

## UNIT – 13

### AMINES

#### 1 / 2 / 3 Marks Questions

1. Arrange the following in order of decreasing basic strength
  - (a) Ethyl amine, Ammonia, Triethyl amine
  - (b) Aniline, p- Nitroaniline , p- Toluidine
2. Amine group in aniline is ortho and para directing. Why does then aniline on nitration give substantial amount of m-nitroaniline
3. Primary amines have higher boiling points than tertiary amines. Why?
4. 'Amide are more acidic than amines'. Why?
5. Arrange the following amines in the ascending order of basic strength giving reason- $\text{EtNH}_2$ ,  $\text{Et}_2\text{NH}$ ,  $\text{Et}_3\text{N}$ , in aqueous solution?
6. Explain the role of mineral acid in the reaction of a carbonyl compound with KCN (aq)?
7. Why is acetonitrile preferred as a solvent for running organic reaction?
8. Why aniline is acetylated first to prepare mono bromo derivative?
9. Ammonolysis of alkyl halide does not give a corresponding amine in pure state. Explain?
11. Explain why methyl bromide reacts with KCN go give mostly methyl cyanide but it reacts with AgCN to give mostly methyl isocyanide.
12. Why is necessary to maintain the temperature between 273 K and 278 K during diazotization?
13. Why does silver chloride dissolve in aqueous methyl amine solution?
14. How can the following conversion be carried out :-
  - (a) p-toluidine to 2- bromo-4- methylanline
  - (b) Aniline to iodobenzene
  - (c) Aniline to benzonitrile