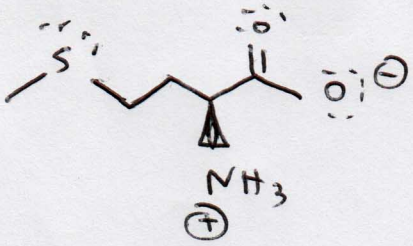
Lab Quiz #2:

- Merrifield resin synthesis
- di-tert-butyl dicarbonate
- DCC

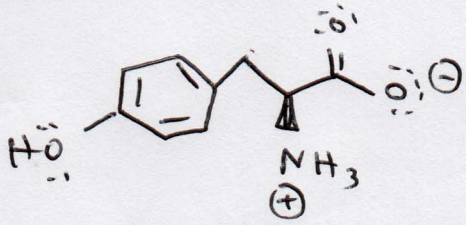
Exam #3!

- amino acids
- D vs L
- pI + acid/base properties
- Electrophoresis
- Ion exchange chromatography (ninhydrin)
  (Beer's law)
- Synthesis amino acids
- Protein structure
- Sequencing - Edman degradation, methionine

A few more amino acids!

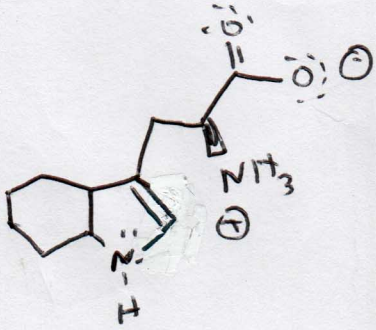


L-methionine



L-tyrosine

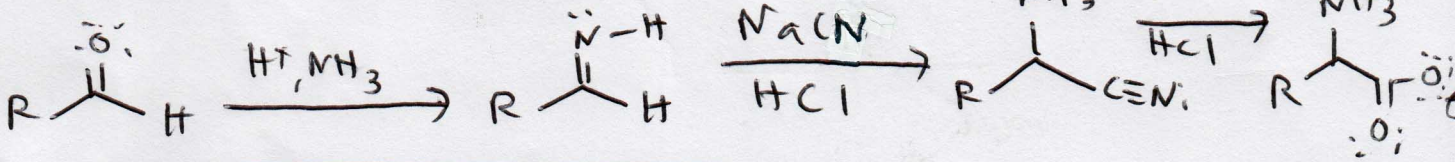
indole

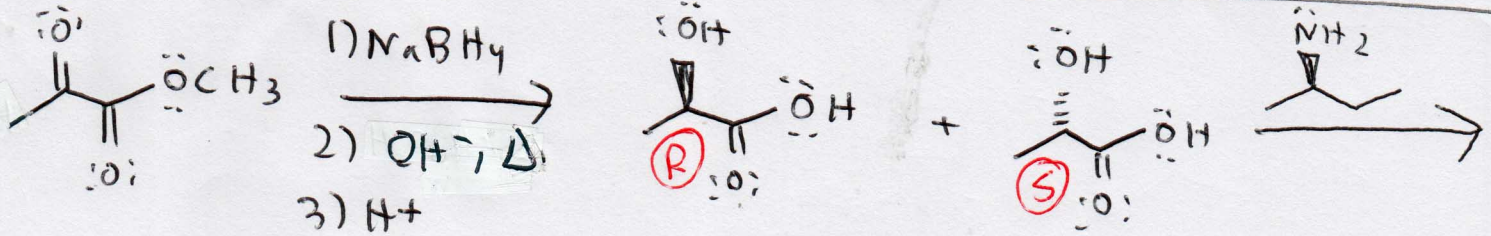


L-tryptophan

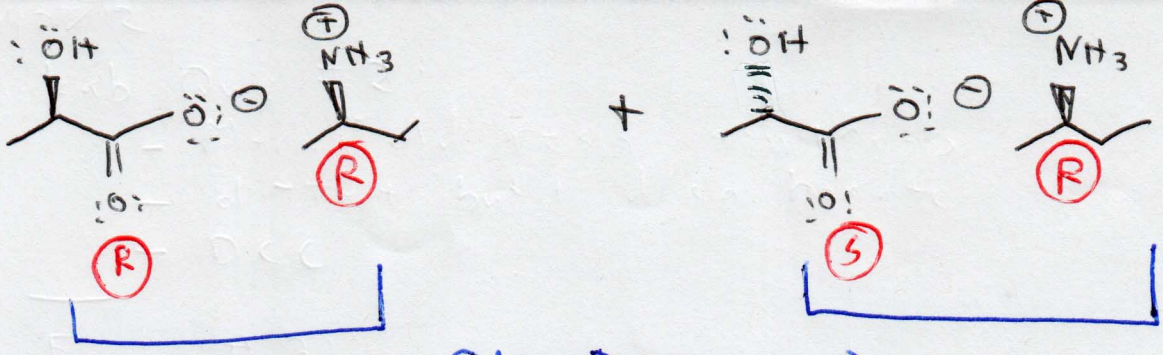
Synthesis of amino acids

Strecker synthesis





(enantiomers)



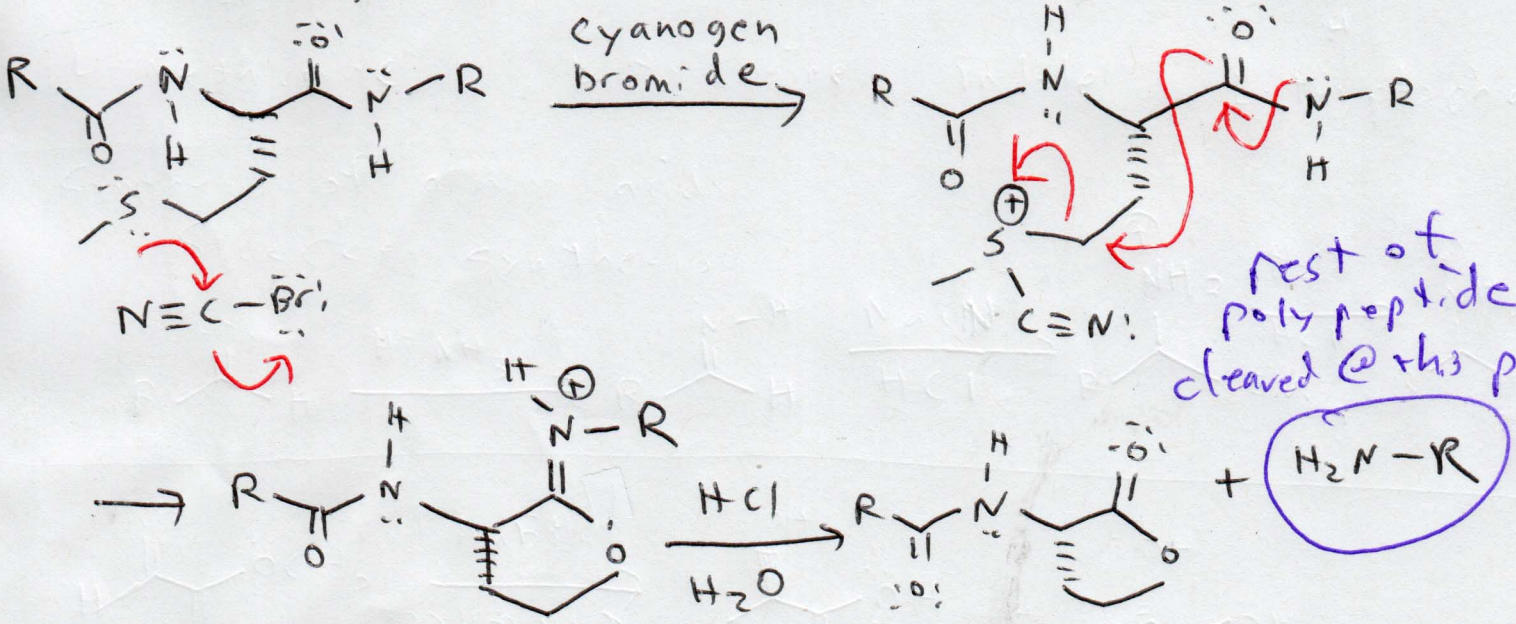
(diastereomers)

The hydroxyacids shown above are enantiomers, which means they cannot be easily physically separated since their physical properties are identical (with the exception of optical rotation, which cannot be used to separate them). If a chiral auxiliary (extra molecule) is reacted with the two acids, diastereomers are formed. Since diastereomers have different physical properties, they can be separate. Once the original carboxylic acids are recovered, they will have been effectively separated.

Protein structure

1° - sequence – the order of amino acids

Cleavage at methionine



Next: Chapter 27