DPP

DAILY PRACTICE PROBLEMS

Class: XIIth Date:

**Solutions** 

**Subject: CHEMISTRY** 

**DPP No.: 3** 

# **Topic :- Amines**

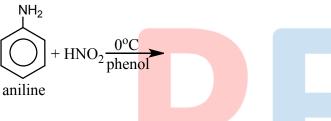
## 1 **(b)**

 $C_2H_5NH_2 + HNO_2 \rightarrow C_2H_5OH + N_2 + H_2O$ 

ethyl amine

ethyl alcohol

(1°aliphatic amine)



1° aromatic amine

∴ Dye test is used to distinguish between 1°aliphatic and

1° aromatic amine

# 2 **(a)**

Hofmann bromamide degradation takes place with complete retention of stereochemical configuration in the migrating alkyl group

#### 3 **(d)**

$$C_6H_5SO_2Cl + RNH_2 \rightarrow RNHSO_2C_6H_5 \xrightarrow{KOH} R - NKSO_2C_6H_5$$

Benzene sulphyonyl N-alkyl benzene soluble in KOH

chloride sulphonamide

## 4 **(b)**

The conversion of —CN to —CH<sub>2</sub>NH<sub>2</sub> by catalytic reduction is called Mendius reaction.

7 **(c)** 

$$C_2H_5NH_2HNO_2C_2H_5OHPCI_3C_2H_5CINH_3C_2H_5NH_2$$
 $\xrightarrow{-N_2}$ 

ethyl amine ethanol ethyl chloride ethyl amine

- 1. (B) (C)
- 8 **(a)**

Azoxybenzene is the main product when reducing agent used is Na<sub>3</sub>AsO<sub>3</sub>/NaOH

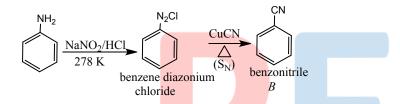
9 **(d)** 

C<sub>6</sub>H<sub>5</sub>COCl has no reaction with carboxylic acids.

10 **(d)** 

CH<sub>3</sub>NH<sub>3</sub>Cl is acidic in nature.

13 **(b)** 



Formation of A is by diazotization and formation of B from A is by  $S_N$  reaction.

14 **(a)** 

 $RCONH_2P_2O_5RCN + H_2O$ 

15 **(a)** 

 $CH_3CH_2I\underbrace{NaCNCH_3CH_2CNOH^-_CH_3CH_2CONH_2}_{2}\underbrace{Br_2/NaOHCH_3CH_2NH_2}_{2}$ 

17 **(c)** 

Amines react with alkyl halide (excess) to give quaternary ammonium salt.

$$C_6H_5NH_2 + 3CH_3I \rightarrow C_6H_5N^+(CH_3)_3I^-$$

19 **(c)** 

Reaction of aniline with benzaldehyde is condensation reaction.

H  $| \\ C_6H_5-C=0+H_2NC_6H_5\underline{Condensation}C_6H_5CH=NC_6H_5+H_2O \\ \\ Benzaldehyde \ aniline \ benzylidene aniline \\$ 



ANSWER-KEY										
Q.	1	2	3	4	5	6	7	8	9	10
A.	В	A	D	В	A	A	C	A	D	D
Q.	11	12	13	14	15	16	17	18	19	20
A.	В	D	В	A	A	A	C	D	С	В

