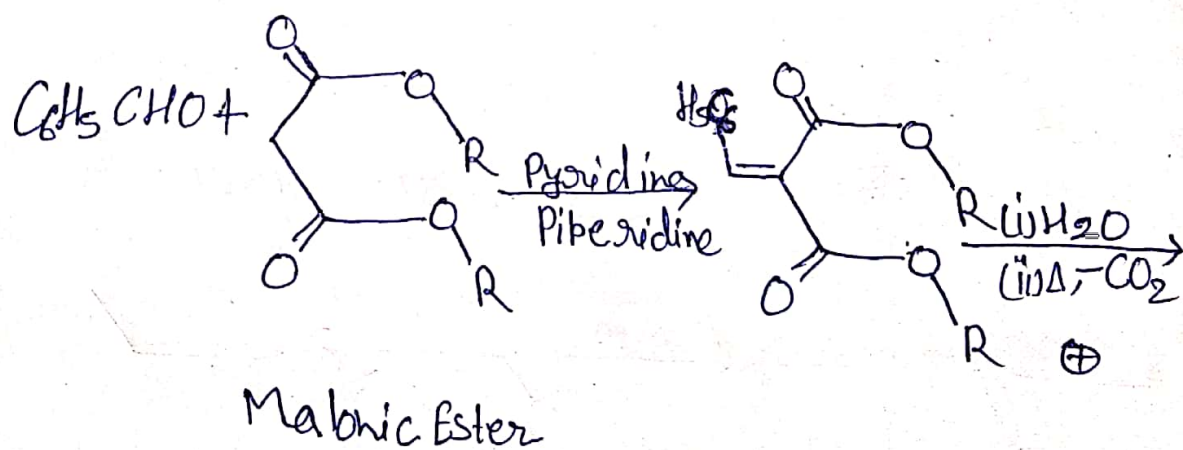
Akhilesh Kumar Singh

Chemistry department BSc (sub) Part-I

Mob: - 8750390927

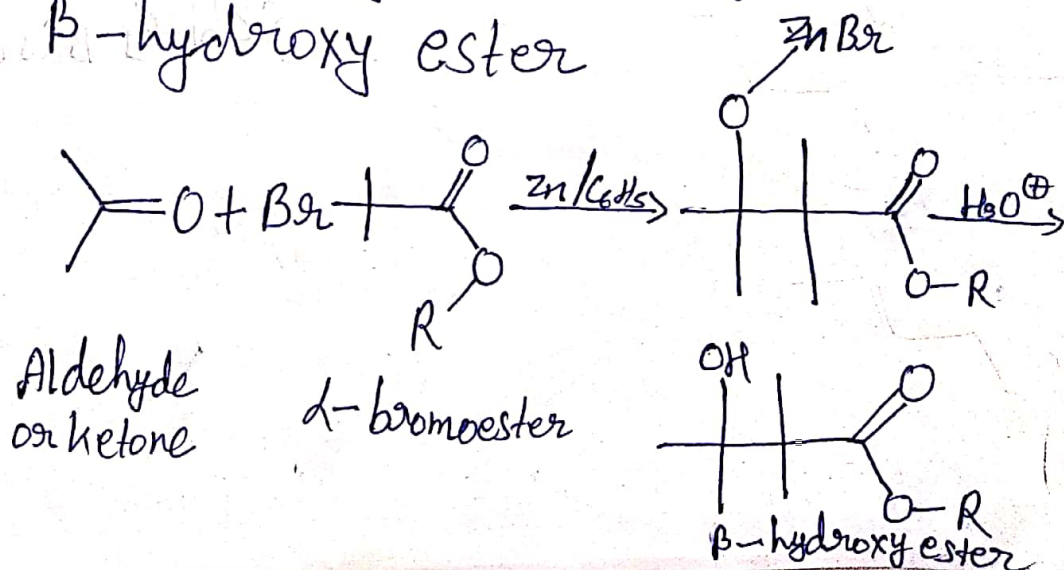
(g) Knoevenagel Reaction!

Condensation of aldehydes and ketones with compounds having active methylene group in the presence of basic catalyst to form α, β -unsaturated compounds is called Knoevenagel reaction. The basic catalyst may be ammonia or its derivative. Thus, 1, 2, 3 amines i.e., aniline, di- or tri-alkyl amines, pyridine or piperidine are used.



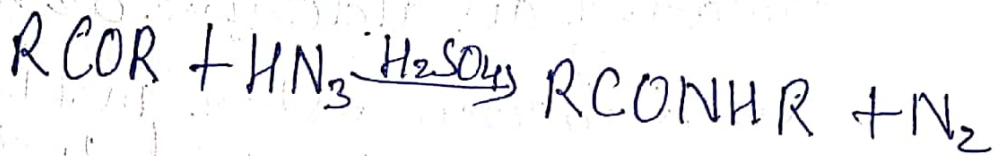
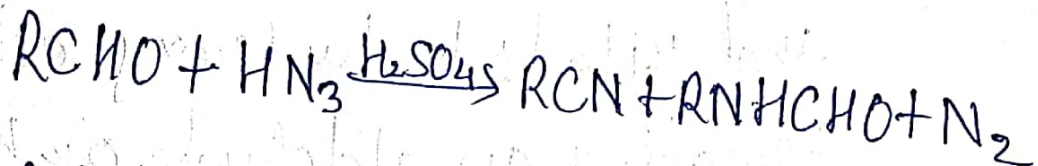
(10) Reformatsky Reaction!

A similar reaction like the addition of ~~organome~~ organometallic compounds on carbonyl compounds that involves the addition of an organozinc reagent to the carbonyl group of an aldehyde or ketone. This reaction, called Reformatsky reaction, extends the carbon skeleton of an aldehyde or ketone and yields β -hydroxy esters. It involves treating an aldehyde or ketone with an α -bromo ester in the presence of zinc metal; ~~to yield~~ the solvent most often used is benzene. The initial product is a zinc alkoxide, which must be hydrolyzed to yield the β -hydroxy ester.

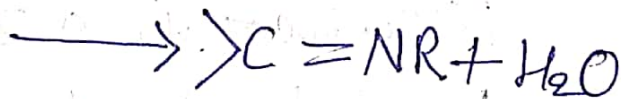


(11) Schmidt Reaction :

This is the reaction between a carbonyl compound and hydrazoic acid in the presence of a strong acid concentrated sulphuric acid. Aldehydes give a mixture of primary amines, whereas ketones gives amides.



Reaction with primary amine: $>C=O + H_2NR$



Schiff's Base

