

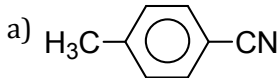
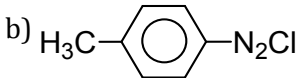
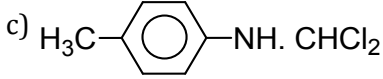
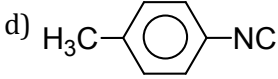
DPP

DAILY PRACTICE PROBLEMS

Class : XIIth
Date :

Subject : CHEMISTRY
DPP No. : 1

Topic :- Amines

- Hofmann bromamide reaction is used to prepare
 - 1° amine
 - 2° amine
 - 3° amine
 - All of these
- Tertiary amine is obtained in the reaction
 - Aniline $\xrightarrow{\text{CH}_3\text{I}, \text{CH}_3\text{I}}$
 - Aniline $\xrightarrow{\text{CH}_3\text{I}}$
 - Nitrobenzene $\xrightarrow{\text{Sn}/\text{HCl}}$
 - None of these
- Which of the following on reduction with LiAlH_4 gives a secondary amine?
 - CH_3NC
 - CH_3CONH_2
 - CH_3CN
 - CH_3NO_2
- Which of the following is most basic in aqueous medium?
 - $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{NH}_2$
 - $\text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{NH}_2$
 - $\text{CH}_3 - \overset{\text{CH}_3}{\underset{|}{\text{N}}} - \text{CH}_3$
 - $\text{CH}_3 - \text{CH}_2 - \overset{\text{CH}_3}{\underset{|}{\text{NH}}} - \text{CH}_3$
- The product *A* and *B* in the reaction are:
 $\text{C}_2\text{H}_5\text{NH}_2 + \text{CHCl}_3 + 3\text{KOH} \rightarrow \text{A} + \text{B} + 3\text{H}_2\text{O}$
 - $\text{C}_2\text{H}_5\text{NC} + 3\text{KCl}$
 - $\text{C}_2\text{H}_5\text{CN} + 3\text{KCl}$
 - $\text{C}_2\text{H}_5\text{CONH}_2 + 3\text{KCl}$
 - $\text{C}_2\text{H}_5\text{NC} + \text{K}_2\text{CO}_3$
- p* - amine and *s* - amine are distinguished by:
 - Br_2/KOH
 - HClO
 - HNO_2
 - NH_3
- Which one of the following compounds will dissolve in an alkali solution after it has undergone reaction with Hinsberg reagent?
 - CH_3NH_2
 - $(\text{CH}_3)_3\text{N}$
 - $(\text{C}_2\text{H}_5)_2\text{NH}$
 - $\text{C}_6\text{H}_5\text{NHC}_6\text{H}_5$
- The reaction of chloroform with alcoholic KOH and *p*-toluidine from
 - 
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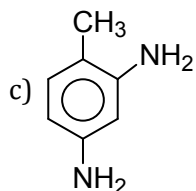
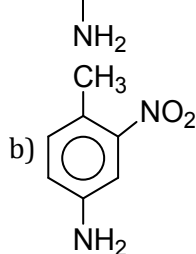
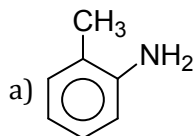
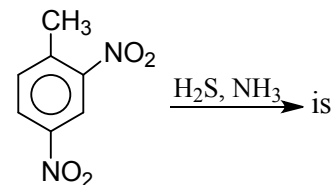
9. Which one of the following functional groups undergoes hydrolysis with alkali to yield an acid group?

- a) $-\text{CN}$ b) $-\text{CHO}$ c) $-\text{COCH}_3$ d) $-\text{Br}$

10. Ethylamine reacts with nitrosyl chloride (NOCl) to form:

- a) Ethyl chloride b) Ethyl alcohol c) Ethyl nitrite d) Nitroethane

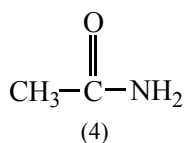
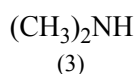
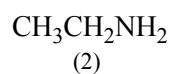
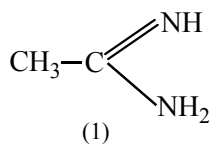
11. The product obtained in the reduction



d) The compound is not reduced

P E

12. The correct order of basic nature of the following compounds is:



a) $2 > 1 > 3 > 4$

b) $1 > 3 > 2 > 4$

c) $3 > 1 > 2 > 4$

d) $1 > 2 > 3 > 4$

13. In reduction of nitrobenzene, which of the following is the intermediate?

- a) ϕNO b) $\phi\text{NHNH}\phi$ c) $\phi\text{N}=\text{N}-\phi$ d) $\begin{array}{c} \text{O} \\ \uparrow \\ \phi\text{N}=\text{N}-\phi \end{array}$

14. Nitration of aniline also gives *m*-nitro aniline in strong acidic medium because

- a) In electrophilic substitution reaction amino group is *meta* directive b) In spite of substituents nitro group always goes to *m*-position
c) In strong acidic medium aniline present as anilinium ion d) None of the above

15. Gabriel's synthesis is used frequently for the preparation of which of the following?

- a) Primary amines b) Primary alcohols c) Tertiary amines d) Tertiary alcohols

16. $\text{C}_6\text{H}_5\text{NO}_2 \xrightarrow{\text{Sn}/\text{HCl}} \text{C}_6\text{H}_5\text{X}$

'X' is identified as

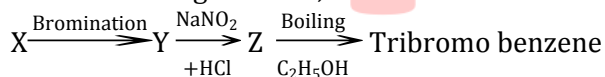
- a) NO b) $-\text{NH}_2$ c) NHOH d) None of these

17. $\text{A} \xrightarrow{\text{H}_2\text{NOH}} \text{B} \xrightarrow{\text{Reduction}} \text{C} \xrightarrow{\text{NOCl}} \text{CH}_3\text{CH}_2\text{Cl}$

In the above sequence A and C are

- a) Methanal, methyl amine b) Acetone, ethaneamine
c) Ethanal, diamethyl amine d) Acetaldehyde, ethyl amine

18. In the following reaction, X is



- a) Benzoic acid b) Salicylic acid c) Phenol d) Aniline

19. Which of the following is not a nitro-derivative?

- a) $\text{C}_6\text{H}_5\text{NO}_2$ b) $\text{CH}_3\text{CH}_2\text{ONO}$ c) $\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_3\text{CH}-\text{N} \\ | \quad \searrow \\ \text{CH}_3 \quad \text{O} \end{array}$ d) $\text{C}_6\text{H}_5(\text{OH})\text{NO}_2$

20. Decreasing order of basic nature in aqueous solutions

- a) $\text{C}_6\text{H}_5\text{NH}_2 > \text{NH}_3 > \text{CH}_3\text{NH}_2 > (\text{CH}_3)_2\text{NH}$ b) $\text{NH}_3 > \text{C}_6\text{H}_5\text{NH}_2 > \text{CH}_3\text{NH}_2 > (\text{CH}_3)_2\text{NH}$
c) $(\text{CH}_3)_2\text{NH} > \text{CH}_3\text{NH}_2 > \text{NH}_3 > \text{C}_6\text{H}_5\text{NH}_2$ d) $\text{CH}_3\text{NH}_2 > (\text{CH}_3)_2\text{NH} > \text{NH}_3 > \text{C}_6\text{H}_5\text{NH}_2$