

DEGREE-I (HONS.)

1.

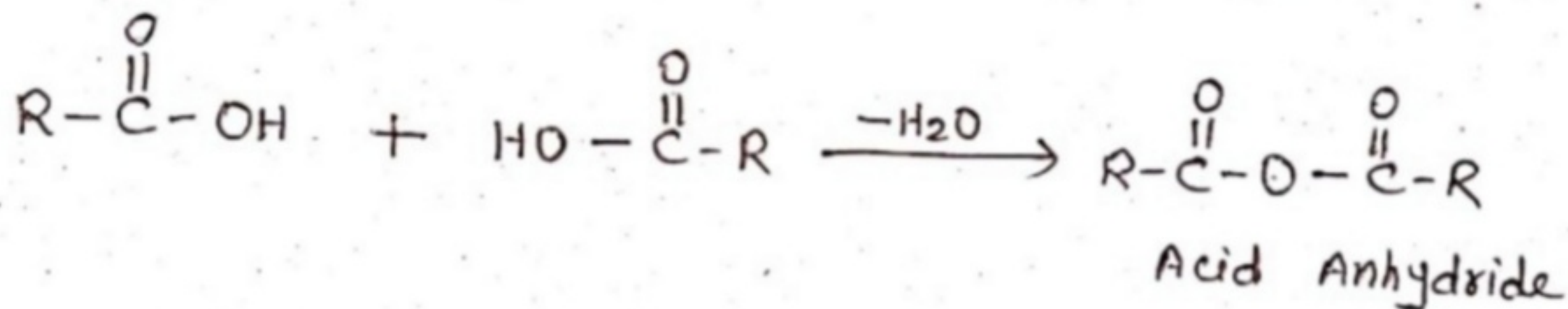
03/11/2020

TOPIC - PREPARATION, PROPERTIES AND USES OF ACID ANHYDRIDES.....

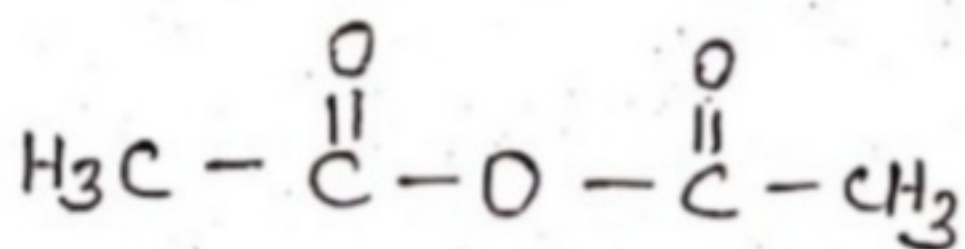
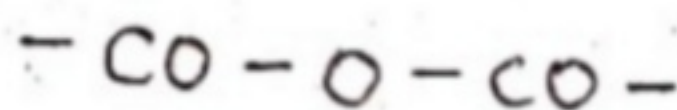
ACID ANHYDRIDES

(Revision Notes)

The compounds derived by loss of a water molecule between two molecules of a carboxylic acid are called Acid anhydrides or simply Anhydrides.



Functional Group



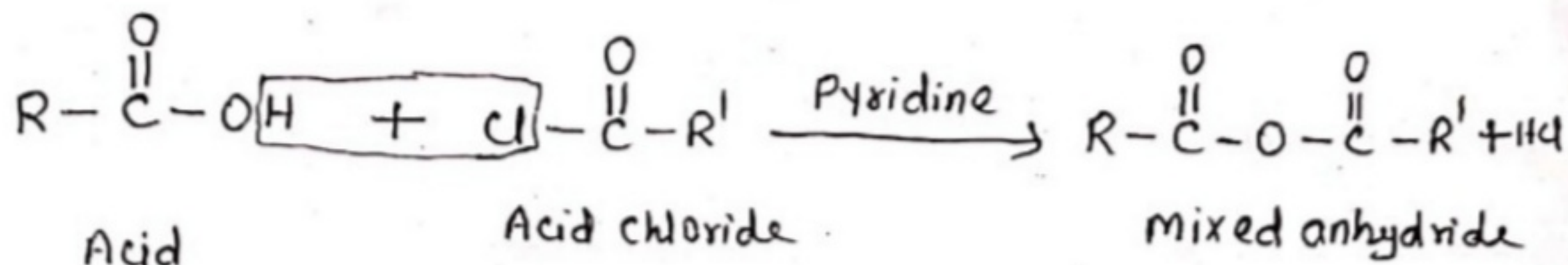
common name — Acetic anhydride

IUPAC name — Ethanoic anhydride.

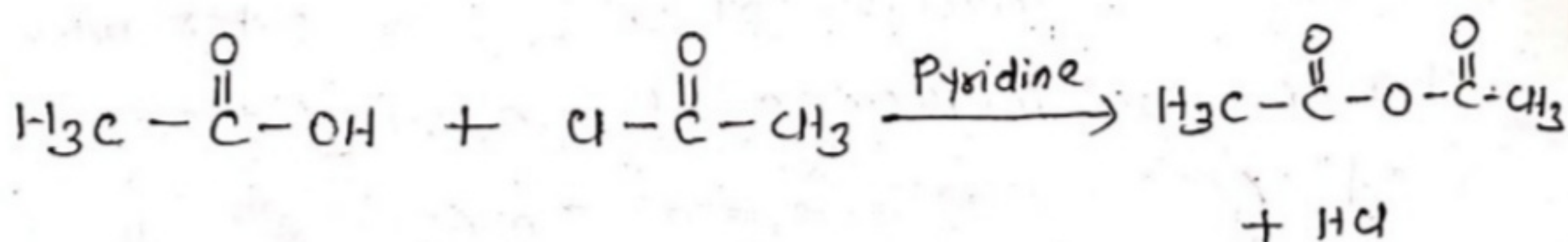
* Anhydrides derived from two molecules of different acids are called Mixed Anhydrides.

METHODS OF PREPARATION

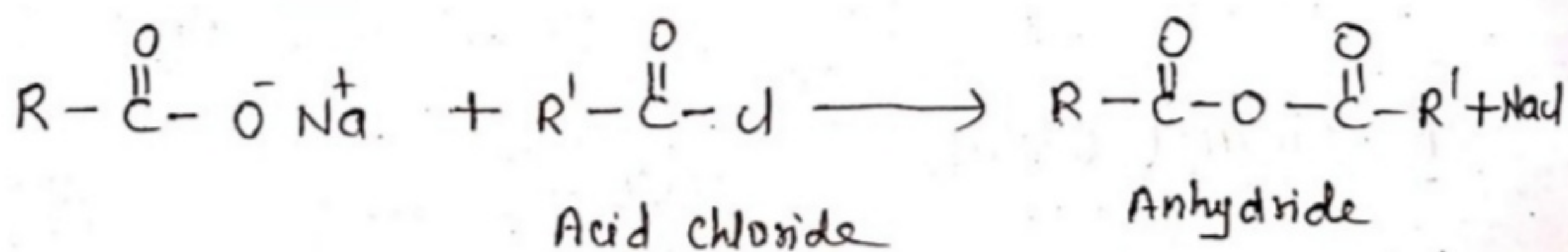
By Reaction of acid halides with a Carboxylic Acid :



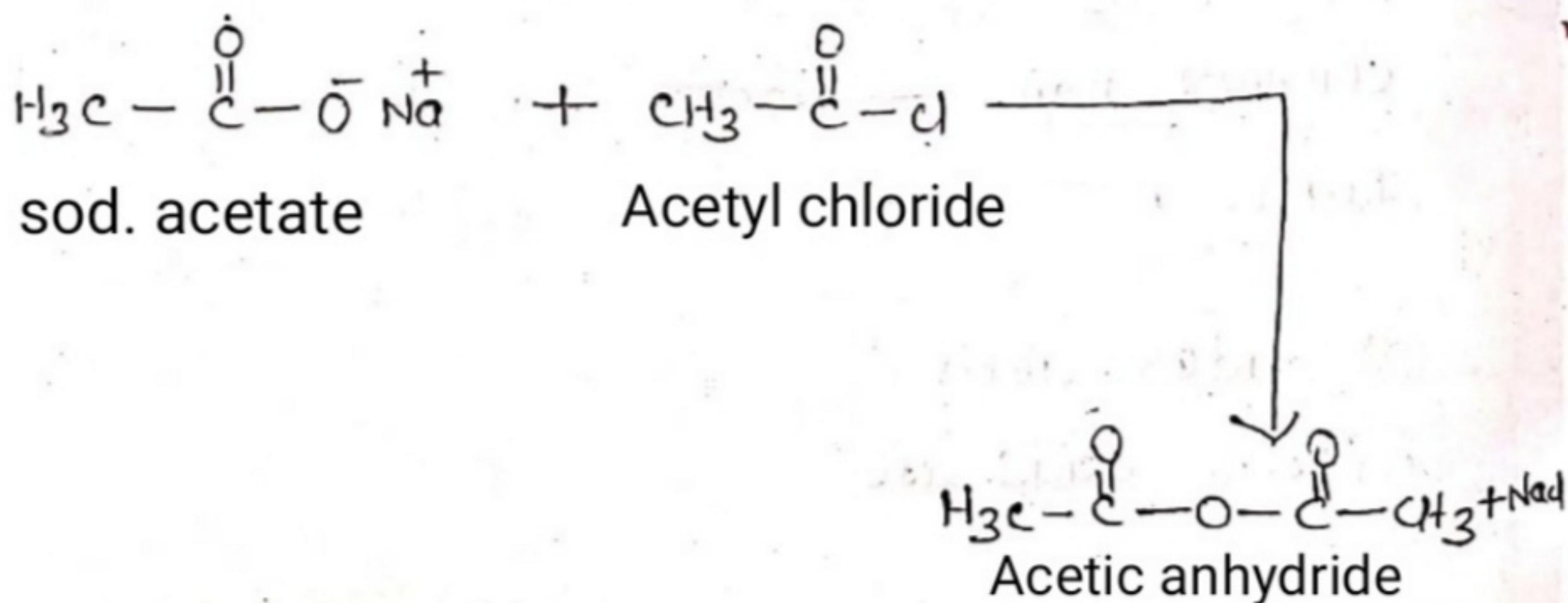
example ;



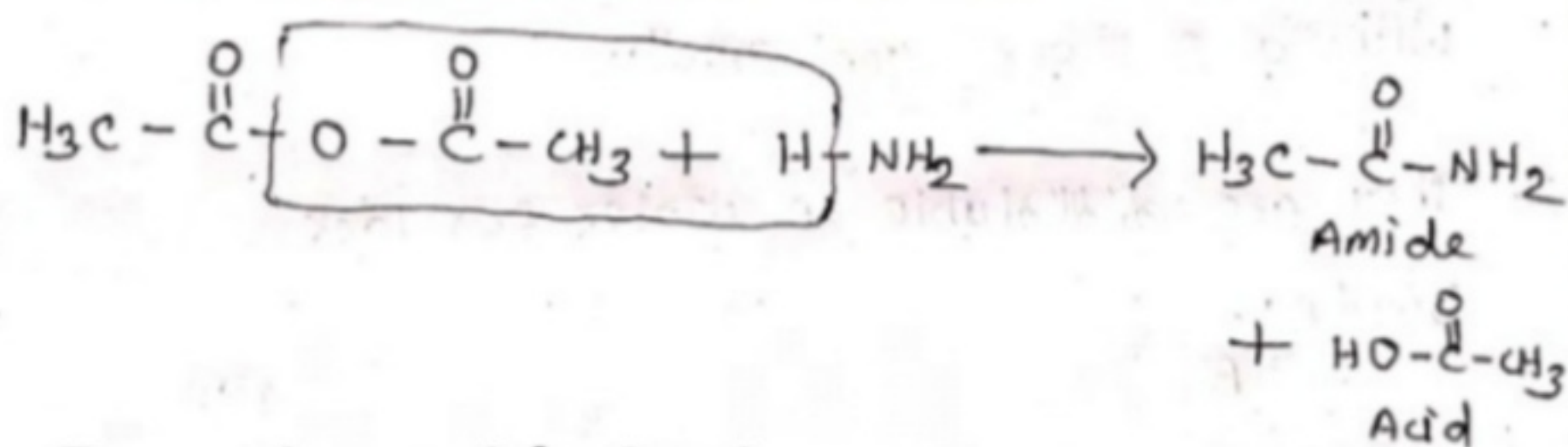
By Reaction of acid halides with salt of a Carboxylic Acid :



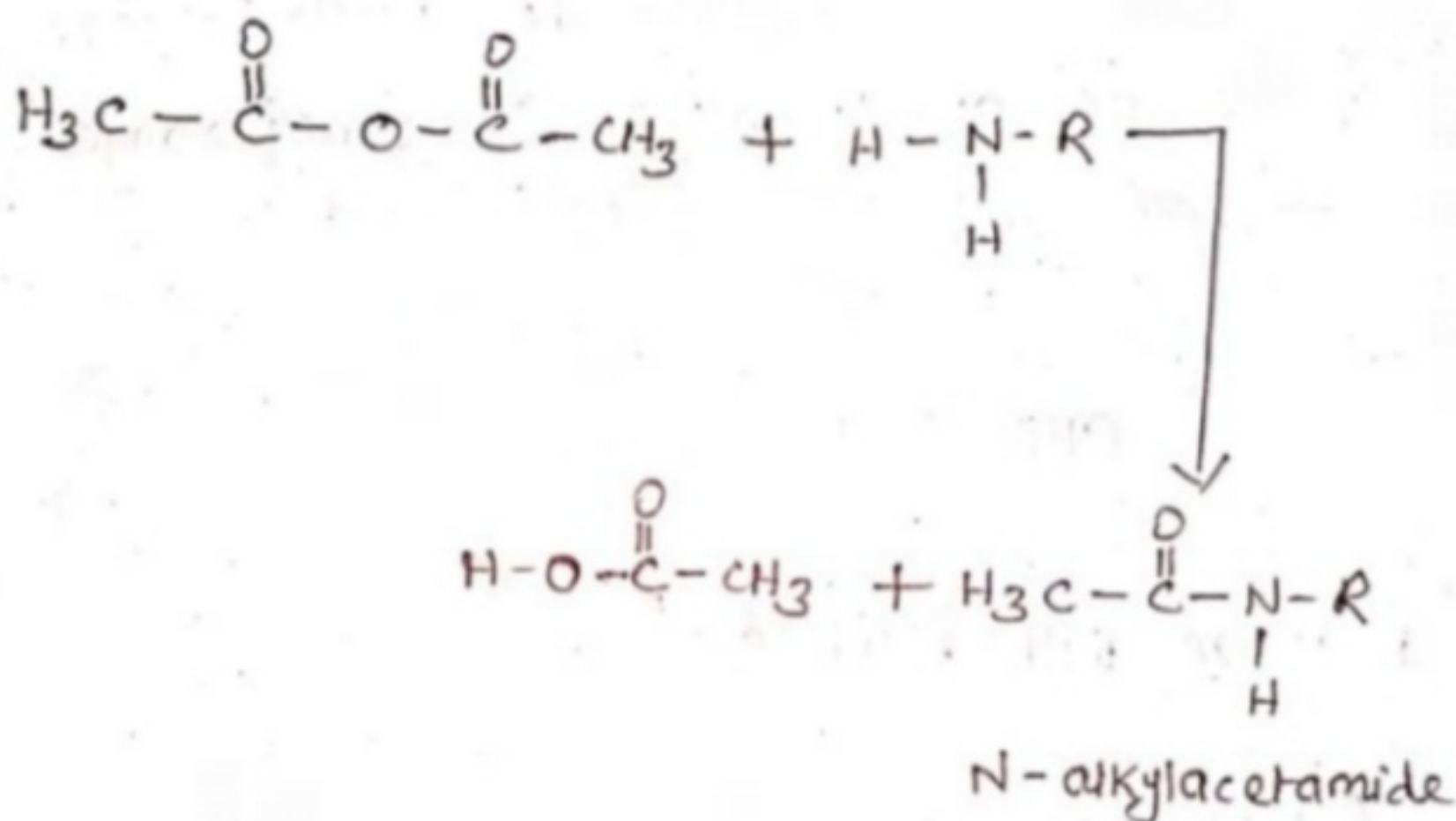
example ;



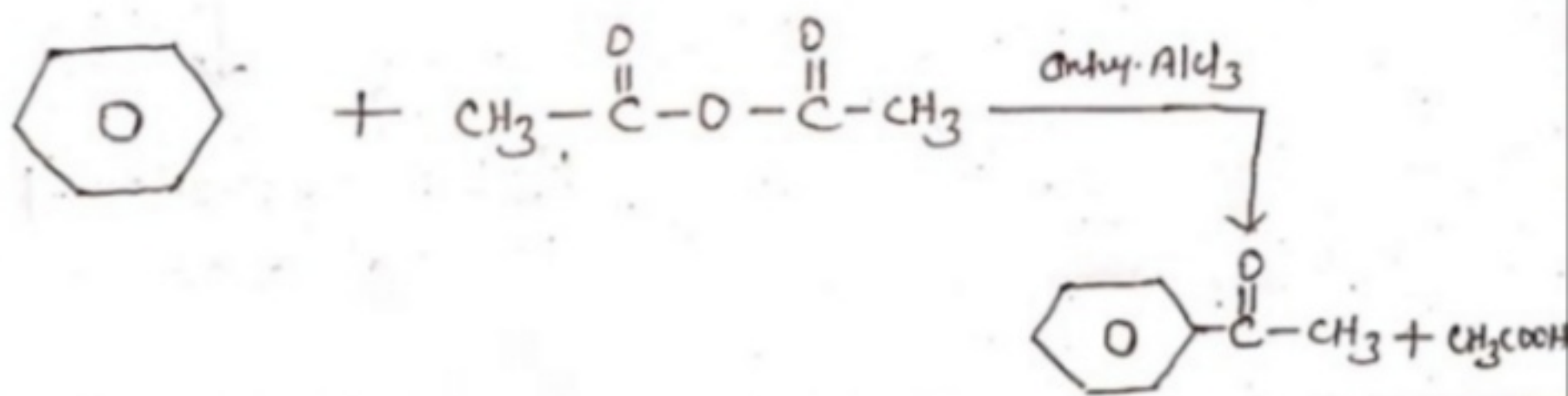
Amide are formed.



3. Reaction with Amines

4. Reaction with benzene in the presence of AlCl_3 .

Ketones are formed. This is called Friedel craft's reaction



Completed