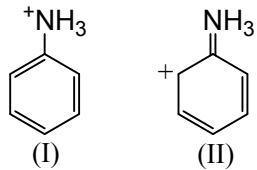
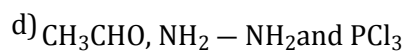
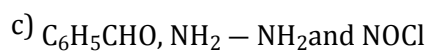
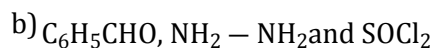
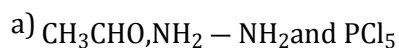
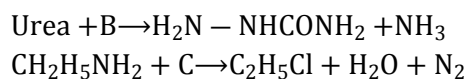


Topic :- Amines

- During diazotization of benzenamine with sodium nitrite and hydrochloric acid, the excess of hydrochloric acid is used primarily to
 - Check the hydrolysis of $\phi - OH$
 - Ensure a stoichiometric amount of nitrous acid
 - Check the concentration of free aniline
 - Neutralize any base formed during reaction
- Hofmann's bromamide reaction is to convert
 - Acid to alcohol
 - Alcohol to acid
 - Amide to amine
 - Amine to amide
- Examine the following two structures for the anilinium ion and choose the correct statement from the ones given below

 - II is not acceptable as canonical structure because carbonium ions are less stable than ammonium ions
 - II is not an acceptable canonical structure because it is non-aromatic
 - II is not an acceptable canonical structure because in it N has 10 valence electrons
 - II is an acceptable as canonical structure
- Choose the amide which on reduction with $LiAlH_4$ yields a secondary amine
 - Ethanamide
 - N-methylethanamide
 - N, N-dimethylethanamide
 - Phenylmethanamide
- When methyl cyanide is hydrolysed in presence of alkali, the product is:
 - Acetamide
 - Methane
 - $CO_2 + H_2O$
 - Acetic acid
- In the following reactions, reactants *A*, *B* and *C* are:
 $Cl_2H_5NH_2 + A \rightarrow C_2H_5N = CH - C_6H_5 + H_2O$



7. Toluene is nitrated and the resulting product is reduced with tin and hydrochloric acid. The product so obtained is diazotised and then heated with cuprous bromide. The reaction mixture so formed contains.

a) Mixture of *o*- and *p*-bromotoluenes

b) Mixture of *o*- and *p*-dibromobenzenes

c) Mixture of *o*- and *p*-bromoanilines

d) Mixture of *o*- and *m*-bromotoluenes

8. >C=O compounds reacts with NH₃ or amines followed by H₂/Ni. The reaction is called

a) Mendius reaction

b) Hofmann bromamide

c) Reductive amination

d) Gabriel's phthalimide

9. A compound which on reaction with aqueous nitrous acid gives an oily nitrosoamine is:

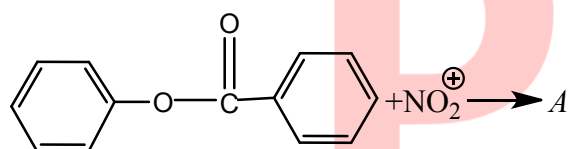
a) Methylamine

b) Ethylamine

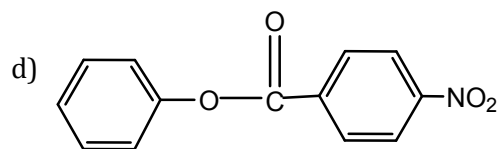
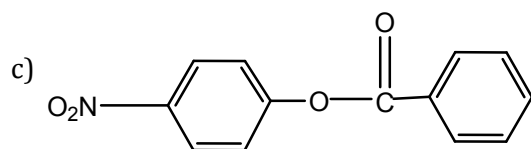
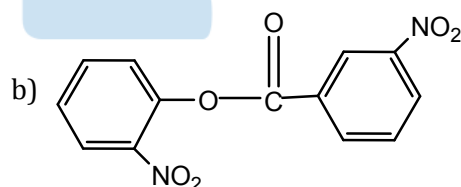
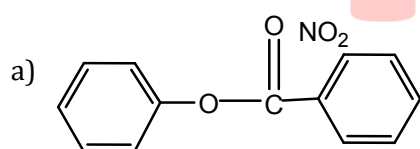
c) Diethylamine

d) Triethylamine

10.



The product A is



11. The active species produced in Hofmann's bromamide reaction is:

a) Br⁻

b) Br₂

c) OBr⁻

d) OBr₂

