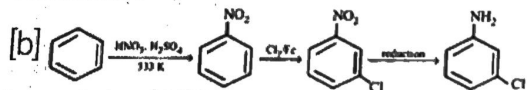


Which reaction sequence would be best to prepare 3-chloroaniline from benzene?

- A) Chlorination, nitration, reduction
- B) Nitration, chlorination, reduction
- C) Nitration, reduction, chlorination
- D) Nitration, reduction, acetylation, chlorination, hydrolysis

Correct Answer: B

Solution :



[a] When chlorination is done earlier than nitration, chlorobenzene formed at first step would introduce $-NO_2$ group in ortho-position, not in w-position. [b] Again if $-NO_2$ group is reduced earlier than the chlorination step, $-NH_2$ group formed on reduction will again introduce $-Cl$ in o-position.