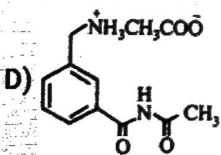
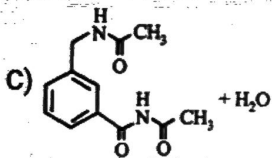
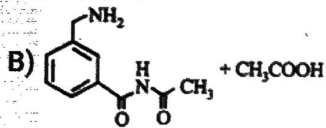
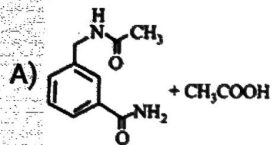
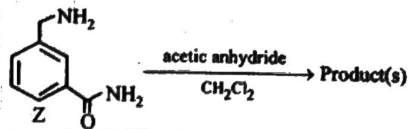


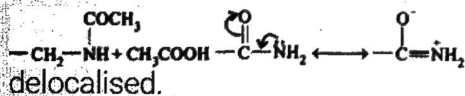
In the reaction shown below, the major product(s) formed is/are



Correct Answer: A

Solution :

[a] $-\overset{\cdot\cdot}{\text{N}}\text{H}_2$ group is acetylated by acetic anhydride in methylene chloride (solvent). $-\text{CH}_2-\ddot{\text{N}}\text{H}_2 + (\text{CH}_3\text{CO})_2\text{O} \xrightarrow{\text{CH}_2\text{Cl}_2}$



Note that $-\text{CONH}_2$ group does not undergo acetylation because here lone pair of electrons is delocalised.