

(Lecture -4)

Degree-II (Sub.)

Chapter - 5

Group - 'C'

By-Dr.Rinky

Guest Faculty.

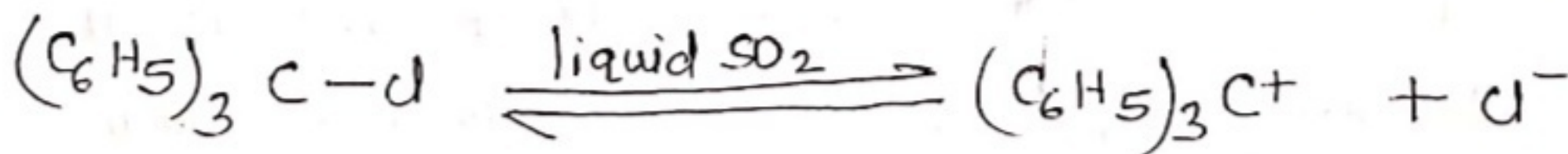
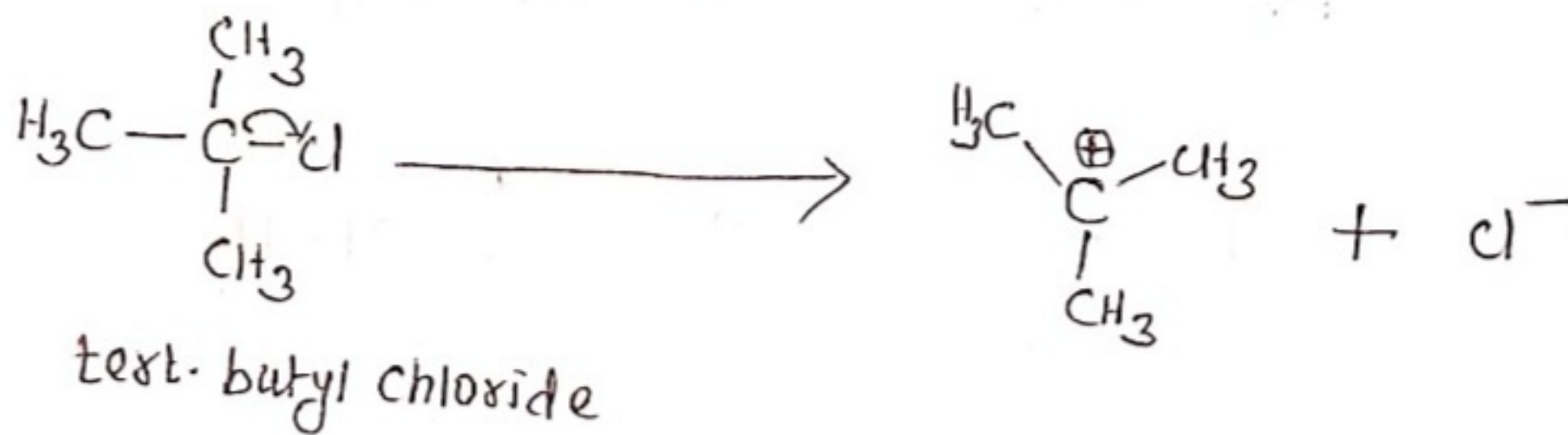
Dept.of Chemistry

Topic - Formation of

Carbonation

1. By Direct Ionisation : ---

Organic halides produce carbonium ions in presence of a highly polar medium,



Triphenyl methyl
chloride
(white solid)

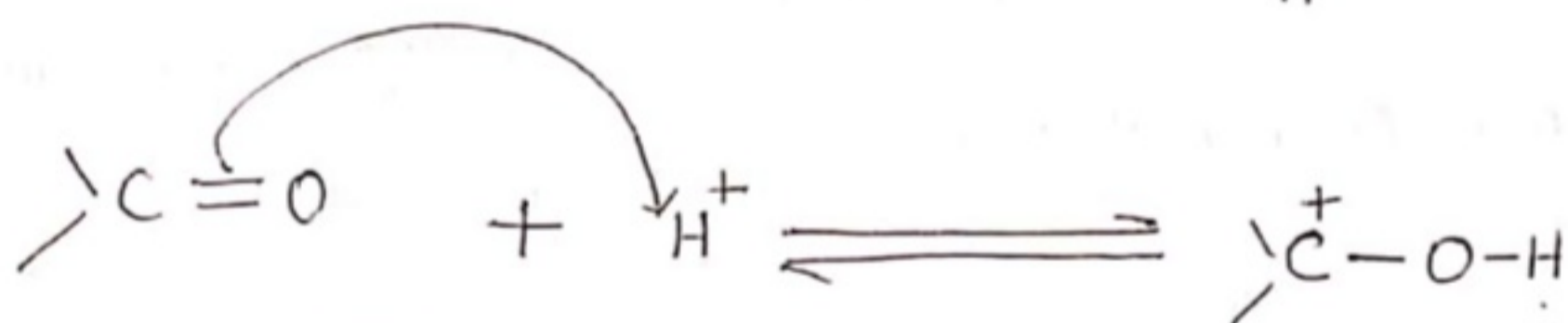
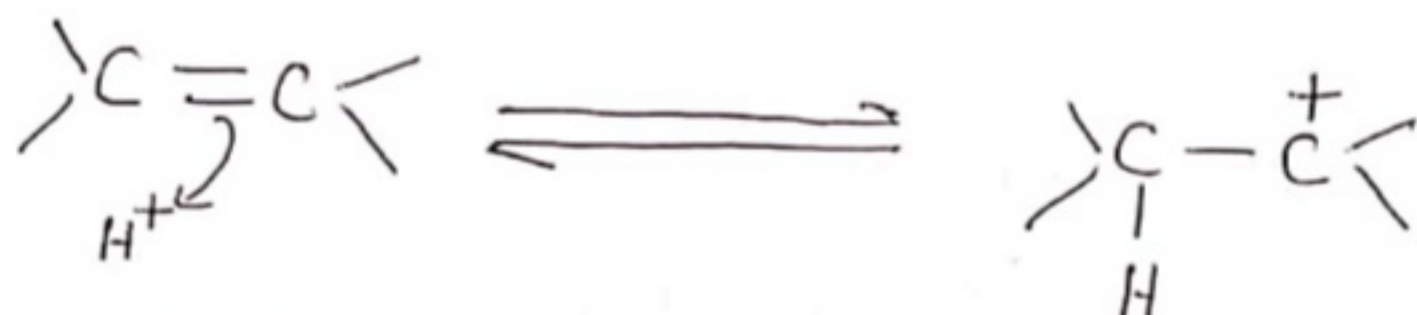
Triphenyl
methyl cation
(orange solution)

18/04/2020

2. By the protonation of unsaturated compounds:---

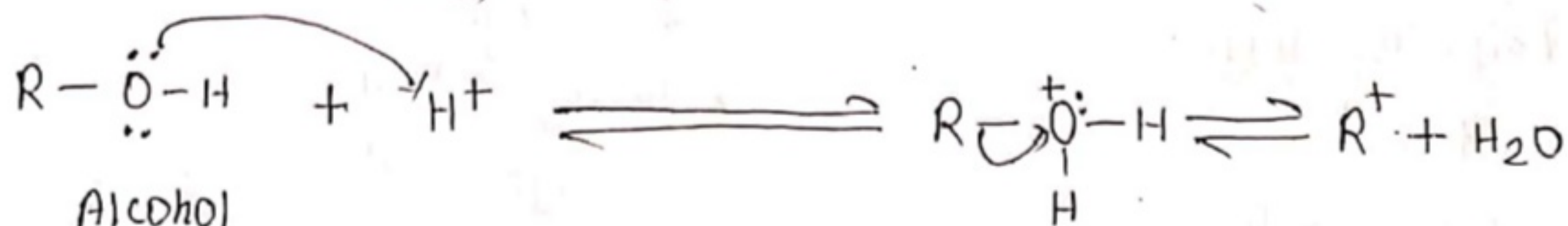
Alkene, carbonyl compounds and nitrile when treated with a proton donating solvent or Lewis acid form carbocation.

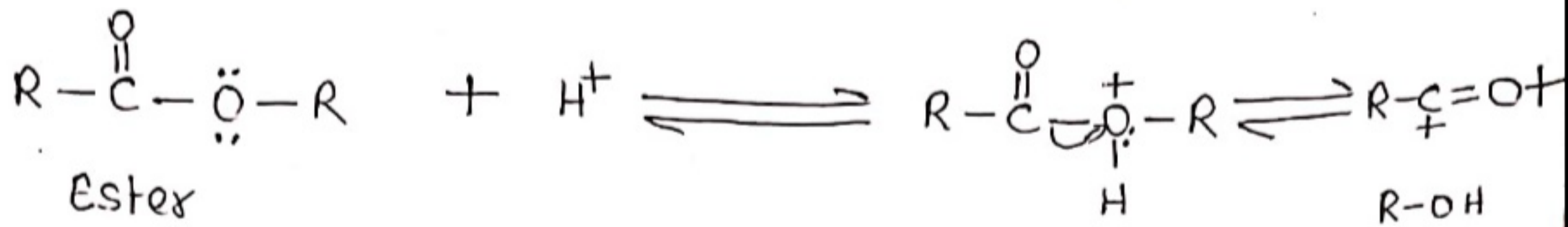
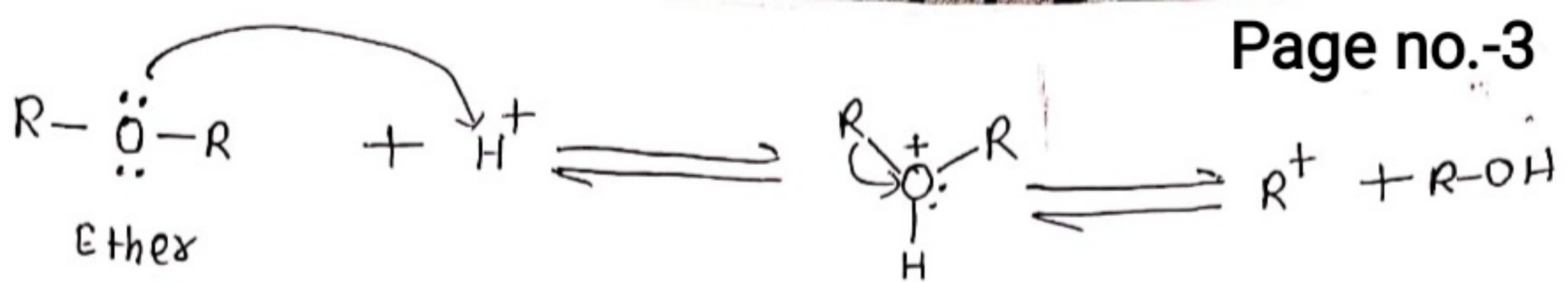
eg.



3. By the protonation of an atom having lone pair of electrons

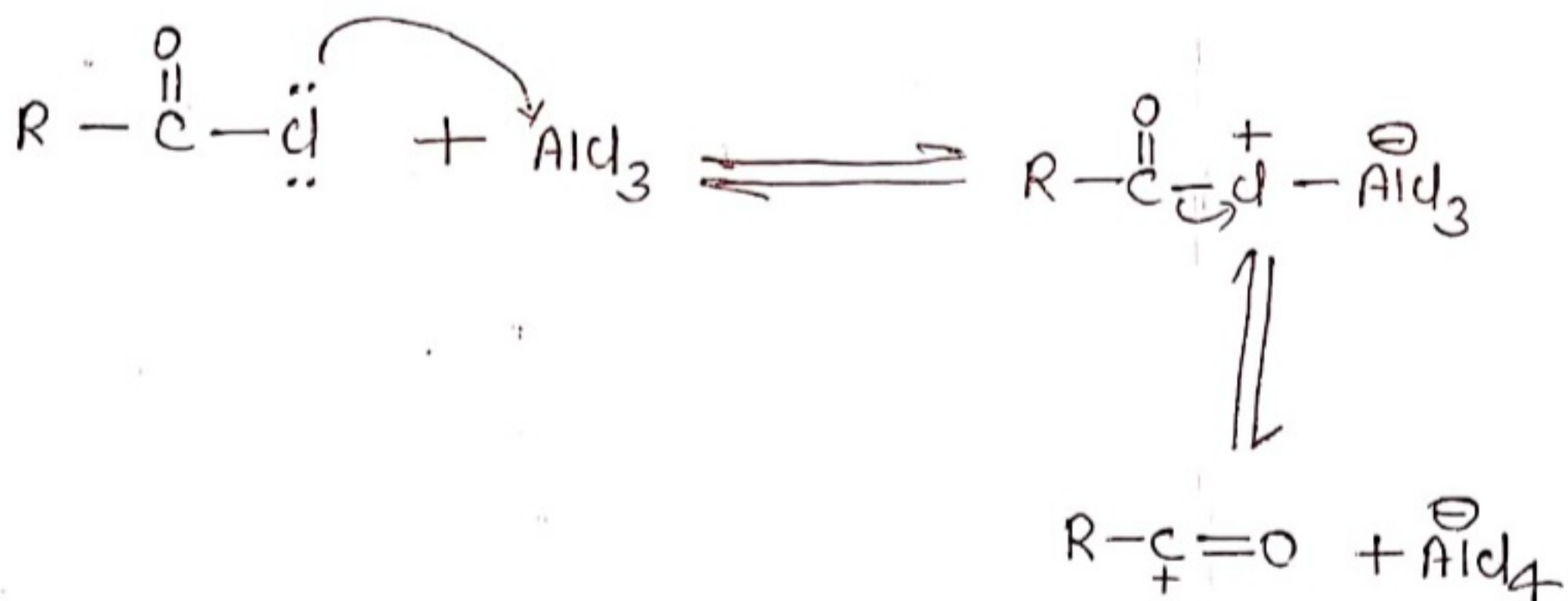
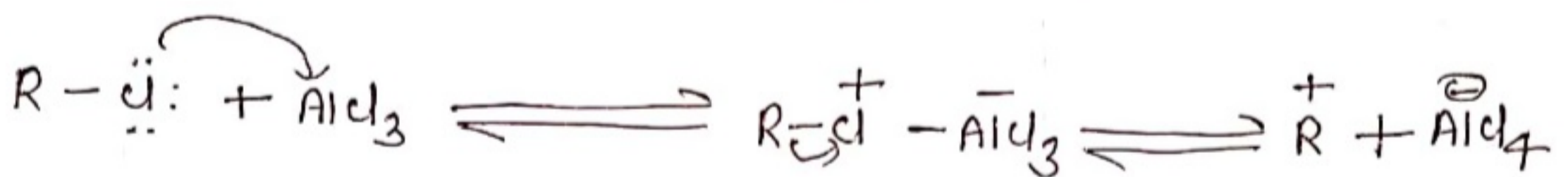
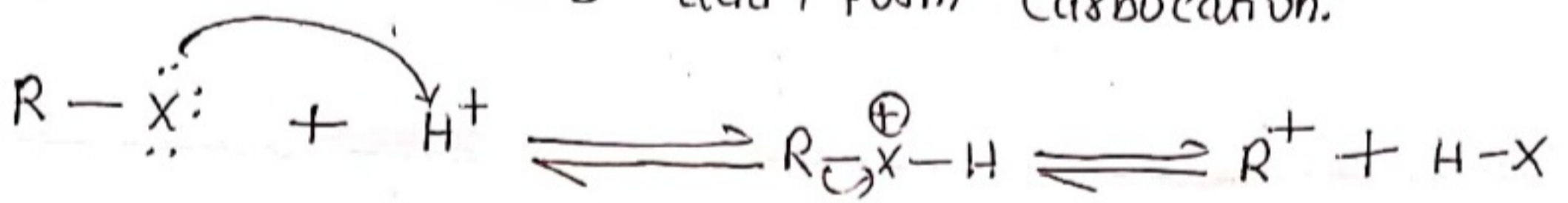
Organic compounds containing lone pair of electrons on an atom, especially oxygen form carbonium ions when treated with acid,





4. By the protonation of alkyl halide or acyl halides! ---

Alkyl halides or acyl halides when treated with a proton donating solvent or Lewis acid, form carbocation.



5. By the decomposition of diazonium salts: ---



To be continued in next lecture...