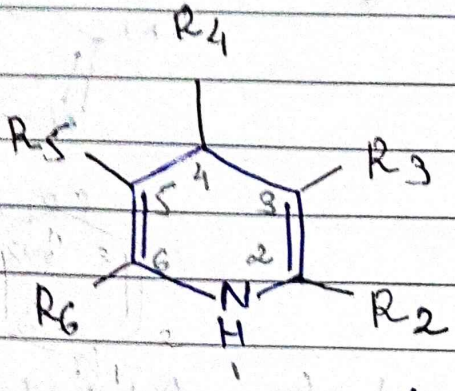
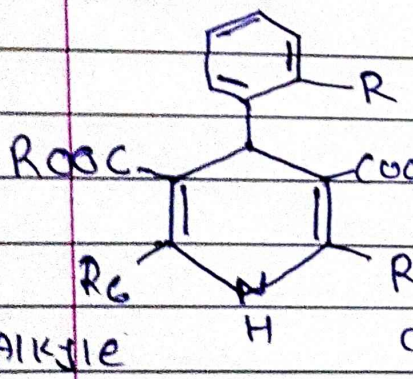
☆ CCB ☆ (Dihydropyride → only)

- **General Structure:**



$R_{2,6}$ → Small Alkyl Group
R_{3}, R_{5} → Ester group.
R_{4} → phenyle or Derivative of phenyle.



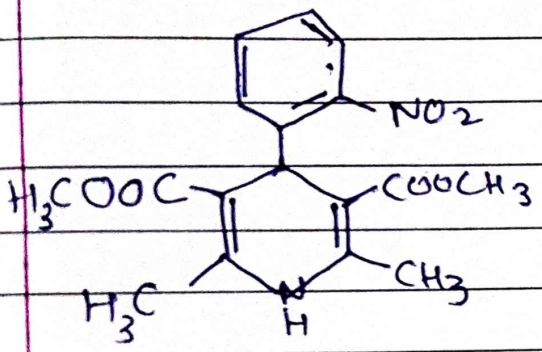
1) In 1,4 Dihydropyridine 1st position Should Not be Substituted

2) 2,6 position contains Small Alkyle Group maybe they Are Same & May Not

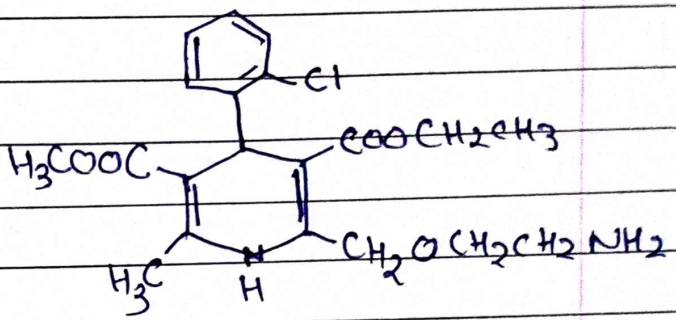
3. 3,4 Position contains Ester, Same & maybe Not
4. 4th position contains phenyle Group or Sometimes it's derivatives
5. phenyle Group/Derivatives Are Essential for Activity
6. 3,5 position Ester determines Distribution of Drug
7. Phenyle Ring May have Substitution At o, m position

8. O, position of phenyle group is more prefer then m position.
9. R is Electrone withdrawing group (NO_2, Cl)
10. Electrone withdrawing group is ALSO Essential for Activity

Examples :-

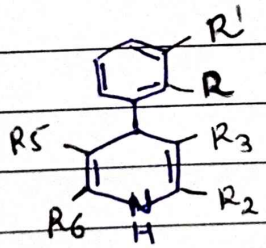


Nifedipine.



Amlodipine

* Summer Table.



No	Name	R	R2	R6	R3	R5
1.	Nifedipine	NO_2	CH_3	CH_3	$COOCH_3$	$COOCH_3$
2.	Amlodipine	Cl	$CH_2-O-CH_2-NH_2$	CH_3	$COOC_2H_5$	$COOCH_3$
3.	Felodipine	o,p Cl	CH_3	CH_3	$COOCH_3$	$COOC_2H_5$
4.	Nimodipine	m NO_2	CH_3	CH_3	$COOCH_2CH_2OCH_3$	$COOCH(CH_3)_2$