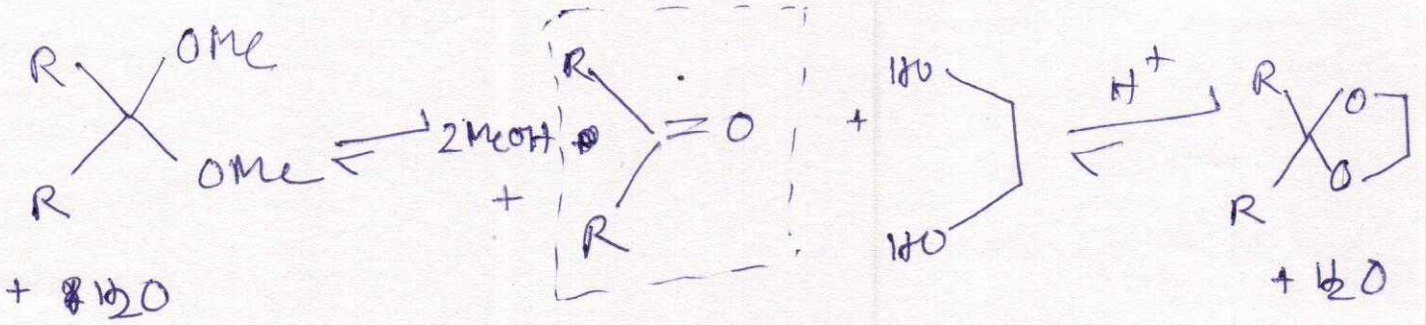
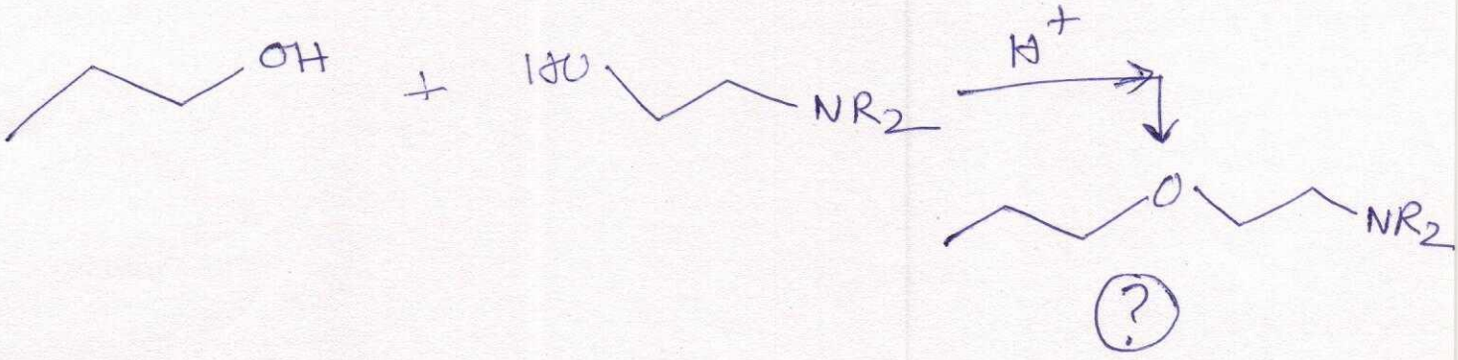
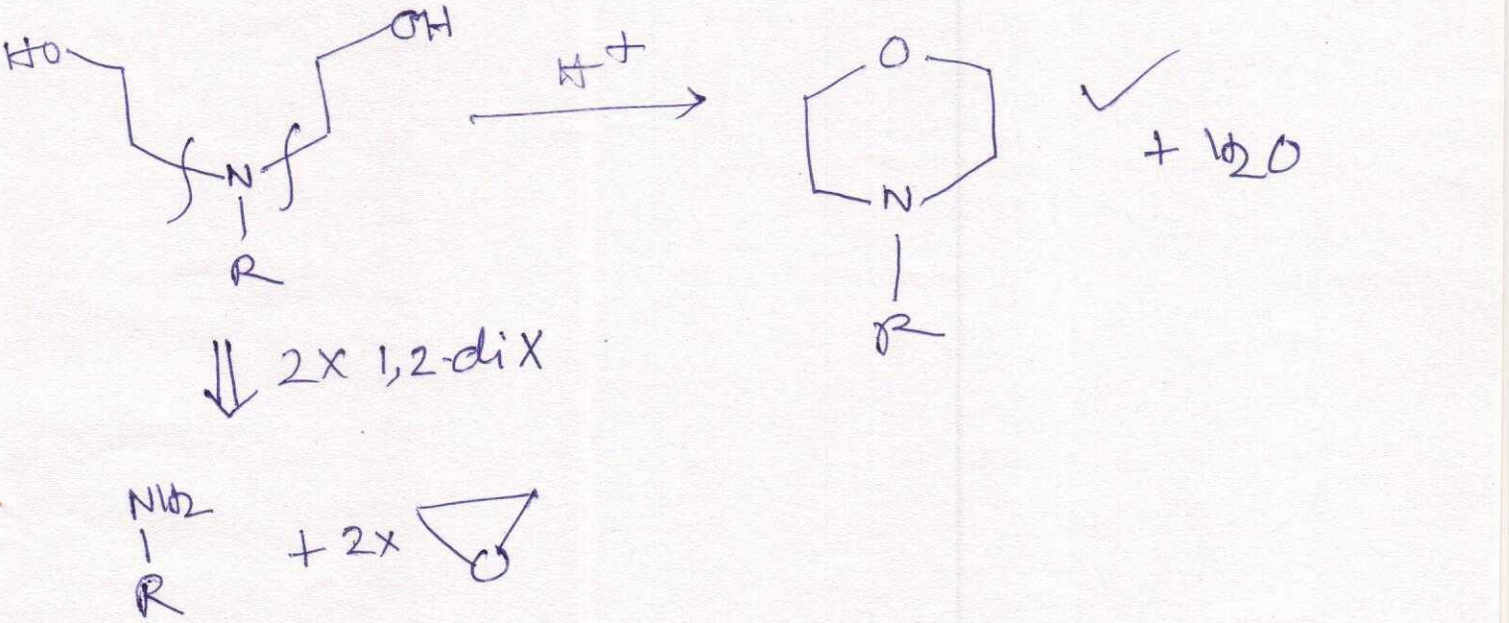
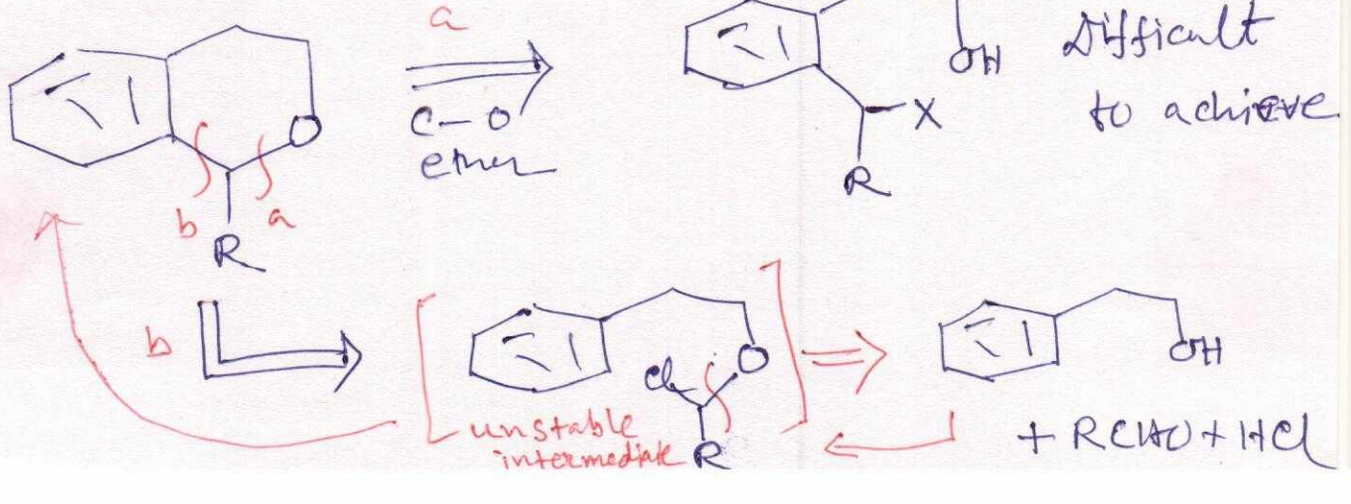
Cyclization Reactions:

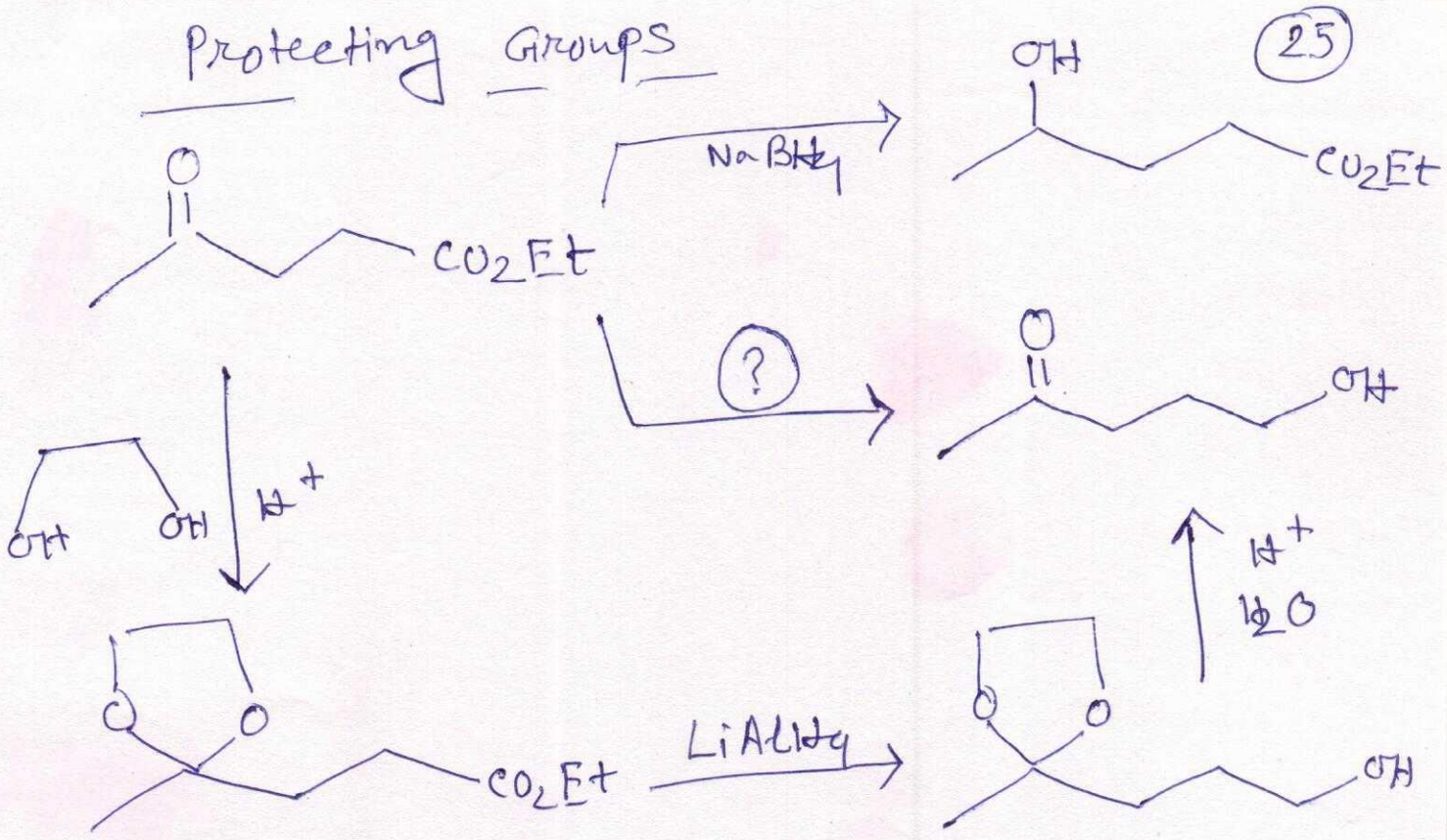








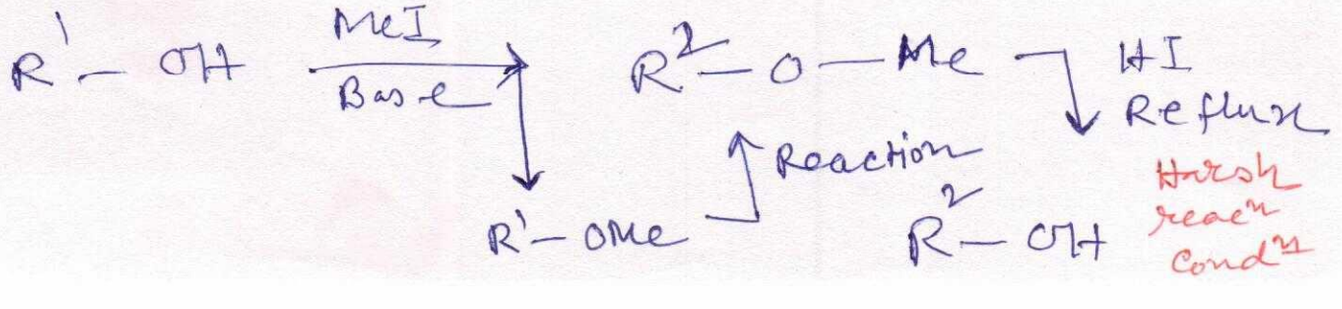
Protecting Groups

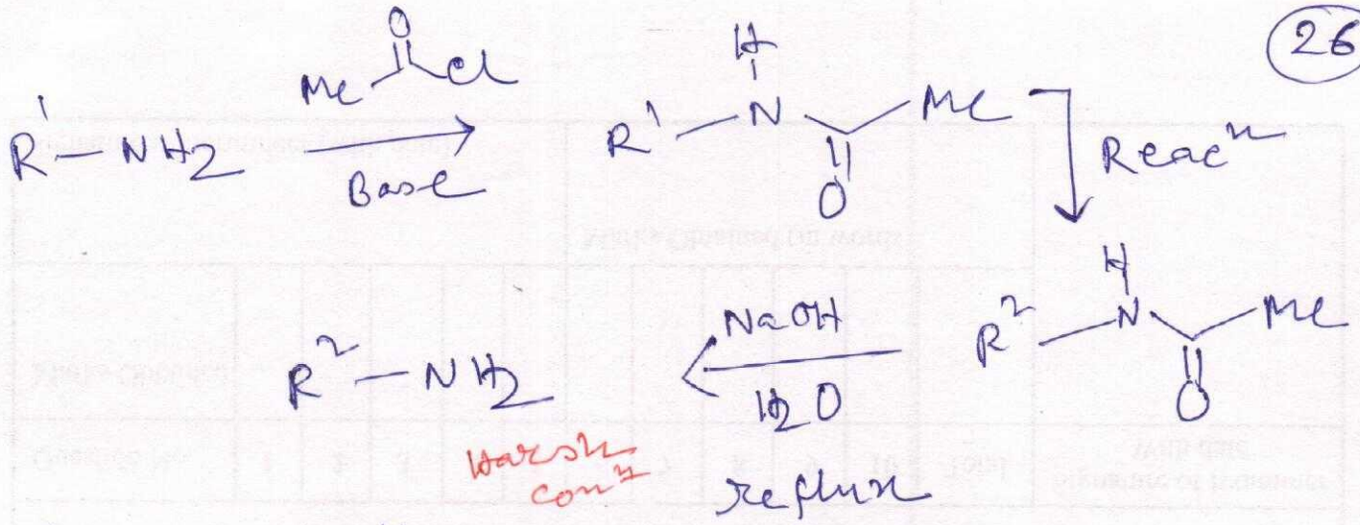


Protecting Group: Properties:

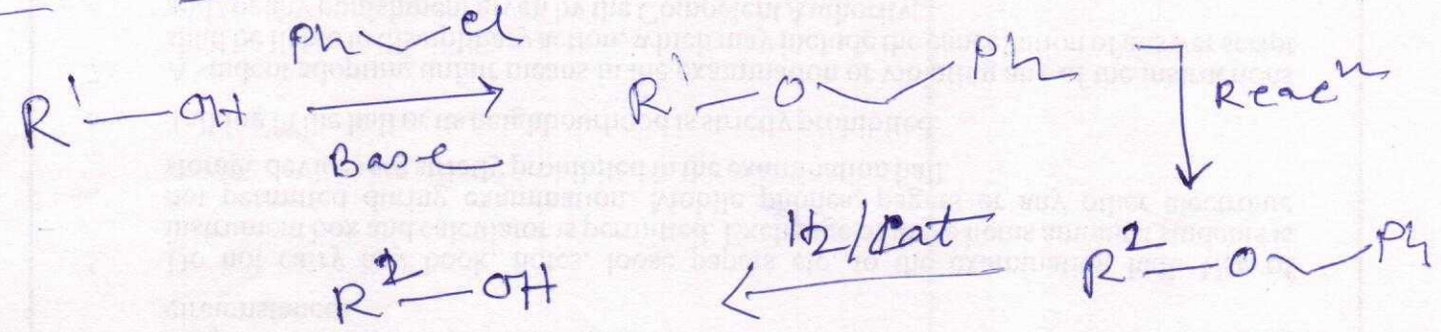
1) It must be easy to put in.
2) It must be resistant to reagents that would react with the unprotected func. groups.
3) It must be easily removed.

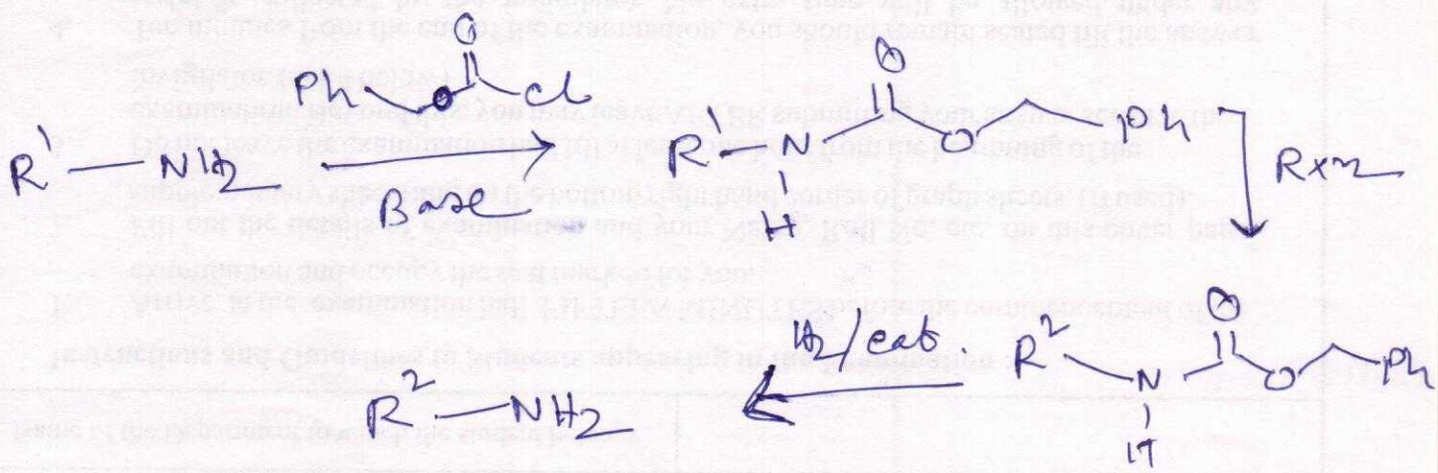
Ethers & amides as protecting group:



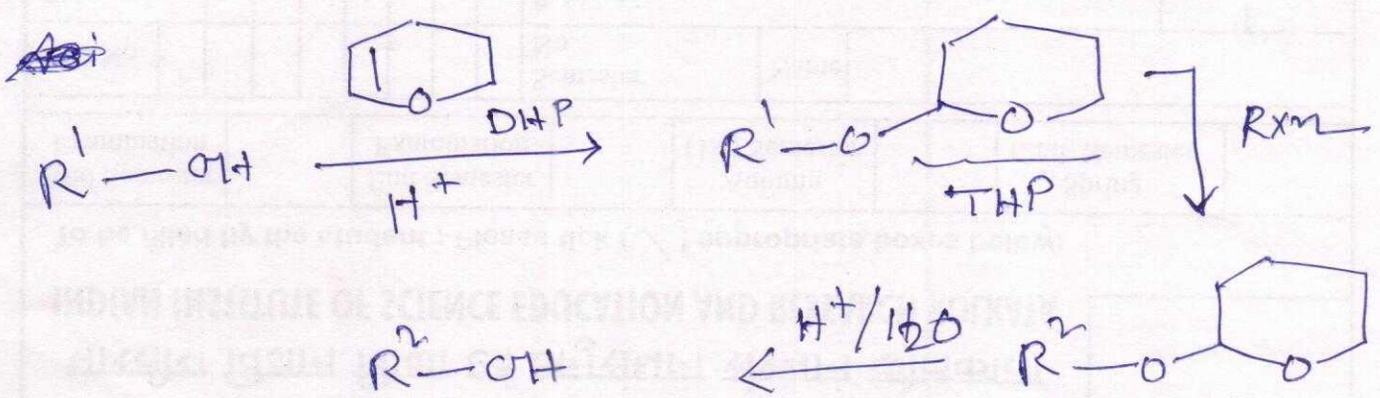


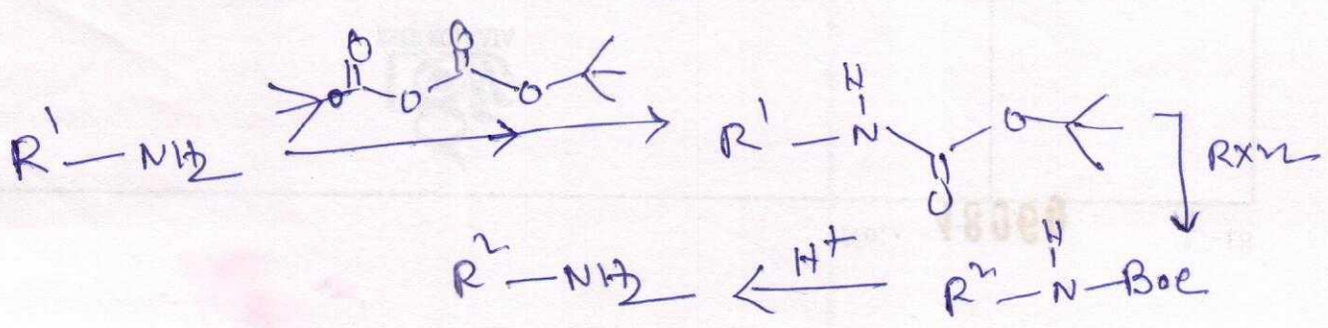
Better Strategy :

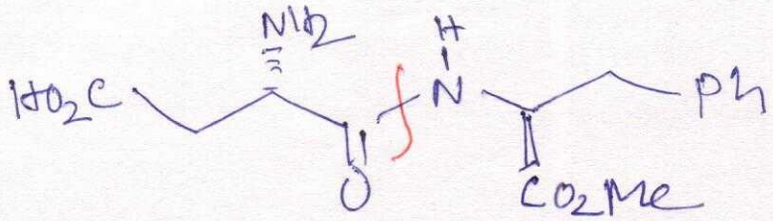




~~Aldi~~

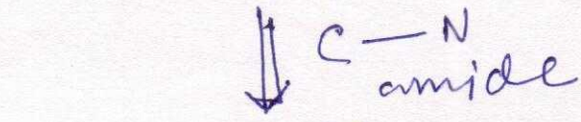




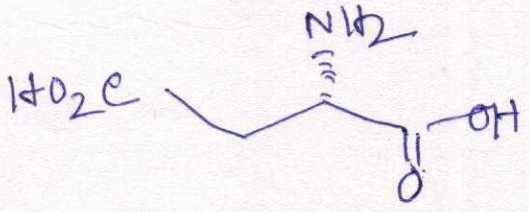


150 times sweeter than sugar

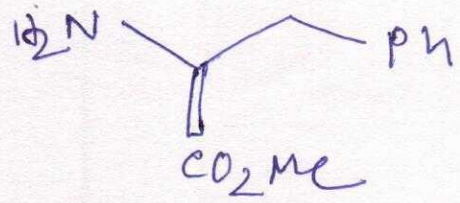
Aspartame (Nutrasweet)



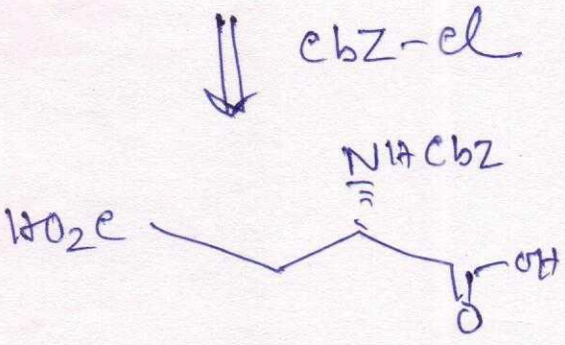
C—N amide

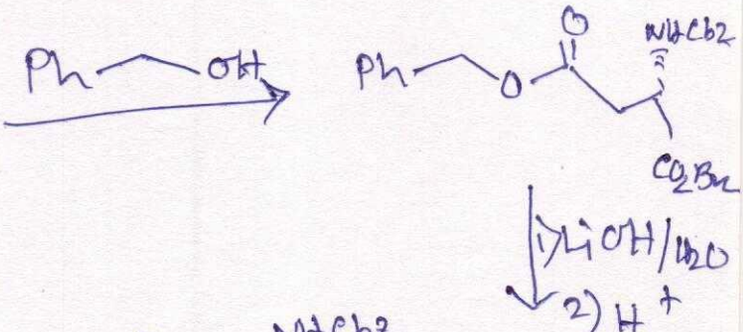


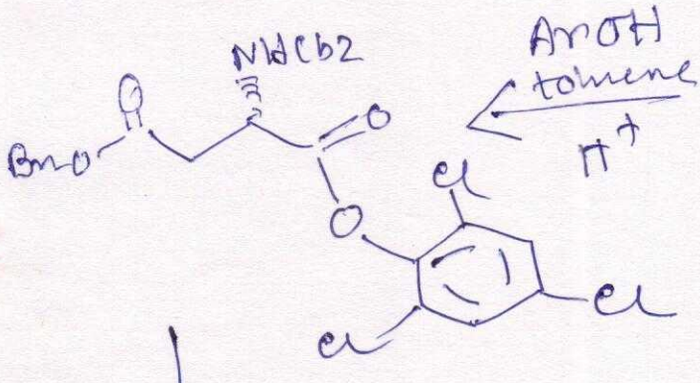
Aspartic acid

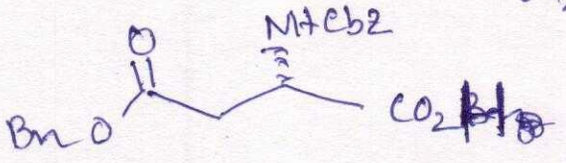


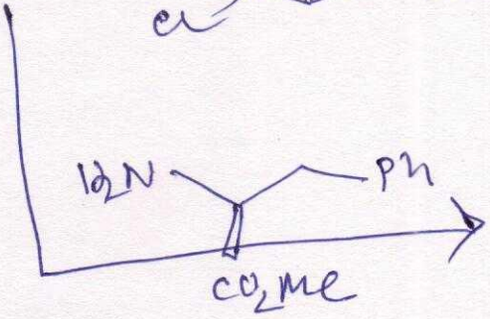
phenyl alanine methyl ester

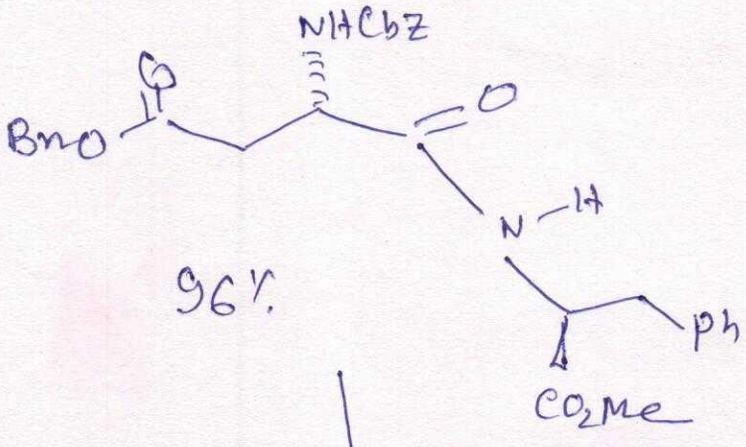


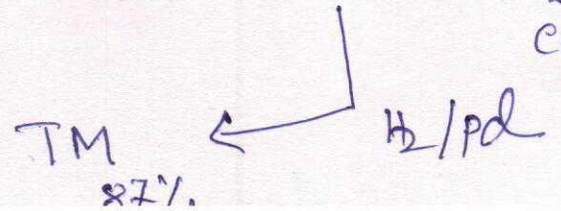


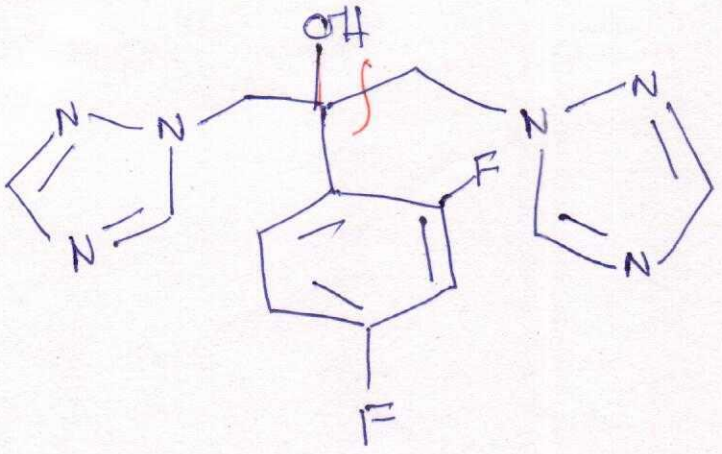






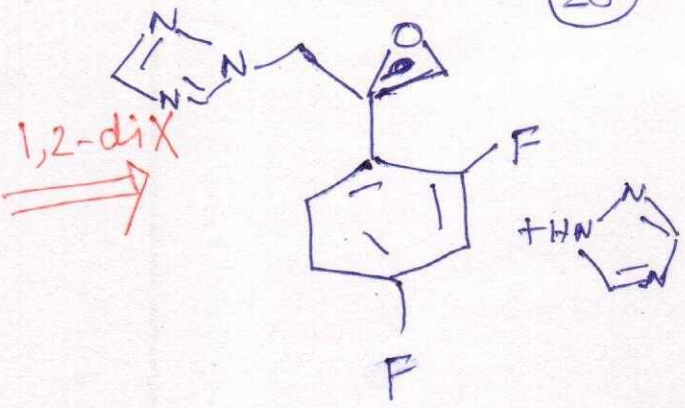






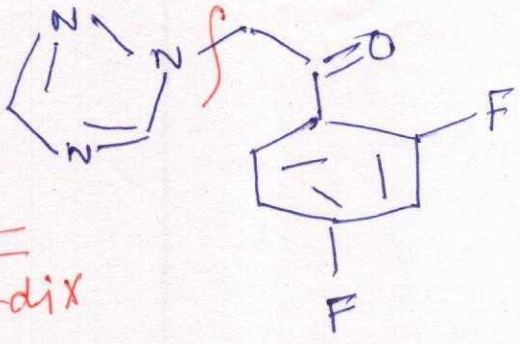
Fluconazole

(Anti-fungal)

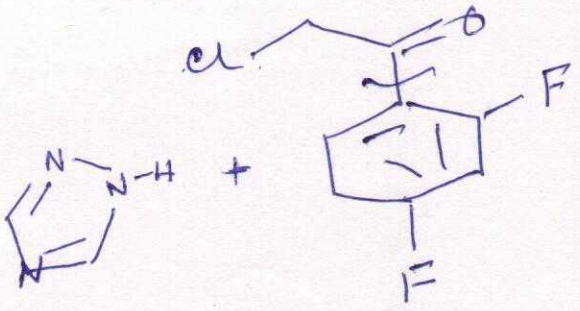


1,2-dix

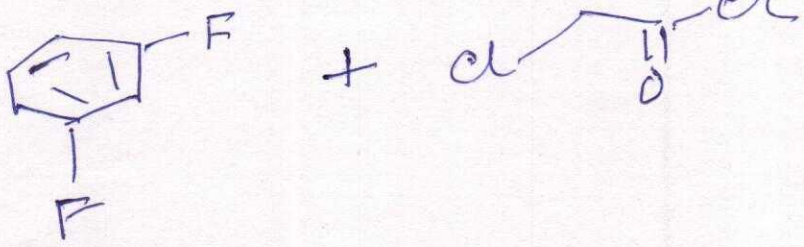
Sulfur ylid

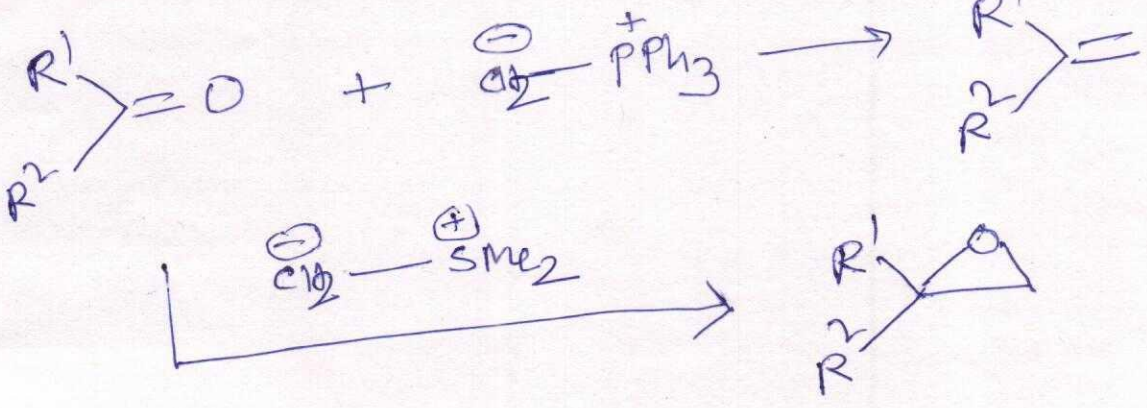


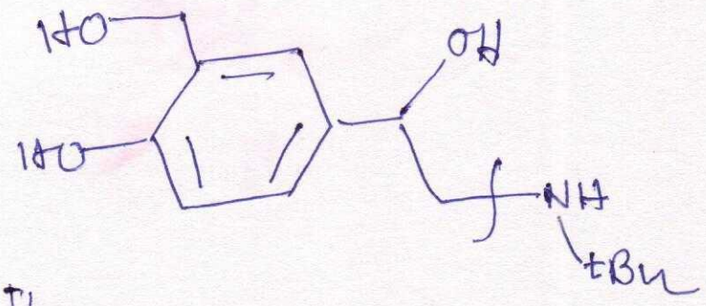
1,2-dix



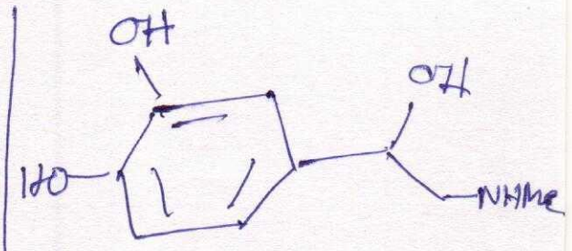
c–c FC acylation





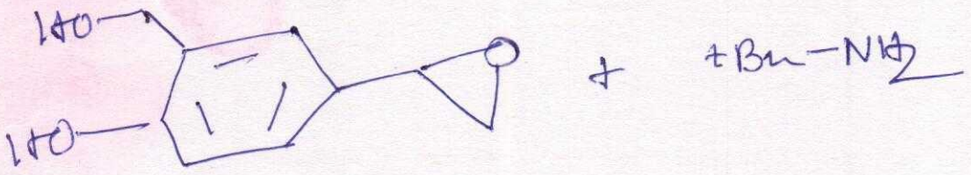


Salbutamol
(Anti-asthma drug)

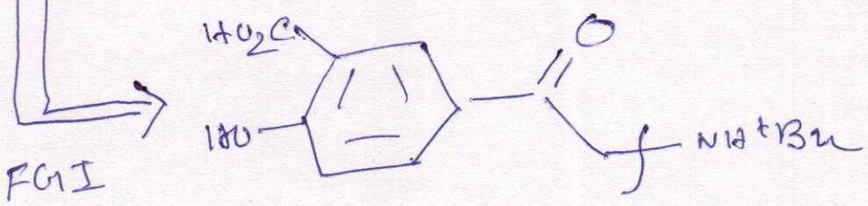


Adrenaline

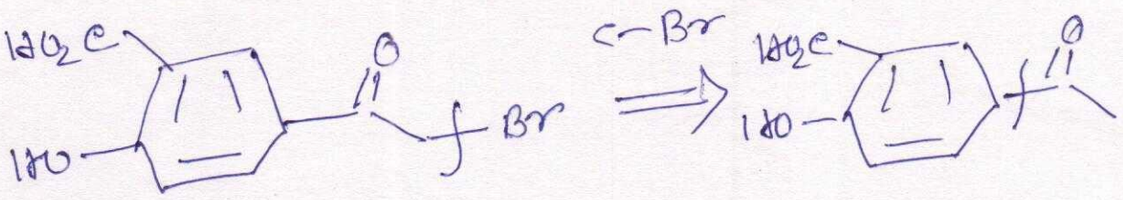
⇓ C–N
1,2-diX



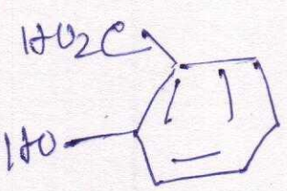
FGI



⇓ 1,2-diX



⇓ C–C
FC acyl^n



Forward Synthesis :