

Class : XIIth Subject : CHEMISTRY

Date: DPP No.:5

Topic:- Amines

1. Which is not the property of ethanenitrile (CH₃CN)?

a) Undergoes acidic hydrolysis to give carboxylic acid

b)Undergoes alkaline hydrolysis to give salt of carboxylic acid

c) It tautomerises to give methyl isocyanide

d)It gives carbylamines reaction with chloroform

2. Acetoneoxime on catalytic hydrogenation gives:

a) 1-propanamine b) Isopropylamine

c) Ethyl methyl amine d)CH4 and ethanamine

3. The product of Hofmann elimination of

$$\leftarrow$$
 CH₂N(CH₃)₂OH is

a)
$$\langle \qquad \rangle$$
—CH₂N(CH₃)₂

c)
$$\leftarrow$$
 CH₂ + (CH₃)₂NOH

b)
$$\sim$$
 NH₂ + (CH₃)₂N

$$d) \left\langle \begin{array}{c} \\ \\ \end{array} \right\rangle + (CH_3)_4 \overset{+}{NO\bar{H}}$$

4. Hofmann's rearrangement during the conversion of an amide to amine involves....... rearrangemet.

- a) Intermolecular
- b)Intramolecular.
- c) Both (a) and (b)
- d)None of these

5. Aniline reacts with ... to yield ... as the final product.

a) Bromine, 2-bromoaniline

- b)Bromine, 2, 4, 6-tribromoaniline
- c) Chloroform/KOH, phenyl cyanide
- d)Acetyl chloride, benzanilide

6. Which of the following is the strongest base?

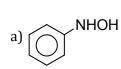
$$_{\rm C}$$
 \sim $_{\rm CH_2}$

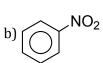
$$d)$$
 CH_2 NH_2

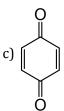
- 7. Which of the following can be used to distinguish acetamide and urea?
 - a) Fehling's solution
- b)Biuret test
- c) Hofmann's reaction d) NaOH solution
- 8. Which of the following amines is optically active?
 - a)_{CH₃NH₂}
 - b)CH3NHCH3
 - c) $CH_3CH_2CH_2 - N - C_2H_5$
 - d)Sec. butylamine
- 9. Which one of the following is not the correct reaction of aryl diazonium salts?
 - a) $C_6H_5N_7^+CI^- + Cu_2CI_2 \rightarrow C_6H_5CI$
- b) $C_6H_5N_2^+CI^- + HBF_4\underbrace{Heat}_{6}C_6H_5F$
- c) $C_6H_5N_7^+CI^- + H_3PO_2 \rightarrow C_6H_5PO_4$
- $^{\rm d)}C_6H_5N_2^+CI^- + SnCI_2/HCI \rightarrow C_6H_5NHNH_2$

- 10. Hinsberg's reagent is
 - a) C₆H₅COCI
- b)CH3COCI
- c) C₆H₅CH₂CI
- d)C₆H₅SO₂CI
- 111. Which one of the following compound when heated with KOH and primary amines gives carbylamine test?
 - a) CHCl₃
- b)CH₃Cl
- c) CCl₄
- d)CH2NC

- 12. Ethyl amine on acetylation gives
 - a) N-ethyl acetamide b) Acetamide
- c) Methyl acetamide
- d)None of these
- 13. The oxidation of aniline with per acetic acid in the presence of acetic acid by refluxing gives



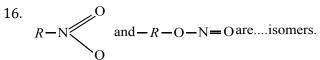




d)None of these

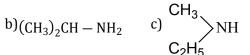
- 14. Aniline reacts with acetaldehyde to form
 - a) Schiff's base
- b)Carbylamine
- c) Immine
- d)None of these
- 15. Aniline gives a precipitate with bromine. The colour of precipitate is
 - a) Red
- b)Black
- c) Blue
- d)White





- a) Chain
- b)Functional
- c) Position
- d)All of these
- 17. A compound of molecular formula C₃H₉N when reacts with benzene sulphonyl chloride gives a product soluble in dilute NaOH solution. The compound should be

$$b)(CH_3)_2CH-NH_2$$



- d)All of these
- 18. Which one does not liberate NH₃ when undergoes hydrolysis?
 - a) Acetanilide
- b)Acetonitrile
- c) Acetamide
- d)Phenyl isocyanide
- 19. *n*-butylamine (I), diethylamine (II) and N, N-dimethylethylamine (III) have the same molar mass. The increasing order of their boiling point is

a)
$$III < II < I$$

c)
$$II < III < I$$

20. Correct order of basic nature of $CH_3NH_2(A)$, $CH_3CN(B)$ and $CH_3N = CHCH_3(C)$ is

a)
$$A > B > C$$

$$a)_A > B > C$$
 $b)_B > C > A$ $c)_A > C > B$ $d)_C > A > B$

c)
$$A > C > B$$

$$(1)^{C} > A > B$$