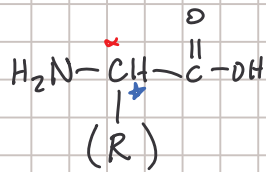


Tues 3 pm question/answer session



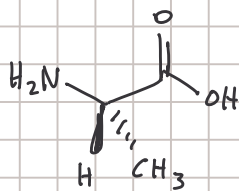
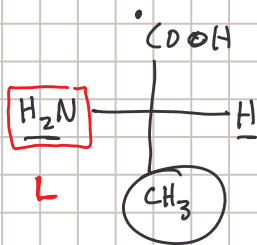
Ch 24 Amino acids/peptides/proteins



α -amino acid

R = H = glycine

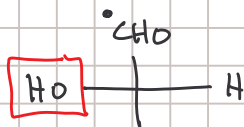
R = CH₃ = alanine



almost all natural amino acids are L

L-alanine

like D/L in sugars

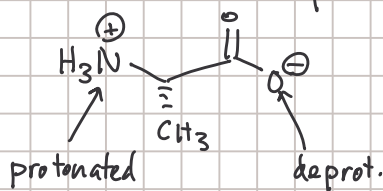


on Left CH₂OH

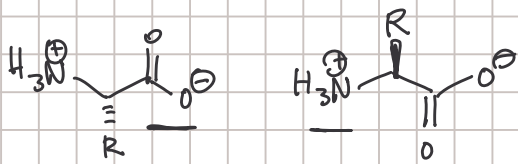
L-glyceraldehyde

water-soluble

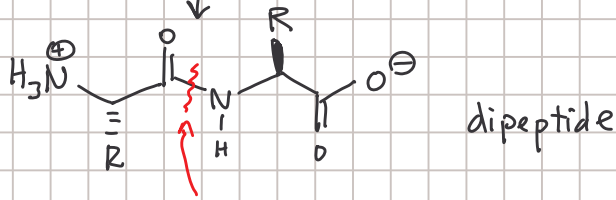
but, at neutral pH ...



Zwitterion (dipolar ion) + and - charge

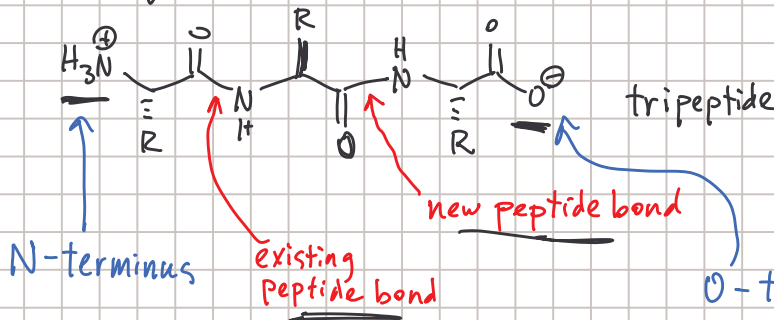


$-\text{H}_2\text{O}$ (condensation)

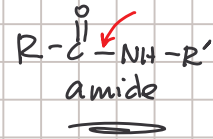


new C-N bond
peptide bond

add another amino acid $-\text{H}_2\text{O}$



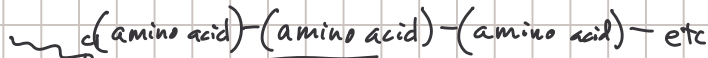
$-\text{H}_2\text{O}$



polypeptide

polymer of amino acids

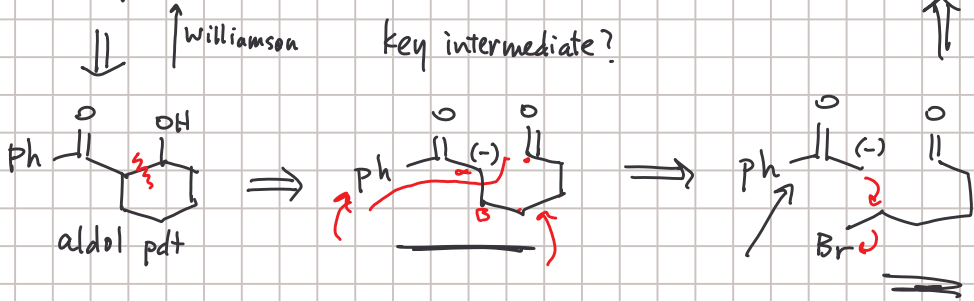
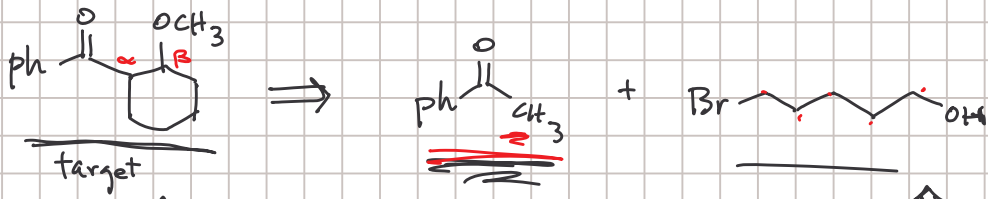
protein = esp. large polypeptide



polystyrene bead

washing w/ solvent after each rxn

solid-phase synthesis



forward:

