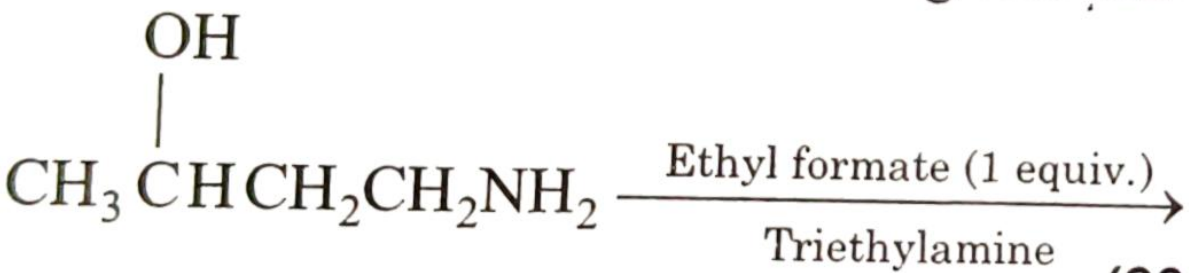
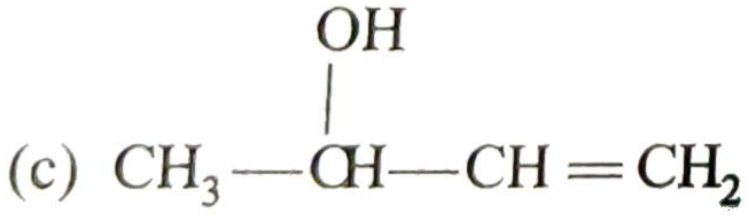
1. The major product of the following reaction is

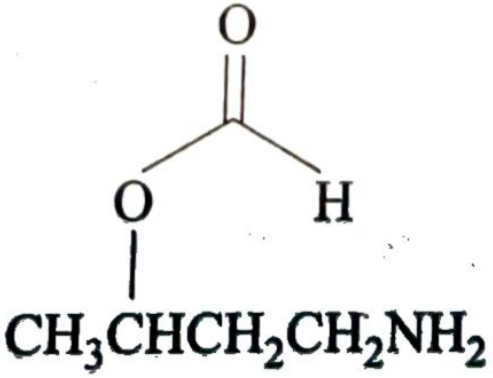


(2019 Main, 10 April I)

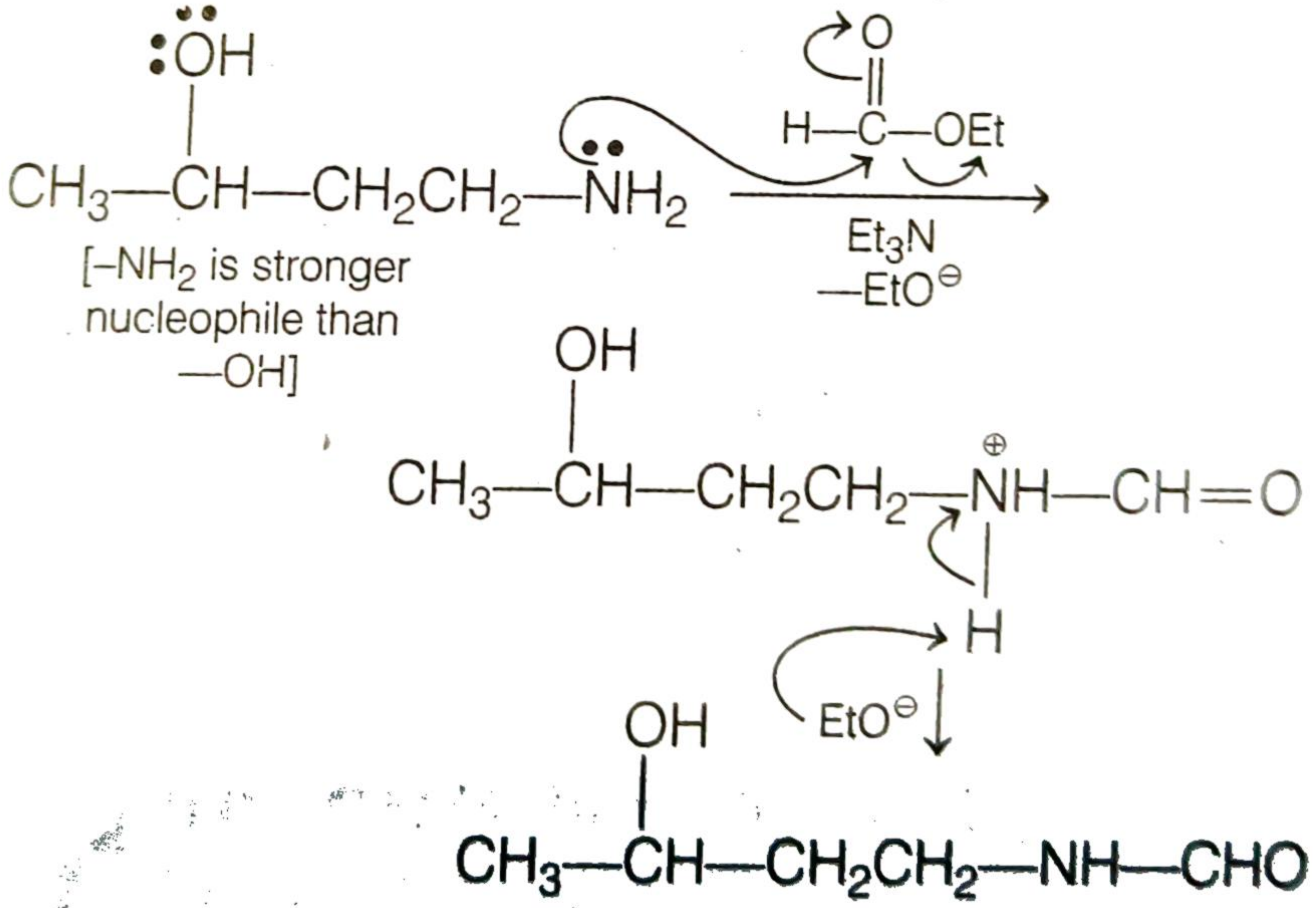
(a) 

(b)

(c) 

(d) 

1. The mechanism of the given reaction is as follows:



The basic **mechanism of the reaction is acyl S_N2 because the** nucleophile, **$CH_3(OH)CH_2CH_2\ NH_2$ attacks the sp^2 carbon of** the ester **(H —CO_2Et) and gets substituted.**