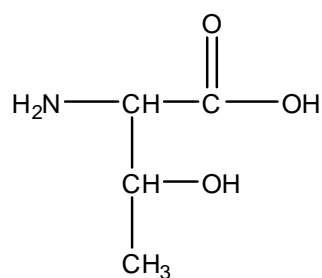
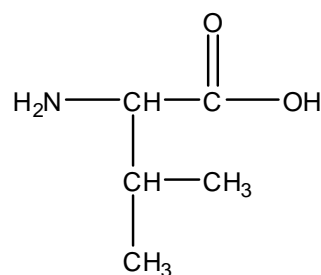


Question One- Amino acids

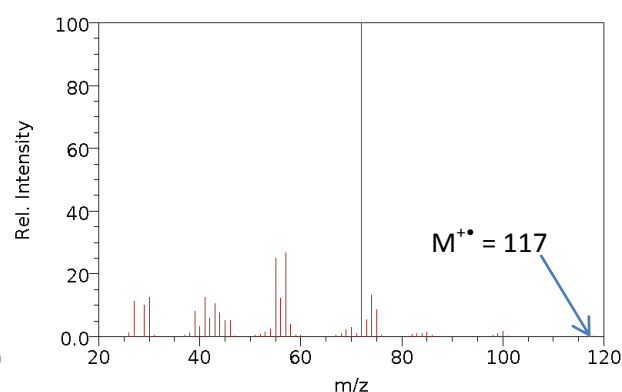
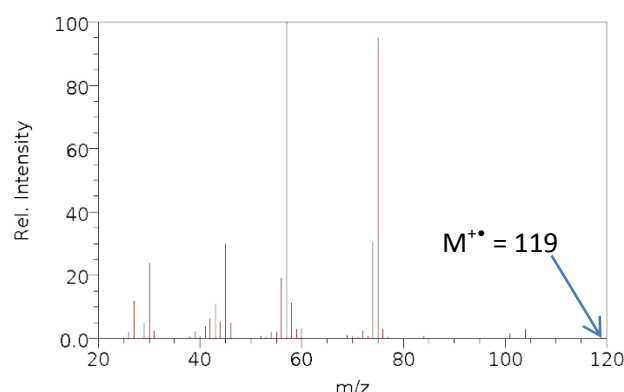
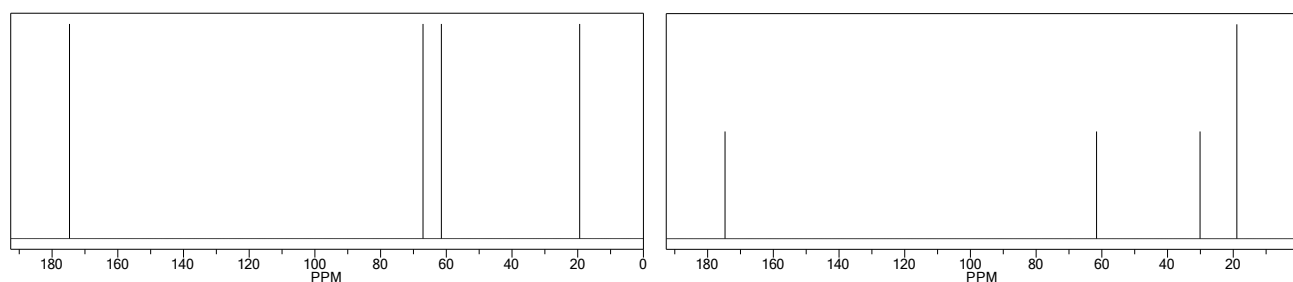
Threonine



Valine

- i) Draw two possible dipeptide made from threonine and valine
- ii) Discuss why Threonine has 4 possible enantiomers while Valine has two. Also discuss the similarity and difference in physical and chemical properties between enantiomers.

- iii) The spectrums of the two amino acid is mixed up, label each spectrum with the type of spectrum as well as the amino acid



- iv) Discribe the possible similarities and differences in the IR spectrum between Valine and Threonine. Explain why the IR spectrum of the two would be confusing to distinguish.