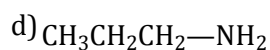
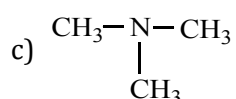
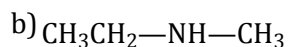
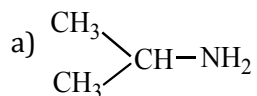


## Topic :- Amines

- The action of nitrous acid on a primary amine gives:  
a) Nitroalkane                      b) Alkyl nitrite                      c) Alcohol                      d) Secondary amine
- The reduction of  $\text{CH}_3\text{CN}$  to  $\text{CH}_3\text{CH}_2\text{NH}_2$  is called:  
a) Rosenmund's reduction  
b) Clemmensen's reduction  
c) Mendius reduction  
d) Hofmann's reduction
- Aniline is reacted with  $\text{Br}_2$  water and the resulting product is treated with an aqueous solution of sodium nitrite in the presence of dilute  $\text{HCl}$ . The compound so formed is converted into tetrafluoroborate which is subsequently heated dry. The end product is  
a) *p*-bromofluorobenzene                      b) *p*-bromoaniline  
c) 2, 4, 6- tribromofluoro benzene                      d) 1, 3, 5- tribromobenzene
- The reaction,  
$$\text{RCOOH} \xrightarrow[\text{conc. H}_2\text{SO}_4]{\text{NaN}_3} \text{RNH}_2 + \text{N}_2 + \text{CO}_2$$
is known as  
a) Curtius reaction                      b) Lossen reaction                      c) Schmidt reaction                      d) Hofmann reaction
- Which of the following compounds on treatment first with  $\text{NaNO}_2/\text{HCl}$  and then coupled with phenol produces *p*-hydroxyazobenzene ?  
a) Nitrobenzene                      b) Azobenzene                      c) Phenol                      d) Aniline
- The structural formula of methyl amino methane is:  
a)  $(\text{CH}_3)_2\text{CHNH}_2$                       b)  $(\text{CH}_3)_3\text{N}$                       c)  $(\text{CH}_3)_2\text{NH}$                       d)  $\text{CH}_3\text{NH}_2$

7. An organic compound ( $C_3H_9N$ ) ( $A$ ), when treated with nitrous acid, gave an alcohol and  $N_2$  gas was evolved. ( $A$ ) on warming with  $CHCl_3$  and caustic potash gave ( $C$ ) which on reduction gave isopropylmethylamine. Predict the structure of ( $A$ ).



8. Urea when heated slowly, product formed is:



c) biuret

d) Ammonium carbamate

9. Which of the following statements is not correct?

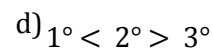
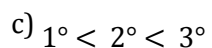
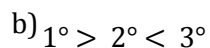
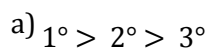
a) Primary amines show intermolecular hydrogen bonding

b) Secondary amines show intermolecular hydrogen bonding

c) Tertiary amines show intermolecular hydrogen bonding

d) Amines have lower boiling points as compared to those of alcohols and carboxylic acids of comparable molar masses

10. Compare boiling point of isomeric alkyl amines.



11. Hofmann's hypobromite reaction affords a method of:

a) Preparing a tertiary amine

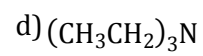
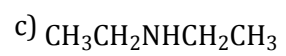
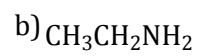
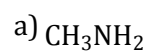
b) Preparing a mixture of amines

c) Stepping down a series

d) Stepping up a series

12. A colourless, odourless and non-combustible gas is liberated when ethylamine reacts with:





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