

CLASS XII
CHAPTER – ORGANIC COMPOUNDS CONTAINING NITROGEN

ONE MARK QUESTIONS

1. Why do amines react as nucleophiles? (2007)
2. Write a chemical reaction in which the iodide ion replaces the diazonium group in a diazonium salt. (2008)
3. Give the IUPAC name of $\text{H}_2\text{N}-\text{CH}_2-\text{CH}_2\text{CH}=\text{CH}_2$ (2010)
4. Why is an alkylamine more basic than ammonia? (2011)

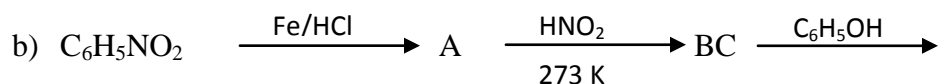
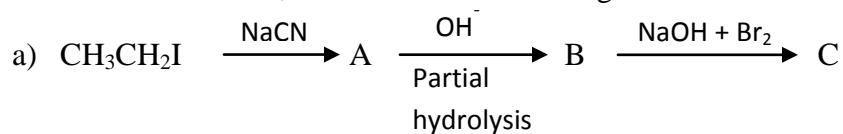
TWO MARK QUESTIONS

1. Effect the following conversions:
 - a) Aniline to p-nitro aniline
 - b) Benzyl bromide to 2-Phenyl ethanamine
 - c) Acetaldehyde to ethyl amine
 - d) Nitro Benzene to Benzene
 - e) Methyl cyanide to acetone
2. Account for the following:
 - a) Diazonium salts of aromatic amines are more stable than those of aliphatic amines.
 - b) Amines are more basic than alcohols of comparable molecular masses.(2011)

THREE MARK QUESTIONS

1. Illustrate the following reactions giving a chemical equation in each case:
 - a) Carbylamine reaction
 - b) Coupling reaction
 - c) Gabriel-Phthalimide synthesis (2011)

2. Give the structures of A, B and C in the following reactions:



FIVE MARK QUESTIONS

1. Effect the following conversions:

- Aniline to p-nitro aniline
- Benzyl bromide to 2-Phenyl ethanamine
- Acetaldehyde to ethyl amine
- Nitro Benzene to Benzene
- Methyl cyanide to acetone

VALUE BASED QUESTION

- Mrinal wanted to establish a chemical plant for the production of ethanamine. He is in favour of its production through ammonolysis of alkyl halides. But his friend suggested him to employ Gabriel phthalimide synthesis process.
 - Is the suggestion given by Mrinal's friend correct? What are the values shown by Mrinal's friend?
 - What do you mean by ammonolysis? Explain ammonolysis of alkyl halides.
 - Why Mrinal's friend suggested him to employ Gabriel phthalimide synthesis method?
