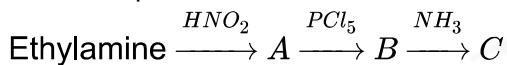


- A.** $Br_2/NaOH, NaOH$
- B.** $Br_2/NaOH, HNO_2$
- C.** $KMnO_4, KOH$
- D.** $HNO_2, Br/NaOH$

2. The end product in the reaction sequence would be:



- A.** Ethyl cyanide
- B.** Ethyl amine
- C.** Methyl amine
- D.** Acetamide

3. Acylation of amines with acyl halides proceeds by which of the following reaction?

- A.** electrophilic addition
- B.** electrophilic substitution
- C.** nucleophilic addition
- D.** nucleophilic substitution

4. The organic compound that undergoes carbylamine reaction is:

- A.** $(C_2H_5)_2NH$
- B.** $C_2H_5NH_2$
- C.** $(C_2H_5)_3N$
- D.** $(C_2H_5)_4N^+I^-$

5. Which of the following amines will form a product that is soluble in KOH, on reaction with Hinsberg's reagent?

- A.** Isopropylamine
- B.** Diethylamine
- C.** N,N-Dimethylpropylamine
- D.** N,N-Dimethylaniline