

Alcohols and Esters

Q-1) What are alcohols?

> Alcohols are organic molecules containing -OH groups.
 1° (primary), 2° (secondary), 3° (tertiary) alcohols.

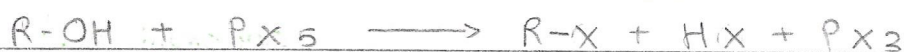
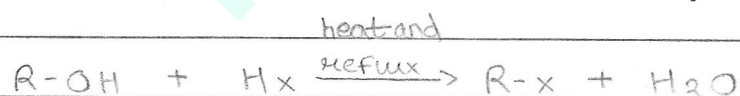
° They are all **soluble** because they are polar & form hydrogen bonds with water.

° They have high MP and BP due to hydrogen bonding.

Q-2) Combustion of alcohols.



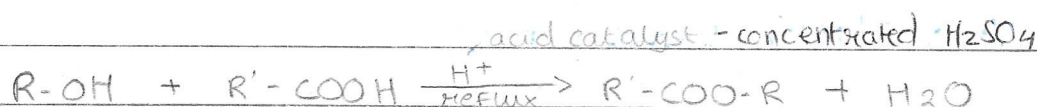
Q-3) Substitution reaction to form halogenoalkanes.



Q-4) Reaction with sodium metal of alcohols.

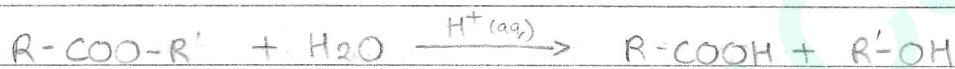


Q-5) Esterification.

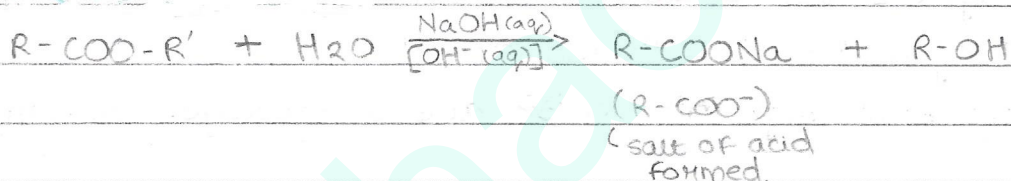


Hydrolysis of esters.

acidic hydrolysis.



alkaline hydrolysis.



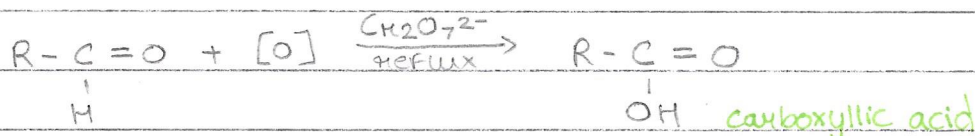
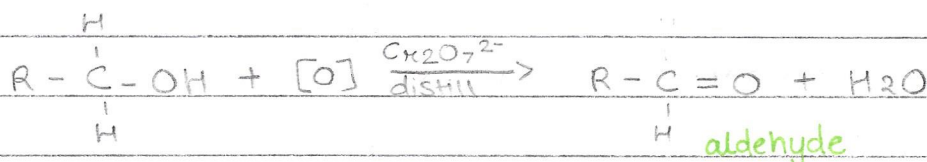
Q-6) Oxidation of alcohols.

oxidation has taken place when:

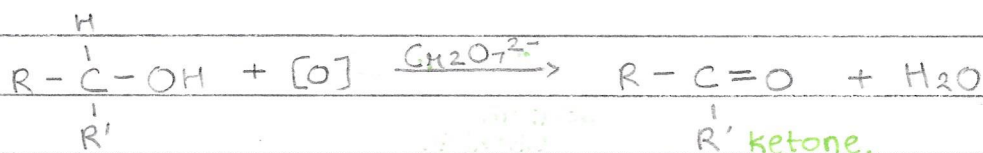
orange solution → green solution



1° alcohol



2° alcohol



3° alcohol

No oxidation takes place.