1. (2006-36) Which of the following macromolecules are a prominent part of animal tissues that function in insulation, helping animals conserve heat?
   a. Carbohydrates
   b. Lipids
   c. Proteins
   d. Nucleic acids

2. (2006-18) What is the function of enzymes in biological systems?
   a. Enzymes act as products to create new chemical reactions.
   b. Enzymes act as substrates when the necessary proteins are unavailable.
   c. Enzymes bond with substrates to create the new reaction products.
   d. Enzymes act as catalysts to drive chemical reactions forward.

3. (2001-27) According to the graph, addition of the enzyme amylase causes the reaction to —
   a. slow down
   b. speed up
   c. take in heat
   d. give off heat

4. (2002-22) Peroxidase is an enzyme that breaks down hydrogen peroxide in cells. It accomplishes this because of its structure. What part of the enzyme is involved in catalytic activity?
   a. Quaternary structure
   b. Active site
   c. Binding pocket
   d. Pleated sheet

5. (2004-43) Proteins are formed from monomers (subunits) called —
   a. nucleic acids
   b. fatty acids
   c. nucleotides
   d. amino acids

6. (2004-16) Enzymes only work with specific substrates because each substrate —
   a. actively interferes with other substrates around it
   b. destroys its specific enzyme
   c. can only use a specific ionic bond with the enzyme
   d. has a specific activation site for enzyme attachment

7. (2005-40) Most cellular activities are processes regulated by the action of —
   a. polysaccharides
   b. lipids
   c. enzymes
   d. carbohydrates

8. (2005-38) Amino acids link together by peptide bonds to form proteins. In which cellular organelle would this process occur?
   a. Mitochondrion
   b. Ribosome
   c. Lysosome
   d. Golgi body

9. (2005-19) Both lipids and carbohydrates are important in animal cells because both —
   a. provide insulation
   b. store energy
   c. form cell walls
   d. contain nitrogen

10. (2003-19) This graph shows that —
   a. more enzymes are present at a higher pH
   b. pepsin is less sensitive to pH than trypsin
   c. pepsin is less effective at low pH than trypsin
   d. pH affects the activity rate of enzymes