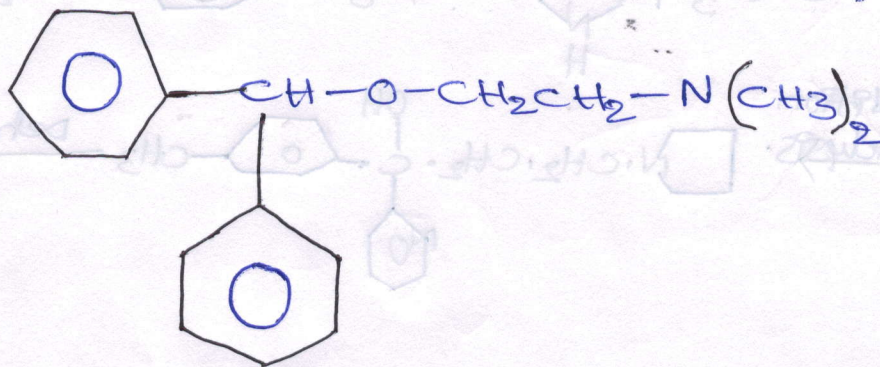


Anti-Histaminic

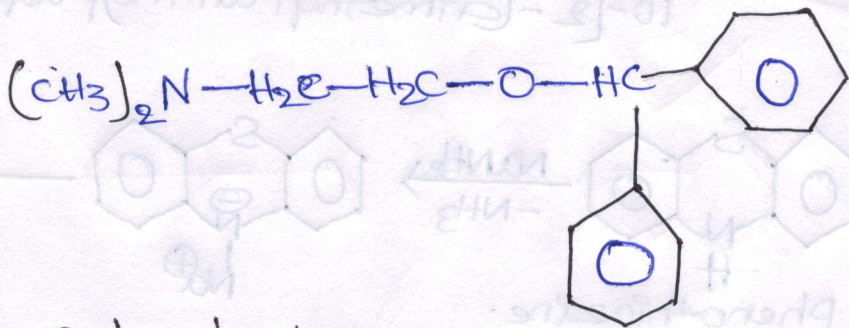
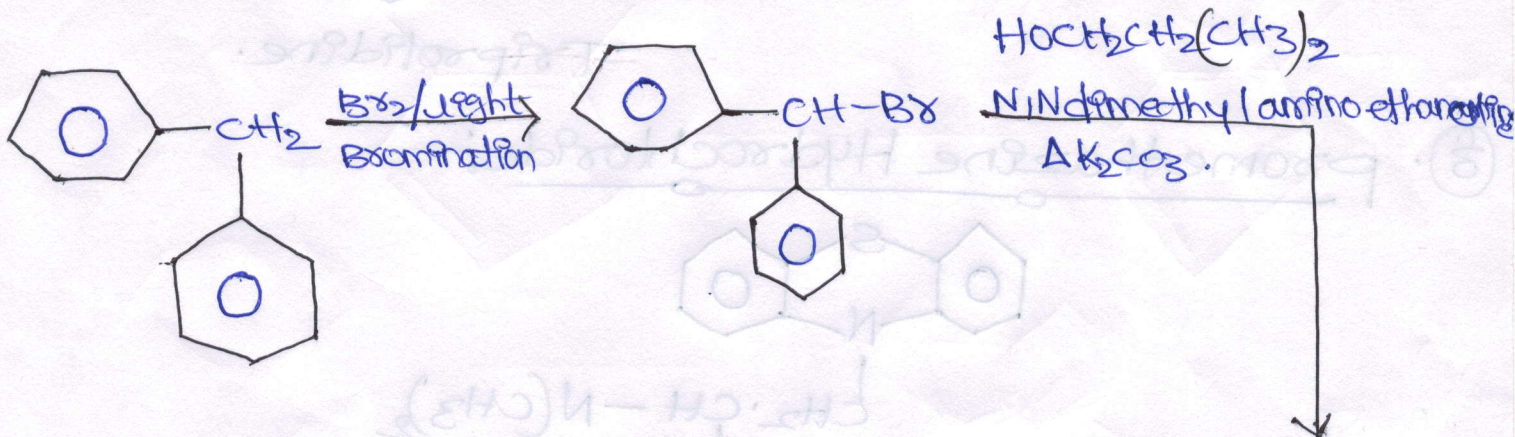
H₂-Antagonist

①. Diphenhydramine Hydrochloride:-



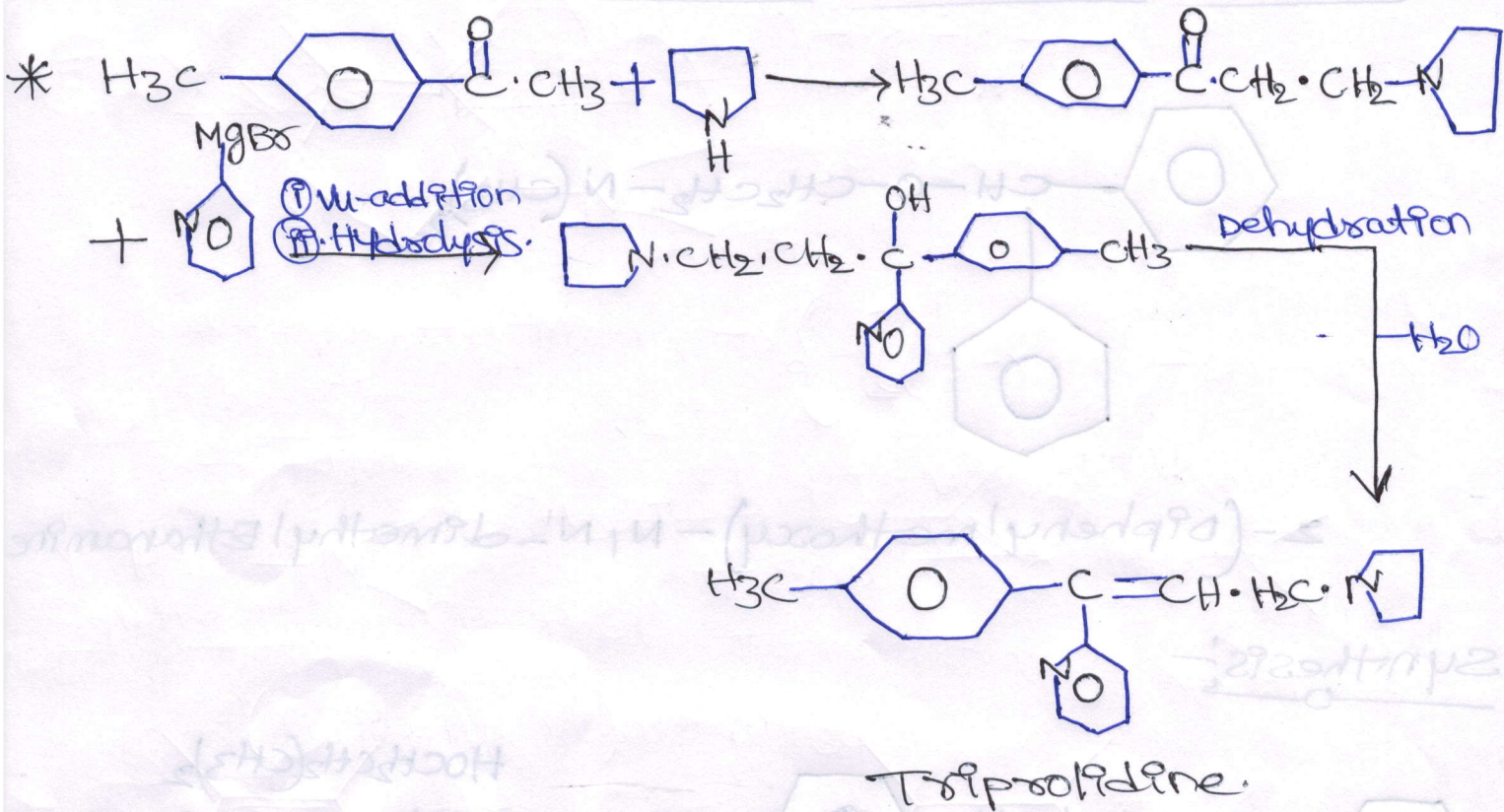
2-(Diphenylmethoxy)-N,N'-dimethylethanamine

Synthesis:-

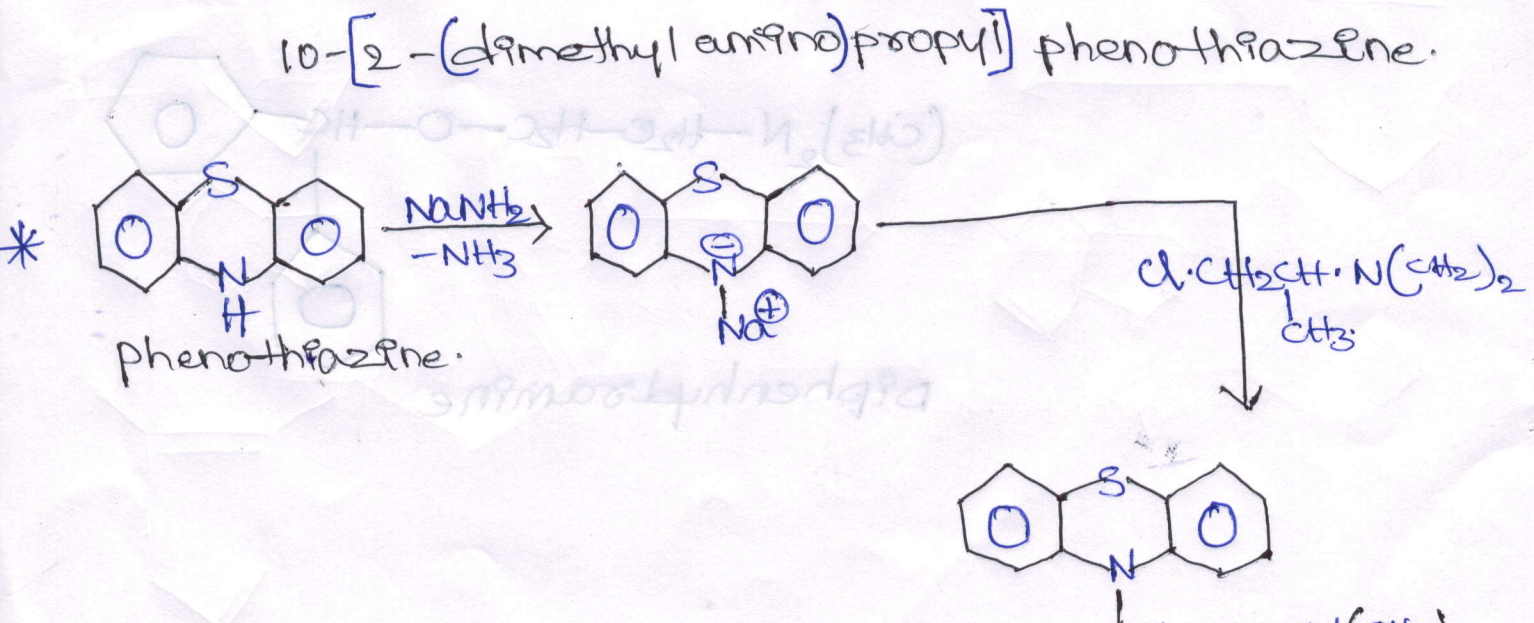
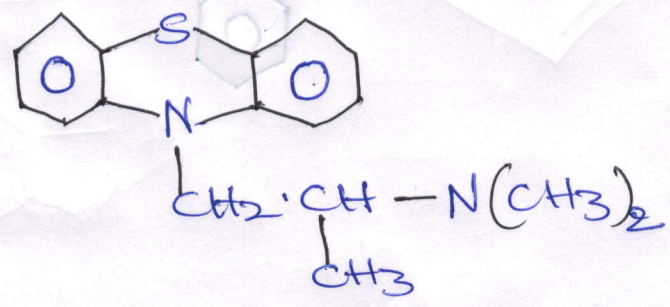


Diphenhydramine

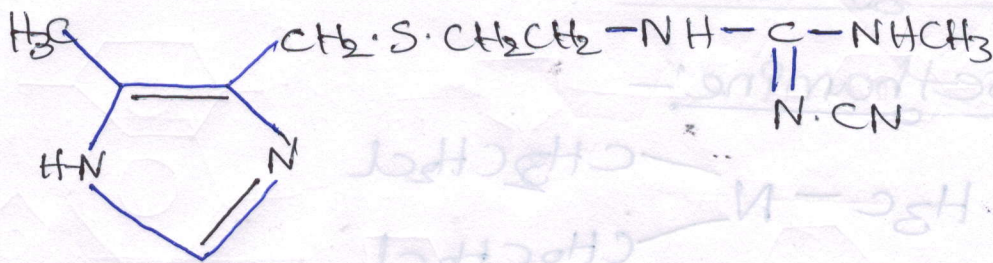
②. Tripiprolidine Hydrochloride:-



③. Promethazine Hydrochloride:-

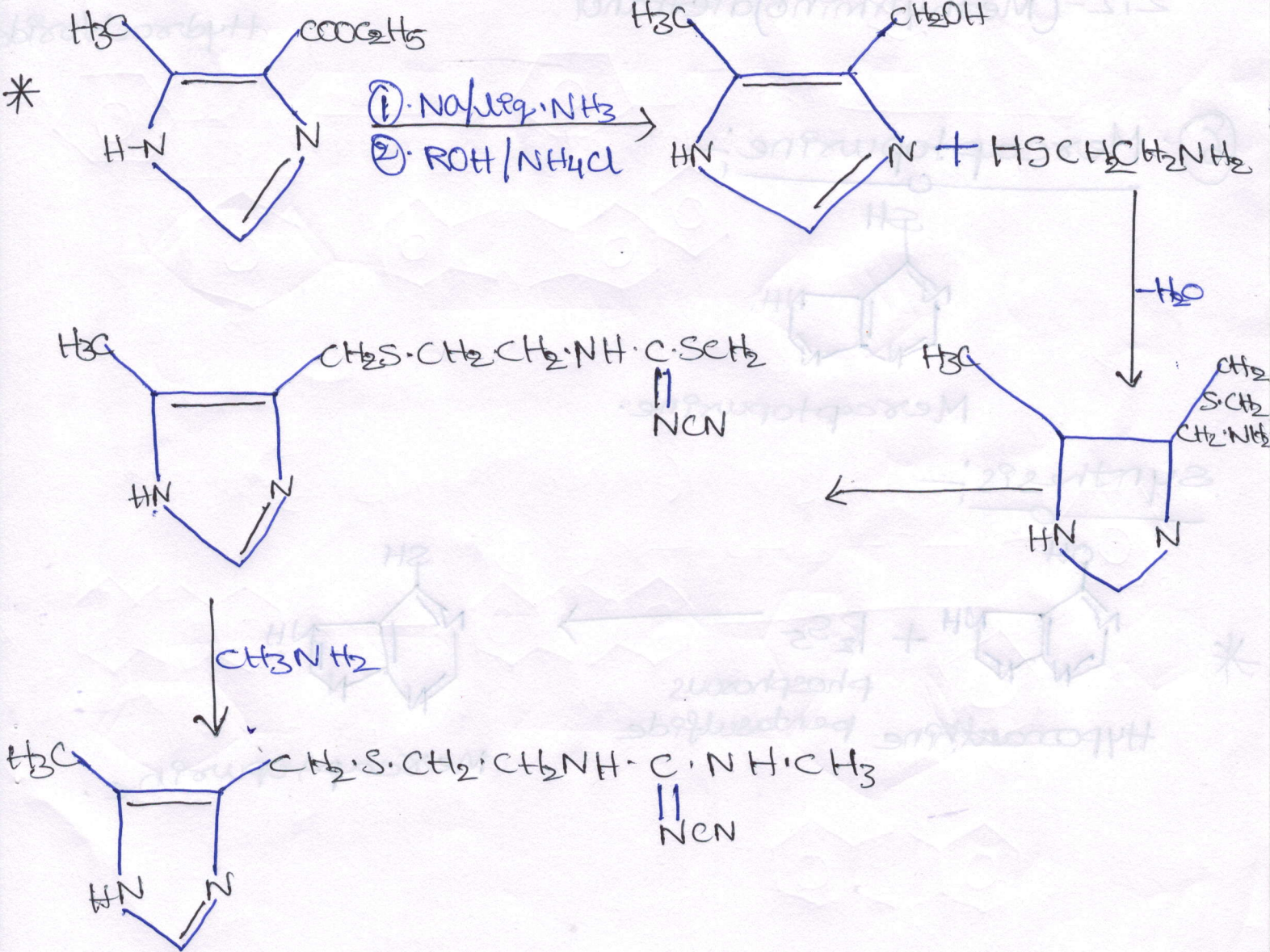


④. Cimetidine:-



N-cyano-N-Methyl-N-ethyl-2-[[[5-methyl-1H-imidazol-4-yl]methyl]thio]ethanamine.

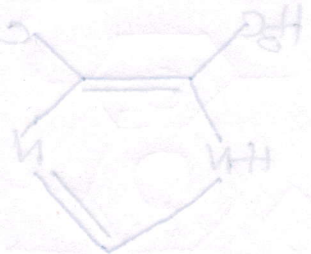
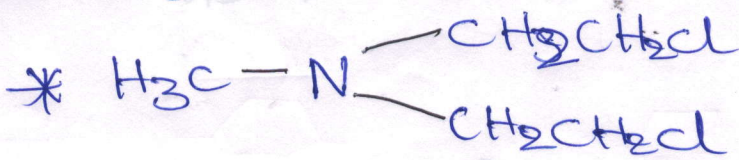
Synthesis:-



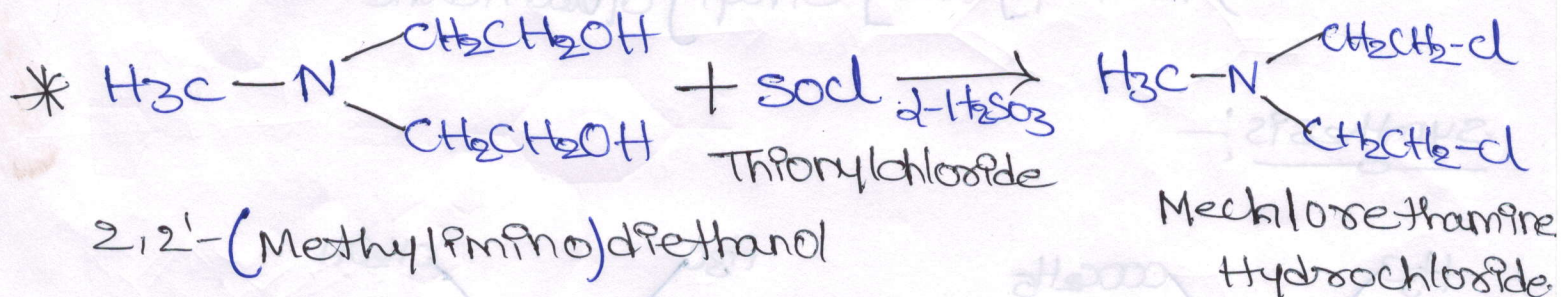
→ Anti-Neoplastic.

Alkylating Agents:-

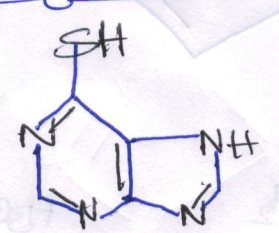
⑤ Mechlorethamine:-



Synthesis:-

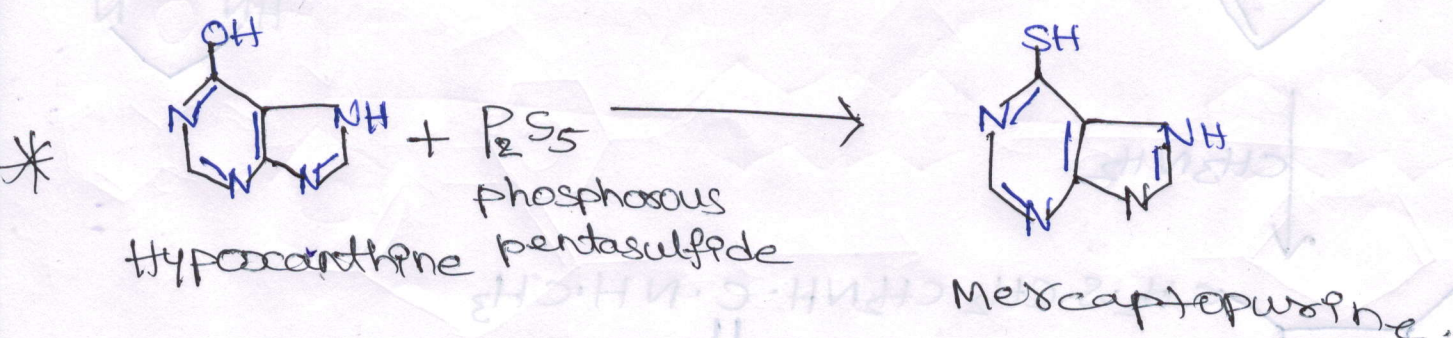


⑥ Mercaptopurine:-

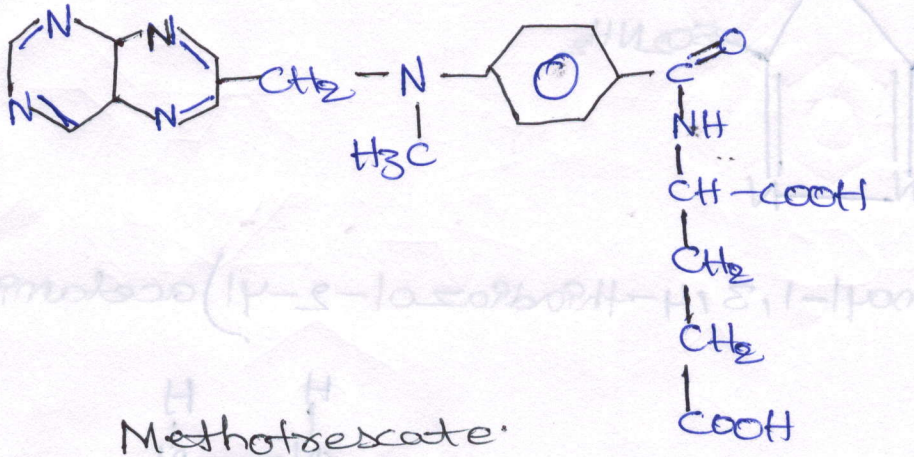


Mercaptopurine.

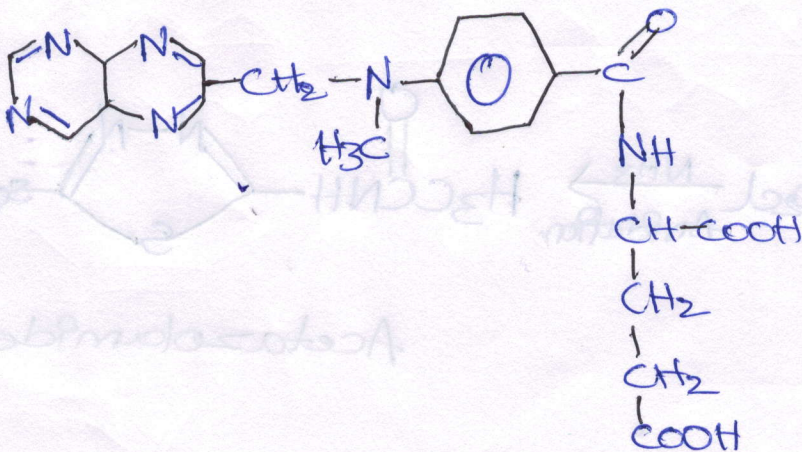
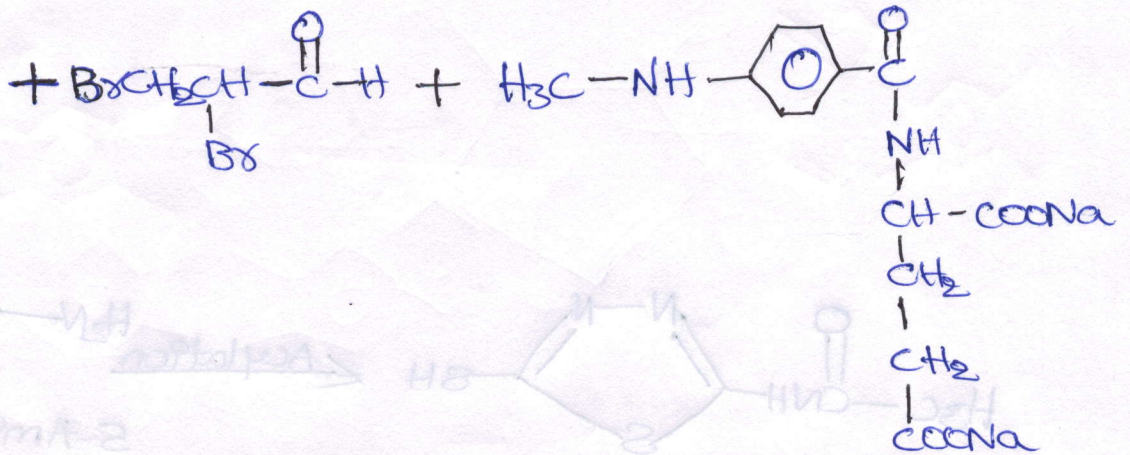
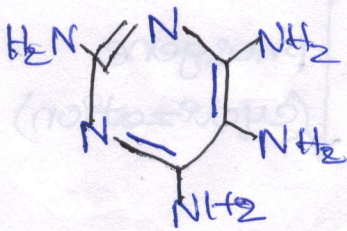
Synthesis:-



7. Methotrexate



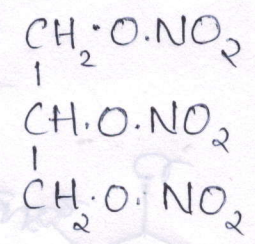
Synthesis



↓
lose water

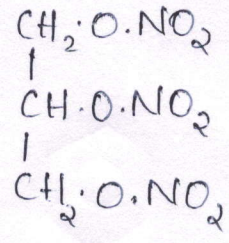
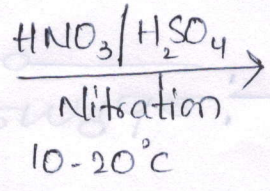
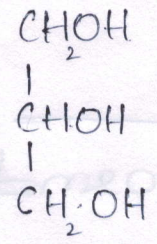
UNIT - II

8. Nitroglycerin*



1, 2, 3 - propanetriol nitrate

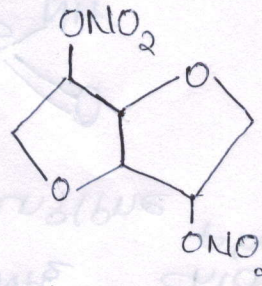
Synthesis:-



Glycerol

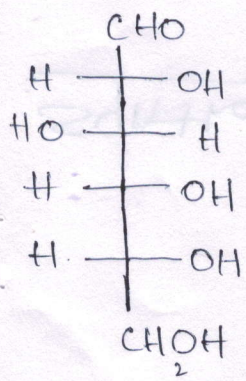
Nitroglycerin

9. Isosorbide dinitrate*

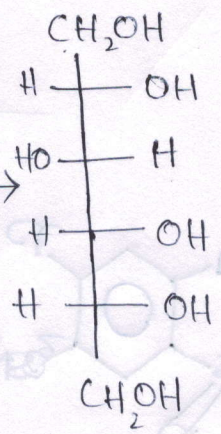
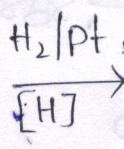


1,4:3,6-Dianhydro-D-glucitol dinitrate

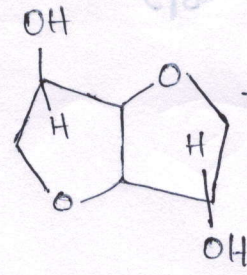
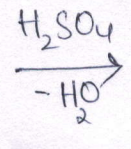
Synthesis:-



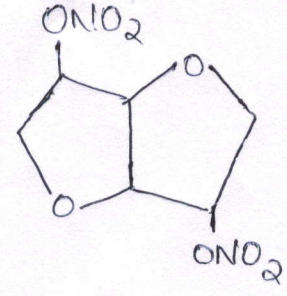
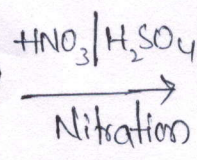
D-glucose



D-Sorbitol



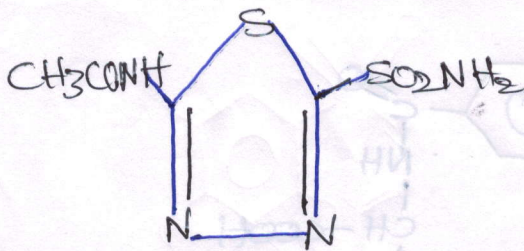
Isosorbide



Isosorbide dinitrate

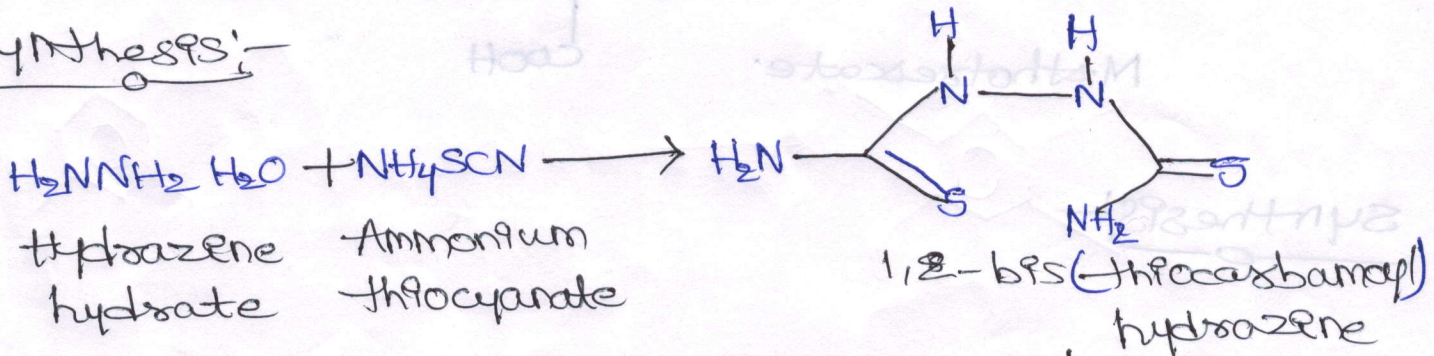
⑩. Acetazolamide :-

Methazolamide (H)

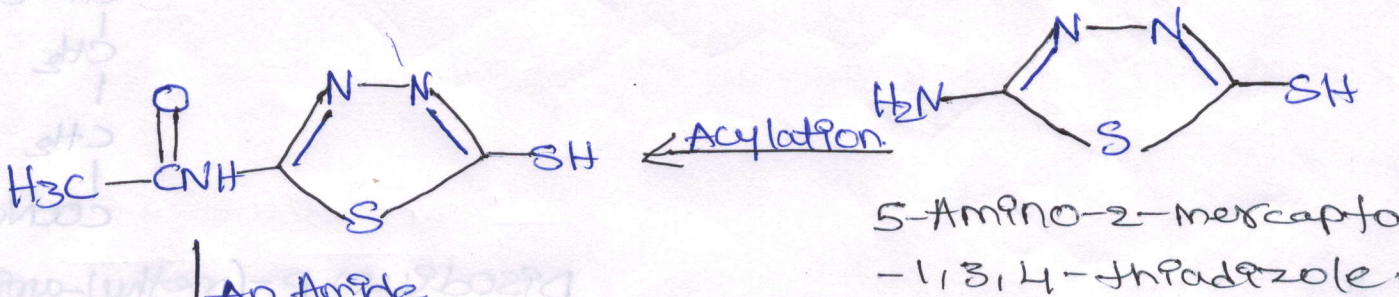


N-(5-sulfamoyl-1,3,4-thiadiazol-2-yl)acetamide.

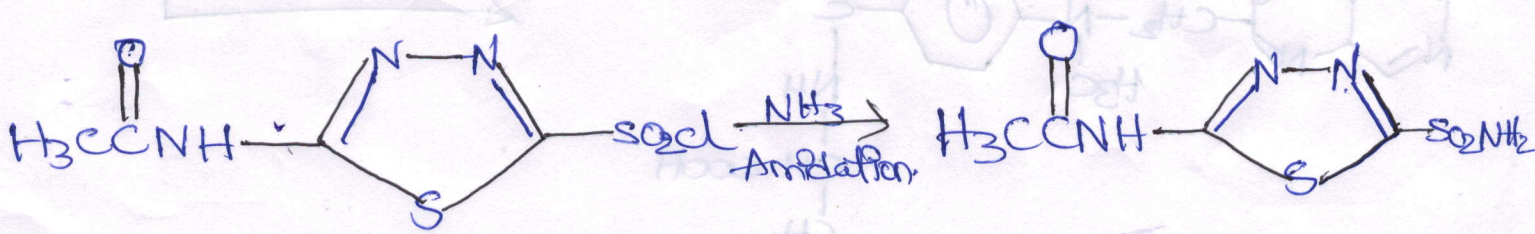
Synthesis :-



↓
phosgene
(cyclization)



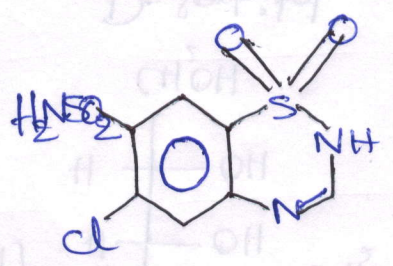
↓
An Amide
Aq. Cl_2
(Oxidation)



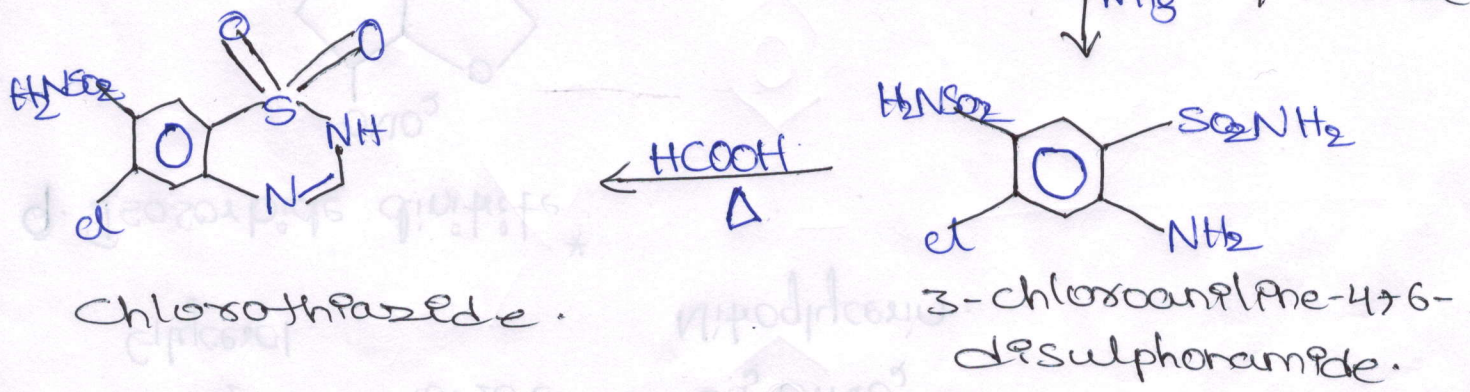
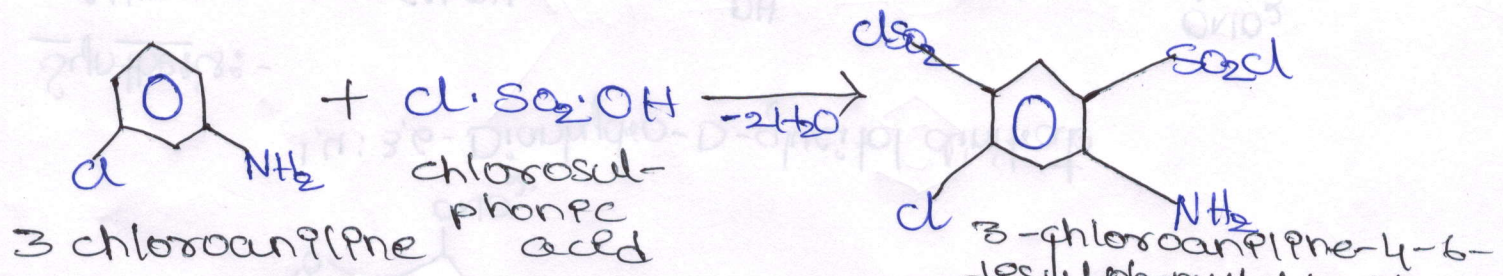
2-sulphonyl chloride

Acetazolamide.

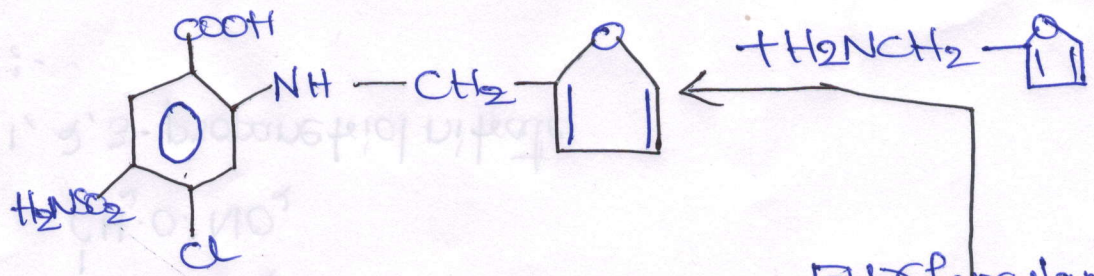
⑪. chlorothiazide:



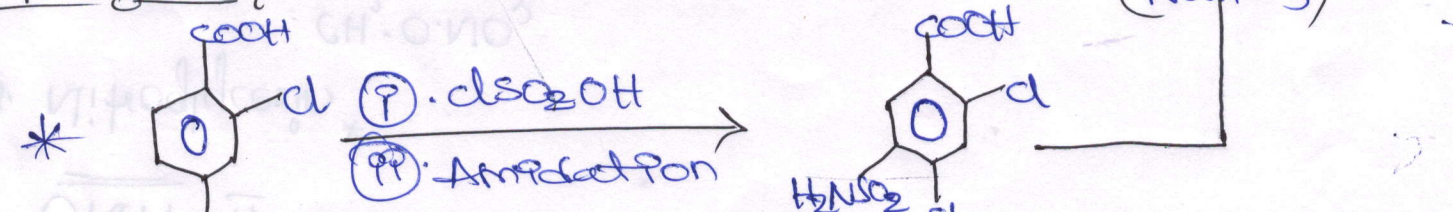
Synthesis:



⑫. furosemide:



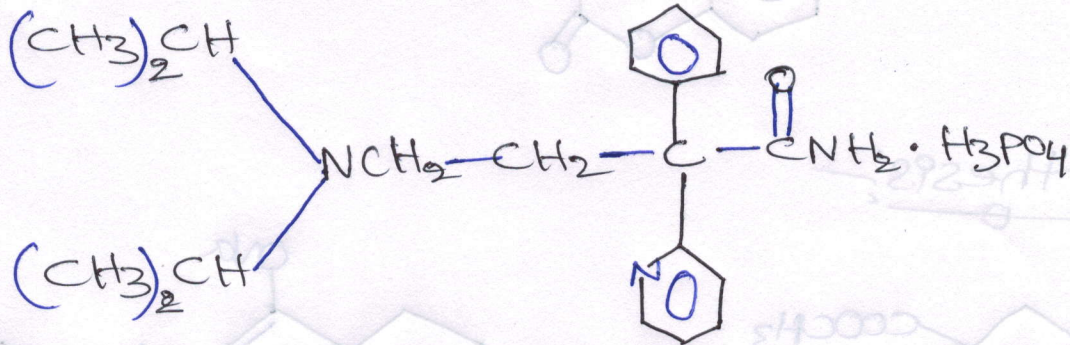
Synthesis:



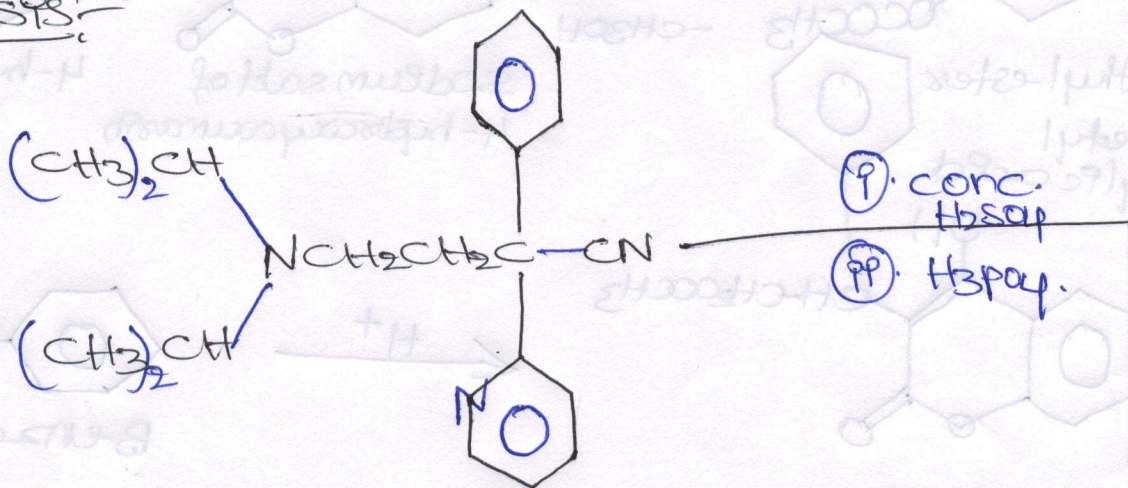
UNIT - III

Anti-arrhythmic Drugs:-

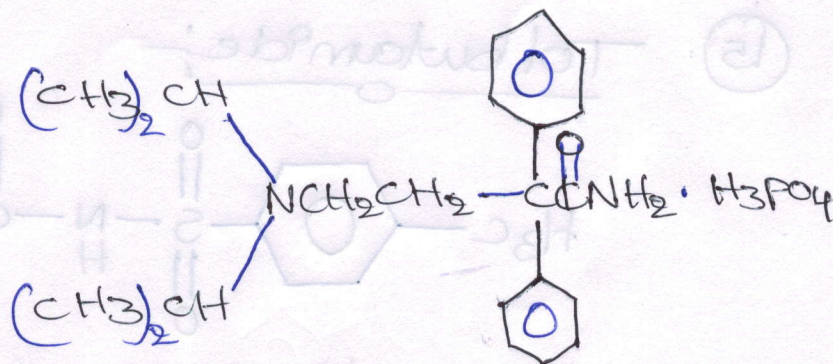
(13) Disopyramide phosphate:-



Synthesis:-



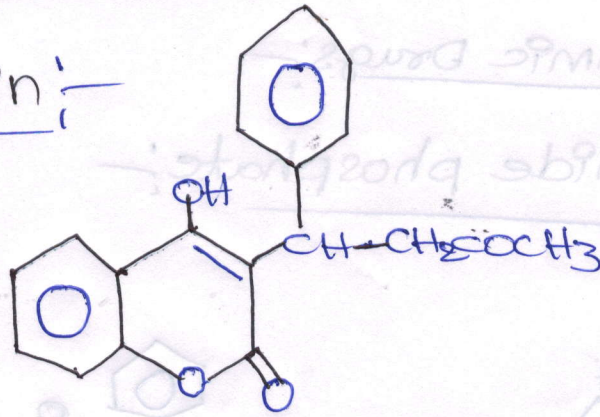
4-Diisopropylamino-
2-phenyl-2-(2-piperidinyl)
butyronitrile.



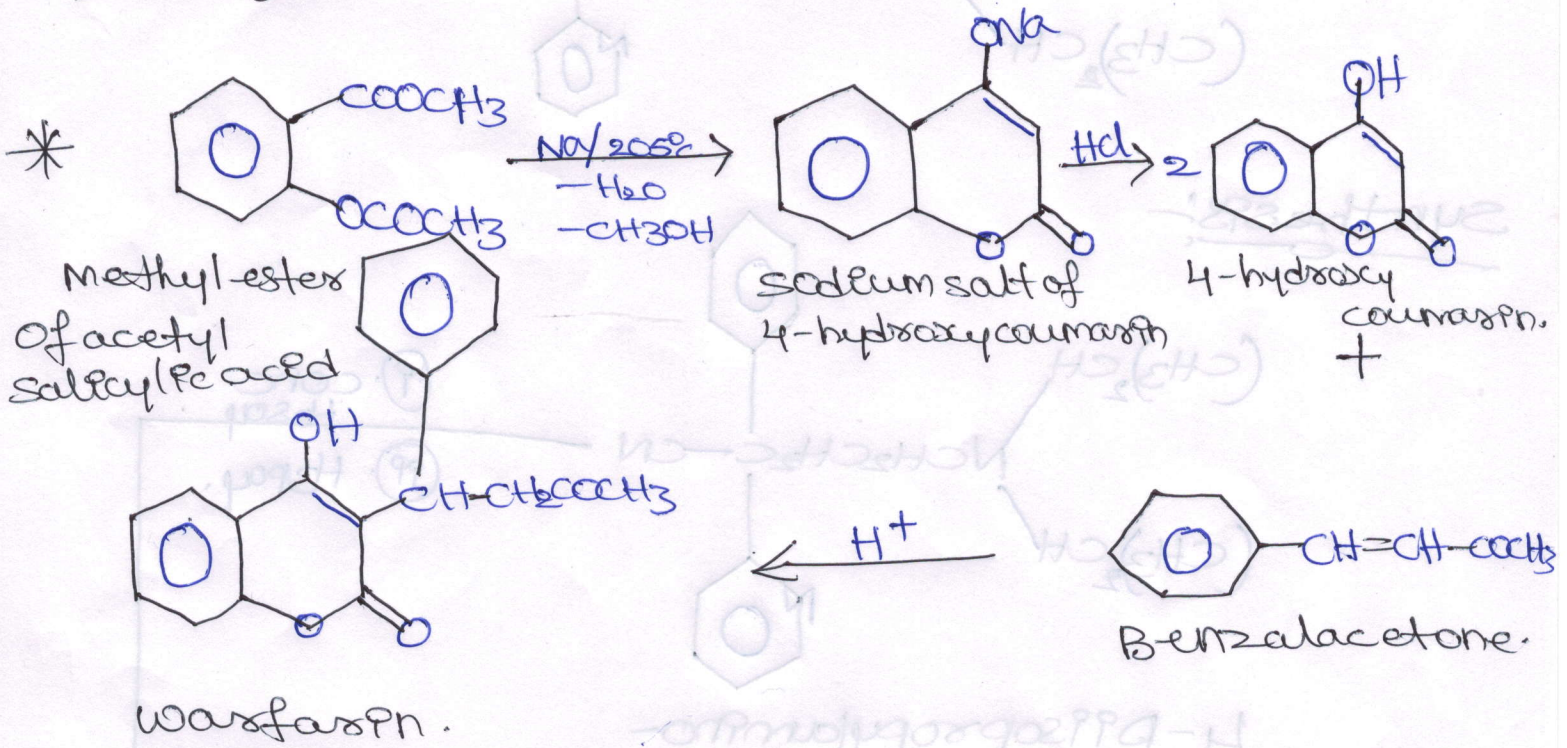
Coagulant & Anticoagulants:-

UNIT - III

(14) warfarin:-



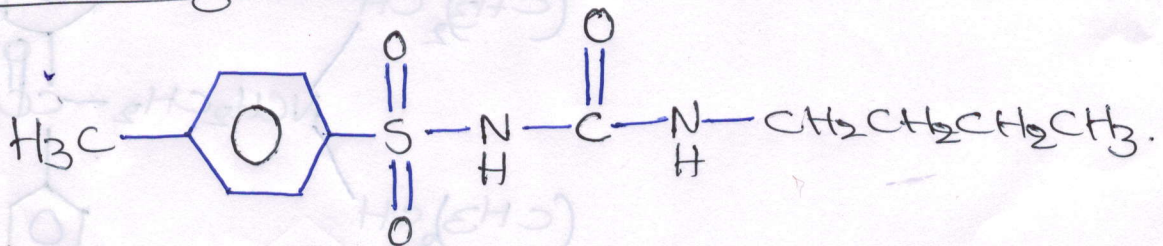
synthesis:-



UNIT - V

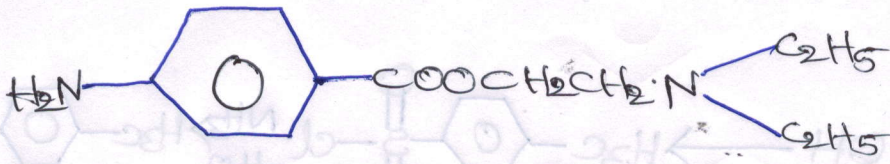
Antidiabetic Agents:-

(15) Tolbutamide:-



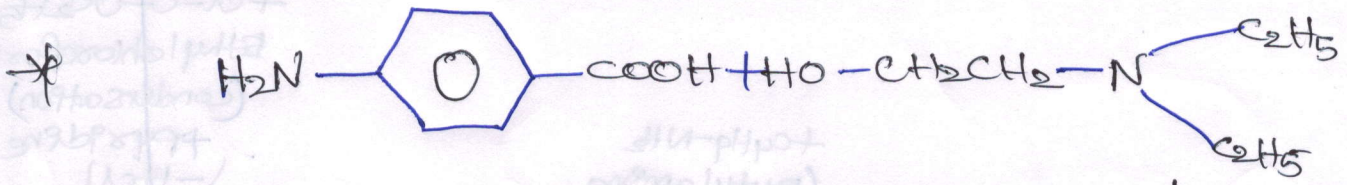
Benzenesulphonamide, N-[(butylamino)carbonyl]-4-

17. Procaine (Novocaine) :-

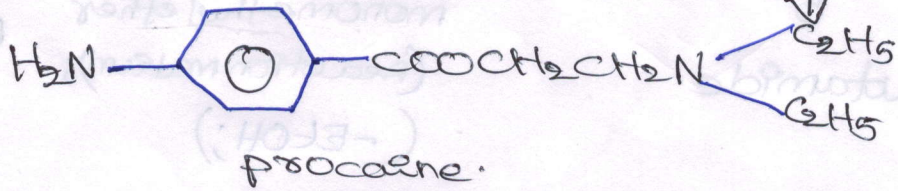


2-(Diethylamino) ethyl - p-amino benzoate.

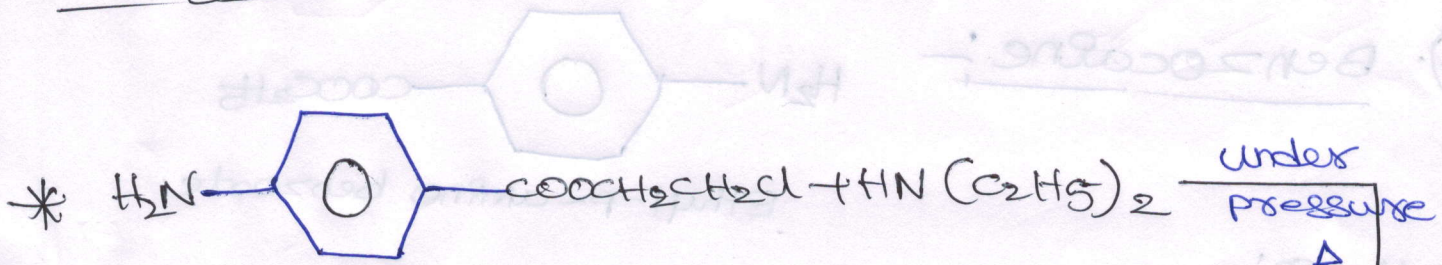
Method-I :- from p-amino benzoic acid.



A, H₂SO₄
-H₂O



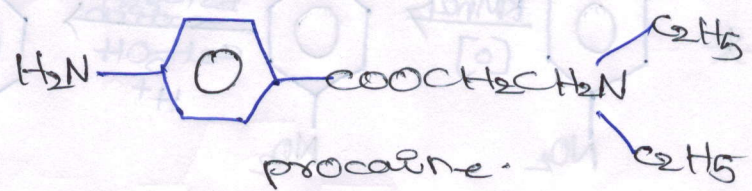
Method-II :- from 2-chloro ethyl - p-amino benzoate.



2-chloro ethyl - p-amino benzoate.

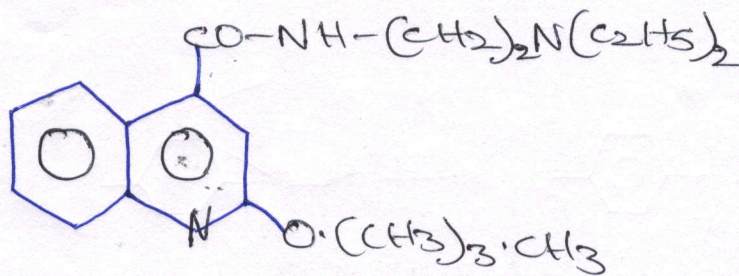
under pressure

Δ
-HCl



Miscellaneous:

(18) Dibucaine:



2-butyl-N-[2-(diethylamino)ethyl]-4-quinolinecarboxamide.

Synthesis:

