



Class 12 Chemistry | Amines

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. Which is a secondary amine?

A. $(\text{CH}_3)_3\text{N}$ B. CH_3NH_2 C. NH_3 D. $(\text{CH}_3)_2\text{NH}$

2. Aniline is less basic than methylamine mainly because:

A. Its N is positively charged initially
B. It contains no lone pair
C. Its N lone pair is delocalised
D. Methylamine is aromatic

3. Which is most basic in aqueous solution among these methylamines?

A. CH_3NH_2 B. $(\text{CH}_3)_3\text{N}$ C. $(\text{CH}_3)_2\text{NH}$ D. NH_3

4. Reduction of nitrobenzene with Sn/HCl followed by base gives:

A. Benzamide B. Aniline
C. Benzonitrile D. Benzene

5. Reduction of CH_3CN with LiAlH_4 gives:

A. Ethylamide B. Dimethylamine
C. Ethylamine D. Methylamine

6. Hofmann bromamide degradation of CH_3CONH_2 gives:

A. CH_3NH_2 B. $(\text{CH}_3)_2\text{NH}$ C. $\text{C}_2\text{H}_5\text{NH}_2$ D. CH_3CN

7. The carbylamine test is given by:

A. Primary amines
B. Only tertiary amines
C. All amines equally
D. Only secondary amines

8. Which gives a positive carbylamine test?

A. Trimethylamine B. Acetamide
C. Dimethylamine D. Aniline

9. Aniline with bromine water gives:

A. Only bromobenzene
B. Benzyl bromide
C. 3-Bromoaniline only
D. 2,4,6-Tribromoaniline

10. Diazotisation of aniline is carried out at:

A. 273-278 K B. Below 100 K
C. 473-478 K D. 373-378 K

11. The reagent combination for diazotisation is:

A. $\text{NaNO}_3/\text{NaOH}$ B. $\text{NaCl}/\text{H}_2\text{O}$
C. $\text{NH}_3/\text{H}_2\text{SO}_4$ D. NaNO_2/HCl

12. Benzenediazonium chloride with CuCl/HCl gives:

A. Benzamide B. Phenol
C. Chlorobenzene D. Aniline

13. Benzenediazonium chloride warmed with water gives:

A. Aniline B. Nitrobenzene
C. Phenol D. Benzene

14. Gabriel synthesis is unsuitable for preparing:

A. Butylamine B. Aniline
C. Ethylamine D. Propylamine

15. Aniline is acetylated before controlled bromination mainly to:

A. Reduce excessive ring activation
B. Remove all nitrogen
C. Make the ring ionic
D. Replace nitrogen with oxygen

ANSWER KEY — check after completing all 15 questions

1.D 2.C 3.C 4.B 5.C 6.A 7.A 8.D 9.D 10.A 11.D 12.C 13.C 14.B 15.A