



CHEMISTRY

BOOKS - OMEGA PUBLICATION

AMINES

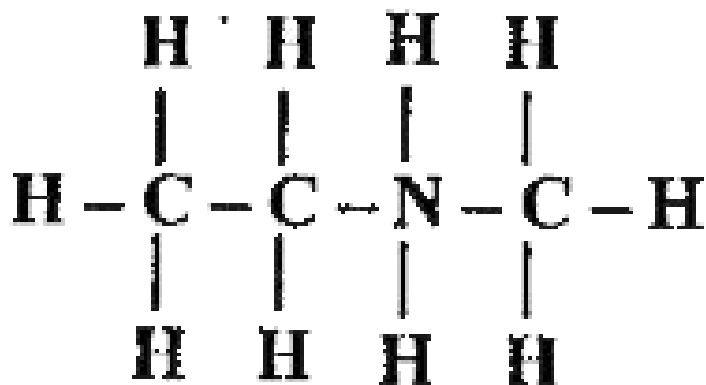
Questions

1. Give an example of primary amine and write its IUPAC name.



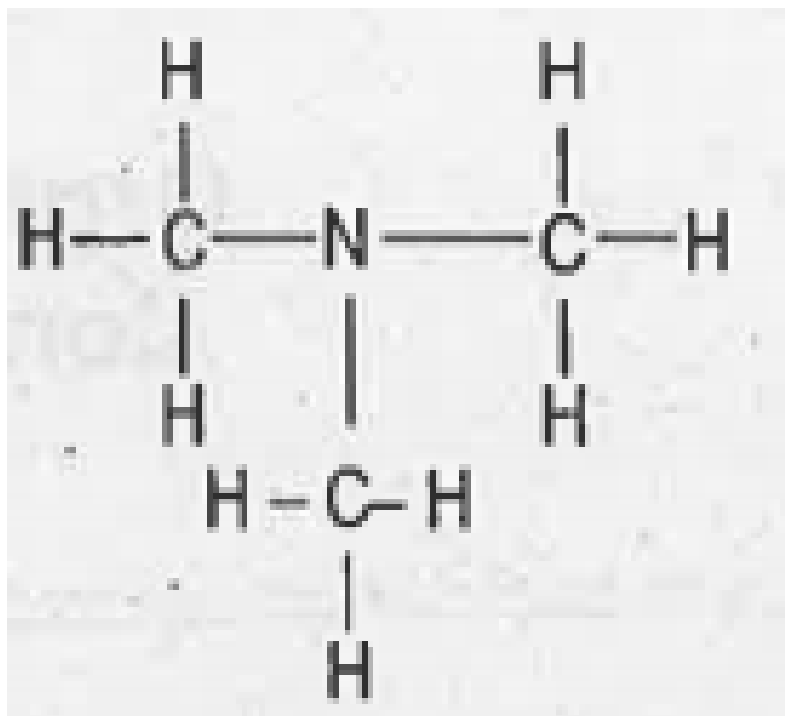
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2. Write the I.U.P.A.C name of 2° amine:



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3. Write the IUPAC name of :



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4. Write the structure of prop-2-en-1 amine.

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5. How do cyanides and isocyanides differ in their structure ?



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6. How will you convert nitrobenzene into aniline ?



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7. How is aniline prepared commercially ?



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8. How will you convert nitrobenzene to benzene diazonium chloride.



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9. How will you convert benzene into aniline ?



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10. What happens when benzonitrile is treated with H_2 gas and Ni ?



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11. Explain Mendius reaction.



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12. Convert acetic acid to methylamine.



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13. How will you convert benzoic acid to aniline?



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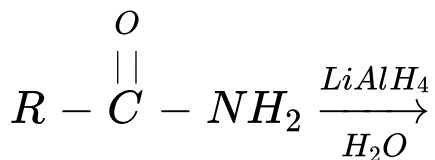
14. Write short note on Hoffmann's bromamide reaction. Why is it regarded as Hoffmann degradation reaction?

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15. Convert the following : Propanoic acid to ethylamine.

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16. Complete the following equations :



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17. Complete the following equations :



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18. Write short note on ammonolysis.

 [Watch Video Solution](#)

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19. Pure amines cannot be prepared by ammonolysis. Why ?

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20. Mention the chief use of quaternary ammonium salts derived from long chain amines.

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21. Gabriel phthalimide synthesis is used for the preparation of aromatic primary amines.

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22. Why aromatic amines cannot be prepared by Gabriel phthalimide synthesis?

 [Watch Video Solution](#)

23. Convert nitrobenzene to acetanilide.

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24. Why amines have lower boiling points than alcohols of comparable molecular masses?



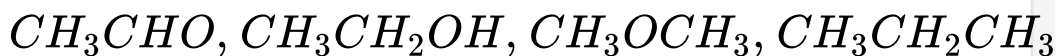
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25. Why are the boiling points of carboxylic acids higher than the corresponding alcohols ?



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26. Arrange the following compounds in the increasing order of their boiling points :



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27. Arrange the following

Aniline, p-nitroaniline, p-methylaniline - in increasing of their basic strength.

 [Watch Video Solution](#)

28. Why amines have lower boiling points than alcohols of comparable molecular masses?



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29. Explain why boiling point of ethylamine is less than that of ethyl alcohol .



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30. Why do primary amines have higher boiling point than tertiary amines?

 [Watch Video Solution](#)

31. Why do primary amines have higher boiling point than tertiary amines?

 [Watch Video Solution](#)

32. Ethylamine is soluble in water whereas the aniline is not. Why?

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33. Explain by giving reason :

Arylamines (aniline) are weaker bases than alkylamines (ethylamine) and ammonia.



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34. Why ethylamine is more basic than methyl amine.



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35. Give reasons for the following :

o-nitrophenol is more acidic than o-methoxyphenol.



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36. Account for the correct order of decreasing basicity of ethylamine, 2-amino ethanol, and 3-amino-1-propanol.



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37. How 1° amine reacts with nitrous acid ?



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38. How 2° amine reacts with nitrous acid ?



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39. Why 2° amine is more basic than 1° and 3° amine ?



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40. Glycine exists as $H_3N^+CH_2COO^-$, zwitter ion. Why?



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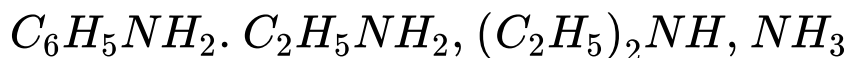
41. Arrange the following in decreasing order of their basic strength in aqueous solution.

$C_6H_5NH_2$, $C_2H_5NH_2$, $(C_2H_5)_2NH$, NH_3



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42. Arrange the following in decreasing order of their basic strength in aqueous solution.



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43. Why do amines act as nucleophiles ?



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44. pK_b of methylamine is less than that of aniline.

Explain

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45. Why ethylamine is more basic than aniline ?

 [Watch Video Solution](#)

46. Explain, why amines are less acidic in nature than comparable alcohols ?

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47. Explain, why amines are less acidic in nature than comparable alcohols ?



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48. Aniline is a weaker base than cyclohexylamine. Why ?



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49. Which is more basic, aliphatic amines or ammonia and why ?

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50. Why Methyl amine is stronger base than ammonia ?

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51. Why ethylamine is more basic than aniline ?

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52. In aqueous solution, trimethylamine is more basic than methylamine.

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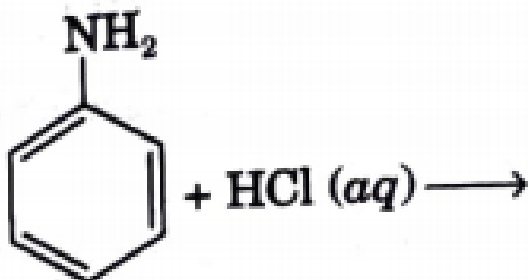
53. Write the reactions of aromatic primary amines with nitrous acid.

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54. Write the reactions of aliphatic primary amines with nitrous acid.

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55. Complete the following reaction :



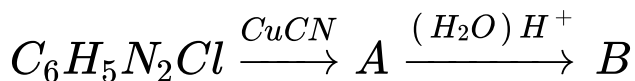
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56.

What is Hinsberg's reagent ?

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57. Complete the following reaction :



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58. Give one chemical test to distinguish between the following pairs of compounds.

Methylamine and dimethylamine



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59. Give one chemical test to distinguish between the following pairs of compounds.

Secondary and tertiary amines



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60. Give one chemical test to distinguish between the following pairs of compounds.

Ethylamine and aniline



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61. Give a chemical test to distinguish between aniline and N-methyl aniline.

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62. Name the test with which primary, secondary and tertiary amines can be distinguished.

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63. What is Carbylamine reaction ? How is it used to distinguish primary amines from secondary and

tertiary amines ?

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64. What happens when phenol is treated with benzoyl chloride in the presence of aqueous NaOH?

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65. $KMnO_4 \xrightarrow{\Delta} ? + MnO_2 + ?$

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66. Which of the following amines undergo acylation reaction ?



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67. Write short note on carbylamine reaction.



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68. How can you find out whether a given amine is a primary amine ? Write the chemical reaction involved in the test you perform.

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69. What happens when ethylamine is warmed with chloroform and alcoholic NaOH ?

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70. How will you convert ethylamine into ethylisocyanide ?

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71. How will you convert

Nitrobenzene to benzoic acid



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72. How will you convert benzoic acid to aniline?



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73. How will you convert

Benzamide to toluene



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74. Accomplish the following conversions ?

Aniline to benzyl alcohol.



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75. How will you convert :

Aniline into p-bromoaniline



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76. How 3° amine reacts with nitrous acid ?

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77. How are the following conversions accomplished ? Write reaction only.

Aniline into chlorobenzene

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78. How are the following conversions accomplished ? Write reaction only.

Aniline into benzoic acid.

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79. Express the following in the scientific notation :

0.0048



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80. Express the following in the scientific notation :

23405



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81. Write the empirical formula of the following compound having the molecular formula C_2H_2 .



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82. How do you convert ethanol to propane nitrile.



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83. Discuss the following reactions :

Nitration of aniline



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84. Discuss the following reactions :

Sulphonation of aniline



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85. Write the empirical formula of the compounds

having the molecular formulas : N_2O_4



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86. Write the empirical formula of the compounds

having the molecular formulas : C_6H_6

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87. Write the empirical formula of the compounds having the molecular formulas : H_2O_2

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88. Write the empirical formula of the compounds having the molecular formulas : $\text{C}_{12}\text{H}_{22}\text{O}_{11}$

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89. Write the empirical formula of the compounds having the molecular formulas : $C_6H_{12}O_6$

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90. Write the empirical formula of the compounds having the molecular formulas : $C_{10}H_8$

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91. What happens when ice cold solution of benzenediazonium chloride is treated with aniline?

Give chemical reaction also.



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92. Write the empirical formula of the compounds having the molecular formulas : Na_2CO_3



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93. Write the empirical formula of the compounds having the molecular formulas : B_2H_6



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94. Write the empirical formula of the compounds having the molecular formulas : N_2O_5



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95. How will you convert aniline to benzene ?



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96. How will you convert

Methanamine to ethanamine.



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97. How will you convert nitrobenzene into aniline
?

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98. How will you convert
Propionamide-to ethylamine.

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99. Write the empirical formula of the compounds having the molecular formulas : Fe_2O_3



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100. Write the iupac name of element with atomic number 128



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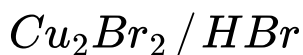
101. How does benzene diazonium chloride react with :

Copper cyanide ?



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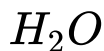
102. How does benzene diazonium chloride react with:



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103. Write the structures of main products when benzene diazonium chloride ($C_6H_5N_2^+ Cl^-$)

reacts with the following reagents :



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104. Write the structures of main products when benzene diazonium chloride ($C_6H_5N_2^+ Cl^-$) reacts with the following reagents :

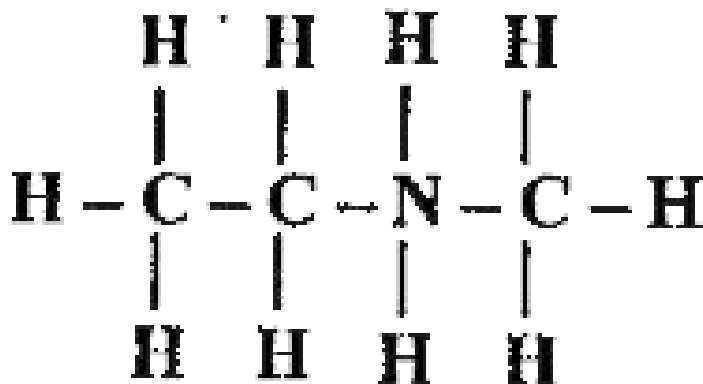


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105. Give an example of primary amine and write its IUPAC name.

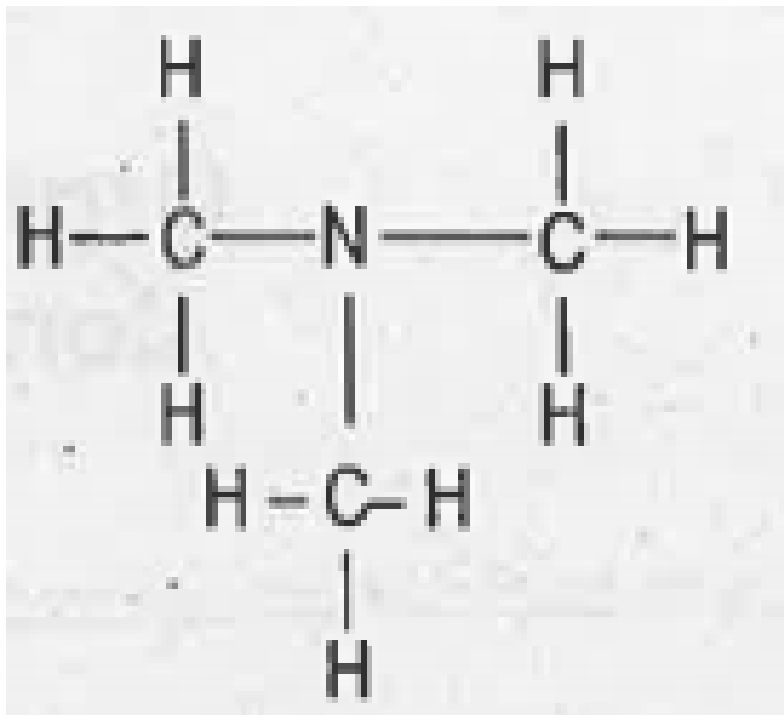
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106. Write the I.U.P.A.C name of 2° amine:



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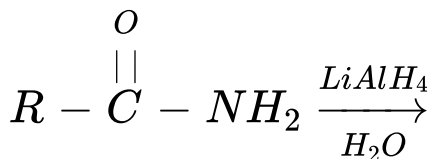


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119. Convert the following : Propanoic acid to ethylamine.

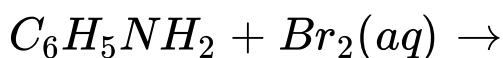
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120. Complete the following equations :



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 [Watch Video Solution](#)

124. Mention the chief use of quaternary ammonium salts derived from long chain amines.

 [Watch Video Solution](#)

125. Give Gabriel phthalimide reaction for preparation of primary amine.

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126. Why aromatic amines cannot be prepared by Gabriel phthalimide synthesis?

 [Watch Video Solution](#)

127. Convert nitrobenzene to acetanilide.

 [Watch Video Solution](#)

128. Why amines have lower boiling point than alcohols and carboxylic acids of comparable molecular masses ?

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129. Why boiling point of alkyl cyanide are higher than those of isomeric isocyanides ?

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130. Arrange the following

$C_2H_5NH_2$, C_2H_5OH , $(CH_3)_3N$ - in increasing order of their boiling point.



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131. Arrange the following

Aniline, p-nitroaniline, p-methylaniline - in increasing order of their basic strength.



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147. Why do amines act as nucleophiles ?

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148. pK_b of aniline is more than that of methylamine. Explain

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149. pK_b of methylamine is less than that of aniline. Explain



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150. Why are amines less acidic than alcohols ?



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151. Explain, why amines are less acidic in nature than comparable alcohols ?



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152. Aniline is a weaker base than cyclohexylamine.

Why ?



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153. Which is more basic, aliphatic amines or ammonia and why ?



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154. Give possible explanation that aliphatic amines are stronger bases than ammonia.

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155. Why ethylamine is more basic than ammonia

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156. Why ethylamine is more basic than methyl amine.

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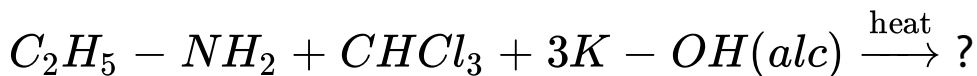
157. Write the reactions of aromatic primary amines with nitrous acid.

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158. Write the reactions of aliphatic primary amines with nitrous acid.

 [Watch Video Solution](#)

159. Complete the following reaction :



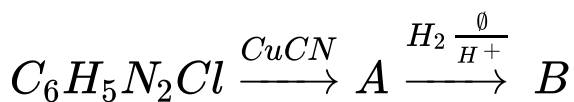
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160.

What is Hinsberg's reagent ?

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161. Complete the following reaction :



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162. Give one chemical test to distinguish between the following pairs of compounds.

Methylamine and dimethylamine

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163. Give one chemical test to distinguish between the following pairs of compounds.

Secondary and tertiary amines

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164. Give one chemical test to distinguish between the following pairs of compounds.

Ethylamine and aniline

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166. Name the test with which primary, secondary and tertiary amines can be distinguished.



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167. What is Carbylamine reaction ? How is it used to distinguish primary amines from secondary and tertiary amines ?



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168. How does aniline react with acetyl chloride in the presence of pyridine ?

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169. Fill in the blanks : $C_6H_5NH_2 \xrightarrow[\Delta]{CH_3COCl} ?$

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170. 3° amines do not undergo acylation why ?

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172. How can you find out whether a given amine is a primary amine ? Write the chemical reaction involved in the test you perform.



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173. What happens when ethylamine is warmed with chloroform and alcoholic NaOH ?

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174. How will you convert chloroform into phenyl isocyanide ?

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175. How will you convert
Nitrobenzene to benzoic acid

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176. How will you convert benzoic acid to aniline?



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177. How will you convert

Benzamide to toluene



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178. Accomplish the following conversions ?

Aniline to benzyl alcohol.



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179. How will you convert :

Aniline into p-bromoaniline



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180. How 3° amine reacts with nitrous acid ?



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181. How are the following conversions accomplished ? Write reaction only.

Aniline into chlorobenzene



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182. How are the following conversions accomplished ? Write reaction only.

Aniline into benzoic acid.



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183. How aniline is converted to phenyl isothiocyanate ?



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184. How will you convert aniline into phenol ?



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185. How will you convert methyl bromide into ethane.



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186. How do you convert ethanol to propane nitrile.



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187. Discuss the following reactions :

Nitration of aniline



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188. Discuss the following reactions :

Sulphonation of aniline



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189. Aniline does not undergo Friedel-Crafts reaction. Explain.



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190. What is T.N.T. ? Give its structure.



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191. Write short note on diazotisation reaction.



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192. Write short note on Sandmeyer reactions.



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193. Explain the following reaction :

Gattermann reaction.



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194. Write short notes on Coupling reaction



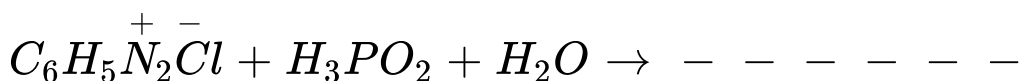
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195. What happens when ice cold solution of benzenediazonium chloride is treated with aniline? Give chemical reaction also.



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196. Complete the reaction :



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197. How will you convert

Nitrobenzene to benzoic acid



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198. How will you convert

Benzamide to toluene



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199. How will you convert aniline to benzene ?



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200. How will you convert

Methanamine to ethanamine.



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201. How will you convert nitrobenzene into aniline

?



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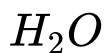
202. How will you convert

Propionamide-to ethylamine.



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203. Write the reaction of benzene diazonium chloride with :



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204. Write the reaction of benzenediazonium chloride with

KI.



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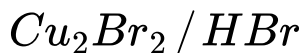
205. How does benzene diazonium chloride react with :

Copper cyanide ?



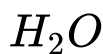
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206. How does benzene diazonium chloride react with:



 [Watch Video Solution](#)

207. Write the structures of main products when benzene diazonium chloride ($C_6H_5N_2^+ Cl^-$) reacts with the following reagents :



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208. Write the structures of main products when benzene diazonium chloride ($C_6H_5N_2^+ Cl^-$) reacts with the following reagents :



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Multiple Choice Questions

1. Stephen reduction converts cyanides to

A. Aldehydes

B. Ketones

C. Amines

D. Acids

Answer: A



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2. Classify the following as pure substances or mixtures:

A. a. graphite

B. b. milk

C. c. air

D. d. diamond

Answer: B



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3. Identify the following as homogenous and hetrogenous mixture :

A. sugar dissolved in water

B. oil and water

C.

D.

Answer: A



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4. Which of the following is not an ambident nucleophile?



Answer: B



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5. Which of the following substances on treatment with P_2O_5 gives ethanenitrile ?

- A. Propanamide
- B. Ethanamide
- C. Ethanoic acid
- D. N-methylethylamine

Answer: B



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6. Methyl cyanide on treatment with methyl magnesium bromide followed by hydrolysis gives

A. propanone

B. ethanol

C. ethanal

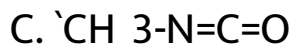
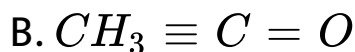
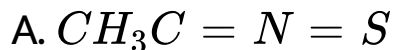
D. propanal

Answer: A



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7. Which of the following represents the poisonous gas which caused tragedy in Bhopal in 1984 ?



Answer: B



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8. When propane is subjected to the treatment with fuming nitric acid at 673 K which of the following will not form ?

A. 1-nitropropane

B. 2-nitropropane

C. Nitromethane

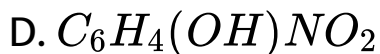
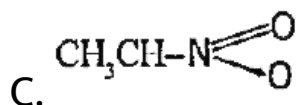
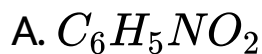
D. Nitrohexane

Answer: D



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9. Which of the following is not a nitro derivative?

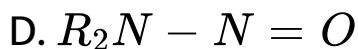
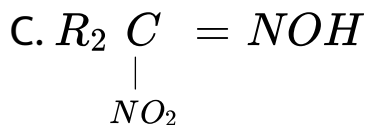
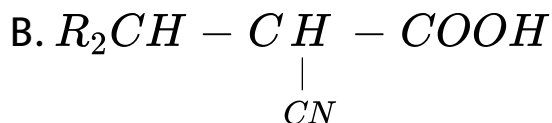
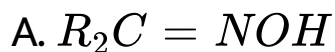


Answer: B



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10. Which of the following structures represent nitrolic acid?



Answer: C



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11. Which reagent should be employed to get ethyl carbylamine from ethyl iodide as major product?

A. HCN

B. AgCN

C. KCN

D. $AgNO_2$ followed by reduction.

Answer: B



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12. NO_2^+ is called

A. nitronium ion

B. nitrosonium ion

C. nitro group

D. none of above

Answer: A



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13. Explain Mendius reaction.

A. RCN and Na / C_2H_5OH

B. RCN and H_2O / HCl

C. RCN and Zn / NH_4Cl

D. RCN and $SnCl_2 / HCl$

Answer: A



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14. Aniline upon heating with conc. HNO_3 and conc. H_2SO_4

mixture gives:

A. o-and p-nitroaniline

B. o-nitroaniline

C. black tarry mass

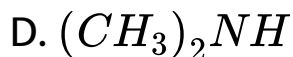
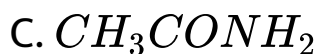
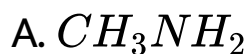
D. No reaction

Answer: A



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15. Which are given by carbylamine reaction?



Answer: A



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16. Nitrobenzene is subjected to reduction with zinc dust and ammonium chloride. The main product formed will be

- A. benzenamine
- B. aniline
- C. N-phenylhydroxylamine
- D. none of above

Answer: C



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17. A primary nitroalkane is treated with nitrous acid, which of the following will be the main product.

- A. Pseudonitrole
- B. Nitrolic acid
- C. A primary amine
- D. Primary alcohol

Answer: B



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18. Nitromethane is subjected to the treatment with chlorine in the presence of sodium hydroxide, the main product is

A. monochloronitromethane

B. trichloromethane

C. chloropicrin

D. none of above.

Answer: C



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19. The electrolytic reduction of nitrobenzene in strongly acidic medium produces

- A. Phenol
- B. p-Aminophenol
- C. Hydroazobenzene
- D. Azobenzene

Answer: B



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20. Which of the following on boiling with $Na_2CO_3(aq)$ gives aniline?

- A. Nitrobenzene
- B. Anilinium chloride
- C. Chlorobenzene
- D. Benzene diazonium chloride.

Answer: B



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21. Which of the following reagents on treatment with benzenamine in basic medium produces phenyl isocyanide?

A. CCl_4

B. trichloromethane

C. methylen dichloride

D. hexachloroethane

Answer: B



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22. An organic compound with formula C_3H_5N on hydrolysis forms an acid which reduces Fehling solution, The compound can be

- A. Ethanenitrile
- B. Isocyanoethane
- C. Ethoxyethane
- D. Propanenitrile

Answer: B



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23. The type of isomerism exhibited by $C_6H_5C \equiv N$ and $C_6H_5N \equiv C$ is

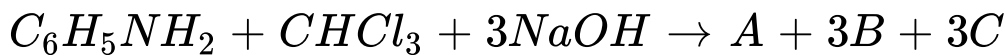
- A. position
- B. functional
- C. enantiomerism
- D. functional as well as tautomerism

Answer: B



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24. In the following reaction,



The product A is

- A. phenyl isocyanide
- B. phenyl isocyanide
- C. ethyl chloride
- D. HCl or H_2O

Answer: A



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25. When benzene diazonium chloride solution is boiled, it yields

- A. Benzene
- B. Aniline
- C. Phenol
- D. Chlorobenzene

Answer: C



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26. Stephen reduction converts cyanides to

A. aldehydes

B. ketones

C. amines

D. acids

Answer: A



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27. Which of the following substances on treatment with P_2O_5 gives ethanenitrile ?

A. Propanamide

B. Ethanamide

C. Ethanoic acid

D. N-methylethylamine.

Answer: B



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28. Aniline upon heating with conc. HNO_3 and
conc. H_2SO_4

mixture gives:

A. o-and p-nitroaniline

B. o-nitroaniline

C. black tarry mass

D. no reaction.

Answer: A



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29. Which are given by carbylamine reaction?

A. CH_3NH_2

B. $C_2H_5NO_2$

C. CH_3CONH_2

D. $(CH_3)NH$

Answer: A



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30. The electrolytic reduction of nitrobenzene in strongly acidic medium produces

A. phenol

B. p-Aminophenol

C. hydroazobenzene

D. azobenzene

Answer: B



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31. Which of the following on boiling with $Na_2CO_3(aq)$ gives aniline?

- A. Nitrobenzene
- B. Anilinium chloride
- C. Chlorobenzene
- D. Benzene diazonium chloride.

Answer: B



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32. An organic compound with formula C_3H_5N on hydrolysis forms an acid which reduces Fehling solution, The compound can be

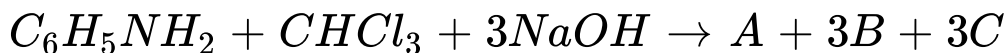
- A. ethanenitrile
- B. isocyanoethane
- C. ethoxyethane
- D. propanenitrile

Answer: B



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33. In the following reaction,



The product A is

- A. phenyl isocyanide
- B. phenyl cyanide
- C. ethyl chloride
- D. HCl or H_2O

Answer: A



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34. Which reactants are involved in Mendius reaction?

A. RCN and Na / C_2H_5OH

B. RCN and $H_2O // HCl$

C. RCN and Zn / NH_4Cl

D. RCN and $SnCl_2 / HCl$

Answer: A



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35. Nitrobenzene is subjected to reduction with zinc dust and ammonium chloride. The main product formed will be

- A. benzenamine
- B. aniline
- C. N-phenylhydroxylamine
- D. none of above.

Answer: C



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36. Which compound undergoes Hoffmann's Bromamide Reaction ?

A. HCHO

B. CH_3CHO

C. CH_3OH

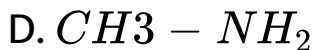
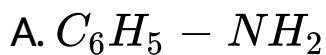
D. $CH_3 - \overset{O}{\parallel} C - NH_2$

Answer: D



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37. Which one of the following is more basic?



Answer: C



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38. Express the following numbers to four significant figures : $1.81234 (10^3)$



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39. Stephen reduction· converts cyanides to

A. Aldehydes

B. Ketones

C. Amines

D. Acids

Answer: A



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40. The electrophile involved in the nitration of benzene is



Answer: B



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41. Among following statements on the nitration of aromatic compounds, the false one is

- A. The fate of nitration of benzene is almost the same as that of hexadeuterobenzene.
- B. The rate of nitration of toluene is greater than that of benzene.
- C. The rate of nitration of benzene is greater than that of hexadeuterobenzene
- D. Nitration is an electrophilic substitution reaction.

Answer: A



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42. Which of the following is not an ambident nucleophile?



Answer: B



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43. Which of the following substances on treatment with P_2O_5 gives ethanenitrile ?

- A. Propanamide
- B. Ethanamide
- C. Ethanoic acid
- D. N-methylethylamine

Answer: B



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44. Methyl cyanide on treatment with methyl magnesium bromide followed by hydrolysis gives

A. propanone

B. ethanol

C. ethanal

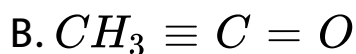
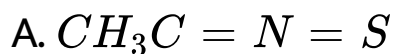
D. propanal

Answer: A



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45. Which of the following represents the poisonous gas which caused tragedy in Bhopal in 1984 ?



Answer: B



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46. When propane is subjected to the treatment with fuming nitric acid at 673 K which of the following will not form ?

A. 1-nitropropane

B. 1-nitropropane

C. Nitromethane

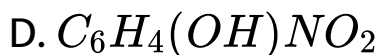
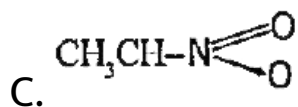
D. Nitrohexane

Answer: D



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47. Which of the following is not a nitro derivative?

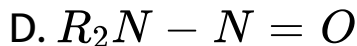
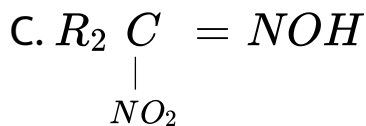
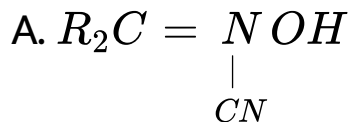


Answer: B



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48. Which of the following structures represent nitrolic acid?



Answer: C



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49. Which reagent should be employed to get ethyl carbamate from ethyl iodide as major product?

A. HCN

B. AgCN

C. KCN

D. $AgNO_2$ followed by reduction.

Answer: B



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50. NO_2^+ is called

- A. nitronium ion
- B. nitrosonium ion
- C. nitro group
- D. none of above

Answer: A



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51. Which reactants are involved in Mendius reaction?

A. RCN and Na / C_2H_5OH

B. RCN and H_2O/HCl

C. RCN and Zn / NH_4Cl

D. RCN and $SnCl_2 / HCl$

Answer: A



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52. Aniline upon heating with conc. HNO_3 and
conc. H_2SO_4

mixture gives:

A. o-and p-nitroaniline

B. o-nitroaniline

C. black tarry mass

D. No reaction

Answer: A

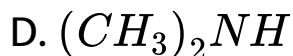


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53. Which are given by carbylamine reaction?

A. CH_3NH_2

B. $C_2H_5NO_2$



Answer: A



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54. Nitrobenzene is subjected to reduction with zinc dust and ammonium chloride. The main product formed will be

A. benzenamine

B. aniline

C. N-phenylhydroxylamine

D. none of above

Answer: C



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55. A primary nitroalkane is treated with nitrous acid, which of the following will be the main product.

A. Pseudonitrole

B. Nitrolic acid

C. A primary amine

D. Primary alcohol

Answer: B



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56. Nitromethane is subjected to the treatment with chlorine in the presence of sodium hydroxide, the main product is

A. monochloronitromethane

B. trichloromethane

C. chloropicrin

D. none of above.

Answer: C



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57. The electrolytic reduction of nitrobenzene in strongly acidic medium produces

A. Phenol

B. p-Aminophenol

C. Hydroazobenzene

D. Azobenzene

Answer: B



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58. Which of the following on boiling with $Na_2CO_3(aq)$ gives aniline?

- A. Nitrobenzene
- B. Anilinium chloride
- C. Chlorobenzene
- D. Benzene diazonium chloride.

Answer: B



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59. Which of the following reagents on treatment with benzenamine in basic medium produces phenyl isocyanide?

A. CCl_4

B. trichloromethane

C. methylen dichloride

D. hexachloroethane

Answer: B



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60. An organic compound with formula C_3H_5N on hydrolysis forms an acid which reduces Fehling solution, The compound can be

- A. Ethanenitrile
- B. Isocyanoethane
- C. Ethoxyethane
- D. Propanenitrile

Answer: B



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61. The type of isomerism exhibited by

$C_6H_5C \equiv N$ and $C_6H_5N \equiv C$ is

A. position

B. functional

C. enantiomerism

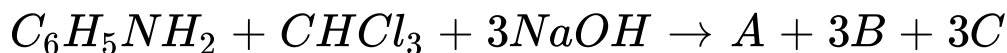
D. functional as well as tautomerism

Answer: B



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62. In the following reaction,



The product A is

- A. phenyl isocyanide
- B. phenyl isocyanide
- C. ethyl chloride
- D. HCl or H_2O

Answer: A



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63. When benzene diazonium chloride solution is boiled, it yields

- A. Benzene
- B. Aniline
- C. Phenol
- D. Chlorobenzene

Answer: C



64. Stephen reduction· converts cyanides to

A. aldehydes

B. ketones

C. amines

D. acids

Answer: A



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65. Which of the following substances on treatment with P_2O_5 gives ethanenitrile ?

A. Propanamide

B. Ethanamide

C. Ethanoic acid

D. N-methylethylamine.

Answer: B



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66. Aniline upon heating with conc. HNO_3 and
conc. H_2SO_4

mixture gives:

A. o-and p-nitroaniline

B. o-nitroaniline

C. black tarry mass

D. no reaction.

Answer: A

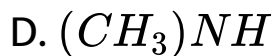


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67. Which are given by carbylamine reaction?

A. CH_3NH_2

B. $C_2H_5NO_2$



Answer: A



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68. The electrolytic reduction of nitrobenzene in strongly acidic medium produces

A. phenol

B. p-Aminophenol

C. hydroazobenzene

D. azobenzene

Answer: B



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69. Which of the following on boiling with $Na_2CO_3(aq)$ gives aniline?

A. Nitrobenzene

B. Anilinium chloride

C. Chlorobenzene

D. Benzene diazonium chloride.

Answer: B



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70. An organic compound with formula C_3H_5N on hydrolysis forms an acid which reduces Fehling solution, The compound can be

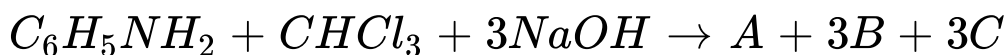
- A. ethanenitrile
- B. isocyanoethane
- C. ethoxyethane
- D. propanenitrile

Answer: B



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71. In the following reaction,



The product A is

A. phenyl isocyanide

B. phenyl cyanide

C. ethyl chloride

D. HCl or H_2O

Answer: A



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72. Which reactants are involved in Mendius reaction?

A. RCN and Na / C_2H_5OH

B. RCN and $H_2O // HCl$

C. RCN and Zn / NH_4Cl

D. RCN and $SnCl_2 / HCl$

Answer: A



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73. Nitrobenzene is subjected to reduction with zinc dust and ammonium chloride. The main product formed will be

- A. benzenamine
- B. aniline
- C. N-phenylhydroxylamine
- D. none of above.

Answer: C



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74. Which compound undergoes Hoffmann's Bromamide Reaction ?

A. HCHO

B. CH_3CHO

C. CH_3OH

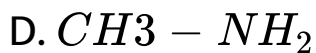
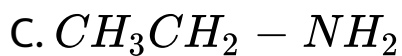
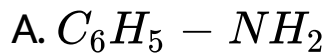
D. $CH_3 - \overset{O}{\parallel} C - NH_2$

Answer: D



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75. Which one of the following is more basic?



Answer: C



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76. Benzene diazonium chloride on reaction with phenol in basic medium gives:

- A. Diphenyl ether
- B. p-Hydroxy azobenzene
- C. Chlorobenzene
- D. Benzene

Answer: D



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