

1. Given below are two statements →

(Mains-2021, July 27th,
shift 1)

Statement I: Aniline is less basic than acetamide.

Statement II: In aniline, the lone pair of electrons on nitrogen atom is delocalized over benzene ring due to resonance and hence less available to a proton.

Choose the correct option.

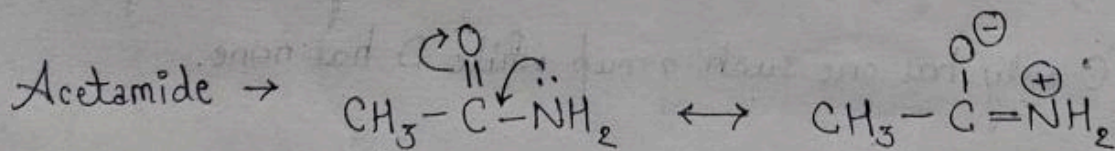
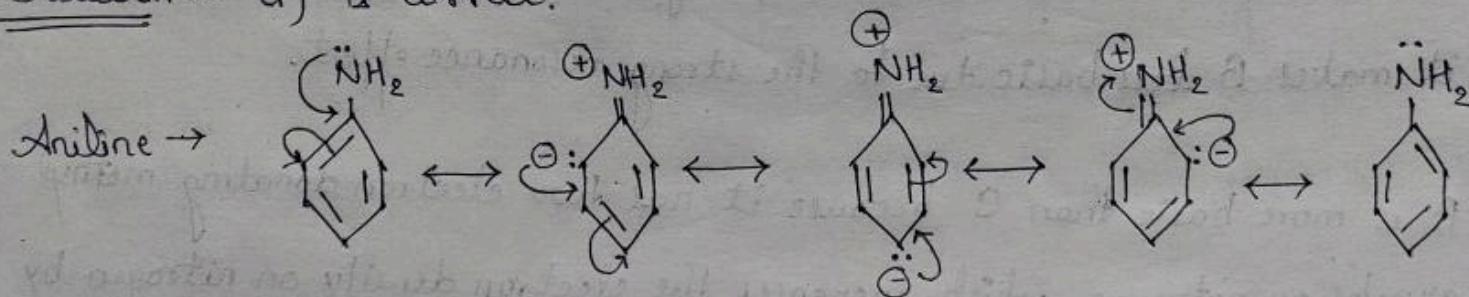
a) Statement I is true but statement II is false.

b) Both statement I and II are true.

c) Both statement I and II are false.

d) Statement I is false but statement II is true.

Solution → d) is correct.



Even though aniline has more resonating structures and should be more stable and less basic, oxygen is more electronegative and a much better withdrawing group than the phenyl group.