**Anatomy & Physiology I**

**Exam 1 Answer Key**

# **Chapter 1**

1. A. Homeostasis
2. B. Anabolic
3. B. larger molecules are broken down simpler/smaller ones.
4. A. Chemical
5. B. Organism
6. D. Chemical, Molecule, Cell, Tissue, Organ, Organ System, Organism
7. E. Cephalon
8. C. Cranium
9. D. Neck
10. C. Chest
11. B. thumb, big toe
12. A. Detecting/Processing Information & Sending out actions to the body
13. C. Regulating hormone levels in the body
14. A. Digesting your food
15. A. Handles movement of the body
16. D. Immune system support & returns fluids to the body
17. A. Removal of carbon dioxide from the body and delivery oxygen to the blood
18. D. Medial
19. A. Inferior
20. D. Prone
21. B. the mamma(breasts)/anteriorly
22. B. superficial
23. D. Coronal
24. C. Sagittal
25. B. Brain
26. C. Thoracic
27. A. Abdominal
28. A. Proximal
29. E. None of the Above.
30. D. Pelvic
31. C. Visceral
32. B. Superficial
33. B. thoracic, abdominopelvic, inferior, thoracic
34. A. serous fluid, reducing friction
35. B. Negative
36. B. Positive
37. E. None of the above.

# **Chapter 2**

1. D. Atom
2. C. Electron
3. C. molecule
4. A. atomic weight
5. B. Atomic weight
6. B. Proton
7. B. Valance
8. D. Neutrons
9. A. Electron
10. D. Anion
11. B. donor
12. C. cation, anion
13. B. the sharing an electron between both elements
14. A. hydrogen, polar
15. C. three electrons
16. B. Exergonic
17. A. chemical reaction
18. B. reactants
19. C. products
20. A. Synthesis
21. A. Anabolism
22. C. exchanged
23. B. more energy goes into the reaction than is released and the products store the excess energy that fueled the reaction
24. D. enzyme, catalyst, energy required to start the reaction
25. B. solvent, solubility
26. C. the energy required to raise the temperature of a substance by 1\*C is great
27. A. lubricator
28. B. electrolyte
29. B. Hydrophilic
30. A. Hydrophobic
31. D. dehydration
32. A. hydrolysis
33. A. 7.0
34. D. 2,7
35. A. Energy reserves
36. A. Hormones
37. A. Reduce the energy required to start the reaction.
38. D. it changes shape and thus the function changes
39. A. An energy source used for pretty much everything in the body.

**Chapter 3**

1. A. Somatic
2. C. Nucleolus, nucleus, cell body, cell membrane
3. C. cell body; most cellular organelles, cytosol
4. A. Chromosomes
5. C. ribosomes, proteins, protein synthesis
6. D. ATP production
7. C. Golgi apparatus
8. D. cleaners of the cell
9. A. Helping the movement of chromosomes during cell division & providing support for the microtubules of the cytoskeleton.
10. A. energy, against the gradient
11. A. the movement of chemicals across the membrane.
12. A. hydrophilic, hydrophobic
13. B. sensory, movement of fluids across cell membrane
14. A. microvilli
15. A. peroxisomes
16. A. mitochondria
17. A. Diffusion
18. B. Water moves across a membrane to equalize the amount of water and solutes on both sides of it.
19. B. prophase, prometaphase, metaphase, anaphase, telophase, cytokinesis
20. C. metaphase
21. C. microtubules pull the chromosomes apart, and the centrioles are split in two
22. A. telophase
23. E. prophase
24. B. cytokinesis
25. A. does not flow in or out of a cell due to there being equal amounts of solutes and water.
26. A. is gained due to the solution having less solutes
27. A. lost due to the solution having more solutes
28. A. hemolysis
29. D. crenation
30. A. active transport across the cell membrane into the cell
31. B. pinocytosis
32. D. phagocytosis
33. C. removed from cell.
34. A. cancer