Exercise 8 (Modules 3.12-3.14)

Identify each of the levels of protein structure in the diagrams. Then choose the descriptions from the list below that go with each of the levels.

1. __________ Structure
   Descriptions: ____________________

2. __________ Structure
   Descriptions: ____________________

3. __________ Structure
   Descriptions: ____________________

4. __________ Structure
   Descriptions: ____________________

Choose from these descriptions:

A. Overall three-dimensional shape
B. Amino acid sequence
C. Even a slight change in this can alter tertiary structure.
D. This level occurs in proteins with more than one polypeptide subunit.
E. Coiling and folding produced by hydrogen bonds between —NH and C=O groups
F. Not present in all proteins
G. Level of structure that is held together by peptide bonds
H. Alpha helix and pleated sheet
I. Stabilized by clustering of hydrophobic R groups, hydrogen bonds, ionic bonds, and sometimes even covalent bonds
J. "Globular" or "fibrous" might describe this level of structure.
K. Folding that results from interactions among R groups of amino acids in the polypeptide chain.