

### **CHEMISTRY**

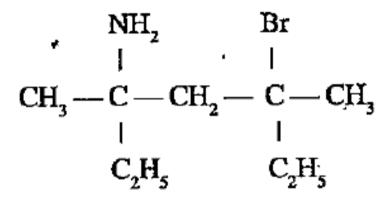
## **BOOKS - MBD CHEMISTRY (ODIA ENGLISH)**

# ORGANIC COMPOUNDS CONTAINING NITROGEN

**Question Bank** 

1. Write the IUPAC name of following compound.

2. Write the IUPAC name of following compound.





3. Why amines are basic in nature?



<b>4.</b> Why aromatic amines possess low basicity?
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5. Lower amines are soluble in water due to—
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6. Write short notes on Hofmam's bromamide reaction.
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**7.** Give the increasing order of abundance of the noble gases in air by volume.



8. How Fenton's reagent acts on tertiary amines?



**9.** What is Fenton, s Reagent?



10. Distinguish between primary and secondary amines.

Give one test only with equation.

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11. RQ is highest in:



12. Carbyl amine reaction is given by



**13.**  $NH_3$  is \_\_\_\_ acidic than ethylamine.



**14.**  $CH_3NH_2+CH_3COCl
ightarrow_- -_+ + HCl$ 



**15.** Amine have \_\_\_\_\_ boiling points compared to corresponding alcohols



**16.** Ammonia is:



**17.** Glucose on reduction with  $Na \, / \, Hg$  and water gives



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**18.**  $(CH_3)_3C-NH_2$  is a \_\_\_\_ amine



<b>19.</b> Hinsberg reagent distinguishes between and
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<b>20.</b> Nitroethane on heating with Sn and HCl produce—
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<b>21.</b> $RNO_2$ on reduction with $Zn/NH_4Cl$ gives
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**22.** Carbyl amine reaction is given by



**23.**  $NH_3$  is less acidic than ethylamine. true or false



**24.** Amine have \_\_\_\_\_ boiling points compared to corresponding alcohols



**25.** Ammonia is more basic than aliphatic amines. true or false



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**26.** Ethyl cyanide on reduction with  $Na/C_2H_5OH$  gives ethyl amine.



**27.**  $(CH_3)_3C - NH_2$  is a \_\_\_\_ amine



**28.** Explain the action of nitrous acid on primary, secondary and tertiary amines. How aniline differs from methyl amine in its reaction with nitrous acid?



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**29.** Do the conversion ethyl amine  $\rightarrow$  methyl amine.



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30. Account for the following

Amines are basic substances while amides are neutral



**31.** Reactivity of NO is due to:



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32. How will you convert

methanamine into ethanamine?



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**33.** What happends when nitroethane is treated with  $LiAlH_4$ ?



**34.** Which compound is formed when benzene diazonium chloride reacts with phenol in basic medium?



**35.** Give a suitable example of acetylation.



**36.** How will you convert ethylamine to methylamine?



**37.** How the following conversion can be carried out?

Aniline to phenylisocyanide



**38.** Arrange the following in increasing order of their basic strength :  $NH_3$ ,  $CH_3-NH_2$ ,  $C_6H_5-NH_2$ 



39. What is vapour phase nitration?



40. Account for the following

Aromatic amines are weaker bases than aliphatic amines.



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**41.** Explain - why methylamine is a stronger base than aniline?



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**42.** Why amines are more basic than the comparable alcohols?



43. Account for the following

Methylamine in water reacts with ferric chloride to precipitate hydrated ferric oxide.



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**44.** Explain the following observations

Electrophilic substitution in case of aromatic amines takes place more readily than benzene.



**45.** For the carbylamine reaction we need hot alcoholic KOH and :



**46.** Explain the Hofnann bromamide reaction with one example.



47. Give an example of ambident nucleophile reaction.



48. Illustrate the Sandmeyer reaction with example.



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49. Identify A and B in the following reaction.

$$C_2H_5C\equiv N \stackrel{LiAlH_4}{-\!\!\!-\!\!\!-\!\!\!-\!\!\!-} A \stackrel{HNO_2}{-\!\!\!-\!\!\!-\!\!\!-\!\!\!-} B$$

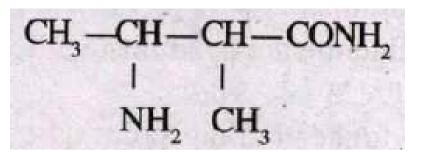


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**50.** State the reaction for obtaining benzoic acid from aniline.



### 51. Write IUPAC names for





### 52. Write IUPAC names for





**53.** Out of ethyl amine and ethyl alcohol which has higher boiling point and why?



**54.** Alkyl amines are stronger bases than aryl amines. Explain.



**55.** Give an example of Hinsberg test.



$$H_2N-CH_2-CH_2-CH_2-CH_2-CHO$$



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**57.** Write IUPAC name of the following.





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**58.** Write IUPAC name of the following.

 $CH_3NH_2$ 



 $CH_3CH_2NH_2$ 



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**60.** Write IUPAC name of the following.





61. Write IUPAC name of the following.





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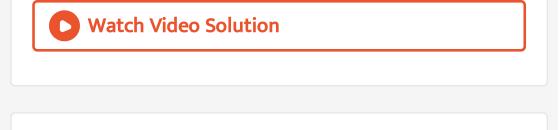
**63.** Write IUPAC name of the following.





**64.** Write IUPAC name of the following.

 $C_4H_9NC$ 



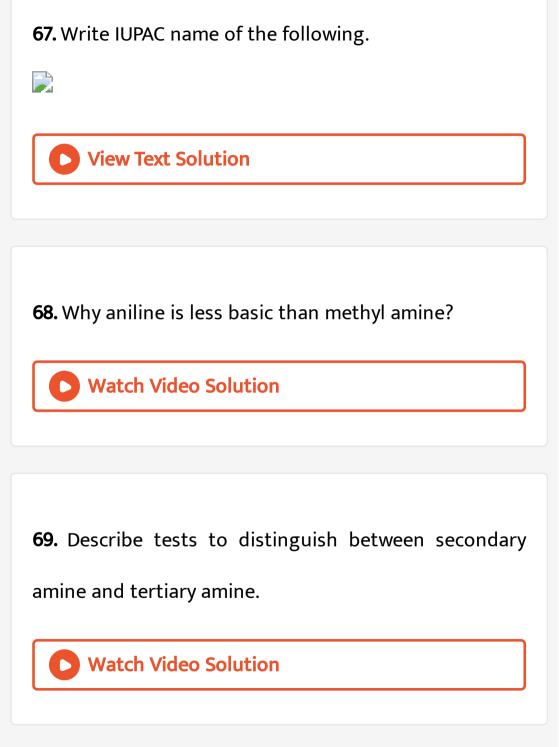




**66.** Write IUPAC name of the following.







<b>70.</b> How will you convert Nitrobenzene to phenol?
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<b>71.</b> How will you convert aniline to chlorobenzene ?
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<b>72.</b> How can you convert p-toluidine to 2-bromo-4-methylaniline.
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73. How can you convert aniline to iodobenzene.



74. How can you convert benzonitrile from aniline.



**75.** Classify the following amines as primary, secondary and tertiary.

$$(C_5H_5)_2NH$$



**76.** Classify the following amines as primary, secondary and tertiary.

 $(C_5H_5)_2NH$ 



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77. Why do amines dissolve in mineral acids?



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**78.** What happens when an alkyl halide reacts with  $AgNO_2$  and the product is reduced.



**79.** What is ammonolysis? Give its application.



80. What happens when nitroethane reacts with NaOH?



**81.** What happens when nitromethane reacts with acetaldehyde?



**82.** What happens when ethyl nitrite is boiled with NaOH?



**83.** What happens when ethyl amine reacts with methyl iodide?



**84.** What happens when methyl cyanide reacts with  $LiAlH_4$ ?



**85.** What happens when methyl amine is heated with chloroform in the presence of alkali?



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**86.** What happens when nitropropane reacts with bromine in presence of NaOH?



**87.** What happens when nitromethane reacts with chlorine in presence of NaOH?



**88.** What happens when nitropropane is heated above  $300^{\circ}C$  ?



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**89.** What happens when ethane reacts with nitric acid at  $400^{\circ}C$  ?



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90. How can you convert acetic acid to methyl amine?



91. How will you convert Acetaldehyde to methane.



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92. How will you convert

methanamine into ethanamine?



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93. Account for the following

Aromatic amines are weaker bases than aliphatic amines.

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94. Discuss classification ofamines giving examples.



**95.** How can you prepare aliphatic amines from alcohols ?



**96.** How can you prepare aliphatic amines from alkanamides?



97. How can you prepare aliphatic amines from nitroalkanes? **Watch Video Solution** 98. How can you prepare aliphatic amines from alkane nitriles? **Watch Video Solution** 99. Explain Solubility of amines in water. **Watch Video Solution** 

**100.** Explain Boiling point of amines as compared to corresponding alkanes alcohols and corboxylic acids of compareble molecular mass.



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101. Explain Basic nature of amines.



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**102.** Discuss the reactions of aliphatic amines with alkyl halides.



**103.** Discuss the reactions of aliphatic amines with acid



**104.** Discuss the reactions of aliphatic primary amines with nitrous acid.



105. How can you prepare aniline from Nitrobenzene



106. Explain the basic nature of aniline?



**107.** How does aniline react with  $CH_3I$ ?



**108.** How does aniline react with  $-CH_3COCl$ ?



**109.** How does aniline react with  $HNO_2$ ? **Watch Video Solution** 110. How does aniline react with bromine water? **Watch Video Solution** 111. Give the structure of benzene diazonium chloride. **Watch Video Solution** 

**112.** Discuss the preparation of benzene doazonium chloride



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**113.** How can you synthesis benzene from benzene diazonium chloride ?



**114.** How can you synthesis phenol from benzene diazonium chloride ?



**115.** How can you synthesis haloarenes from benzene diazonium chloride ?



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**116.** How can you synthesis iodobenzene from benzene diazonium chloride ?



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**117.** Which of the following compound is expected to be most basic :

B. Ethylamine C. Hydroxylamine D. Methylamine **Answer: B Watch Video Solution** 118. The action of nitrous acid on a primary aliphatic amine gives: A. Nitro alkane B. Alkyl nitrite

A. Aniline

- C. Alcohol
- D. Secondary amine

#### **Answer: C**



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# **119.** $C_3H_9N$ can not represent :

- A.  $1^{\circ}$  amine
- B.  $2^{\circ}$  amine
- $\mathsf{C.}\,3^\circ$  amine
- D. Quaternary salt

# **Answer: D**



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120. A colourless organic compound gave brisk effervescence with a mixture of  $NaNO_2$  and dil . HCl It could be :

- A. Glucose
- B. Oxalic acid
- C. Urea
- D. Benzoic acid

**Answer: C** 

**121.** The compound having the molecular formula  $C_3H_9N$  represents:

- A. Trimethylamine
- B. n-propylamine
- C. Isopropylamine
- D. All the three

**Answer: D** 



**122.** Hofmann's hypobromite reaction affords a method of :

- A. Preparing a tertiary amine
- B. Preparing a mixture of amines
- C. Stepping down a series
- D. Stepping up a series

## **Answer: C**



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**123.** The correct order of the increasing basicity of methyl amine, ammonia and aniline is:

- A. Methylamine < Aniline < Ammonia
- B. Aniline < Ammonia < Methylamine
- C. Aniline < Methylamine < Ammonia
- D. Ammonia < Aniline < Methylamine

#### **Answer: B**



- **124.** When methyl cyanide is hydroysed in presence of alkali, the product is :
  - A. Acetamide
  - B. Methane

$$\mathsf{C.}\ CO_2 + H_2O$$

D. Acetic acid

#### **Answer: D**



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**125.** Which of the following compound gives carbylamine when heated with chloroform and alcoholic potash:

- A. Aldehyde
- B. Primary amine
- C. Secondary amine

D. Phenol

## **Answer: B**



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**126.** On heating two molecules of urea, a gas evolves along with formation of biuret. Identity the gas :

A. CO

B.  $NH_3$ 

 $C. CO_2$ 

D.  $H_2$ 

#### **Answer: B**



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# 127. A secondary amine is:

- A. A compound with two  $-NH_2$  groups
- B. A compound with 2 carbon atoms and a  $\mbox{-}NH_2$  group
- C. A compound with a  $NH_2$  group on the carbon atom in numder 2 position
- D. A compound in which 2 of the hydrogens of  $NH_3$  have been replaced by alkyl or arly groups.

## **Answer: D**



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**128.** Tertiary nitro compound can not show tautomerism because :

- A. They are very stable
- B. Isomerises to give sec, nitro compounds
- C. Do not have labile H atom
- D. They are highly reactive

#### **Answer: C**



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**129.** The structural formula of methyl amino methane is

:

A. 
$$(CH_3)_2CHNH_2$$

B. 
$$(CH_3)_3N$$

C. 
$$(CH_3)_2NH$$

D.  $CH_3NH_2$ 

#### **Answer: C**



130. Aniline is a:
A. Primary base
B. Secondary base
C. Tertiary base
D. Neutral compound
Answer: A  Watch Video Solution

131. Aliphatic amines are soluble in water because :

A. They are basic

- B. They are amino compounds
- C. They are lighter than water
- D. Of formation of hydrogen bonds with water

#### **Answer: D**



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**132.** The basicity of aromatic (aryl) amines follows the order:

A. 
$$3^{\circ} > 2^{\circ} > 1^{\circ} > \,$$
 NH\_3`

B. 
$$3^{\circ} < 2^{\circ} < 1^{\circ} < NH_3$$

C. 
$$2^{\circ} < 3^{\circ} < 1^{\circ} < NH_3$$

D. None

#### **Answer: B**



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**133.** Aliphatic amines are .....basic than  $NH_3$  but aromatic amines are .....basic than  $NH_3$ 

- A. More ,less
- B. Less, more
- C. BOTH (A) AND (B)
- D. None

## **Answer: A**



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**134.** Nitroso amines  $(R_2H-N=O)$  are water soluble .On heating with conc. HCl, they give secondary amines. The reaction is called:

- A. Perkin reaction
- B. Fries reaction
- C. Liebermann nitroso reaction
- D. Etard reaction

## **Answer: C**

**135.** The general formula of quarternary ammonium compound is :

A. 
$$R-NH_2$$

B. 
$$R_3N$$

C. 
$$[R_4N]^+X^-$$

D. 
$$NH_4X$$

#### **Answer: C**



<b>136.</b> Amines have :
A. Garlic odour
B. Fishy odour
C. Jasmine odour
D. Bitter almonds
Answer: B
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137. Primary nitroalkanes on hydrolysis gives:

A. RCOOH +  $NH_2OH$ 

B. RCOOH C.  $NH_2OH$ D. RCOR **Answer: A Watch Video Solution 138.** Aqueous solution of urea is: A. Acidic B. Alkaline

C. Almost neutral

D. Amphotrric

#### **Answer: C**



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# 139. Urea is not used:

- A. As fertilizer
- B. In manufacture of plastic
- C. In preparation of medicines
- D. In purification of water

# **Answer: D**



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# **140.** Nitroparaffins on reduction give :



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# 141. RMgX on reacting with cyanogen chloride gives :

A. R -NC

B. R-Cl

C. R-CN

D. None

# **Answer: C**



**142.** Which of the following enzymes can hydrolyse urea into  $CO_2$  and  $NH_3$ 

- A. Amylase
- B. Urease
- C. Lipase
- D. Zymase

**Answer: B** 



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**143.** Which of the following is not a nitroderivative:

A.  $C_6H_5NO_2$ 

B.  $CH_3CH_2ONO$ 

C. 📝

D.  $C_6H_4(OH)NO_2$ 

# **Answer: B**



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**144.** Which of the following compound is optically active?

A.  $CH_3NH_2$ 

B.  $CH_3NHCH_3$ 

C.	F 24

D. Sec. Butylamine

#### **Answer: D**



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**145.** The number of  $(\pi)$ -bonds in the structure gives

below are: NC-CH=CH-CN

**A.** 5

B. 4

C. 3

D. 2

# **Answer: A**



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**146.** When a primary amine is heated with  $CS_2$  in presence of  $HgCl_2$ , the product formed is :

- A. Alkyl cyanate
- B. Alkyl isothiocyanate
- C. Carbylamine
- D. Alkyl cyanide

#### **Answer: B**



# **147.** Amine are more basic than:

- A. Alcohols
- B. Ethers
- C. Esters
- D. All

## **Answer: D**



<b>148.</b> Ethylamine	reacts with	nitrosyl	chloride	(NOCI)	to
form:					

- A. Ethyl chloride
- B. Ethyl alcohol
- C. Ethyl nitrite
- D. Nitro ethane

**Answer: A** 



**149.** Which compound will liberate  $CO_2$  from

 $NaHCO_3$  solution :

A.  $CH_3CONH_2$ 

B.  $CH_3NH_2$ 

C.  $(CH_3)_4N^+OH^-$ 

D.  $CH_3H^+H_3Cl^-$ 

**Answer: D** 



**150.** 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 the above

**Answer: C** 



**151.** What is the proper vsequence of reagent in the Hofmann's degradation reaction :

- A.  $Br_2$ , KOH,  $H_2O$
- B. KOH,  $Br_2H_2O$
- $\mathsf{C}.\,H_2O,\,KOH,\,Br_2$
- D.  $KOH, H_2O, Br_2$

#### **Answer: A**



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152. A mixture of P,S and T amines is separated by:

A. Hofmann method				
B. Hinsberg method				
C. Distillation				
D. All				
Answer: D				
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<b>153.</b> In hypobromite reaction of amide, carbonyl carbon				
atom is lost as :				
A. CO				
B. $CO_2$				

$$\mathsf{C.}\,CO_3^{2\,-}$$

D. None of the above

## **Answer: C**



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**154.** How many primary amines are possible with formula  $C_4H_{11}N$  ?

**A.** 1

B. 2

C. 3

D. 4

## **Answer: D**



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**155.** When methyl iodide is treated with ammonia, the product obtained is :

- A. Methylamine
- B. Dimethylamine
- C. Trimethylamine
- D. All

#### **Answer: D**



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**156.** When  $NaNO_2$  and dilute HCl were added to an amine at  $0^{\circ}C$  a colourless gas was evolved and an ionic compound is formed. The amine is :

- A. Any primary amine
- B. An aromatic primary amine
- C. Any amine
- D. None

#### **Answer: B**



**157.** Arrange the following  $CH_3NH_2$  (I),  $(CH_3)_2NH$  (II),  $C_6H_5NH_2$  (III) and  $(CH_3)_3N$  (IV) in increasing order of basicity in aqueous madium :

$$A.\,II\,\,<\,\,I\,\,<\,\,IV\,\,<\,\,III$$

## **Answer: B**



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**158.** Which of the following will give dye test:

- A. Aniline
- B. Methylamine
- C. Diphenyl amine
- D. Ethylamine

## **Answer: A**



- **159.** Reaction of nitrous acid on  $1^{\circ}$  aliphatic amines in cold will give :
  - A. A diazonium salt
  - B. An alcohol

- C. A nitrile
- D. A dye

#### **Answer: B**



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**160.** Aniline was subjected to diazotisation reaction and the product formed was reduced with Sn + NaOH.The product was :

- A.  $C_6H_5OH$
- B.  $C_6H_6$
- C.  $C_6H_5CH_2OH$

D.  $C_6H_5COOH$ 

**Answer: B** 



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161. Which nitro compound will show tautomerisum:

A.  $C_6H_5NO_2$ 

B.  $(CH_3)_3CNO_2$ 

C.  $CH_3CH_2NO_2$ 

D. none of the above

**Answer: C** 

**162.** Acetoneoxime on catalytic hydrogenation gives :

- A. 1- propanamine
- B. Isoprophlamine
- C. Ethyl methyl amine
- D.  $CH_4$  and ethanamine

**Answer: B** 



A. Nitrobenzene B. Glycerine trinitrate C. Picric acid D. TNT **Answer: B View Text Solution 164.**  $CH_3NH_2$  in water act as : A. Acid B. Base C. Ester

D. Salt

**Answer: B** 



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**165.** The Hinsberg test, is used to test:

A.

В.

C.

D.

**Answer: D** 

## 166. Which is most basic:

- A.  $NH_3$
- B.  $CH_3NH_2$
- $\mathsf{C}.\,(CH_3)_2NH$
- D.  $C_6H_5NH_2$

#### **Answer: C**



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B. Secondary amine C. Tertiary amines D. All **Answer: A Watch Video Solution** 168. The reaction of acetamide with bromine and caustic potash or NaOBr gives: A. Ethane B. Ethyl alcohol

A. Primary amines

- C. Ethylamine
- D. Methylamine

## **Answer: D**



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# **169.** Which are functional isomers :

- A. Methanol and methoxy methane
- B. Ethyl alcohol and ether
- C. Acetone and acetaldehyde
- D. N-methylethanamine and N, N- dimethyl-

methanamine

## **Answer: D**



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## **170.** H -C $\equiv$ N and H-N $\equiv$ C are:

- A. Tautomers
- **B.** Metamers
- C. Functional isomer
- D. Geometrical isomers

#### **Answer: A**



**171.** Acetamide is treated separately with the following reagent. Which of these would give methylamine?

- A. NaOBr
- B. Sodium hypobromite
- C.  $NaOH + Br_2$
- D. All

**Answer: D** 



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**172.** Which of the following is not characteristic of amines:

- A. They smell like ammonia
- B. They are inflammable in air
- C. They show the property of hydrogen bonding
- D. They are amphoteric in nature .

#### **Answer: D**



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173. The geometry of ethyl amine is:

- A. Pyramidal
- B. Tetrahedral
- C. Triangular
- D. Square planar

#### **Answer: A**



- **174.** Methyl ethyl propylamine form non- super imposable mirror image but it does not show opitcal activity because:
  - A. Of rapid flipping

- B. Amines are basic in nature
- C. Nitrogen has a lone pair of electrons
- D. Of absence of asymmetric nitrogen

#### **Answer: A**



- **175.** The basic character of amine can be explained :
  - A. In terms of lewis and Arrhenius concept
  - B. Only in terms of Lowry Bronsted concept
  - C. In terms of Lewis and Lowry Bronsted concept
  - D. Only in Lewis concept

## **Answer: C**



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## 176. Benzoyl chloride does not react with:

- A. Primary or secondary amine
- B. Aliphatic compound
- C. Aromatic compounds
- D. Carboxylic acids

#### **Answer: D**



## 177. Aniline and ethylamine resembles in:

- A. Solubility
- B. Action with  $HNO_2$
- C. Action of Grignard reagent
- D. Coupling reaction

#### **Answer: C**



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**178.**  $CH_3CH_2NH_2$  contains a basic  $NH_2$  group , but

 $CH_3CONH_2$  does not , because :

- A. Acctamide is amphoteric in character
- B. In  $CH_3CH_2NH_2$  the electron pair on N-atom is delocalised by resonance
- C. In  $CH_3CH_2NH_2$  there is no resonance , while in acetamide the lone pair of electrons on N atom is delocalised and therefore less available for protonation
- D. None

## **Answer: C**



**179.** Aniline on treating with  $NaN \frac{O_2}{H}Cl$  at  $0^{\circ}C$ 

followed by alkaline B-naphthol solution, gives:

- A. A brilliant red dye
- B. A blue coloured solution
- C. A purpul precipitate
- D. A yellow coloured complex

#### **Answer: A**



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**180.** Diazonium salts are stable only at :

B. Very low temperature C. High temperature D. None **Answer: B View Text Solution 181.** Mendius method of preparation of amines consists of: A. Catalytic reduction of alkyl cyanides B. Reduction of amide with  $LiAlH_4$ 

A. Very high temperature

C. Reduction of nitroparaffin with Sn + HCl

D. Reduction of oximes with  $Na+C_2H_5OH$ 

#### **Answer: A**



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**182.** Aniline on heating with conc. $H_2SO_4$  at  $180^{\circ}C$  gives :

A. P-aminobenzene sulphonic acid

B. Sulphanilic acid

C. BOTH (A) AND (B)

D. None

## **Answer: C**



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**183.** Acetanilide is prepared by the reaction of acetyl chloride on :

- A. Acetamide
- B. Aniline
- C. Acetaldehyde
- D. Benzene

#### **Answer: B**



## **184.** TNT is:

- A. 2,4-dinitrotoluene
- B. 1,2,3,-trinitrotoluene
- C. 2,4,6-trinitrotoluene
- D. 3,4,6-trinitrotoluene

## **Answer: C**



**185.** Alkyl halide (RBr) on treatment with KCN followed by reduction leads to formation of :

- A.  $RNH_2$
- $\mathsf{B.}\,RCH_2NH_2$
- $\mathsf{C.}\,RH+NH_3$
- D.  $RCH_3 + N_2$

#### **Answer: B**



**186.** Schiff's bases or anils are formed when aniline reacts with :

- A. Alcohols
- B. Aromatic aldehydes
- C. Aliphatic ketones
- D. Aromatic ketones

**Answer: B** 



**187.** When treated with bromine water, aniline forms a white precipitate of :

- A. Aniline bromide
- B. p-bromoaniline
- C. o-bromoaniline
- D. 2,4,6-tribromoaniline

### **Answer: C**



**188.** The hydrolysis of methyl cyanide in presence of acid gives :

- A. Methanoic acid
- B. Ethanoic acid
- C. Methylamine
- D. Methyl alcohol

**Answer: B** 



**189.** The product obtained when methyl amine is treated with nitrous acid is :

A. 
$$CH_3OH$$

B. 
$$CH_3 - ONO$$

$$\mathsf{C}.\,CH_3OCH_3$$

D. BOTH (B) AND (C)

#### **Answer: D**



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190. Isocyanide test is used for the derection of:

- A. Primary alcohols
- B. Primary amines
- C. Secondary amines
- D. Secondary alcohols

## **Answer: B**



- **191.** Aniline when treated with acidified  $K_2Cr_2O_7$  the product is :
  - A. p-aminophenol
  - B. p-benzoquinone

- C. Benzoic acid
- D. Phenyl hydroxyl amine

#### **Answer: B**



**View Text Solution** 

# **192.** Benzene diazonium chloride with phenol ti give:

- A. p-hydroxy azobenzene
- B. p-amino azobenzene
- C. o-hydroxy azobenzene
- D. Diazobenzene

## **Answer: A**



**View Text Solution** 

**193.** Diazotisation can be carried out by the action of

 $NaNO_2$  and dilute HCl at ice cold temperature on :

- A. Aromatic secondary amine
- B. Aromatic primary amine
- C. Aromatic nitro compound
- D. Aliphatic amine

#### **Answer: B**



**194.** When benzene diazonium chloride is heated with methanol, the product is :

- A. Methyl benzene
- B. Phenyl methyl ether
- C. Methyl benzoate
- D. Toluene

#### **Answer: B**



# 195. Aniline reacts with alkyl halide to give

- A. Amino compound
- B. Tertiary compound
- C. Azomethane
- D. Quaternary amm compound

#### **Answer: D**



**View Text Solution** 

196. Which will not go for diazotisation:

A.  $C_6H_5NH_2$ 



C. 🗾

D. 🗾

## **Answer: B**



**View Text Solution** 

# **197.** 2,4,6-tribromo aniline is a product of :

A. Electrophilic addition on  $C_6H_5NH_2$ 

B. Electrophilic substitution on  $C_6H_5NH_2$ 

C. Nucleophilic addition on  $C_6H_5NH_2$ 

D. Nucleophilic substitution on  $C_6H_5NH_2$ 

## **Answer: B**



**View Text Solution** 

**198.** A diazonium salt reacts with phenol to give an azo dye . The reaction is called :

- A. Diazotisation
- B. Condensation
- C. Coupling
- D. Reduction

## **Answer: C**



**199.** When aniline reacts with oil of bitter almonds  $(C_6H_5CHO)$  condensation takes place and benzal derivatives are formed . These are known as :

- A. Iodide of Millon's base
- B. Schiff's reagent
- C. Benedict reagent
- D. Schiff's bases

## **Answer: D**



**200.** A compound A when reacted with  $PCl_5$  and then with ammonia gave B,B when treatment with bromine and caustic potash produced C . C on treatment with  $NaNO_2$  and HCl at  $0^{\circ}C$  and then boiling produced orthocresol. Compound A is :

- A. o-toluic acid
- B. o-chlorotoluene
- C. o-bromotoluene
- D. m-toluic acid

## **Answer: A**



A. $RNH_2$
B. $R_2NH$
C. $R_3N$
D. All
Answer: D
View Text Solution
<b>202.</b> The hydrochlorides of amines form double salt with:

**201.** RX on heating with  $NH_3$  in sealed tube gives :

A.  $PtCl_4$ B.  $AuCl_3$ C. BOTH (A) AND (B) D. None **Answer: C View Text Solution 203.** Urea reacts with  $HNO_3$  to give : A. Urea nitrite B. Urea nitrate  $\mathsf{C}.\,H_2CO_3$ 

D. None

## **Answer: B**



**View Text Solution** 

**204.** A primary amine heated with  $CS_2$  in presence of excess of  $HgCl_2$  gives isothiocyanate. The reaction is called:

- A. Hofmann's bromamide reaction
- B. Hofmann's mustard oil reaction
- C. Perkin's condensation
- D. Hofmann's elimination

## **Answer: B**



**View Text Solution** 

## 205. Aniline differs from ethyl amine in:

- A. Basic nature
- B. Acetylation
- C. Carbylamine reaction
- D. Reaction with aldehyde

## **Answer: A**



**206.** Carbylamine reaction tubes are not thrown into sink, to avoid bad odour, but are treated with cons. HCl to give:

A. 
$$RCOOH + NH_3$$

B. 
$$RNH_2$$

$$\mathsf{C.}\,RNH_2 + HCOOH$$

D. 
$$RCOOH + N_2$$

## **Answer: C**



**207.** A nitrogenous subsatnce X is treated with  $HNO_2$  and the product so formed is further treated with NaOH solution , which produces blue colouration X can be:

- A.  $CH_3CH_2NH_2$
- B.  $CH_3CH_2NO_2$
- C.  $CH_2CH_2ONO$
- D.  $(CH_3)_2CHNO_2$

## **Answer: D**



<b>208.</b> The name urea was given by :
A. Wohler
B. Berzelius
C. Roulle
D. Lemery
Answer: C
View Text Solution
209. Urea when heated slowly, product formed is:
A. $N_2$

- B.  $CO_2$
- C. Biuret
- D. Ammonium carbamate

## **Answer: C**



**View Text Solution** 

**210.** Urea when heated a white residue is formed .lts alkaline solution when treated with few drops of  $CuSO_4$  solution gives :

- A. Red colour
- B. Violet colour

- C. Green colour
- D. Yellow colour

## **Answer: B**



**View Text Solution** 

## **211.** The diamide of carbonic acid is:

- A. Acctamide
- B. Formamide
- C. Benzamide
- D. Urea

## **Answer: D**



**View Text Solution** 

# **212.** Reaction, $CH_3CNO_2$ gives :

A.  $CH_3Br$ 

B.  $CH_4$ 

 $\mathsf{C}.\,CH_3OBR$ 

D.  $CH_3NH_2$ 

## **Answer: D**



213. Amides may be converted into amines by reaction named after A. Perkin B. Claisen C. Hofmann D. Kolbe **Answer: C View Text Solution** 

**214.** Benzaldehyde reacts with methyl amine to gives :

A. 
$$C_6H_5NH_2$$

B. 
$$C_6H_5CH_2NH_2$$

$$\mathsf{C.}\, C_6H_5CH=NCH_3$$

D. 
$$C_6H_5CONH_2$$

## **Answer: C**



**View Text Solution** 

**215.** A compound which on reaction with aqueous nitrous acid gives an oilly nitrosoamine is :

A. Methylamine

B. Ethylamine

- C. Diethylamine
- D. Triethylamine

## **Answer: C**



**View Text Solution** 

## 216. Gabriels phthalimide reaction is used to prepare:

- A. p-amine
- B. s-amine
- C. t-amine
- D. All

## **Answer: A**



**View Text Solution** 

## **217.** $CH_3CONH_2$ IS dehydrated by $P_2O_5$ to give :

A. 
$$CH_3NH_2$$

B. 
$$CH_3CN$$

$$\mathsf{C}.\,CH_3CHO$$

D. 
$$CH_3-CH_3+CO+NH_3$$

## **Answer: B**



**218.** Grignard reagent and acetyl chloride does not react with :

- A.  $RNH_2$
- B.  $R_2NH$
- C.  $R_3$
- D. None

## **Answer: C**



**219.** Which one the following compound when heated with KOH and primary amines give carbylamine test:

- A.  $CHCl_3$
- B.  $CH_3Cl$
- C.  $\mathbb{C}l_4$
- D.  $CH_3NC$

**Answer: A** 



**View Text Solution** 

**220.** Which gives offensive smell with  $CHl_3$  and KOH :

- A.  $1^{\circ}$  amine
- B.  $2^{\circ}$  amine
- $\mathsf{C.}\,3^\circ$  amine
- D. All

## **Answer: A**



**View Text Solution** 

221. General formula of an amine is:

- A.  $C_n H_{2n+1} N$
- B.  $C_nH_{2n+2}N$ 
  - C.  $C_N H_{2n+3} N$

D.  $C_N H_{2n} N$ 

## **Answer: C**



View Text Solution

## **222.** Amine may contain:

A.  $-NH_2gp$ .

B. angle NHgp.

 $\mathsf{C.}-\rangle\mathsf{N}$  gp.

D. All

**Answer: D** 

## 223. p-amine and s-amine are distinguished by:

A. 
$$Br_2/KOH$$

B. HClO

 $\mathsf{C}.\,NHO_2$ 

D.  $NH_3$ 

## **Answer: C**



**224.** The pri., sec. and ter.amines can be distinguished by:

- A. Hinsberg's reagent
- B. Grignard's reagent
- C. Fehling's solution
- D. Tollen's reagent

## **Answer: A**



**225.** Alkanamide, which on Hofmann's reaction gives 1-phenylethylamine, is:

- A. 2- phenylpropanamide
- B. 3- phenylpropanamide
- C. 2- phenylethanamide
- D. N- phenylethanamide

## **Answer: A**



**226.** Ethly amine can be prepared by the action of  $Br_2$  and NaOH on :

- A. Acetamide
- B. Propionamide
- C. Methylamine
- D. Methyl cyanide

**Answer: B** 



**227.** Gas evolved during the reaction of sodium metal on ethyl amine is :

- A.  $N_2$
- B.  $C_2H_2$
- $\mathsf{C}.\,H_2$
- D.  $CO_2$

## **Answer: C**



**228.** Ethyl amine undergoes oxidation in the presence of  $KMnO_4$  followed by hydrolysis to from :

- A. An acid
- B. An alcohol
- C. An aldehyde
- D. A N oxide

**Answer: C** 



**View Text Solution** 

**229.** Indicate the correct stetement :

A.  $C_2H_5N^+H_3OH^-^-$  is acidic

B.  $C_2H_5NH_2$  is less besic than  $NH_3$ 

C.  $C_2H_5NH_2$  is a stronger base than  $NH_3$ 

D.  $C_2H_5NH_2$  forms salts with bases

## **Answer: C**



**View Text Solution** 

**230.** Which of the following reaction does not yield an amine:

A. 
$$R-X+NH_3$$

$$\mathsf{C.}\,R - CN + H_2O \stackrel{H^+}{\longrightarrow}$$

D. 🖳

## **Answer: C**



**View Text Solution** 

**231.** What is the end product in the following sequence of reactions,

$$C_2H_5NH_2\stackrel{HNO_2}{\longrightarrow} A\stackrel{PCl_5}{\longrightarrow} B\stackrel{NH_3}{\longrightarrow} C$$

- A. Ethyl cyanide
- B. Ethylamine
- C. Methylamine

D. Acetamide

## **Answer: B**



**View Text Solution** 

## **232.** A positive carbylamine test given by :

A. N,N- demethyl aniline

B. 2,4- dimethyl aniline

C. N- methyl -o- methyl aniline

D. p- methyl benzyl aniline

#### **Answer: D**

**233.** The decreasing order of the basic chracter of three amines and ammonia is :

A. 
$$NH_3 > CH_3NH_2 > C_2H_5NH_2 > C_6H_5NH_2$$

$${\sf B.}\, C_2H_5NH_2 > CH_3NH_2 > NH_3 > C_6H_5NH_2$$

C. 
$$C_6 H_5 N H_2 > C_2 H_5 N H_2 > C H_3 N H_2 > N H_3$$

D. 
$$CH_3NH_2 > C_2H_5NH_2 > C_6H_5NH_2 > NH_3$$

## **Answer: B**



**234.** Which of the following is carbamide:

A.  $CH_3CONH_2$ 

B.  $NH_2CONH_2$ 

 $\mathsf{C}.\,CH_2(NH_2)CONH_2$ 

D.  $CO(OH)NH_2$ 

## **Answer: B**



**View Text Solution** 

**235.** Carboxylic acid on reacting with  $N_3H$  gives :

A. Amines

**B.** Amides C. Acids D. Aldehyde **Answer: A View Text Solution** 236. Dehydration of an amide gives: A. Cyanide B. Amine C. Isocyanide D. Fatty acid

## **Answer: A**



## 237. Reaction of primary amine with aldehydes gives :

- A. Amide
- B. Aldimine
- C. Nitrile
- D. None

## **Answer: B**



**238.** Which substance when boiled which NaOH will evolve  $NH_3$ :

- A. Ethylamine
- B. Aniline
- C. Acetamide
- D. Acetoxime

**Answer: C** 



**239.** Hinsberg method to separate amines is based on the use of :

- A. Benzene sulphonylchloride
- B. Benzene sulphonic acid
- C. Ethyl oxalate
- D. Acetyl chloride

**Answer: A** 



**240.** An amine reacts with  $C_6H_5SO_2Cl$  and the product is soluble in alkali, amine is :

- A.  $1^{\circ}$
- B.  $2^{\circ}$
- $\mathsf{C.\,3}^\circ$
- D. All

**Answer: A** 



View Text Solution

241. Ethyl amine on acetylation gives:

- A. Acetamide
- B. Methyl acetamide
- C. N-ethyl acetamide
- D. None

# **Answer: C**



- **242.** When  $(NH_4)_2SO_4+KCNO$  are heated, we get :
  - A. Nitrogen
  - B. Carbon dioxide
  - C. Birret

D. Ammonium carbonate

# **Answer: C**



**View Text Solution** 

**243.** Which of the following will give a primary amine on hydrolysis:

- A. Nitroparaffin
- B. Alkyl cyanide
- C. Oxime
- D. Alkyl isocyanate

# **Answer: D**



**View Text Solution** 

# **244.** The type of isomerism shown by $C_6H_5CN$ and $C_6H_5NC$ is :

- A. Position
- B. Functional
- C. Enantiomerism
- D. Tautomerism

# **Answer: B**



**245.** Primary aliphatic or aromatic amines can be distinguished from secondry and tertiary amines by reacting with :

- A. Chloroform and alcoholic KOH
- B. Methyl iodide
- C. Chloroform alone
- D. Zinc dust

**Answer: A** 



246. Which of the following is least besic:

A. 
$$(C_2H_5)_3N$$

$$\operatorname{B.} C_2H_5NH_2$$

C. 
$$(C_2H_5)_2NH$$

D. 
$$C_6H_5NH_2$$

# **Answer: D**



**View Text Solution** 

247. Mark the correct statement:

A. Methyl amine is slightly acidic

- B. Methyl amine is less basic than ammonia
- C. Methyl amine is a stronger base than ammonia
- D. Methyl amine forms salts with alkalies.

## **Answer: C**



**View Text Solution** 

# **248.** Which of the following is a weakest base:

- A. Ammonia
- B. Methylamine
- C. Dimethylamine
- D. Trimethylamine

# **Answer: A**



**View Text Solution** 

**249.** Which of the following amines will not react with  $HNO_2$  acid to give nitrogen :

A.  $CH_3NH_2$ 

B.  $CH_3CH_2NH_2$ 

C. 🖳

D. 🗾

# **Answer: D**



**250.** What is decreasing order of basicity of PST ethyl amines and  $NH_3$ :

A.

$$NH_3 > C_2H_5NH_2 > (C_2H_5)_2NH > (C_2H_5)_3N$$

В.

$$(C_2H_5)_3N > (C_2H_5)_2NH > C_2H_5NH_2 > NH_3$$

C.

$$(C_2H_5)_2NH>C_2H_5NH_2>NH_3>(C_2H_5)_3N$$

D.

$$(C_2H_5)_2NH > (C_2H_5)_3N > C_2H_5NH_2 > NH_3$$

# **Answer: D**



**View Text Solution** 

# 251. Urea on heating with ethanol gives:

A. Urethane

B. Urea alcohol

C. Ureides

D. None

## **Answer: A**



**252.** Alkyl nitrite on reduction with  $Sn \, / \, HCl$  gives :

A. Alcohol

B. Hydroxylamine

C. Both (a) and (b)

D. Hydrazine

## **Answer: C**



**View Text Solution** 

**253.** Primary, secondry, tertiary nitroalkanes can be identified by the action of :

- A.  $NHO_2 + NaOH$ aq.
- B.  $CHCl_3 + NaOH$  aq.
- C.  $CHCl_3 + KOH$  alc.
- D. None

# **Answer: A**



- **254.** Which statement is not true among the following:
  - A. Amines are bases
  - B. They turn red litmus blue
  - C. Trimethyl amine is less basic than dimethyl amine

D. Amines yield alkanols on aqueous hydrolysis

## **Answer: D**



**View Text Solution** 

# 255. The strongest base in acid medium is

A. Chlorobenzene

B. Nitobenzene

C. Aniline

D. Phenol

# **Answer: C**

**256.** A compound X has the molecular formula  $C_7H_7NO$ . On treatment with  $Br_2$  and KOH, X gives an amine Y. the latter gives carbylamine test. Y upon diazotisation and coupling with phenol gives an azo dye. Thue X is :

A. 
$$C_6H_5CONH_2$$

B. 
$$C_6H_5NO_2$$

$$\mathsf{C.}\,C_6H_5COONH_4$$

# D. None

Answer: A

**257.** The compound which on reaction with cold  $HNO_2$  gives only nitrosoamine is :

A. 
$$CH_3NH_2$$

B. 
$$(CH_3)_2NH$$

$$\mathsf{C}.\,(CH_3)_3N$$

D. 
$$(C_2H_5)_3N$$

# **Answer: B**



**258.** Acetamide and ethyl amine can be distinguished by reacting with :

A. Aqueous HCl and heat

B. Acid  $KMnO_4$ 

C.  $Br_2$  water

D. Aqueous NaOH and heat

# **Answer: D**



**259.** The product D in the following sequence of reactions is,

# $CH_3COOH \stackrel{NH_3}{\longrightarrow} A(br)^{heat} \stackrel{P_2O_5}{\longrightarrow} C \stackrel{Na+C_2H_5OH}{\longrightarrow} D$

**260.** Diethyl amine on oxidation with  $KMnO_4$  gives :

- A. Ester
- B. Amine
- C. Acid
- D. Alcohol

# **Answer: B**



**View Text Solution** 

A. Ethanal

- B. Propanone
- C. Tetraethyl hydrazine
- D. None

# **Answer: C**



**View Text Solution** 

# **261.** Urea reacts with hydrazine to form :

- A. Nitrogen
- B. Phenyl hydrazine
- C. Semicarbazide
- D. Urethane

# **Answer: C**



**View Text Solution** 

**262.** The main product in the reaction  $HCONHR \xrightarrow{POCl_3}$ ?

A. RCN

B. RNC

C. RCNO

D. RNCO

## **Answer: B**



**263.** R-N  $\equiv$  C+HgO  $\rightarrow A+Hg_2O$ , What is A:

A.  $RNH_2$ 

B.  $RCONH_2$ 

C. R-NCO

D. RCOOH

# **Answer: C**



**264.** Which of the following can be used distinguish acetamide and urea:

- A. Fehling's solution
- B. Biuret test
- C. Hofmann's reaction
- D. NaOH solution

# **Answer: B**



**265.** A colourless, odourless and non-combustible gas is liberated when ethylamine reacts with :

- A. NaHO
- B.  $CH_3COCl$
- C.  $NaNO_2 + HCl$
- D.  $H_2SO_4$

# **Answer: C**



**View Text Solution** 

**266.** The strongest base among the following is:

- A.  $NH_3$ 
  - B.  $CH_3NH_2$
- $\mathsf{C}.\,(CH_3)_2NH$ 
  - D.  $(CH_3)_3N$

# **Answer: C**



**View Text Solution** 

267. Carbonyl chloride reacts with ammonia to from:

- - A.  $CO_2$
  - B.  $NH_2CONH_2$
  - C.  $CH_3COONH_4$

# D. $CH_3CONH_2$

# **Answer: D**



**View Text Solution** 

**268.** Which of the following is hydrolysed to give secondary amine :

- A. Alkyl cyanide
- В. 🗾
- C. Nitro paraffins
- D. Acid amide

# **Answer: B**



**269.** When aniline is heated with glacial acetic acid in presence of anhydrous  $ZnCl_2$ , the product is:

- A. Acetamide
- B. Acetanilide
- C. Phenhyl acetamide
- D. Chlorobenzene

## **Answer: B**



**270.** In the diazotisasation of aniline with sodium nitrite and hydrochloric acid, the excess of hydrochloric acid is used primarily to:

- A. Supress the concentration of free aniline
- B. Supress the hydrolysis to phenol
- C. Ensure a stoichiometric amount of nitrous acid and HCl
- D. Neutralise the base liberated

**Answer: B** 



<b>271.</b> Benzene diazonium chloride forms orange red dye
with:
A. Phenol
B. Cresol
B. Cresor
C. Resorcinal
D. All
Answer: D
No and Caladian
View Text Solution

**272.** p-hydroxy azobenzene is formed by the reaction :

- A. Hofmann rearrangement
- B. Fries migration
- C. Benzidine rearrangement
- D. Diazotisation and coupling

# **Answer: D**



**View Text Solution** 

**273.** Carcinogens are the products of the reaction between:

A. 
$$R_2NH + HNO_2$$

$$\mathsf{B.}\,R_3N + HNO_2$$

$$\mathsf{C.}\,RNH_2 + HNO_2$$

D. None

# **Answer: A**



**View Text Solution** 

**274.** The structure of compound when aniline reacts with  $NaNO_2$  in presence of HCl in cold :

A. 
$$NH_2Cl$$

B. 
$$C_6H_5N=NCl$$

C. N (equiv) N

D. 
$$C_6H_5NHNHC_6H_5$$

# **Answer: B**



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**275.** Hofmann rearrangement during the conversion of an amide to amine involves......rearrangement :

- A. Intermolecular
- B. Intramolecular
- C. Both (a) and (b)
- D. None

## **Answer: B**



276. Aniline is weaker base than ethyl amine because:

A. Lone pair of electrons of N-atom is not freely available for Co-ordination with a proton due to resonance than in ethly amine

- B. Its b.pt. is higher than that of ethyl amine
- C. It does not produce sufficient concentration of OH ions in solution
- D. It is insoluble in water while ethyl amine is soluble in water

## **Answer: A**

**277.** Which of the following compounds gives a secondary amine on reduction :

- A. Nitromethane
- B. Nitrobenzene
- C. Methyl isocyanide
- D. Methyl cyanide

**Answer: C** 



278. Diethyl carbonate on heating with ammonia gives :

A. 
$$C_2H_5NH_2$$

B. 
$$(C_2H_5)_3N$$

C. 
$$(C_2H_5)_2NH$$

D. Urea

#### **Answer: D**



**View Text Solution** 

**279.** Which of the following is not correct:

A. Ethylamine and aniline both have  $NH_2$  group

- B. Ethylamine and aniline both dissolve in HCl
- C. Ethylamine and aniline both react with  $CHCl_3$
- D. Ethylamine and aniline both react with  $HNO_2$  to give hydroxy compounds in cold

# **Answer: D**



**280.** When chlorobenzene is treated with  $NH_3$  in presence of  $Cu_2O$  in xylene at 570K, the product obtained is :

A. Benzylamine

- B. Aniline
- C. Schiff's base
- D. Diazonium salt

# **Answer: B**



**View Text Solution** 

# **281.** Aniline is used :

- A. In crimping of wool
- B. Dyeing industry
- C. Making of glue
- D. Fast drying varnish

# **Answer: B**



**View Text Solution** 

# 282. Nitroalkane is acidic only towards:

A.  $Na_2CO_3$ 

B. NaOH

C. Alcohol

D. Liquid  $NH_3$ 

## **Answer: B**



**283.** Primary, secondry, and tertiary amines may be scparated by using :

- A. Ethanoyl chloride
- B. Diethyl oxalate
- C. Thionyl chloride
- D. None

#### **Answer: B**



**View Text Solution** 

284. Sulphonation of nitrobenzene gives :

- A. p-nitrosulphonic aciod
- B. m- nitrosulphonic acid
- C. o-nitrosulphonic acid
- D. o-and p-nitrosulphonic acid

#### **Answer: B**



- **285.** Which of the following reacts with  $COCl_2$  to give phenylisocyanate:
  - A. Aniline
  - B. Aminophenol

- C. Nitrobenzene
- D. Chlorobenzene

#### **Answer: A**



**View Text Solution** 

## **286.** Primary amines react with benzaldehyde to from:

- A. Azo dyes
- B. Diazonium salts
- C. Schiff's base
- D. Anilides

#### **Answer: C**



**287.** Which would not react with benzene sulphony chloride in aqueous NaOH:

- A. Aniline
- B. N,N-dimethyl aniline
- C. p- toluidine
- D. N-ethyl aniline

#### **Answer: B**



**288.** Which of the following reagents will convert nitromethan into methyl amine :

A. 
$$Zn/HCl$$

B. 
$$Zn/NaOH$$

C. 
$$Zn/C_2H_5OH$$

D. 
$$Ni/H_2$$

### **Answer: A**



289. Which of the following statement is correct:

- A. Aniline is stornger base than ammoia
- B. Methylamine is a stronger base than aniline and ammonia
- C. Aniline is stronger than ammonia, but weaker base than methylamine
- D. Methylamine is stronger than aniline, but weaker base than ammonia

#### **Answer: B**



290. Aniline on	heating	with alc.	KOH and	$CS_2$	gives	:
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- A. Thio urea
- B. Schhifs base
- C. Phenol
- D. sec-diphenyl thio urea

#### **Answer: D**



**View Text Solution** 

**291.** Substitution of one alkyl group by replacing hydrogen of primary amines :

- A. Increases the base strenght
- B. Decreases the base strenght
- C. Remains the same
- D. None

#### **Answer: A**



**View Text Solution** 

## **292.** The value of $K_b$ is highest in case :

- A. p-methoxy aniline
- B. p-chloroaniline
- C. p-nitroaniline

D. p- methyl aniline

#### **Answer: D**



**View Text Solution** 

**293.** Nitrobenzene on reduction . With Al - Hg and water gives :

- A. Azobenzene
- B. Aniline
- C. Azoxy benzene
- D. Phenylhydroxylamine

#### **Answer: D**



**View Text Solution** 

## 294. Which of the following is primary amine:

- A. Acetanilide
- B. Dimethylamine
- C. 2 aminopropane
- D. N,N dimethyl 1,2 aminopropane

#### **Answer: C**



## **295.** The basic character of amines is due to:

- A. Presence of nitrogen atom
- B. Tetrahedral structure
- C. Lone pair of electrons on nitrogen atom.
- D. High electronegativity of nitrogen

#### **Answer: C**



**View Text Solution** 

296. Diazo- coupling is useful to prepare:

A. Pesticides

- B. Dyes
- C. Proteins
- D. Vitamins

#### **Answer: B**



**View Text Solution** 

**297.** The reduction of nitrobenzene with Zn and KOH (aq.)

- A. Benzene
- B. Aniline
- C. Hydroazobenzene

D. None

#### **Answer: C**



**View Text Solution** 

**298.** When benzene diazonium chloride is treated with cuprous chloride and HCl the product formed is :

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

## **Answer: A**



**View Text Solution** 

**299.** Diazomethane reacts with carboxylic acids to produce:

- A. Ester
- B. Alcohol
- C. Amine
- D. Lmines

#### **Answer: A**



### 300. Oil of mirbane is another name for :

- A. Aniline is stornger base than ammoia
- B. Nitrobenzene
- C. Toluene
- D. Toluidine

#### **Answer: B**



**301.** When ethanol is mixed with ammonia and passed over catalyst,the compound formed is :

- A.  $C_2H_5NH_2$
- B.  $C_2H_4$
- $\mathsf{C.}\ C_2H_5OC_2H_5$
- D.  $CH_3OCH_3$

**Answer: A** 



**302.** The reduction of  $CH_3CN$  to  $CH_3CH_2NH_2$  is called :

- A. Rosenmund reduction
- B. Clemmensen's reduction
- C. Mendius reduction
- D. Hofmann's reduction

**Answer: C** 



**303.** Which one is formed when an aqueous acidic solution of benzene diazonium chloride is boiled .

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

#### **Answer: B**



**304.** The active species produced in Hofmann's bromide reaction is :

- A. Br
- B.  $Br_2$
- C. Obr
- D.  $Obr_2$

#### **Answer: C**



**305.** The compound formed when malonic ester reacts with urea is :

- A. Cinnamic acid
- B. Butyric acid
- C. Barbituric acid
- D. Crotonic acid

**Answer: C** 



**View Text Solution** 

**306.** Ketones and  $1 \circ$  aminest react to form :

- A. Amides
- B. Oximes
- C. Urea
- D. Anils

#### **Answer: D**



**View Text Solution** 

**307.** Allyl isocyanide contains ......and ......bonds:

- A.  $9\sigma$  and  $3\pi$
- B.  $9\sigma$  and  $9\pi$
- C.  $3\sigma$  and  $4\pi$

D.  $5\sigma$  and  $7\pi$ 

**Answer: A** 



**View Text Solution** 

**308.** Acetaldoxime reacts with  $P_2O_5$  to give :

A.  $CH_3CN$ 

B.  $C_2H_5CNO$ 

 $\mathsf{C.}\,C_2H_5CN$ 

D. All

**Answer: A** 

**309.** The basic character of methylamins in vapour phase is :

A. 
$$3^{\circ} > 2^{\circ} > 1^{\circ} > NH_3$$

B. 
$$2^{\circ} > 3^{\circ} > 1^{\circ} > NH_3$$

C. 
$$1^{\circ} > 2^{\circ} > 3^{\circ} > NH_3$$

D. None

**Answer: A** 



## **310.** $C_3H_9N$ represent :

- A.  $1^{\circ}$  amine
- B.  $2^{\circ}$  amine
- $\text{C.}\,3^{\circ}$  amine
- D. All

#### **Answer: D**



**View Text Solution** 

**311.** Grignard reagent and acetyl chloride does not react with :

- A. Pri. Amine
- B. Sec.amine
- C. Aldehydes
- D. All

#### **Answer: D**



**View Text Solution** 

312. The reaction given,

 $RNH_2 + S = C = S \xrightarrow[-H_2S]{HgCl_2} R R - N = C = S$ 

constitutes:

A. Mustard oil reaction

- B. Test for  $1^{\circ}$  amine
- C. Negative test for  $2^{\circ}$  amine
- D. All

#### **Answer: D**



**View Text Solution** 

# **313.** $1^{\circ}, 2^{\circ}, 3^{\circ}$ amines Can be best distinguished by:

- A.  $HNO_2$  treatment
- B. Exhaustive alkylation
- C. Mustard oil reaction
- D. Carbylamine reaction

#### **Answer: A**



**View Text Solution** 

**314.** Boiling of  $C_2H_5NCO+NaOH$  leads to the formation of :

A. 
$$C_2H_5COOH + NH_3$$

$$\mathsf{B.}\, C_2H_5NH_2+Na_2CO_3$$

$$\mathsf{C.}\ CH_3NH_2 + CH_3COONa$$

D. None

#### **Answer: B**



