



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

SOLUTION-66(CLASS-12)



TOPIC- ORGANIC COMPOUNDS CONTAINING NITROGEN

SUBJECT – CHEMISTRY

DURATION – 30 mins

F.M. - 15

DATE – 14.11.20

1. Acetamide can be converted to methenamine by which of the following reactions?

- a. Stephen's reaction
- b. Hoffmann bromamide reaction
- c. Carbylamine reaction
- d. Gabriel phthalimide synthesis

Answer: (b)

2. An aldehyde on reaction with primary amine forms

- a. ketone
- b. Schiff's base
- c. aromatic acid
- d. carboxylic acid

Answer: (b)

3. Benzene-diazonium chloride on reaction with phenol in weakly basic medium gives

- a. Diphenyl ether
- b. p-hydroxyazobenzene
- c. Chlorobenzene
- d. Benzene

Answer: (b)

4. Which one of the following does not contain the -COOH group?

- a. Picric acid
- b. Aspirin
- c. Benzoic acid
- d. Ethanoic acid

Answer: (a)

5. C_3H_9N can have how many structural isomers?

- a. 2

- b. 3
- c. 4
- d. 5

Answer: (c)

6. Products formed when Nitrobenzene reacts with $\text{HNO}_3/\text{H}_2\text{SO}_4$ at $80-100^\circ\text{C}$

- a. 1, 4-Dinitrobenzene
- b. 1, 2, 4-Trinitrobenzene
- c. 1, 2-Dinitrobenzene
- d. 1, 3-Dinitrobenzene

Answer: (d)

7. Benzene forms Nitrobenzene on reaction with conc. $\text{HNO}_3/\text{H}_2\text{SO}_4$, in the reaction HNO_3 acts as a

- a. catalyst
- b. reducing agent
- c. base
- d. acid

Answer: (c)

8. The bad-smelling substance formed by the action of alcoholic caustic potash on chloroform and aniline is

- a. Phenyl Isocyanide
- b. Nitrobenzene
- c. Chloropicrin
- d. Acetylene

Answer: (a)

9. Which of the following compound will form secondary amine on reaction with LiAlH_4 ?

- a. Methyl cyanide
- b. Methyl isocyanide
- c. Acetamide
- d. Nitroethane

Answer: (b)

10. Find the compound which is more basic than aniline

- a. Diphenylamine
- b. Triphenylamine
- c. Benzylamine
- d. p-Nitroaniline

Answer: (c)

11. Reduction of aromatic nitro compounds using Fe and HCl gives-

- a. aromatic oxime
- b. aromatic hydrocarbon
- c. aromatic primary amine
- d. aromatic amide

Answer: (c)

12. Presence of nitrogen in which among the following compounds can NOT be detected by Lassaigne method?

- a. Hydrazine
- b. Aniline
- c. p-Toluidine
- d. Picric acid

Answer: (d)

13. The reaction of aniline with chloroform under alkaline conditions leads to the formation of –

- a. Phenyl cyanide
- b. Phenyl isonitrile
- c. Phenyl cyanate
- d. Phenyl isocyanate

Answer: (b)

14. Which of the following compound will not undergo azo coupling reaction with benzene diazonium chloride?

- a. Aniline
- b. Phenol
- c. Anisole
- d. Nitrobenzene

Answer: (d)

15. Acetamide and ethyl amine can be distinguished by reacting with-

- a. aq. HCl and heat
- b. aq. NaOH and heat
- c. acidified KMnO₄
- d. bromine water

Answer: (b)

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