Amines

1.

$$CH_3$$
 $CH_3 - C - CH_2NH_2 \xrightarrow{HNO_2} A \text{ (major product)}$
 CH_3

(a)
$$CH_3 - CH_2OH$$

 $CH_3 - CH_3OH$

(b)
$$CH_3 - CH_3 - CH_2 - CH_3$$

OH

(c)
$$CH_3 - CH_2NO$$

 $CH_3 - CH_3$

(d)
$$CH_3 - CH - CH = CH_2$$

 CH_3

▼ Answer

Answer: b

Here, Z is

- (a) RCH₂ CH₂NH₂
- (b) RCH₂NH₂
- (c) RCH₂CONH₂
- (d) RNH_2

▼ Answer

Answer: b

- 3. The correct decreasing order of boiling points among amines and their corresponding acids and alcohols is
- (a) $R CH_2 NH_2 > RCOOH > RCH_2OH$
- (b) RCH2NH2 > RCH₂OH > RCOOH
- (c) $R CH_2OH > R CH_2NH_2 > RCOOH$
- (d) $R COOH > R CH_2OH > R CH_2NH_2$

▼ Answer

Answer: d

- 4. Aniline is less basic than ethylamine. This is due to
- (a) Conjugation of lone pair of nitrogen with the ring
- (b) The insoluble nature of aniline
- (c) More Kfc value of aniline
- (d) Hydrogen bonding

▼ Answer

Answer: a

- 5. Primary amine reacts with carbon disulphide and HgCl₂ to produce alkyl isothiocyanate. This reaction is
- (a) Carbylanine reaction
- (b) Hoffmann bromamide reaction
- (c) Perkin reaction
- (d) Hoffmann mustard oil reaction

▼ Answer

Answer: d

6. Hinsberg's reagent is

(a) COOC₂H₅

(b) $C_6H_5SO_2C1$

COOC₂H₅

(c) $C_6H_5SO_2NH_2$

(d) CH₃COCH₂COOC₂H₅

▼ Answer

Answer: b

- 7. Nitration of aniline is carried out after acylation because
- (a) Acylation dectivates the NH₂ group
- (b) Oxidation can be prevented
- (c) O-and p-products are obtained in good yield
- (d) All of these

▼ Answer

Answer: d

- 8. NH₂ group in aniline is
- (a) Ortho directing
- (b) Meta directing
- (c) Ortho and para directing
- (d) Para directing

▼ Answer

Answer: c

- 9. Primary and secondary amines cannot be distinguished by
- (a) Schiff's reagent
- (b) Carbylamine reaction
- (c) Hoffmann's bromamide reaction
- (d) Iodoform test

▼ Answer

Answer: b

- 10. Which of the following cannot be identified by carbyl amine test?
- $1. C_2H_5NH_2$
- $2. C_6H_5NH_2$
- 3. $C_6H_5 NH C_6H_5$
- 4. $(C_2H_5)_3N$
- (a) 1, 2
- (b) 1, 2, 4
- (c) 3, 4
- (d) 2, 4

▼ Answer

Answer: c