Human Body Review #4: Circulatory System

Modified True/False

*Indicate whether the sentence or statement is true or false. If false, change the identified word or phrase to make the sentence or statement true.*

___ 1. The cardiovascular system consists of the heart, blood vessels, and **lymph**.

___ 2. The two upper chambers of the heart are called **atria**.

___ 3. The **right ventricle** pumps blood to the lungs.

___ 4. Blood flows from the heart to the body through **veins**.

___ 5. As blood moves away from the heart, blood pressure **increases**.

___ 6. **White** blood cells are the most numerous type of cells in whole blood.

___ 7. The risk of a heart attack is **higher** for people who smoke.

___ 8. The blood pressure of a person with hypertension is **lower** than normal.
Multiple Choice
Identify the letter of the choice that best completes the statement or answers the question.

9. Which of these is NOT a function of the cardiovascular system?
   a. attacking disease-causing microorganisms
   b. carrying oxygen, glucose, and other needed materials to cells
   c. carrying waste products away from cells
   d. controlling many body processes by means of chemicals

10. Needed substances are carried to the body cells by
    a. enzymes.
    b. blood.
    c. water.
    d. food.

11. The function of the atria is to
    a. pump blood to the lungs.
    b. pump blood to the body.
    c. receive blood that comes into the heart.
    d. deliver oxygen to body tissues.

12. A pacemaker adjusts the heart rate to correspond to the body’s
    a. creation of waste products.
    b. need for carbon dioxide.
    c. ability to fight disease.
    d. oxygen needs.

13. Blood vessels that carry blood away from the heart are called
    a. veins.
    b. arteries.
    c. capillaries.
    d. lymphatic vessels.

14. When blood flows into the right atrium from the body, it contains
    a. little oxygen and a lot of carbon dioxide.
    b. a lot of oxygen and little carbon dioxide.
    c. a lot of both oxygen and carbon dioxide.
    d. little of either oxygen or carbon dioxide.

15. In which vessels are materials exchanged between the blood and the body cells?
    a. veins
    b. arteries
    c. capillaries
    d. lymphatic vessels
16. Blood can flow freely through arteries because
   a. arteries are lined with smooth muscle.
   b. arteries are lined with a layer of smooth epithelial cells.
   c. connective tissue pushes blood through arteries.
   d. arteries have only one layer of cells.

17. What causes blood pressure?
   a. the force with which the ventricles contract
   b. the rate at which blood flows through the heart
   c. the speed at which oxygen is returned to blood in the lungs
   d. the strength of the muscles in the walls of the capillaries

18. In a blood pressure reading of 120/85, the number 120 refers to the blood pressure
   a. in the capillaries.
   b. in the veins.
   c. when the ventricles relax.
   d. when the ventricles contract.

19. Which component of blood carries oxygen to the body cells?
   a. plasma
   b. platelets
   c. red blood cells
   d. white blood cells

20. If a person’s blood lacked platelets, what process could not take place?
   a. carrying oxygen to cells
   b. carrying glucose to cells
   c. clotting of blood
   d. transfusing of blood

21. Atherosclerosis is a condition in which
   a. blood pressure is consistently higher than normal.
   b. muscles in artery walls lose their ability to contract.
   c. capillaries widen and release too much fluid.
   d. artery walls thicken as the result of a buildup of fatty materials.

22. Exercise is important for cardiovascular health because it
   a. increases blood pressure.
   b. strengthens heart muscle.
   c. makes the coronary arteries wider.
   d. reduces sodium in the blood.

23. Which of these structures prevents blood from flowing backward?
   a. aorta
   b. valve
   c. septum
   d. coronary artery
24. When the ventricles contract, blood is pumped
   a. out of the heart.
   b. into the heart.
   c. through the septum.
   d. into veins.

25. Which chamber of the heart pumps oxygen-poor blood to the lungs?
   a. left atrium
   b. right atrium
   c. left ventricle
   d. right ventricle

26. Which chamber of the heart contracts with the most force?
   a. right atrium
   b. right ventricle
   c. left atrium
   d. left ventricle

27. If your pulse rate increases, your heart is beating
   a. slower than before.
   b. faster than before.
   c. more forcefully than before.
   d. with less pressure than before.

28. What instrument is used to measure blood pressure?
   a. thermometer
   b. stethoscope
   c. sphygmomanometer
   d. blood bank

29. Hypertension is a condition in which
   a. blood pressure is consistently lower than normal.
   b. blood pressure is consistently higher than normal.
   c. fatty deposits build up on artery walls.
   d. some of the heart muscle dies.

30. Which component of blood is 90 percent water?
   a. plasma
   b. platelets
   c. red blood cells
   d. white blood cells

31. The function of white blood cells is to
   a. carry carbon dioxide.
   b. increase blood pressure.
   c. carry wastes away from body cells.
   d. fight disease.
Completion
*Complete each sentence or statement.*

32. The group of cells called the ____________________ regulates the rate at which the heart beats.

33. Blood is pumped through blood vessels by the action of the organ known as the ________________.

34. A flap of tissue called a(n) ________________ separates the right atrium from the right ventricle.

35. Blood that contains a lot of carbon dioxide flows from the body into the ________________ atrium of the heart.

36. Blood that is rich in oxygen leaves the heart through the blood vessel known as the ________________.

37. Blood returns to the heart from the body through blood vessels called ____________________.

38. Substances are exchanged between the blood and body cells in the blood vessels known as ________________.

39. The force with which the ________________ contract causes blood pressure.

40. Fibrin is produced when the blood components called ________________ start a chain reaction.

41. Red blood cells contain ________________, a protein that carries oxygen from the lungs.

42. High blood pressure is also called ________________.
Human Body Review #4: Circulatory System
Answer Section

MODIFIED TRUE/FALSE

1. F, blood
2. T
3. T
4. F, arteries
5. F, decreases
6. F, Red
7. T
8. F, higher

MULTIPLE CHOICE

9. D
10. B
11. C
12. D
13. B
14. A
15. C
16. B
17. A
18. D
19. C
20. C
21. D
22. B
23. B
24. A
25. D
26. D
27. B
28. C
29. B
30. A
31. D

COMPLETION

32. pacemaker
33. heart
34. valve
35. right
36. aorta
37. veins
38. capillaries
39. ventricles
40. platelets
41. hemoglobin
42. hypertension