

**CHE 102 - Homework - Ch 29b**  
**Protein Structure**

p. 804-824

Score: \_\_\_\_/45

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Define the following terms in your own words. Do not write the definitions from the book verbatim, I am capable of doing that. Draw pictures where appropriate. Use complete sentences.

- [4 pt] 1. Define Primary Structure and include a picture illustrating your definition.
- [5 pt] 2. Define Secondary Structure, also list the 3 types and sketch a picture of 2 of the 3 types. In addition draw an example of the Hydrogen bond that would form between two amino acids to form the secondary structure).
- [5 pt] 3. Define Tertiary Structure, also list the 5 forces responsible for the formation
- [4 pt] 4. Define Quaternary Structure and include a picture illustrating your definition.

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- [5 pt] 5. Draw a picture illustrating the Hydrogen Bonding that would occur between Asp and Asp. Is this an example of primary, secondary, tertiary or quaternary structure? (Show an example between Asp and Asp)
- [4 pt] 6. Draw a picture illustrating the Ionic Bonding that would occur between Asp and Arg)
- [4 pt] 7. Draw a picture illustrating the Disulfide Bonding that would occur between Cys and Cys)
- [4 pt] 8. What is the difference in the Hydrogen Bonding responsible for secondary structure and tertiary structure.

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[5 pt] 9. Define denaturation. List at least five different ways to denature proteins.

[5 pt] 10. Proteins serve many functions in the body. List 7 functions they can perform