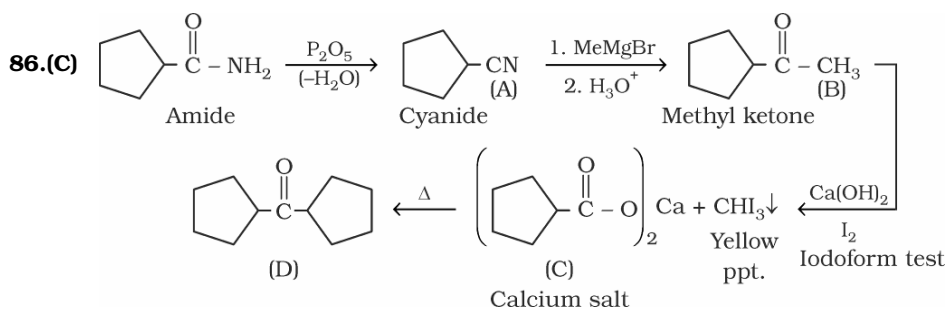
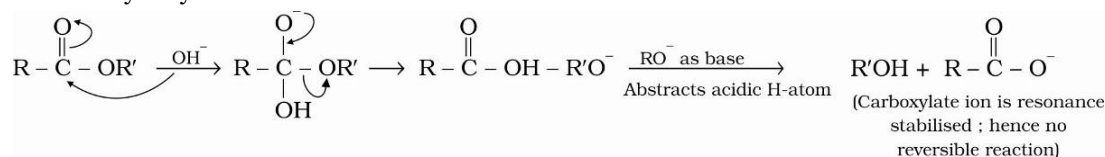


Daily Tutorial Sheet-7

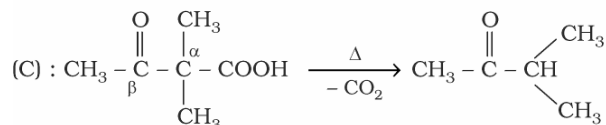
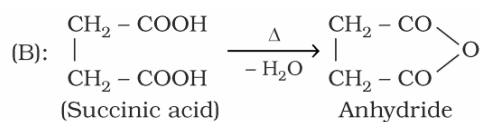
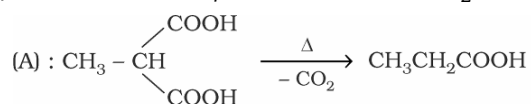
Level-2



87.(B) Alkaline hydrolysis of ester is not reversible.

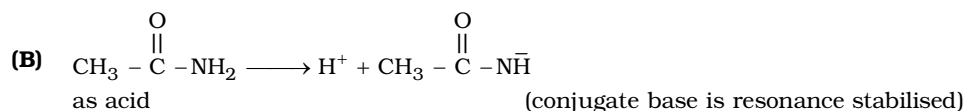
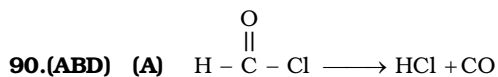


88.(AC) Malonic acid and β -Keto acids lose CO_2 on heating.

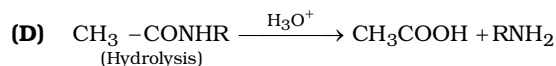
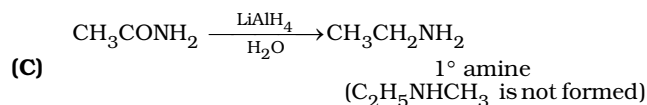


(D) : Hydroxy acids do not lose CO_2 on heating (α , β or γ)

89.(ABCD) All options are methods for preparation of ester.

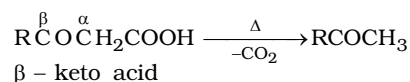
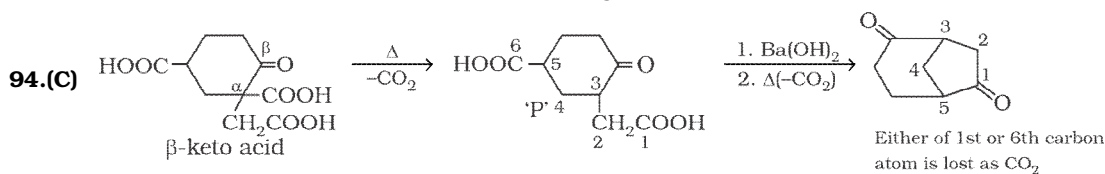
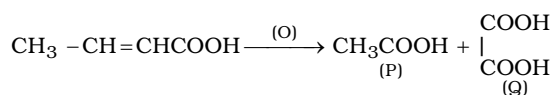
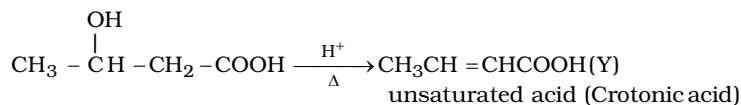
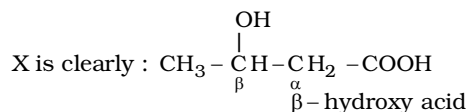
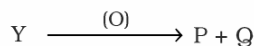
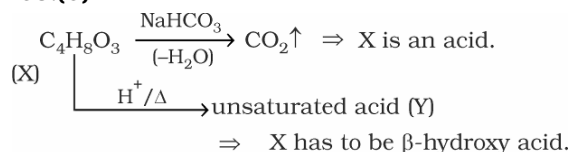


$CH_2-C(=O)-NH_2$ is basic due to ℓp over 'N' but a weak base due to ℓp being involved in resonance.

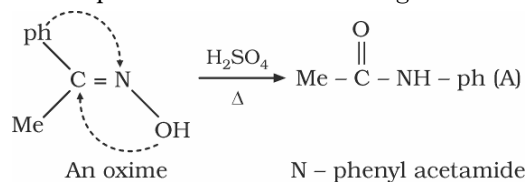


91.(D) Alkaline hydrolysis involves attack of OH^- ion at $-C(=O)-OR$; which depends upon polarity of $>C=O$ bond. A deactivating group will increase this polarity via $-I$ or $-M$ (R) effect. NO_2^- group at 'p' position will increase the polarity $>C=O$ bond to maximum extent hence p-nitro benzoate will be most easily hydrolysed.

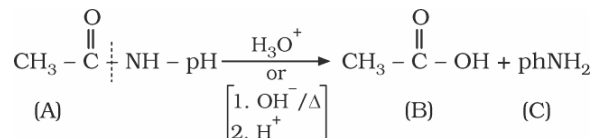
92.(C) 93.(C)



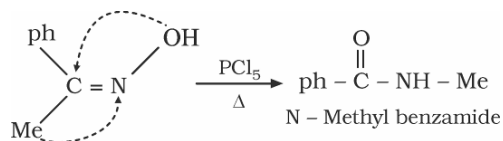
95(B) This is an example of "Beckmann's rearrangement".



This rearrangement can also be brought by using PCl_5 instead of H_2SO_4 . The working rule for this rearrangement is "group anti to $-\text{OH}$ first migrates to N-atom and then O atom adds to carbon forming amides".



Note : The given oxime has another geometric isomer (given below) which also shows Beckmann's rearrangement as follows.



Note : Observe that amide formed here is the metamer of amide formed above.