

BIOLOGY 150 Summer Session I, 1999
Homework Practice Question - ANSWERS

The BEST answer choice from among those given was:

Homework #1

1. b) a hypothesis
2. b) deductive reasoning
3. a) inductive reasoning
4. a) group
5. a) geometrically
6. c) theory
7. d) all of the above
8. b) SETI
9. c) Panspermia
10. a) amino acids came first

Homework 2

1. e) none of these is correct (its an electron)
2. c) involve the sharing of electrons between atoms
3. e) choose this answer if none of these is correct
4. a) true
5. a) true
6. a)
7. a) protein
8. c) is a hexose sugar
9. d) a & c only
10. b) two fatty acids
11. c) a glycosidic bond

Homework 3

1. a) primary structure is the linear sequence
2. b) alpha helix is due to H-bonds
3. c) classically, the word enzyme defines protein catalysis
4. b)
5. c) enzymes lower the energy of activation
6. b) substrates bind at the active site
7. b)
8. Heat of vaporization $540 \text{ cal/gm} \times 2,000\text{gm} = 1,080 \text{ Kcal}$
9. " glycosidic bonds point down (below plane), while \$ glycosidic bonds point up

Homework 4

1. c) the fatty acid end is hydrophobic
2. a) the 2ndary level (alpha helix and beta sheet) is due to H-bonds
3. a) any molecule that donates protons is an acid
4. e) enzyme perform all these duties, plus many more
5. b)
6. a)
7. d)

8. b) false

Homework 5

1. e) each choice serves as a good definition of a redox reaction
2. a)
3. c) NAD⁺ accepts a hydride ion (2e⁻ & a proton)
4. c) converts glu --> pyr
5. b) "-ketoglutarate is an intermediate in the Krebs cycle
6. b) false NADH is the reduced form of NAD⁺
7. b) with the peri-mitochondrial space
8. a) the definition of substrate level phosphorylation