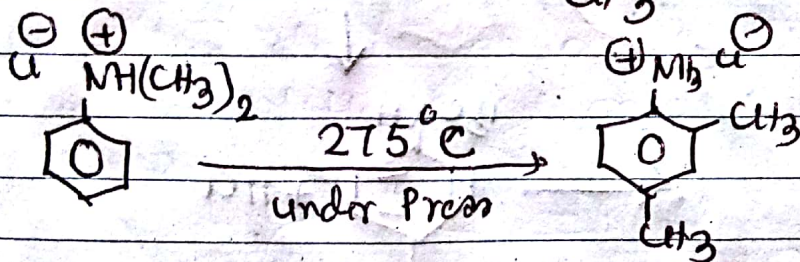
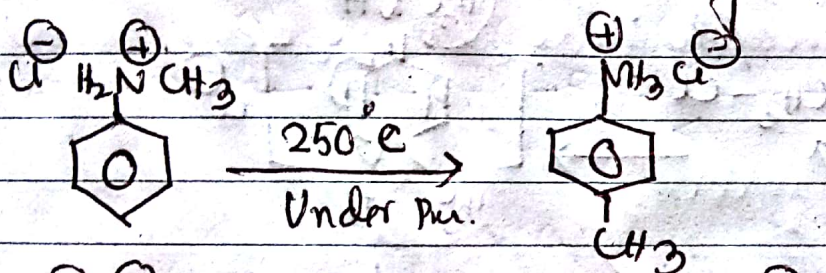
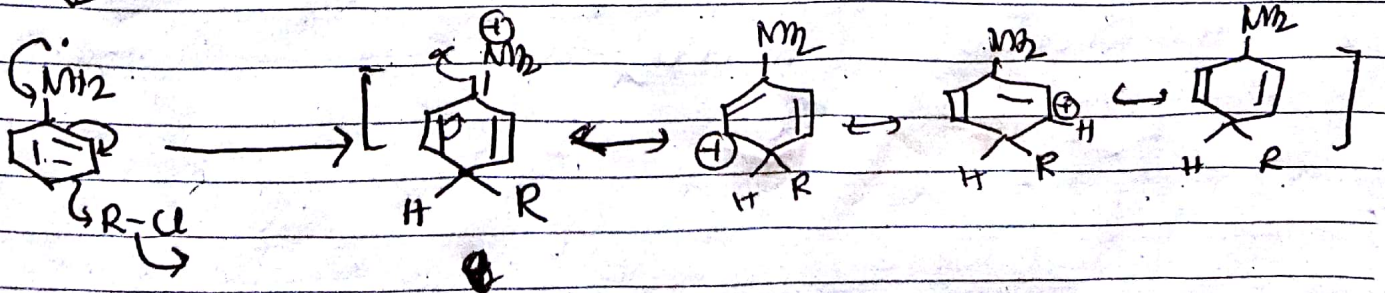
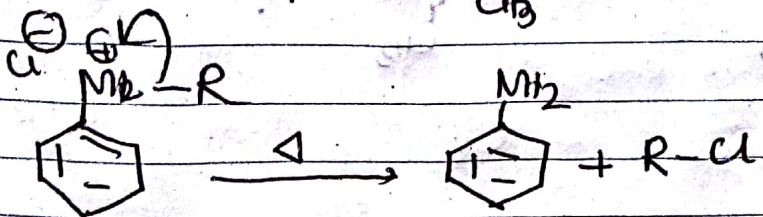
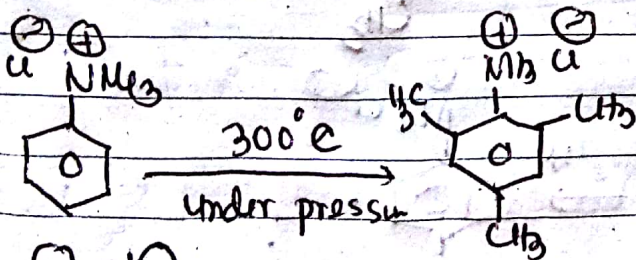


Hofmann-Markovnikov rearrangement:

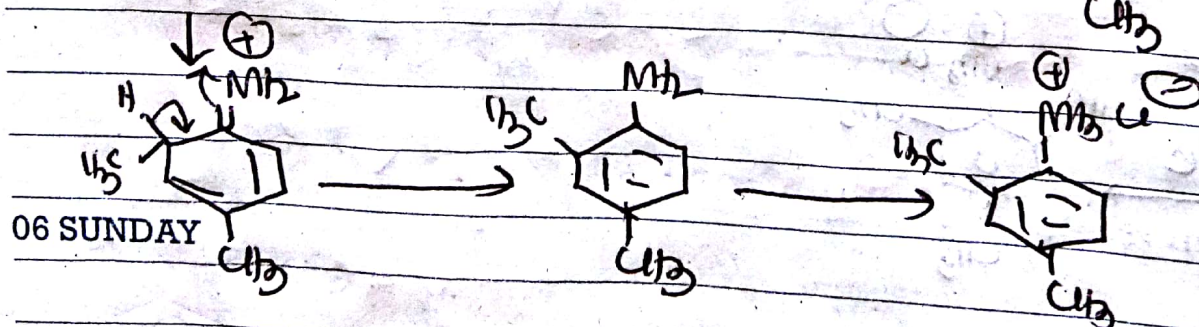
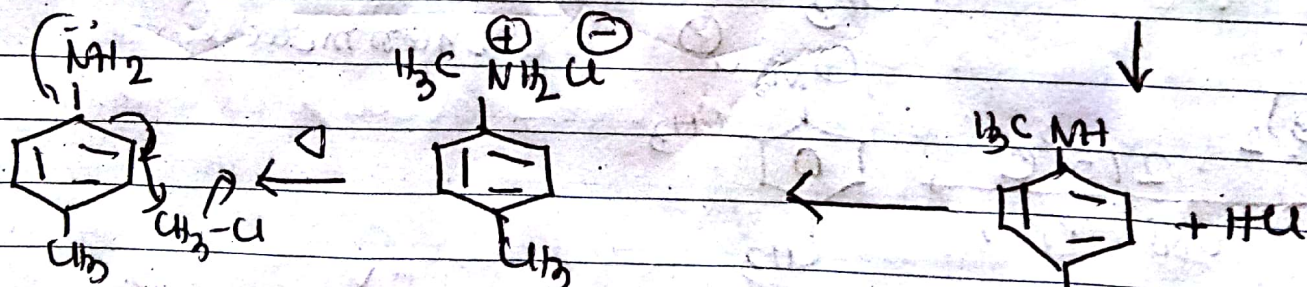
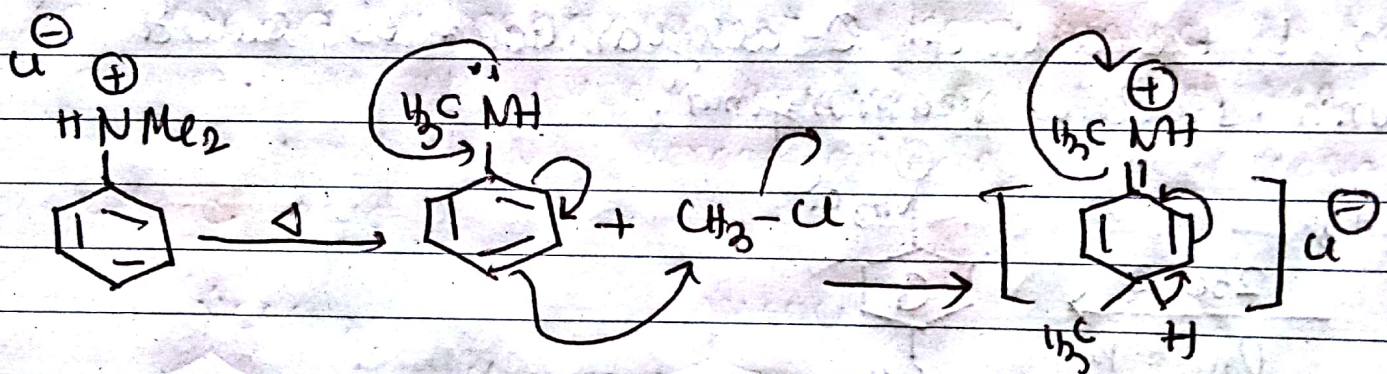
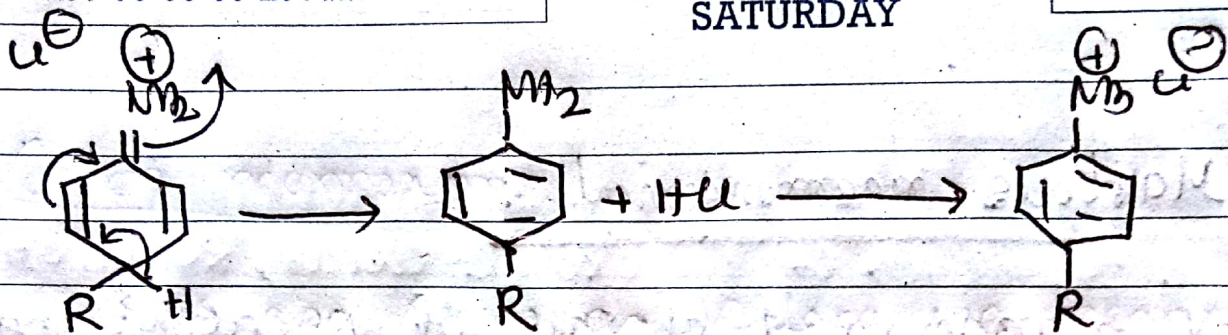
The thermal rearrangement of salts of N-alkyl amine to the salts of o-alkylanilines is called Hofmann-Markovnikov rearrangement.



Intermolecular



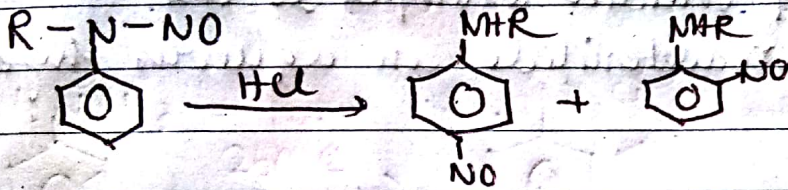
SATURDAY



06 SUNDAY

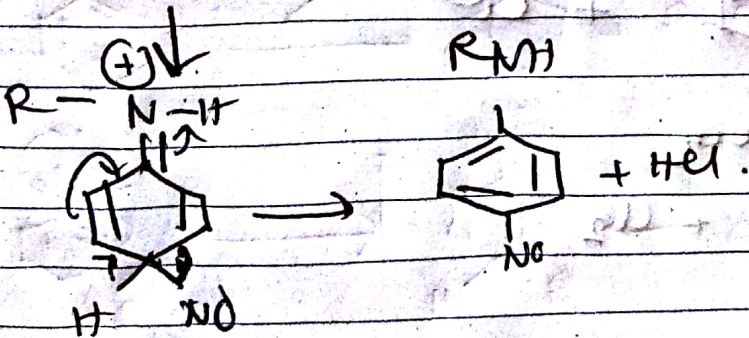
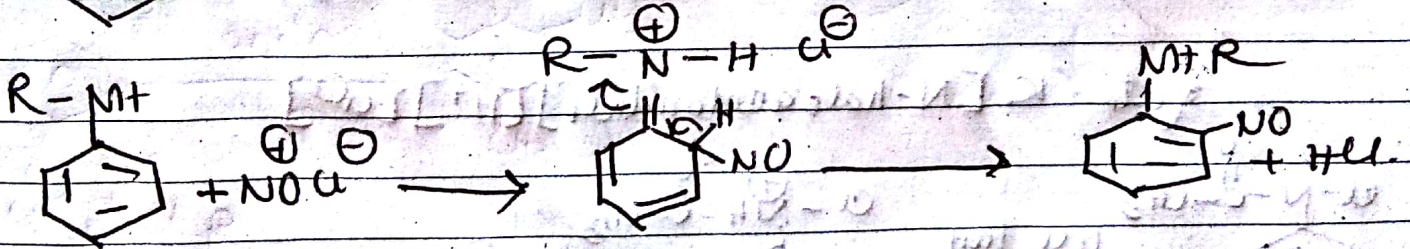
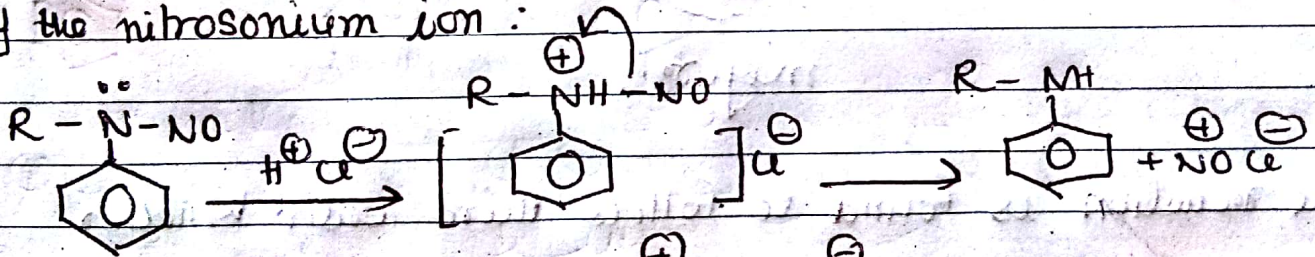
The Fischer-Hepp Rearrangement

The acid-catalyzed rearrangement of N-alkyl-N-nitrosoanilines to N-alkyl-p-nitrosoanilines is called F. Hepp rearr.



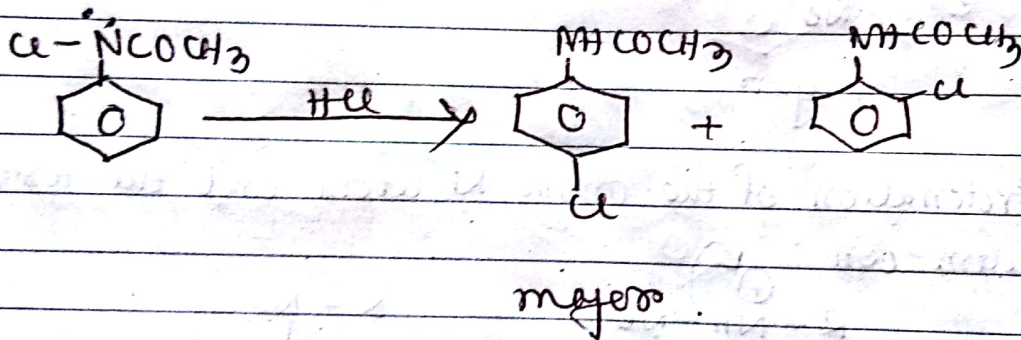
major

Mechanism: Protonation of the amino N atom and the formation of the nitrosonium ion:



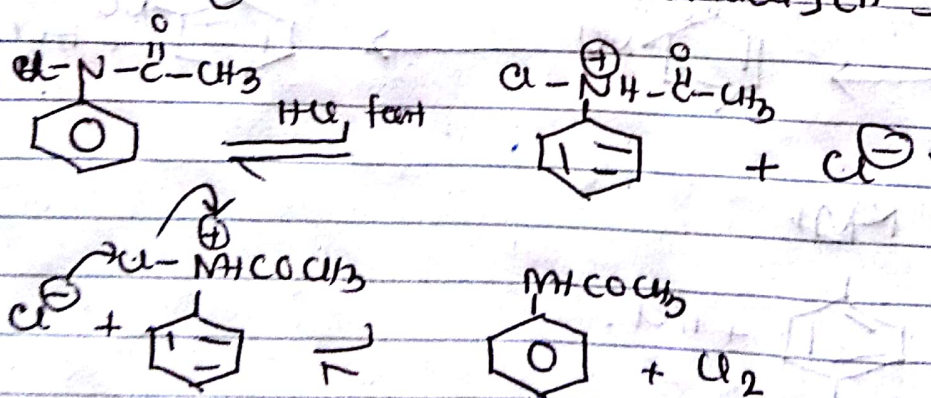
Orton rearrangement :

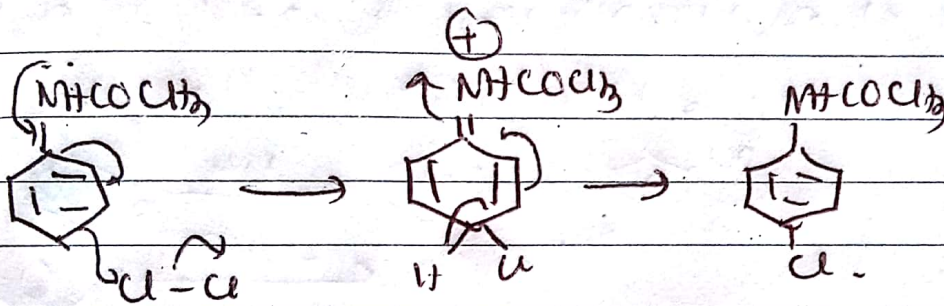
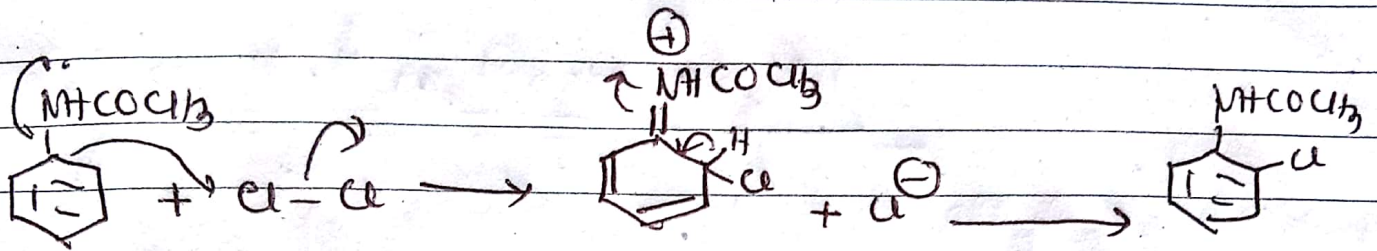
This is also known as chloramine rearrangement and involves the rearrangement of aromatic N-halogeno amines. The most widely studied example is the rearrangement of N-chloroacetanilide in aqueous hydrochloric acid.



The reaction is found to follow third order kinetics.

$$\text{Rate} = k [\text{N-haloacetanilide}] [\text{H}^+] [\text{Cl}^-]$$





One strong piece of evidence for the intermolecular nature of the rearrangement is that when hydrochloric acid labelled with radioactive chlorine is used, the *p*-chloroacetophenone produced contains some radioactive chlorine.