

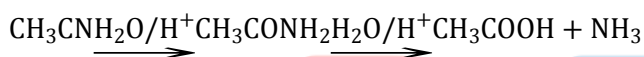
Topic :- Amines

1 (d)

Carbylamine reaction is given by aliphatic and aromatic primary amine.

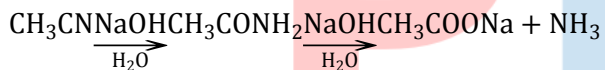
CH_3CN does not give carbylamine reaction with chloroform because it is not an amine.

CH_3CN undergoes acidic hydrolysis to give carboxylic acid.



acetic acid

CH_3CN undergoes alkaline hydrolysis to give salt of carboxylic acid.



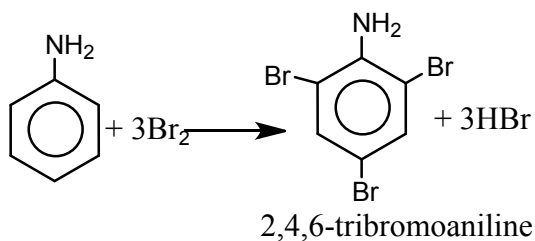
Sodium acetate

CH_3CN tautomerises to give methyl isocyanide.



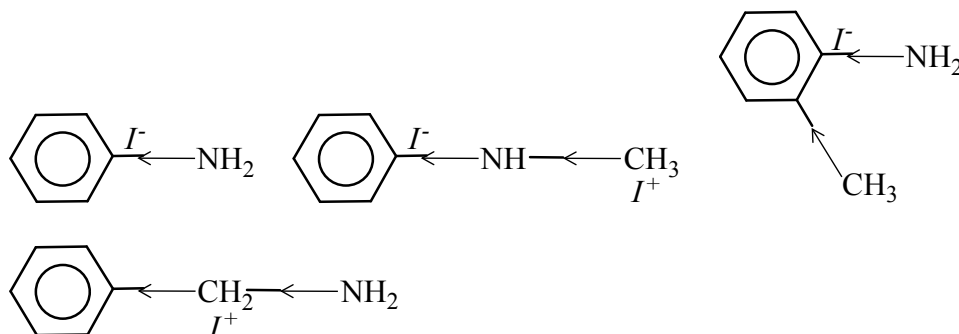
5 (b)

Aniline reacts with Br_2 to give 2, 4, 6-tribromoaniline not bromoaniline as



6 (d)

CH_3 – (an electron releasing (+I) group) increases electron density at N-atom hence, basic nature is increased.



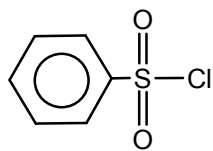
C_6H_5 decreases electron density at N-atom thus basic nature is decreased. (Lone-pair on N in aniline compounds is delocalised along with π -electrons in benzene).

Thus, (d) is the strongest base.

7 (b)

Urea gives biuret test. Biuret formed gives violet colour with CuSO_4 in alkaline medium.

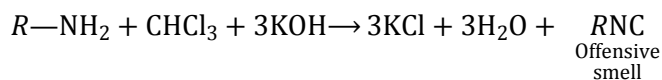
10 (d)



or $\text{C}_6\text{H}_5\text{SO}_2\text{Cl}$ is called Hinsberg reagent.

It is used for the distinction of $1^\circ, 2^\circ, 3^\circ$ amine.

11 (a)



12 (a)

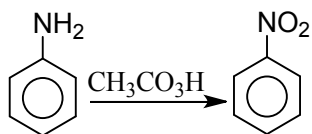
Ethyl amine, on acetylation, gives N-ethyl acetamide.



N-ethyl acetamide

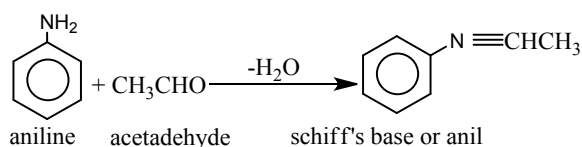
13 (b)

Aniline on oxidation with per acetic acid, $\text{CH}_3\text{CO}_3\text{H}$ gives nitrobenzene



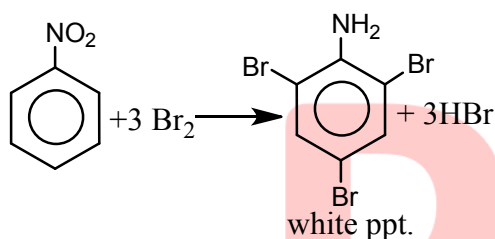
14 (a)

Aniline or any 1° amine reacts with aldehyde to form Schiff's base or anils.

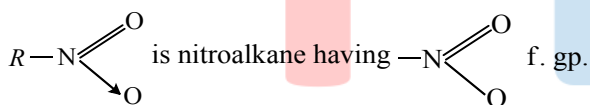


15 (d)

Aniline reacts with bromine and give white ppt. of 2, 4, 6 tribromoaniline.



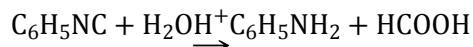
16 (b)



$\text{R}-\text{O}-\text{N}=\text{O}$ is alkylnitrite having $-\text{O}-\text{N}=\text{O}$ f. gp. ; f. gps are different.

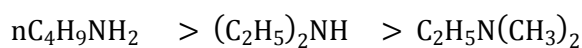
18 (d)

Isocyanide on hydrolysis forms primary amine not ammonia.



19 (a)

Intermolecular H-bonding is more in primary amines than in secondary amines as there are two H-atom available for H-bonding. Tertiary amines do not have intermolecular H-bonding due to absence of H-atom available for H-bonding. Therefore, the order of boiling points of the given amines is as follows



b.p. 350.8 K b.p. 329.3 K b.p. 310.5 K

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

PE