Name: _____ **Class:** _____ **Date:** _____ **ID: A**

Bio12-Q4W3-Circ.+Resp.+Excretion systems-H.W.

True/False
Indicate whether the statement is true or false.

____ 1. The respiratory system uses oxygen in the breakdown of glucose in cells in order to provide energy in the form of ATP.

____ 2. If you have type A blood and anti-A is added during a transfusion, no clumps will form.

____ 3. Your pulse represents the pressure that blood exerts as it pushes the walls of a vein.

____ 4. Breathing is controlled by changes in the chemistry of the blood, which cause the medulla oblongata to react.

____ 5. When your diaphragm contracts, the space in the chest cavity becomes larger.

____ 6. Carbon dioxide and oxygen are the waste products of cellular respiration.

____ 7. The major waste products of the cells are ammonia and the wastes from the breakdown of proteins.

____ 8. As the liquid passes through the U-shaped tubule in the nephron, most of the ions and water and all of the glucose and amino acids are reabsorbed into the bloodstream.

____ 9. Blood enters the heart through the atria.

____ 10. The only veins that carry oxygen-rich blood are the venae cavae.

____ 11. The blood in the veins is prevented from flowing backward because of valves in these blood vessels.

____ 12. Red blood cells are produced in the spleen.

____ 13. Human red blood cells are produced by the liver.

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 14. Which organ filters blood that has collected wastes from cells throughout the body and maintains the homeostasis of body fluids?
a. kidneys
b. heart
c. lungs
d. pacemaker

____ 15. Which of the following stores urine before being expelled from the body?
a. urinary bladder
b. urethra
c. kidneys
d. ureters

____ 16. The process that uses oxygen to break down glucose, producing energy, takes place _____.
a. only in the lungs
b. when the diaphragm contracts
c. in alveoli
d. within cells

____ 17. Which of the following is associated with cellular respiration?
a. metabolic processes
b. ATP formation
c. gas exchange in cells
d. all of these

____ 18. Which of the following is true of breathing?
a. homeostatic process
b. involuntary process
c. coordinated process
d. all of these

____ 19. Which of the following is the shape of the diaphragm when it is in the exhaling position?
a. circular
b. dome shape
c. flat
d. triangular

____ 20. The filtering unit of the kidney is the ____.
a. bladder
b. ureter
c. nephron
d. urethra

____ 21. Which of the following is a function of the kidney?
a. remove wastes from the blood
b. adjust the fluid level of the blood
c. adjust the salt level of the blood
d. all of the above

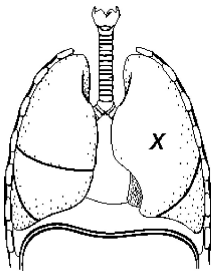

Figure 37-3

____ 22. How would the diaphragm change in Figure 37-3 in order to inhale?
a. flatten and lower
b. expand and go higher
c. flatten and go higher
d. expand and lower

____ 23. What would happen to the diaphragm in Figure 37-3 during a cough?
a. it would flutter
b. it would remain still
c. it would move up rapidly
d. it would relax

____ 24. Approximately what is the gas concentration at the point marked X in Figure 37-3 if it is at a high pressure?
a. more oxygen, less carbon dioxide
b. less oxygen, more carbon dioxide
c. more oxygen, more carbon dioxide
d. less oxygen, less carbon dioxide

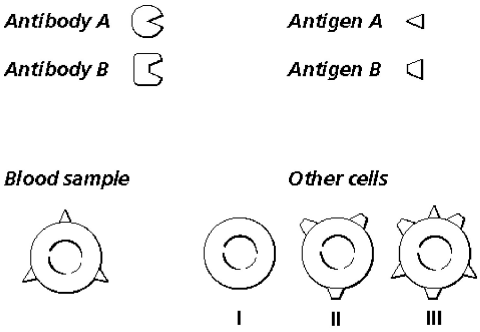

Figure 37-4

____ 25. What antibodies does the sample shown in Figure 37-4 have?
a. A
b. B
c. both
d. neither

____ 26. Which blood cell can the specimen shown in Figure 37-4 be given with no harm?
a. I
b. II
c. III
d. I and II

____ 27. Which type of blood cell can the specimen shown in Figure 37-4 donate to with no harm?
a. I
b. II
c. III
d. all of them

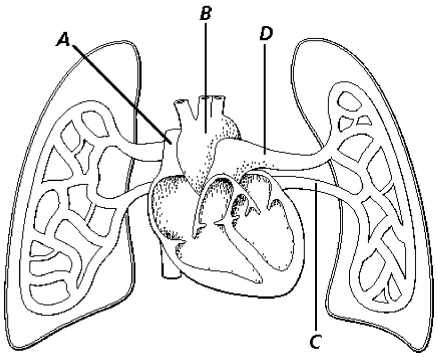

Figure 37-5

____ 28. What is the destination of blood a B in Figure 37-5?
a. the heart
b. both lungs
c. the body
d. the left lung

____ 29. How is the blood located in the vein at C in Figure 37-5 different than the blood in all other veins of the body?
a. it is rich with oxygen
b. it is rich with carbon dioxide
c. it doesn't reach the lung
d. it doesn't reach the heart

____ 30. Why is blood pumped through D before B in Figure 37-5?
a. to enrich it with oxygen
b. to enrich it with carbon dioxide
c. to enrich it with water
d. to enrich it with blood cells

Matching

Match each item with the correct statement below.

a. hemoglobin
b. antigen
c. trachea
d. nephron
e. artery
f. atrium
g. alveoli
h. urine
i. aorta
j. platelets
k. pulse
l. antibody
m. plasma
n. capillary
o. ventricle
p. vein

____ 31. Solution of body wastes consisting of excess water, waste molecules, and excess ions
____ 32. Regular surge of blood through an artery
____ 33. Largest blood vessel in the body
____ 34. A lower chamber of the heart
____ 35. An upper chamber of the heart
____ 36. A large blood vessel that carries blood from the tissues to the heart
____ 37. A kind of large, muscular, thick-walled elastic vessel that carries blood away from the heart
____ 38. Protein that reacts with an antigen

____ 39. Microscopic blood vessel
____ 40. Foreign substance that stimulates an immune response
____ 41. Cell fragments that help blood to clot after an injury
____ 42. Iron-containing protein that picks up oxygen after it enters the blood vessels in the lungs
____ 43. Fluid portion of blood in which blood cells move
____ 44. Sacs of the lungs where exchange of oxygen and carbon dioxide takes place
____ 45. Passageway leading from the larynx to the lungs

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