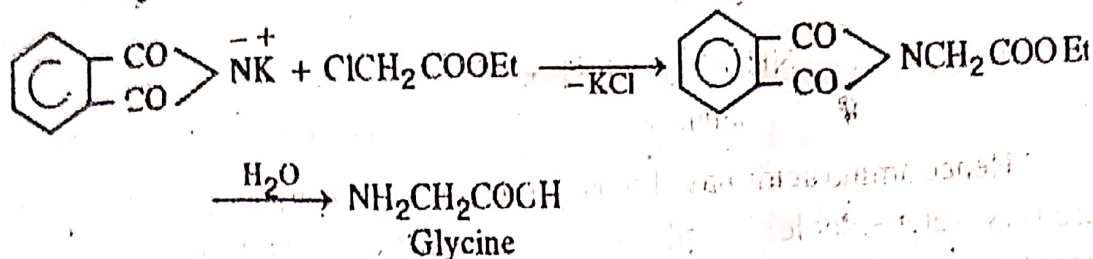
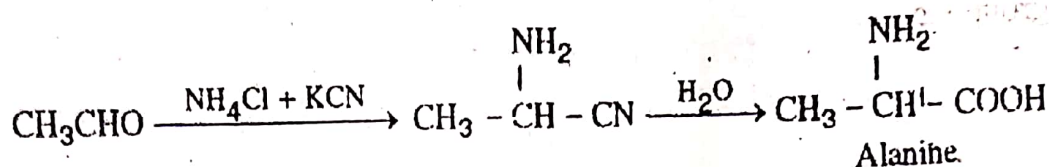


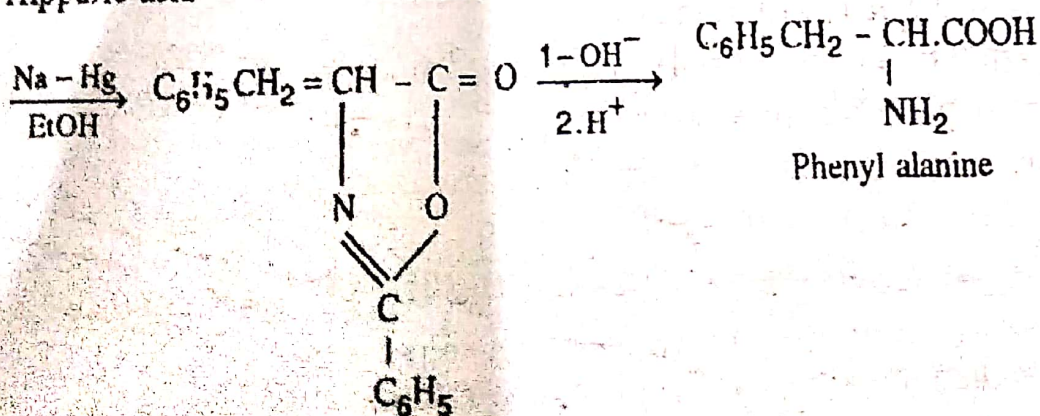
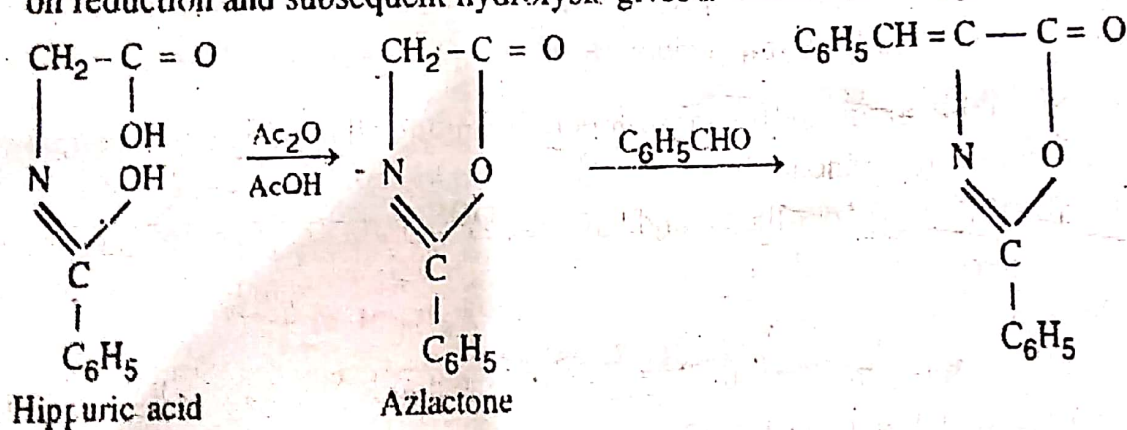
2. By Gabriel's phthalimide reaction :



3. By Strecker's synthesis : A cyanohydrin of an aldehyde is prepared by the action of NH_4Cl and KCN , upon hydrolysis, gives α -amino acids e.g.

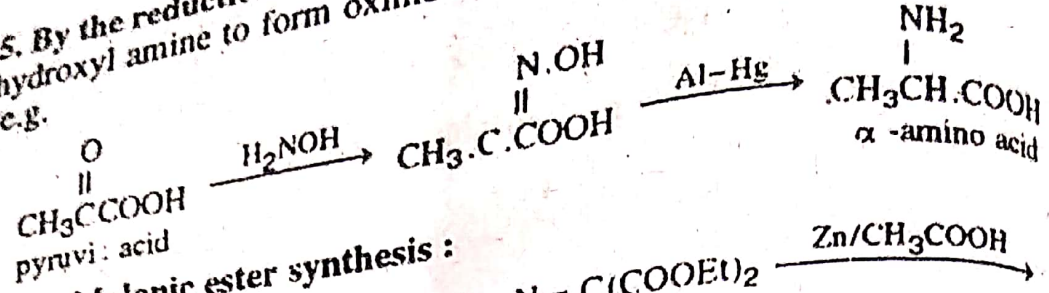


4. By Erlenmyer Azlactone synthesis : When hippuric acid (benzoyl. glycine) is heated with acetic anhydride in presence of sodium acetate, azlactone is formed. It condenses with an aldehyde to form a product which on reduction and subsequent hydrolysis gives α -amino acids e.g.

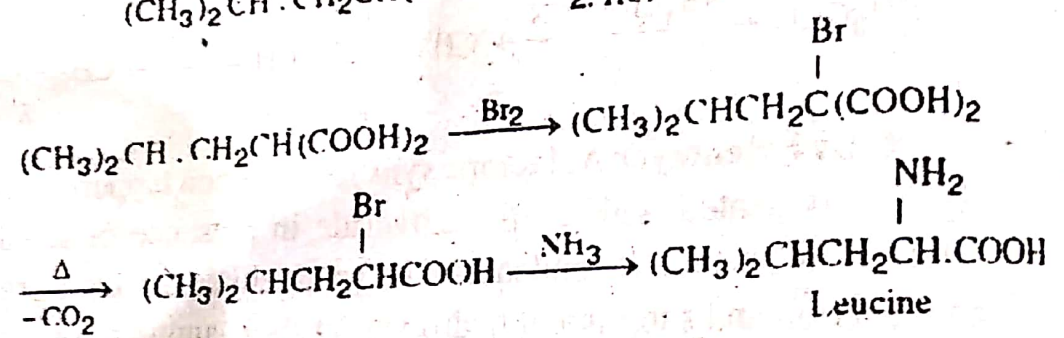
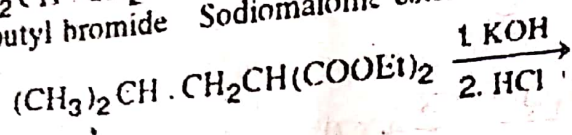
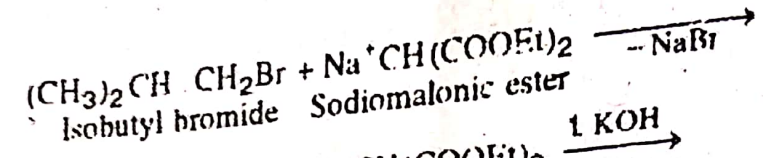
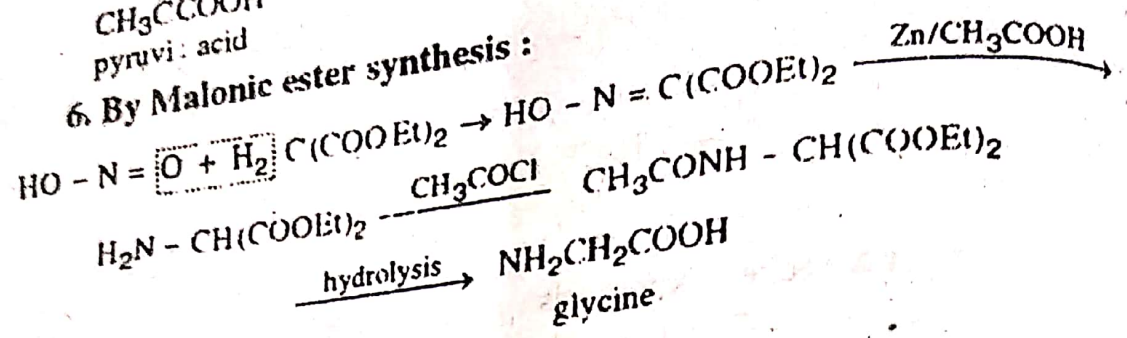


(6)

5. By the reduction of oximes : The aldo or keto acid is firstly treated with hydroxyl amine to form oxime which upon reduction gives α -amino acids e.g.



6. By Malonic ester synthesis :



7. Sorensen synthesis : This is simply the combination of phthalimide and malonic ester synthesis.

