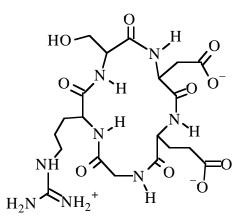
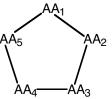
Quiz 1 6/19/02

You may collaborate and use your book.

1. Consider the following molecule: (5 pts)

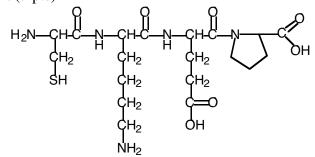


What amino acids make up the cyclic pentapeptide displayed above? Give your answer following the form given below using the three-letter amino acid code:



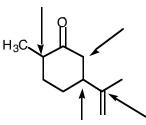
2. Book problem 19.35 (4 pts). Amino acid side chains in the active sites of enzymes can act as acids of bases during catalysis. List the amino acid side chains that can accept H⁺ and those that can donate H⁺ during enzyme-catalyzed reactions. Assume the pH is physiological.

3. From problem 18.65: Which end is the N-terminal and which is the C-terminal? Draw the structure one of the products that would form if the peptide were digested at physiological pH. (3 pts)



Digestion Product:

4. From problem 18.43. (3 pts)



5. From 19.39. Why don't increases in concentration of substrate or enzyme change reaction rates in exactly the same way? (5 pts)