



## CHEMISTRY

CH: 13 AMINES

Class: XII

I Answer the following

1. Arrange the following as mentioned.
  - a)  $\text{CH}_3\text{NH}_2, (\text{CH}_3)_2\text{NH}, (\text{CH}_3)_3\text{N}, \text{NH}_3$  in the decreasing order of basic strength.
  - b)  $\text{C}_6\text{H}_5\text{NH}_2, \text{C}_6\text{H}_5\text{NHCH}_3, (\text{C}_2\text{H}_5)_2\text{NH}, \text{C}_2\text{H}_5\text{NH}_2$  in the decreasing order of  $pK_b$ .
2. Account for the following.
  - a. An alkylamine is more basic than ammonia.  
Or  
Methyl amine is a stronger base than ammonia.  
Or  
Aliphatic amines are stronger bases than aromatic amines.
  - b. Amines react as nucleophiles.
  - c. Aqueous solutions of amines are basic in nature.
  - d. Amines are more basic than alcohols of comparable molecular masses.  
Or  
Amines are less acidic than alcohols of comparable molecular masses.
  - e. Reactivity of  $-\text{NH}_2$  group gets reduced in acetanilide.
  - f. Primary amines have higher boiling points than tertiary amines
3. Identify A & B in each of the following reactions.

