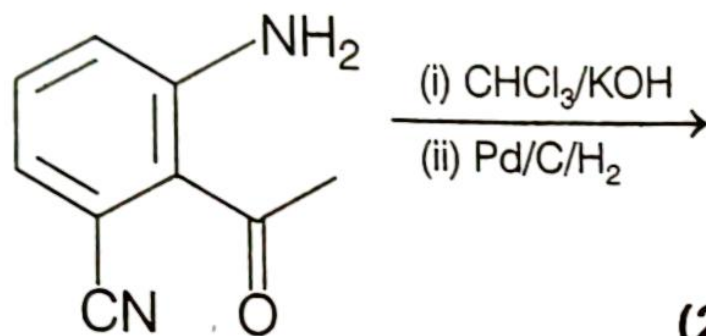
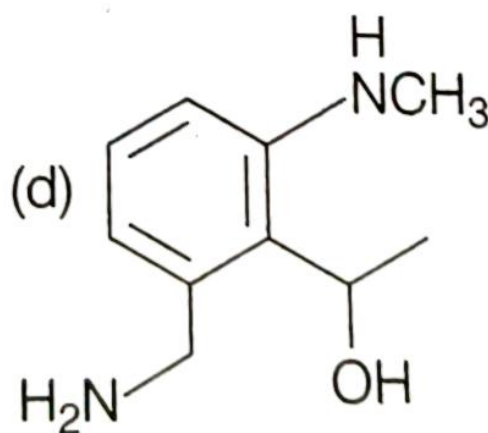
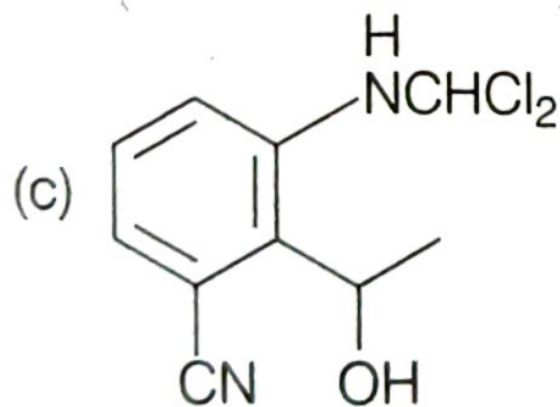
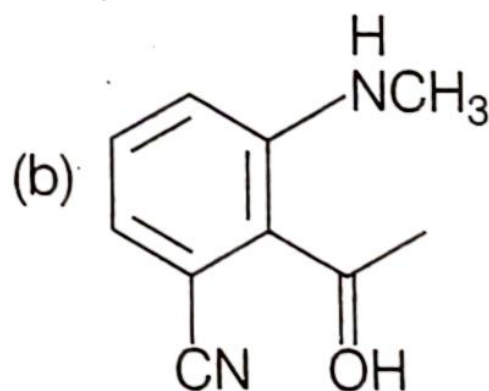
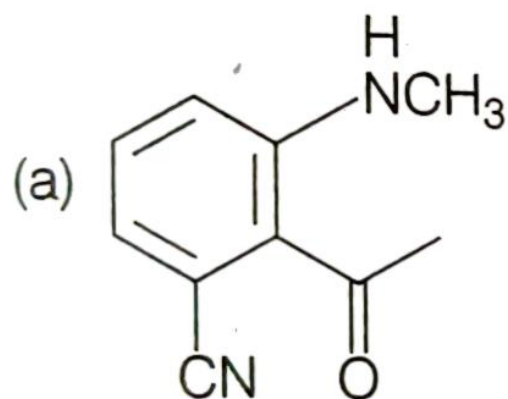


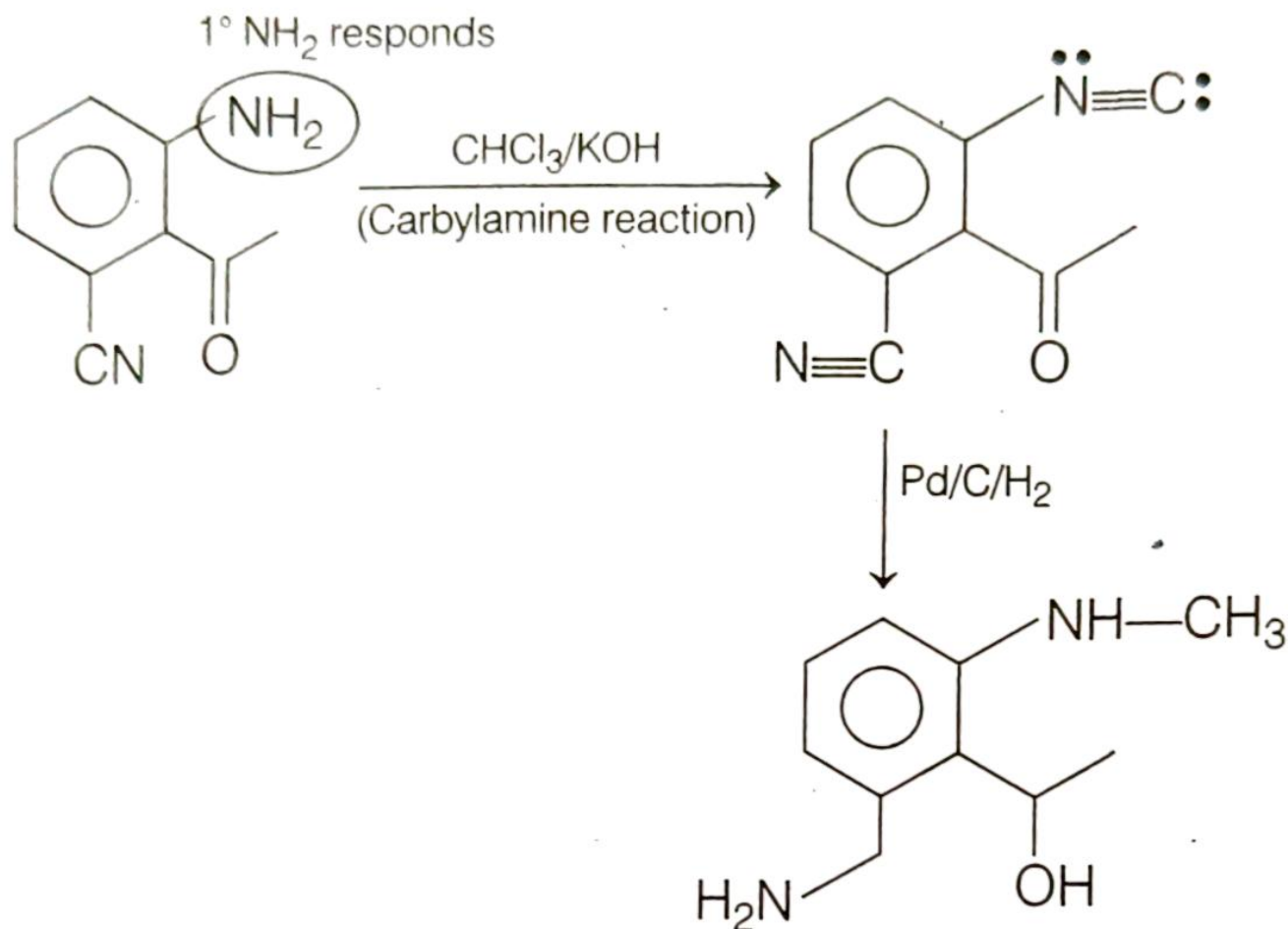
5. The major product obtained in the following reaction is



(2019 Main, 8 April II)



5.



In step (i), 1° amine is converted into isocyanide, when reacts with CHCl₃ / KOH. This reaction is known as carbylamine reaction. This reaction is used to detect primary amine in a compound.

In step (ii), isocyanide is reduced to secondary amine and cyanide is reduced to primary amine, and carbonyl group to alcoholic group when treated with Pd/C/H₂.