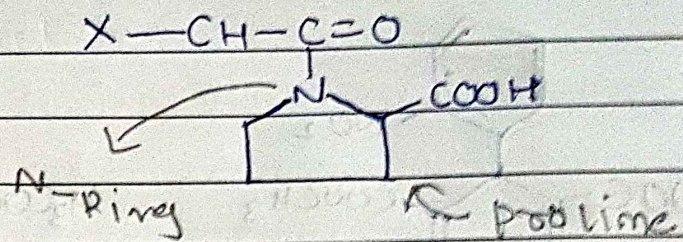
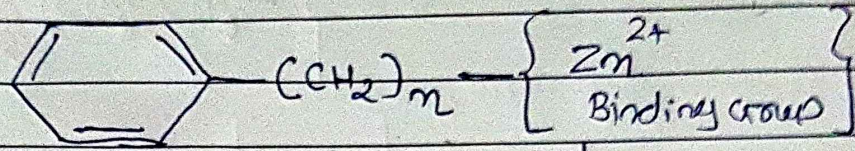


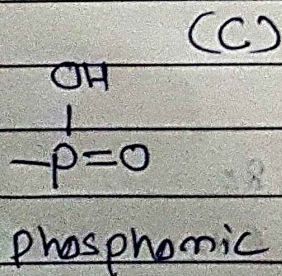
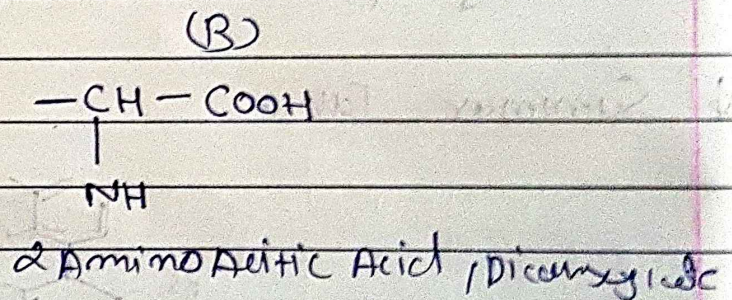
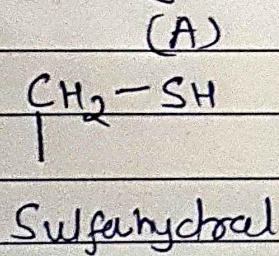
★ ACEi ★

- General Structure



X = CH₃, n-butyle Amine
(CH₂)_n-NH₂

Zn²⁺ Binding groups :



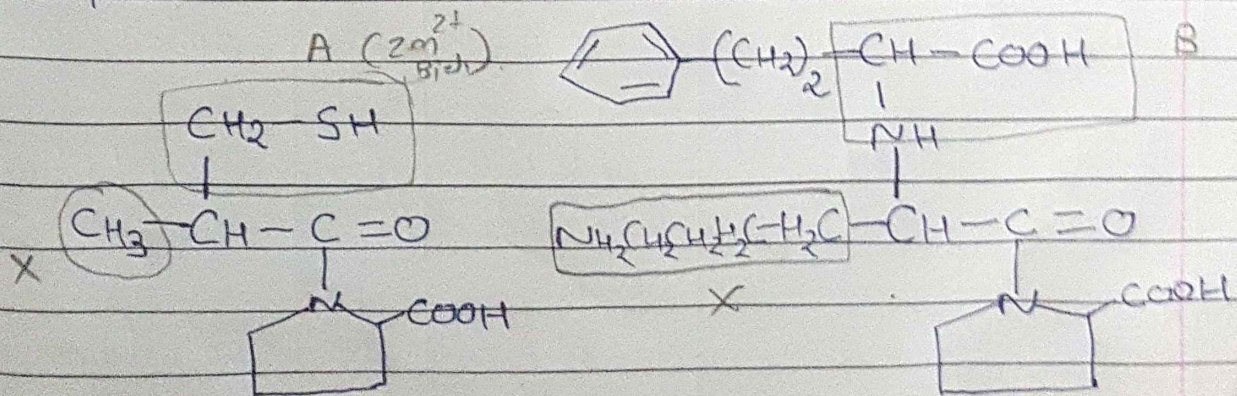
① Sulfhydryl → Captopril

② Dicarboxylate / α-Amino → Enalapril, Lisinopril, Ramipril

③ phosph → Fosinopril

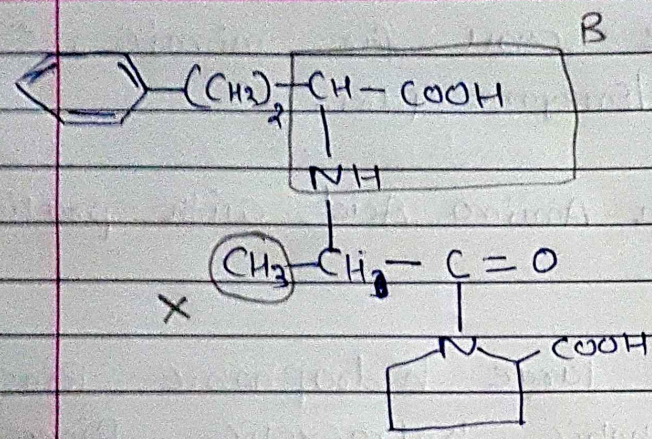
1. N-Ring must have COOH for mimetic, C-Terminus of ACE Substrate/Enzyme part.
2. Substitution of other Amino Acid with proline decrease Activity
3. N-Ring should be large hydrophobic Ring or large hydrophobic heterocyclic Ring in N Ring Increase potency & Change dynamic, kinetic data.
4. from Zn^{2+} Binding group Shows Superior binding to Zn^{2+} Among carboxylate & phospho
5. Esterification of B, C & then Attachment produce orally Active products.
6. X is CH_3 or N-butyle Amine (carboxylate must).
7. thiol containing produce Skin Rash & Taste disturbance
8. thiol/sulfhydryl can form disulfide which Reduce Duration of Action.

Examples:



Captopril

Lisinopril



Emalapril