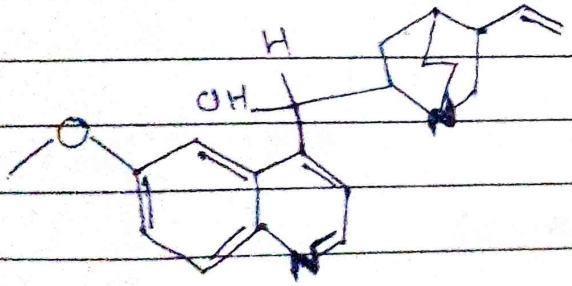
Anti Arrhythmic Drugs

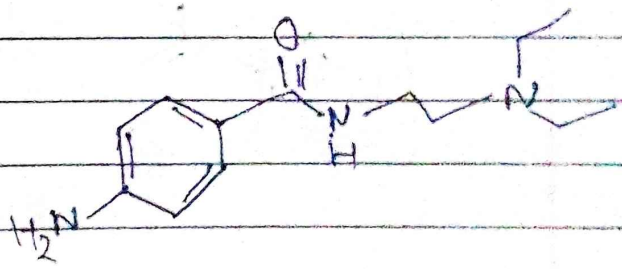
- Class 1 → Na^+ Blockes (channel)
  - 1a. Moderate → Quinidine, procainamide
  - 1b. Weak → lidocain, phenytoin
  - 1c. Strong → Flecainide, propafenone
- Class 2 → β-blockes
  Propranolol, metoprolol, Atenolol, Sotalol
- Class 3 → K^+ blockes
  Amiodarone, sotalol
- Class-4 → Ca^{2+} blockes
  Verapamil, Diltiazem

Structures

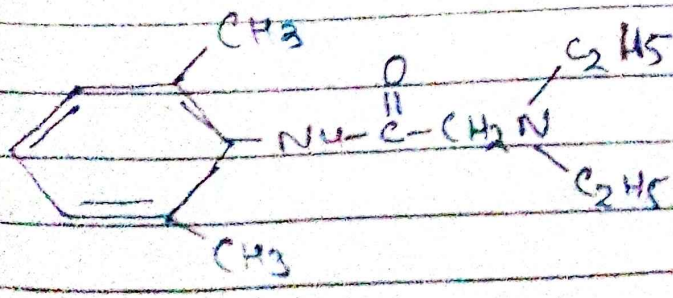
- Na^+ blockes.



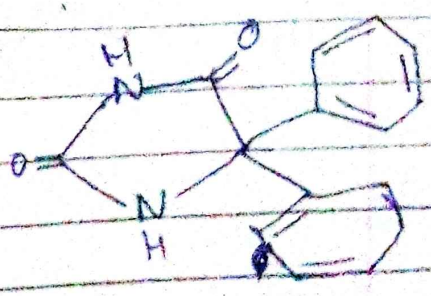
Quinidine



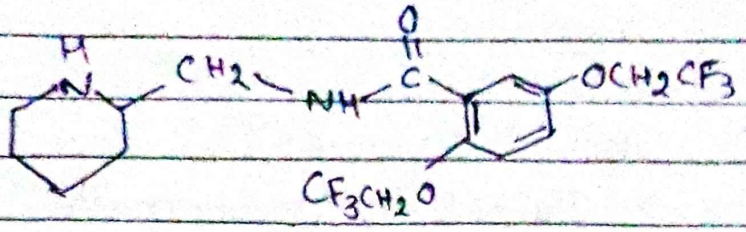
procainamide



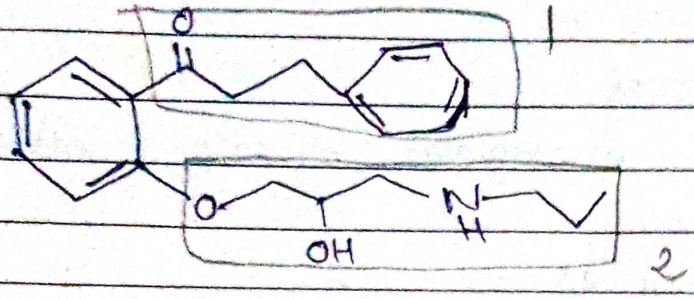
Lidocaine



phenytoin



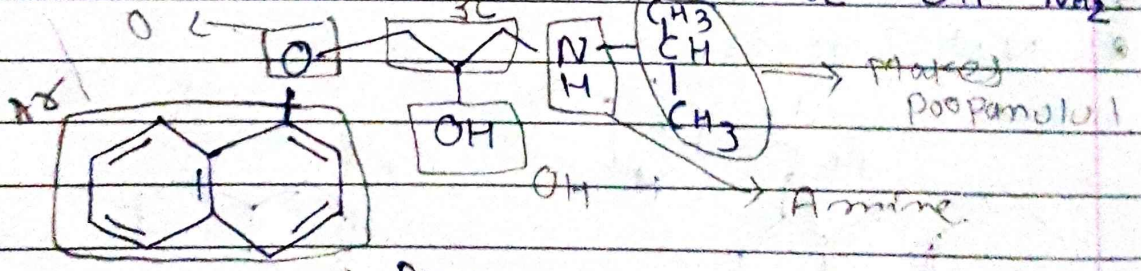
Flecainide



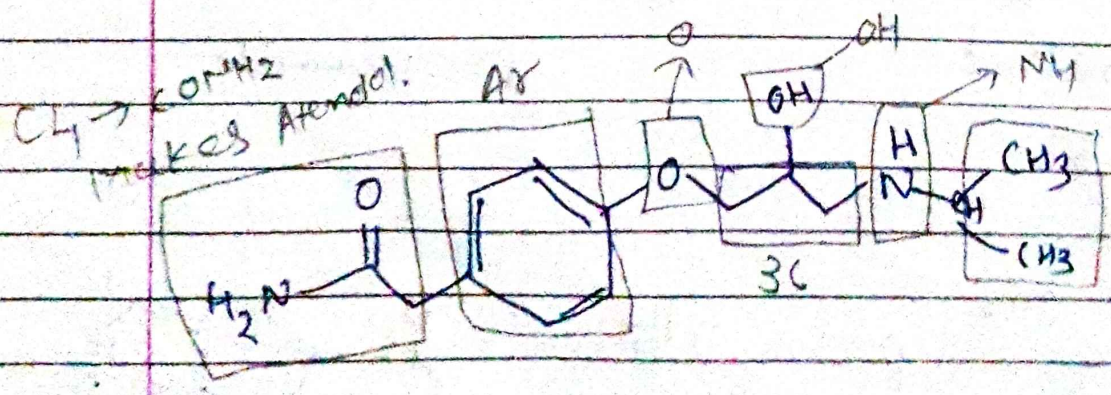
Propafenone

- Class – 2 β-blockers -

→ General Structure → Ar – O – 3C – OH – NH_2

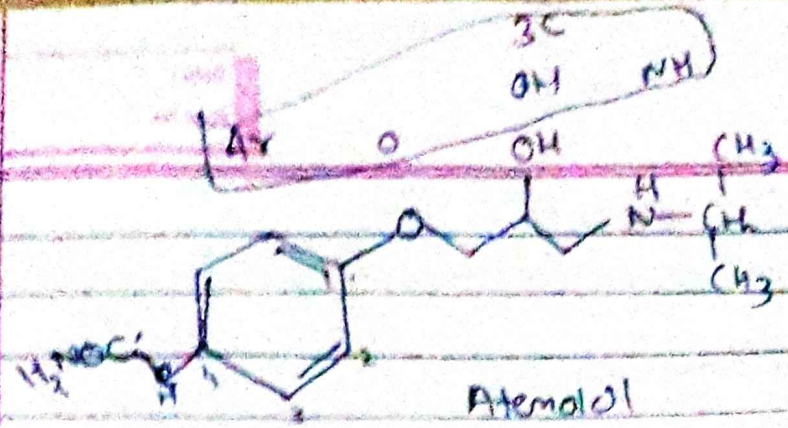


Propranolol

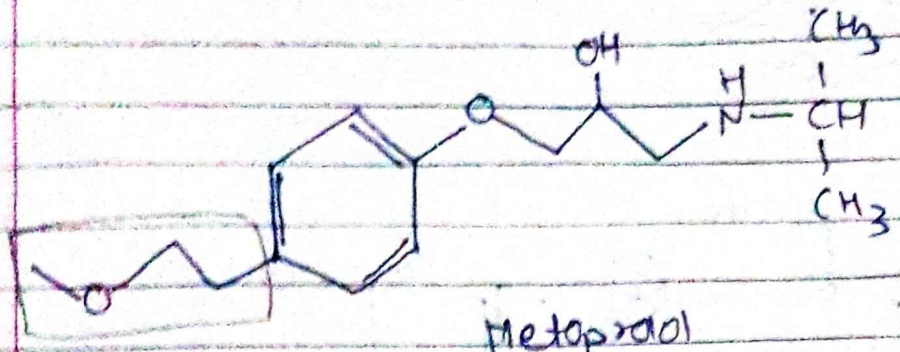


Atenolol

→ More Simple.



Atenolol

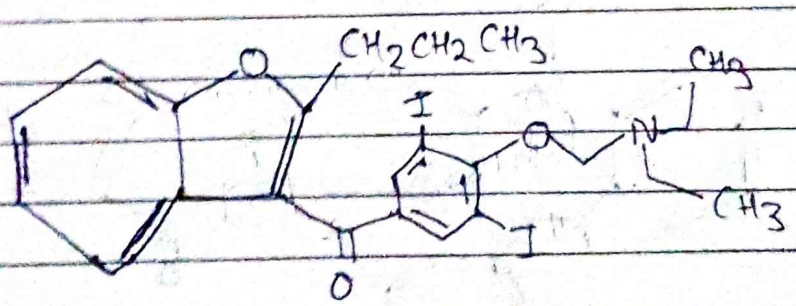


Metoprolol

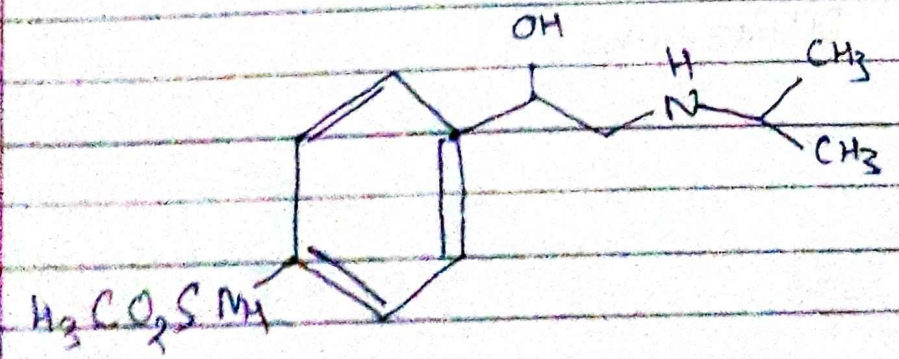
$C_4 \rightarrow CH_3CH_2OCH_3 \rightarrow$ methoxy ethane

At C_4 makes Metoprolol.

- Class ~~3~~ → K^+ blockers



Amiodarone

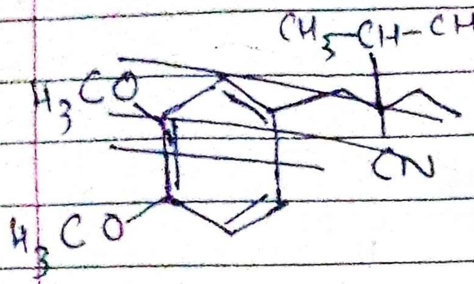


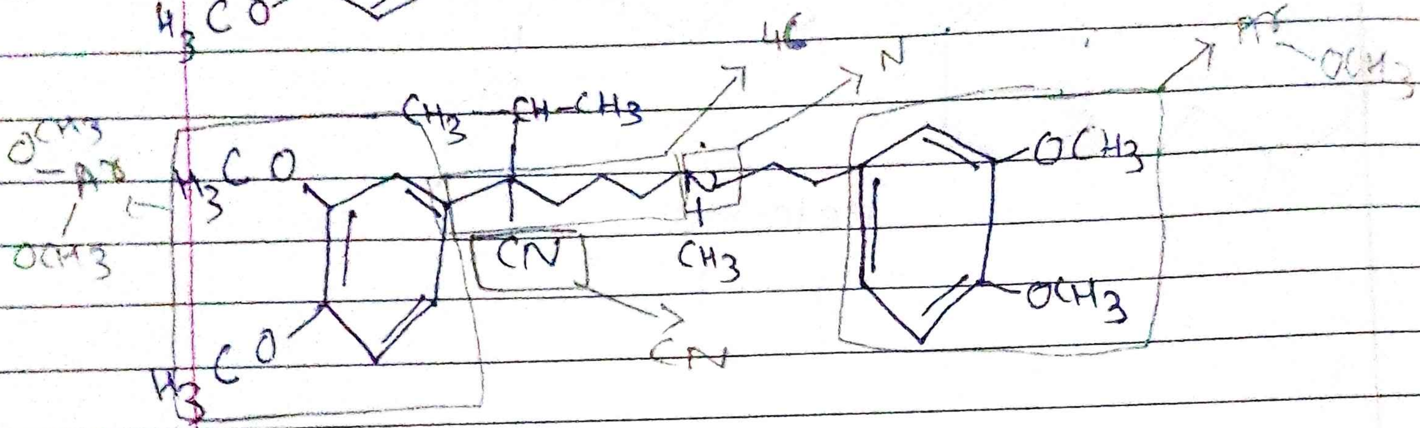
Sotalol

$Ar = 3C - OH - NH - CH(CH_3)_2$

- class-4 → Ca^{2+} blockes

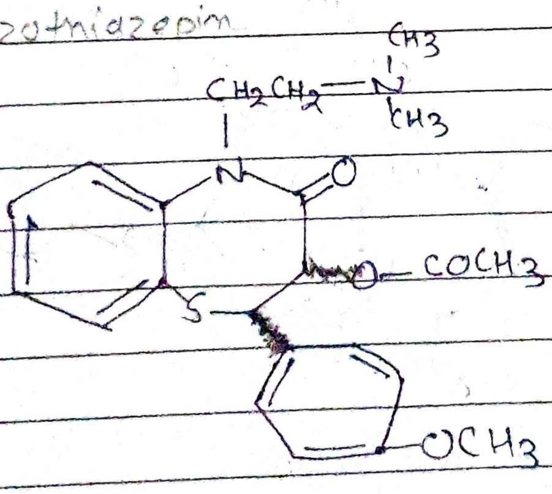
Phenyle Alkyle Amine → $(CH_3O)_2$ Ar – CN – C – N – ...





Verapamil

Benzothiazepin



Diltiazem