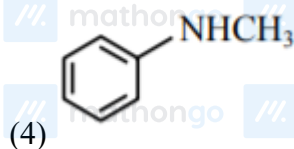
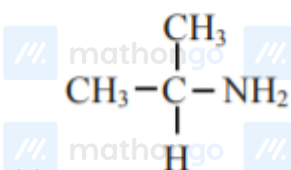
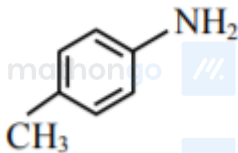
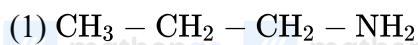


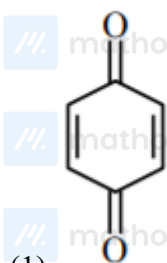
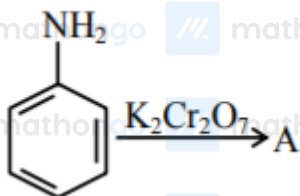
Q1 2021 (01 Sep Shift 2)

Which one of the following gives the most stable Diazonium salt ?



Q2 2021 (01 Sep Shift 2)

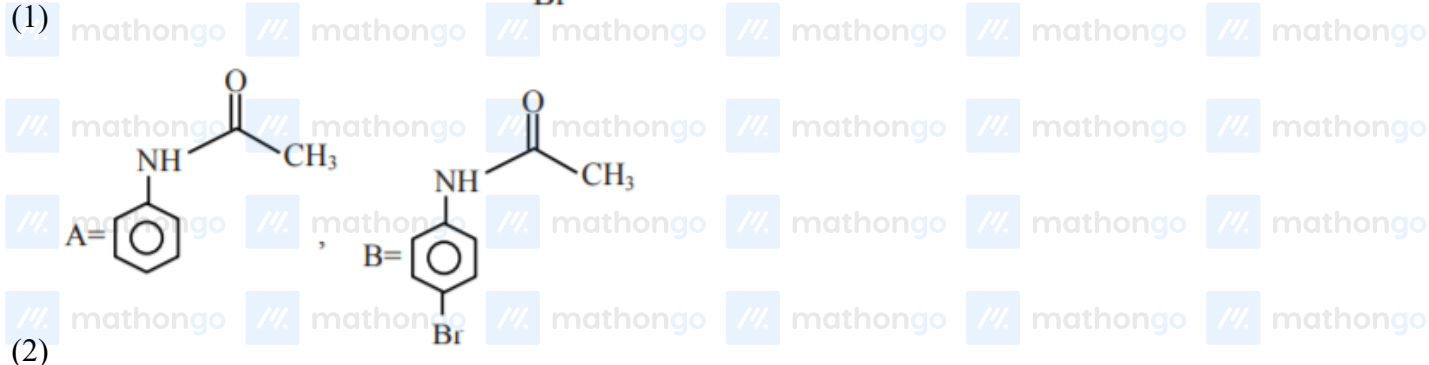
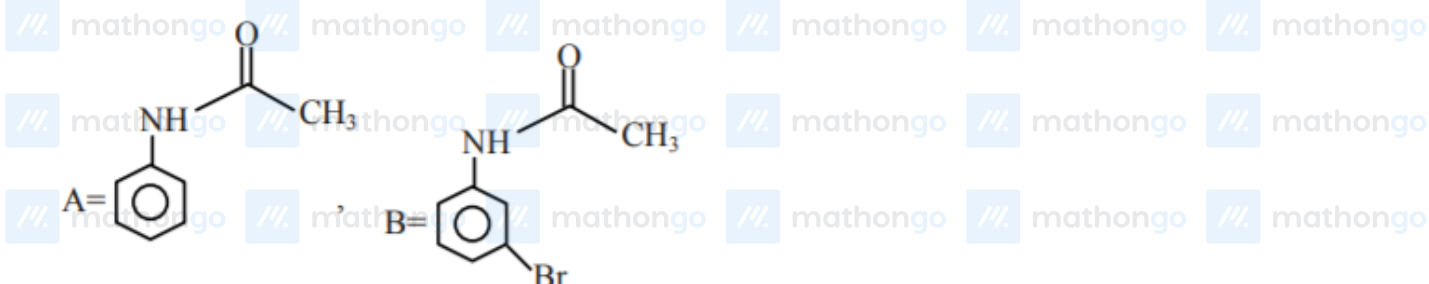
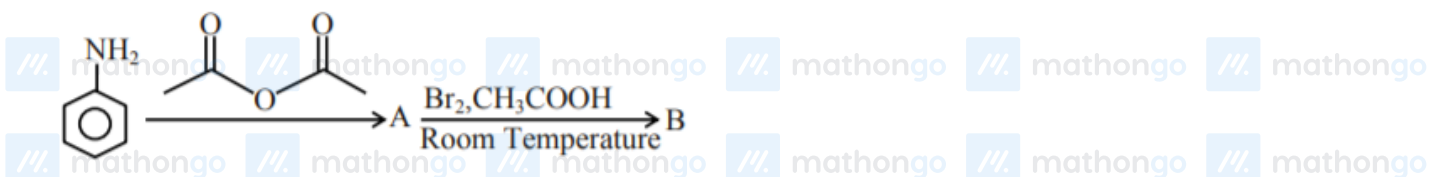
Identify A in the following reaction.

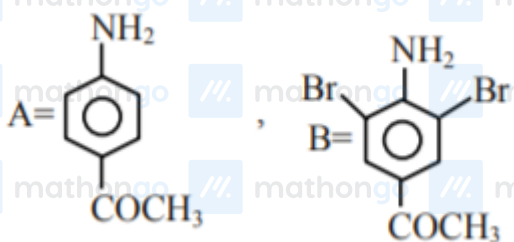
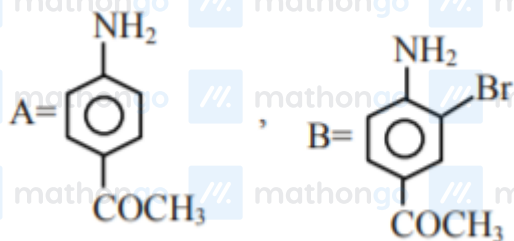




Q3 2021 (31 Aug Shift 2)

The major products A and B formed in the following reaction sequence are :





Q4 2021 (31 Aug Shift 1)

The total number of reagents from those given below, that can convert nitrobenzene into aniline is _____.

(Integer answer)

I. Sn – HCl

II. Sn – NH₄OH

III. Fe - HCl

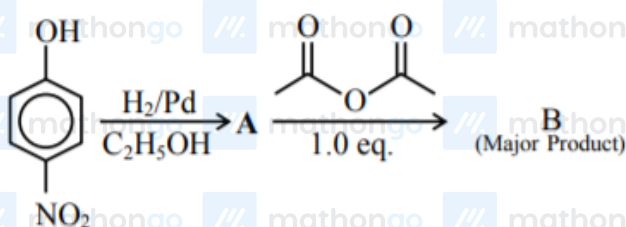
IV. Zn – HCl

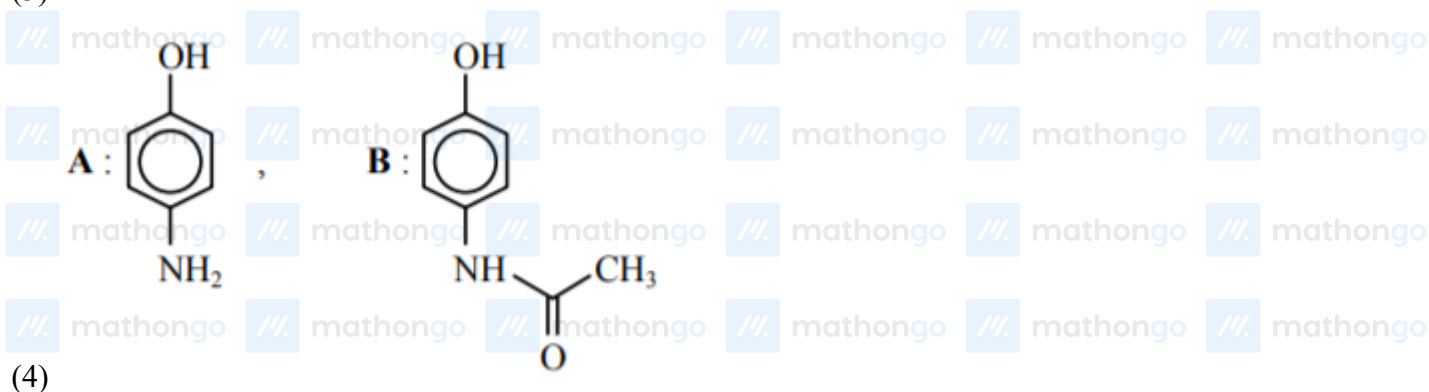
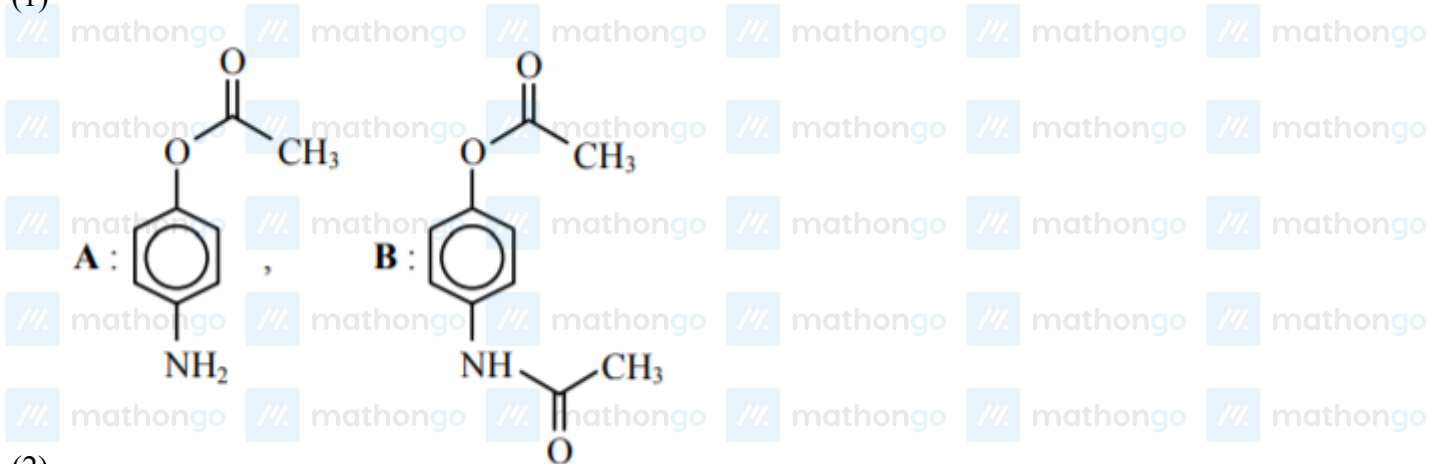
V. H₂ – Pd

VI. H₂ - Raney Nickel

Q5 2021 (27 Aug Shift 2)

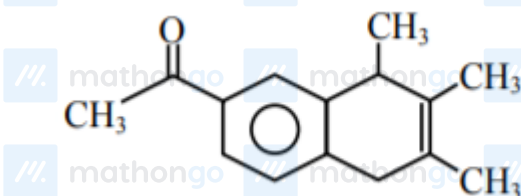
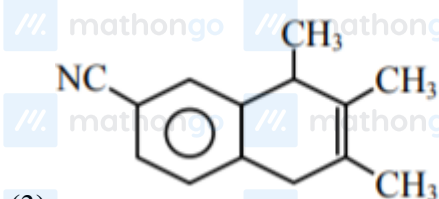
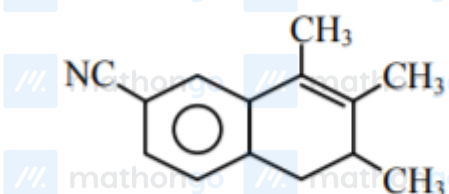
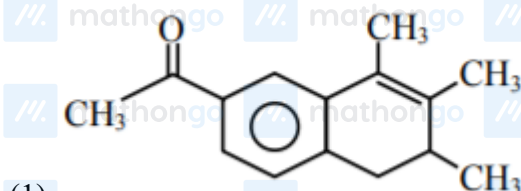
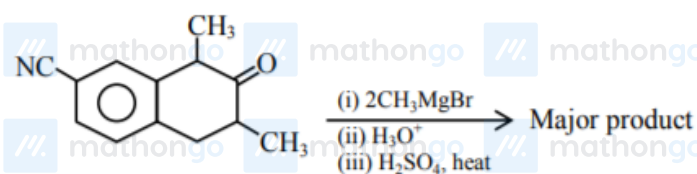
The correct structures of **A** and **B** formed in the following reactions are :





Q6 2021 (27 Aug Shift 2)

Which one of the following is the major product of the given reaction?

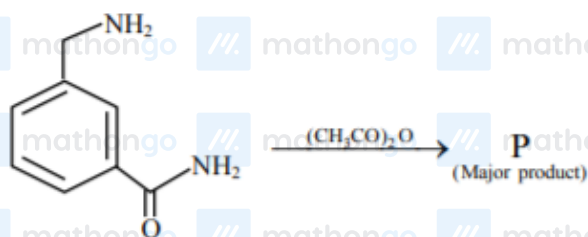


Q7 2021 (27 Aug Shift 1)

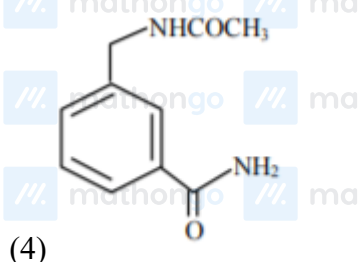
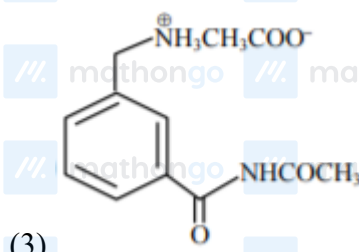
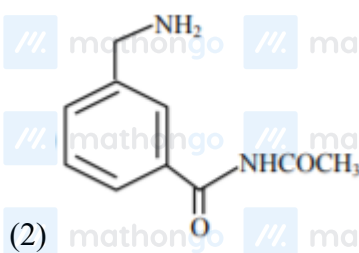
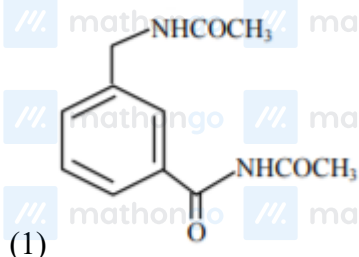
Which of the following is *not* a correct statement for primary aliphatic amines?

- (1) The intermolecular association in primary amines is less than the intermolecular association in secondary amines.
- (2) Primary amines on treating with nitrous acid solution form corresponding alcohols except methyl amine.
- (3) Primary amines are less basic than the secondary amines.
- (4) Primary amines can be prepared by the Gabriel phthalimide synthesis.

Q8 2021 (26 Aug Shift 2)



The major product in the above reaction is :



Answer Key

Q1 (2)

Q2 (1)

Q3 (2)

Q4 (5)

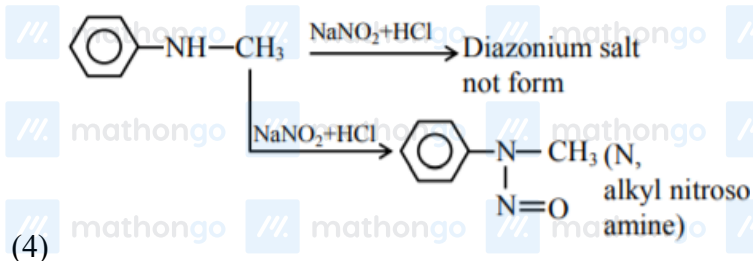
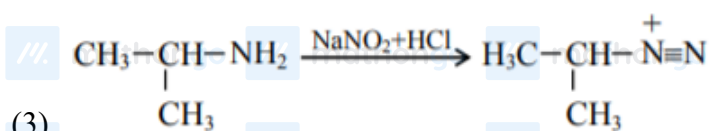
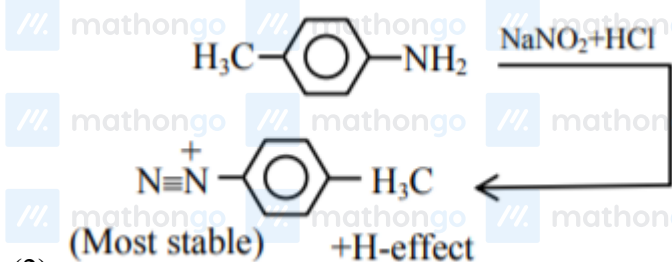
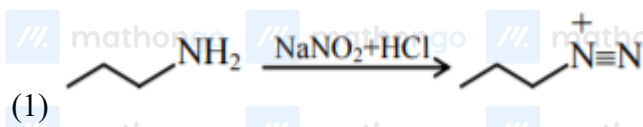
Q5 (4)

Q6 (1)

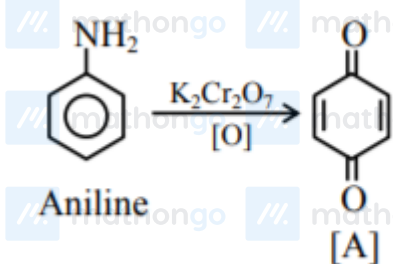
Q7 (1)

Q8 (4)

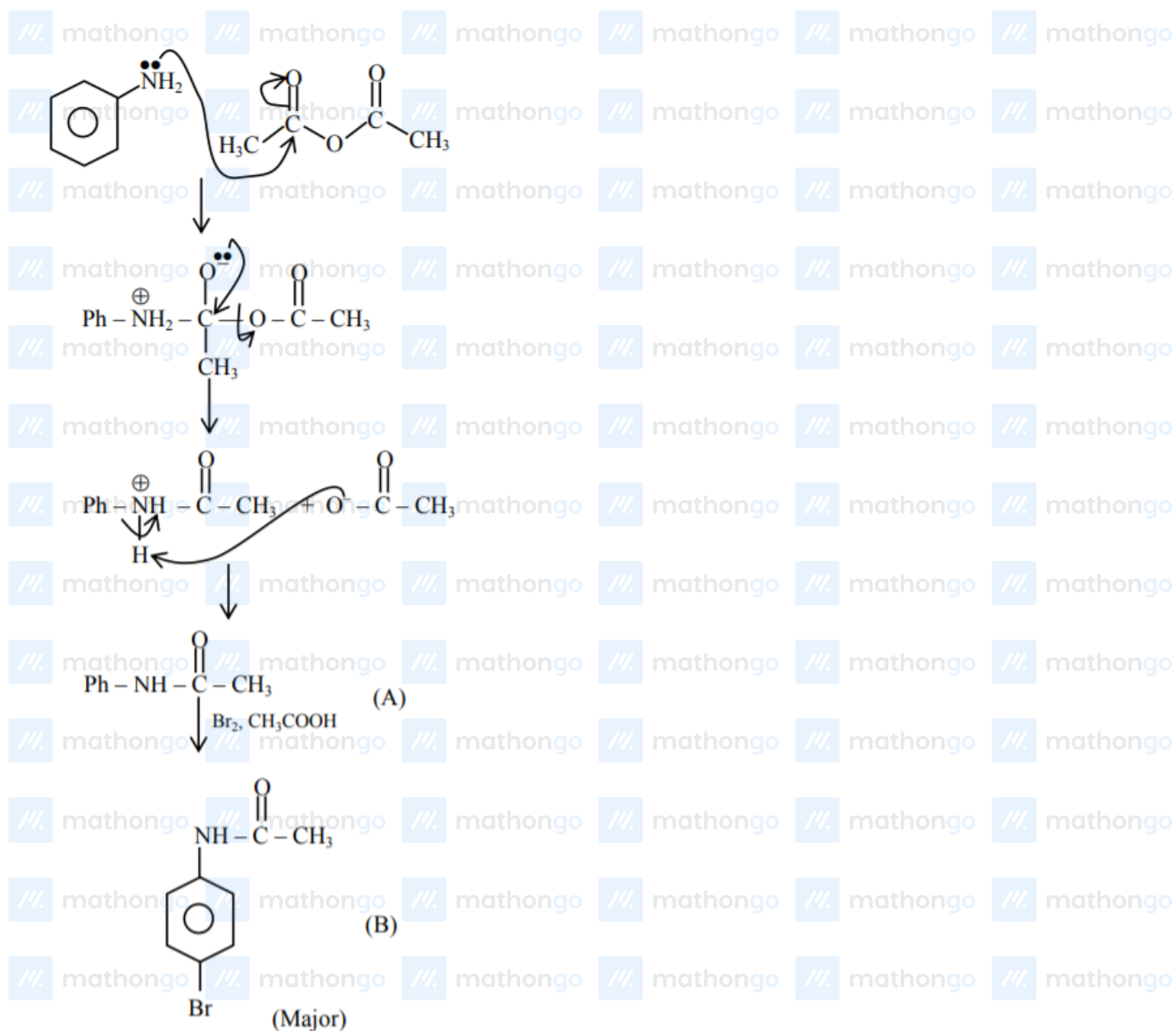
Q1 (2)



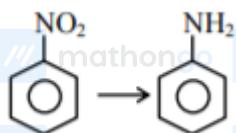
Q2 (1)



Q3 (2)

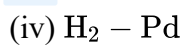
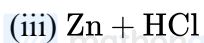


Q4 (5)

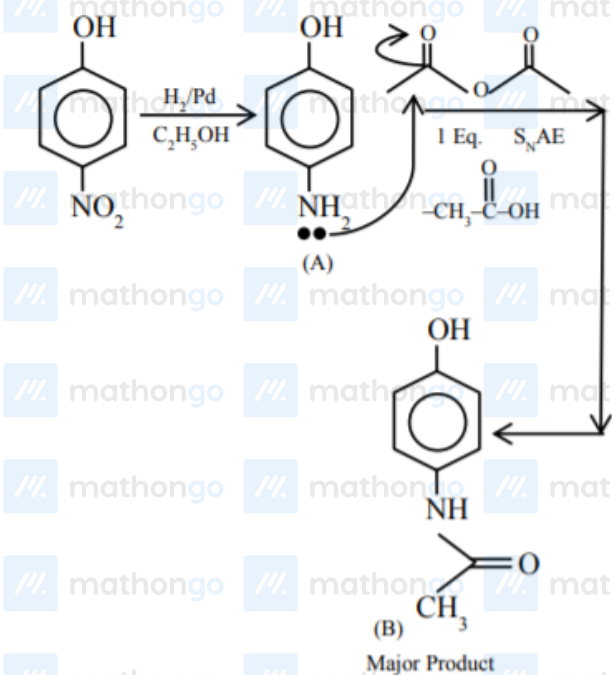


Reagents used can be

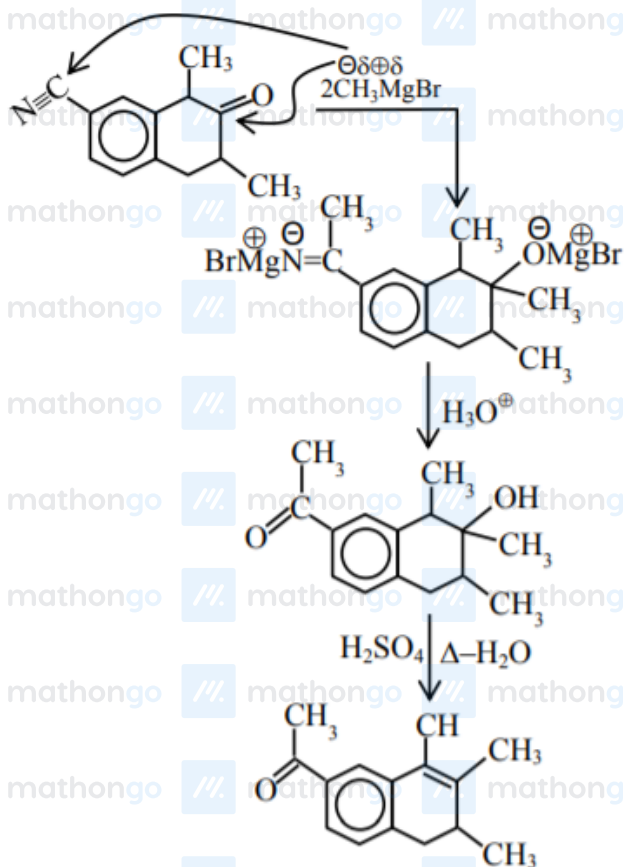
(i) $\text{Sn} + \text{HCl}$



Q5 (4)



Q6 (1)



Q7 (1)

The intermolecular association is more prominent in case of primary amines as compared to secondary, due to the availability of two hydrogen atom.

Q8 (4)

