

Board – CBSE

Class – 12th

Topic – Amines

1. For an amine RNH_2 , write an expression to indicate its basic strength.
2. Give one example of Hoffmann – Bromamide reaction
3. Distinguish between ethylamine and aniline.
4. Give an example of diazotization
5. Write chemical reaction of aniline with benzoyl chloride and write the name of the product obtained.
6. Complete the following reactions:
 - (a) $\text{C}_6\text{H}_5\text{NH}_2 + \text{CHCl}_3 + \text{alc. KOH} \rightarrow$
 - (b) $\text{C}_6\text{H}_5\text{NH}_2 + \text{Br}_2 (\text{aq}) \rightarrow$
 - (c) $\text{C}_6\text{H}_5\text{NH}_2 + \text{H}_2\text{SO}_4 (\text{conc.}) \rightarrow$
7. Accomplish the following conversions:
 - (a) Aniline to p-bromoaniline
 - (b) Benzamide to toluene
 - (c) Aniline to benzyl alcohol.
8. Accomplish the following conversions:
 - (a) Nitrobenzene to benzoic acid
 - (b) Benzene to m-bromophenol
 - (c) Benzoic acid to aniline
9. How will you convert
 - (a) Nitro methane into dimethylamine
 - (b) Propanoic acid into ethanoic acid?
10. How will you convert:
 - (a) Ethanoic acid into methanamine
 - (b) Hexane nitrile into 1-aminopentane
11. Write the reactions of
 - (a) Aromatic and
 - (b) aliphatic primary amines with nitrous acid.
12. Write structures and IUPAC names of
 - (a) The amide which gives propanamine by Hoffmann bromamide reaction.
 - (b) The amine produced by the Hoffmann degradation of benzamide.
13. Write chemical equations for the following conversions:
 - (a) $\text{CH}_3 - \text{CH}_2 - \text{Cl}$ into $\text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{NH}_2$
 - (b) $\text{C}_6\text{H}_5 - \text{CH}_2 - \text{Cl}$ into $\text{C}_6\text{H}_5 - \text{CH}_2 - \text{CH}_2 - \text{NH}_2$
14. Write short notes on acetylation.
15. Write short notes on ammonolysis.
16. Write short notes on diazotization