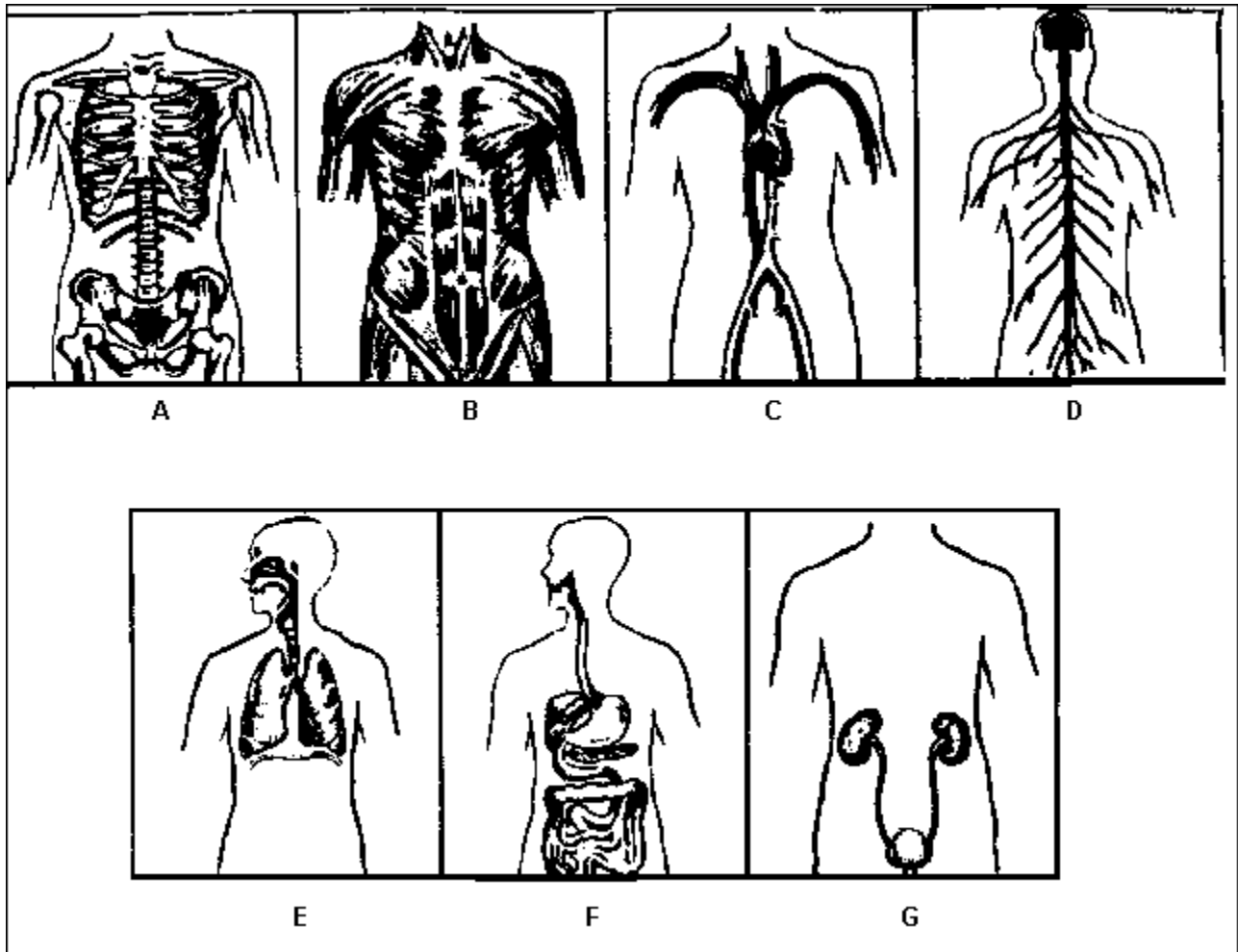


Circulatory System: Practice Questions # 1

1. Which statement best describes arteries?

- A. They have thick walls and transport blood away from the heart.
- B. They have thick walls and transport blood toward the heart.
- C. They have thin walls and transport blood away from the heart.
- D. They have thin walls and transport blood toward the heart.

2.

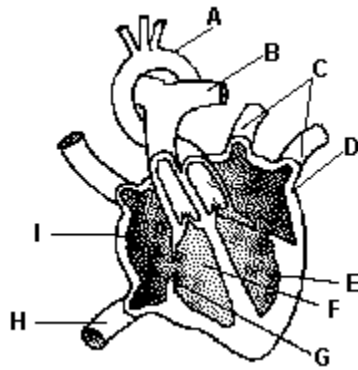


The diagrams show various organ systems. Cardiovascular diseases interfere most directly with the normal functioning of

- A. system *E*
- B. system *G*
- C. system *C*
- D. system *D*

3. Blood normally flows from the capillaries directly into
- A. small arteries
 - B. small veins
 - C. lymph vessels
 - D. heart atria
4. Which body structures have walls one cell thick?
- A. veins and arteries
 - B. trachea and bronchi
 - C. capillaries and alveoli
 - D. lymph vessels and stomach
5. What is a major difference between red blood cells and white blood cells?
- A. Red blood cells contain hemoglobin, but white blood cells do not.
 - B. Red blood cells can move, but white blood cells cannot.
 - C. Red blood cells contain nuclei, but white blood cells do not.
 - D. Red blood cells engulf foreign bacteria, but white blood cells do not.
6. Which organic compounds are needed for the synthesis of the plasma membrane, contain a large amount of stored energy, and have been linked to cardiovascular diseases?
- A. complex carbohydrates
 - B. saturated fats
 - C. simple sugars
 - D. polyunsaturated fats
7. A pulse can be detected most easily in
- A. an artery
 - B. a vein
 - C. a capillary
 - D. a lacteal

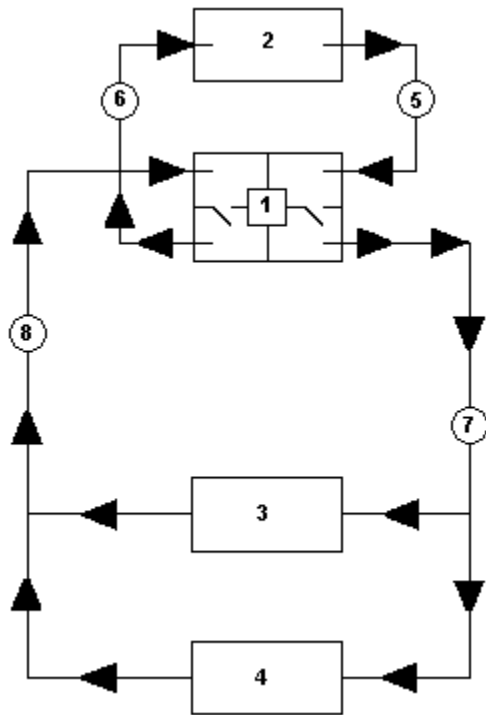
8.



In the diagram of the human heart, which structures are most closely associated with the transport of deoxygenated blood?

- A. A, B, and C
- B. B, F, and I
- C. C, D, and E
- D. D, H, and I

9.



The diagram represents several major circulatory pathways in the human body. Which sequence represents the normal blood flow in circulation to the lungs?

- A. 2 → 5 → 7 → 4
- B. 4 → 8 → 1 → 6
- C. 1 → 6 → 2 → 5
- D. 5 → 7 → 3 → 8

10. The breaking apart of platelets in the blood helps in the
- A. synthesis of hemoglobin
 - B. formation of a clot
 - C. release of antibodies
 - D. deamination of amino acids
11. If a human system fails to function properly, what is the most likely result?
- A. a stable rate of metabolism
 - B. a disturbance in homeostasis
 - C. a change in the method of cellular respiration
 - D. a change in the function of DNA
12. The main function of the human digestive system is to
- A. rid the body of cellular waste materials
 - B. process organic molecules so they can enter cells
 - C. break down glucose in order to release energy
 - D. change amino acids into proteins and carbohydrates
13. Which two systems are most directly involved in providing molecules needed for the synthesis of fats in human cells?
- A. digestive and circulatory
 - B. excretory and digestive
 - C. immune and muscular
 - D. reproductive and circulatory
14. Which body system is correctly paired with its function?
- A. excretory — produces antibodies to fight disease-causing organisms
 - B. digestive — produces hormones for storage and insulation
 - C. circulatory — transports materials for energy release in body cells
 - D. respiratory — collects waste material for digestion
15. The failure to regulate the pH of the blood can affect the activity of
- A. enzymes that clot blood
 - B. red blood cells that make antibodies
 - C. chlorophyll that carries oxygen in the blood
 - D. DNA that controls starch digestion in the blood

16. The sickle-cell trait is an inherited condition resulting from the presence of abnormal molecules of the protein hemoglobin in red blood cells. A person with the sickle-cell trait may have a child with the same condition because the child receives from the parent
- A. abnormal red blood cells
 - B. abnormal hemoglobin molecules
 - C. a code for the production of abnormal hemoglobin
 - D. a code for the production of abnormal amino acids

Answer Key 1: Circulatory System

1. A
2. C
3. B
4. C
5. A
6. B
7. A
8. B
9. C
10. B
11. B
12. B
13. A
14. C
15. A
16. C