



CHEMISTRY

BOOKS - DISHA CHEMISTRY (HINGLISH)

AMINES



1. The reduction of nitro compounds is most preferred in

the presence of

A. Pd/ H_2 in ethanol

B. Sn + HCl

C. Linely divided Ni

D. iron scrap and HCl

Answer: D



2. Ortho-Nitrophenol is less soluble in water than p- and m- Nitrophenols because :

A. o-Nitrophenol is more volatile than those of m-

and p-isomers.

B. o-Nitrophenol shows intramolecular H-bonding

C. o-Nitrophenol shows intermolecular H-bonding

D. Melting point of o-Nitrophenol is lower than those

of m- and p-isomers.

Answer: B

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3. In a reaction of aniline a coloured product C was obtained

The structure of C would be :









Answer: D

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4. The number of primary amines of formula $C_4H_{11}N$ is :

A. 1

B. 3

C. 4

D. 2

Answer: C View Text Solution

5. Which of the following reactions will not give a primary amine?

A. $CH_3CONH_2 \xrightarrow{Br_2/KOH}$

 $\mathsf{B.}\,CH_3CN \xrightarrow{LiAlH_4}$

 $\mathsf{C.}\,CH_3NC \xrightarrow{LiAlH_4}$

 $\mathsf{D.}\,CH_3CONH_2 \stackrel{LiAlH_4}{\longrightarrow}$

Answer: C



6. Which one of the following methods is neither meant

for the synthesis nor for separation of a mines?

A. Curtius reaction

B. Wurtz reaction

C. Hofmann method

D. Hinsberg method

Answer: B



7. Amongst the following the most basic compound is

A. p -nitroaniline

B. acetanilide

C. aniline

D. benzylamine

Answer: D

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8. Which of the following is not correct ?

A. Ethyl amine and aniline both have - NH_2 group

B. Ethyl amine and aniline dissolve in HCl

C. Ethyl amine and aniline both react with $CHCl_3$

and KOH to form unpleasant smelling compound

D. Ethyl amine and aniline both react with HNO_2 in

cold to give hydroxy compounds

Answer: D

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9. Arrange the following amines in the order of increasing basicity.









Answer: C

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10. When bromination of aniline is carried out by protecting $-NH_2$. The product jis

A. o-bromoaniline

B. 2,4,6-tribromoaniline

C. p-bromoaniline

D. mixture of o-and p-bromoaniline

Answer: D

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11. Ethyl isocyanide on hydrolysis in acidic medium generates

A. propanoic acid and ammonium salt

B. ethanoic acid and ammonium salt

C. methylamine salt and ethanoic acid

D. ethylamine salt and methanoic acid

Answer: D



12. Which one of the following is the strongest base in

aqueous solution?

A. Methylamine

B. Trimetltylamine

C. Aniline

D. Dimethylamine

Answer: D



13. Tautomerism will be exhibited by

A. $(CH_3)_3CNO$

$\mathsf{B.}\,(CH_3)_2NH$

$C. R_3 CNO_2$

D. RCH_2NO_2

Answer: D

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14. Amongst the compounds given, the one that would form a brilliant colored dye on treatment with $NaNO_2$ in dil. HCI followed by addition to an alkaline solution of β -naphthol is









Answer: C

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15. Amongst the given set of reactants, the most appropriate for preparing 2° amine is ____.

A. $2^\circ R - Br + NH_3$

B. $2^{\,\circ}\,R - Br + NaCN$ followed by H_2 /Pt

C. $1^{\circ}R - NH_2 + RCHO$ followed by H_2 /Pt

D. $1^{\circ}R - Br$ (2 mol) + Potassium phthalimide

followed by H_3O^+ /heat

Answer: C

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16. In the chemical reaction, $CH_3CH_2NH_2+CHCl_3+3KOH o (A)+(B)+3H_2O$, the compounds (A) and (B) are respectively

A. C_2H_5NC and 3KCl

B. C_2H_5CN and 3KCl

C. $CH_3CH_2CONH_2$ and 3KCl

D. C_2H_5NC and K_2CO_3

Answer: A

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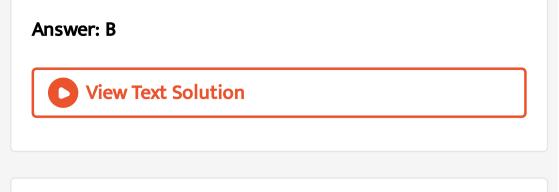
17. Which of the following is not an explosive?

A. Nitroglycerine

B. o-Aminotoluene

C. Dynamite

D. Trinitrotoluene



18. Which of the following reagents will be useful to distinguish between

A. Dilute HCl

B. $C_6H_5SO_2Cl$ and $OH^{\,-}\,/\,H_2O$

C. HONO then β -napthol

D. $AgNO_3$ in H_2O

Answer: C





19. High basicity of Me_2NH relative to Me_3N is attributed to:

A. effect of solvent

B. inductive effect of Me

C. shape of Me_2NH

D. shape of Me_3N

Answer: A

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20. Which reaction sequence would be best to prepare 3-

chloroanilne from benzene ?

A. Chlorination, nitration, reduction

B. Nitration, chlorination, reduction

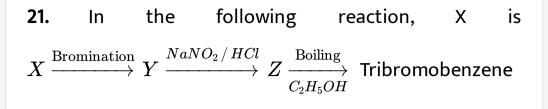
C. Nitration, reduction, chlorination

D. Nitration, reduction, acetylation, chlorination,

hydrolysis

Answer: B





A. Benzoic acid

B. Salicyclic acid

C. Phenol

D. Aniline

Answer: D



22. $R - NH_2 + CH_3COCl \rightarrow A$ (excess)

The product (A) will be-

A. $RNHCOCH_3$

B. $RN(COCH_3)_2$

с.
$$\stackrel{+}{RN}(COCH_3)_3Cl^-$$

 $\mathsf{D.}\,R-CONH_2$

Answer: A

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The alkene formed as a major product in the above elimination reaction is







 $\mathsf{D.}\, CH_2=CH_2$

Answer: D

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24. N- ethyl benzene sulphonyl amide is strongly acidic and soluble in alkali due to presence of

A. strong electron donating sulphonyl group

B. strong electron withdrawing sulphonyl group.

C. weak electron donating sulphonyl group.

D. weak electron withdrawing sulphonyl group.

Answer: B



25. Primary amines can be distinguished from secondary

and tertiary a mines by reacting with

A. Chloroform and alcoholic KOH

B. Methyl iodide

C. Chloroform alone

D. Zinc dust

Answer: A



26. The indicator that is obtained by coupling the diazonium salt of sulphanilic acid with N, N-dimethylaniline is

A. phenanthroline

B. methyl orange

C. methyl red

D. phenolphthalein

Answer: B

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27. Among the following compounds, the increasing order of their basic strength is :



A. (I)lt(II)lt(IV)lt(III)

B. (I)lt(II)lt(III)lt(IV)

C. (II)lt(I)lt(IV)lt(III)

D. (II)lt(I)lt(III)lt(IV)

Answer: C



28. The correct order of basicity of the following compounds

A. BgtAgtC

B. AgtBgtC

C. CgtAgtB

D. CgtBgtA

Answer: C



29. Which of the following compounds cannot be identified by carbylamine test?

A. $CH_3CH_2NH_2$

B. $CHCl_3$

 $\mathsf{C.}\, C_6H_5NH_2$

D. $C_6H_5 - NH - C_6H_5$

Answer: D



30. A compound with molecular mass 180 is acylated with CH_3COCl to get a compound with molecular

mass 390. The number of amino groups present per molecule of the former compound is :

A. 2

B. 5

C. 4

D. 6

Answer: B

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31. Reaction of cyclohexanone with dimethylamine in the presence of catalytic amount of an acid forms a

compound if water during the reaction is continuously removed. The compound formed is generally known as

A. an amine

B. an imine

C. an anemine

D. a Schiff's base

Answer: C



32. Match the compounds in List I with their nature from

List II, as seen in aqueous medium



A. A-III, B-III, C-II, D-I

B. A-II, B-III, C-III, D-I

C. A-III, B-II, C-II, D-III

D. A-I, B-I, C-III, D-II

Answer: A

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33. An organic amino compound reacts with aqueous nitrous acid at low temperature to produce an oily nitrosoamine. The compound is

A. CH_3NH_2

 $\mathsf{B.}\,CH_3CH_2NH_2$

 $\mathsf{C.}\,CH_3CH_2NHCH_2CH_3$

D. $(CH_{3}CH_{3})_{3}N$

Answer: C

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34. Nitrosoamines $(R_2N - N = O)$ are insoluble in water. On heating with conc. H_2SO_4 , they give secondary amines. The reaction is called

A. Liebermann nitroso reaction

B. Etard reaction

- C. Fries reaction
- D. Perkin reaction

Answer: A

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35. Match the compmmds in List I with the appropriate test that will be answered by each one of them in List II

A. A-I , B-IV , C-II , D-I

B. A-I , B-IV , C-III , D-II

C. A-IV , B-II , C-III , D-I

D. A-II, B-III, C-I, D-IV

Answer: D

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36. All three amines $1^\circ, 2^\circ, 3^\circ$ react with

1. H_2O , 2.R-X , 3.HCl , 4. $\left(CH_3CO
ight)_2O$

A. 1,2

B.4 only

C. 1,2,4

D. 1,2,3

Answer: D



37. Hinsberg reagent is

A. $C_6H_5SO_3H$

 $\mathsf{B.}\, C_6H_5NO$

 $\mathsf{C.}\, C_6H_5SO_2Cl$

 $\mathsf{D.}\, C_6 H_5 N_2 Cl$

Answer: C



38. Which of the following amines can be prepared by Gabriel method ? (i) $CH_3CH_2NH_2$, (ii) $(CH_3)_2CHNH_2$, (iii) $(CH_3)_3CNH_2$, (iv) $C_6H_5NH_2$

A. (i) and (iii)

B. (ii) and (iv)

C. (i),(ii) and (iii)

D. (i) and (ii)

Answer: D

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39. When phenol and benzene diazonium chloride are

coupled, the main product is :

A. aniline

B. p-hydroxyazobenzene

C. azobenzene

D. chlorobenzene

Answer: B



40. Replacement of $-N_2^+ Cl^-$ from benzene diazonium

chloride by iodine can be done by using

A. HI

B. NaOl

 $\mathsf{C}. PI_3$

D. KI

Answer: D

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41. $CH_3CH_2Cl \xrightarrow{NaCN} X \xrightarrow{Ni/H_2} Y \xrightarrow{\operatorname{acetic anhydride}} Z$

Z in the above reacting sequence is

A. $CH_3CH_2CH_2NHCOCH_3$

 $\mathsf{B.}\, CH_3 CH_2 CH_2 NH_2$

 $\mathsf{C.}\,CH_3CH_2CH_2CONHCH_3$

 $\mathsf{D.}\, CH_3 CH_2 CH_2 CONHCOCH_3$

Answer: A

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42. Towards electrophilic substitution, the most reactive

will be

A. Nitrobenzene

B. Aniline

C. Aniline hydrochloride

D. N-Acetylaniline

Answer: B

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