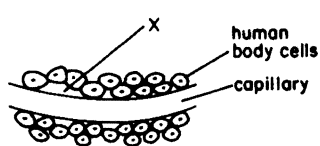


# Anatomy/Physiology Q's

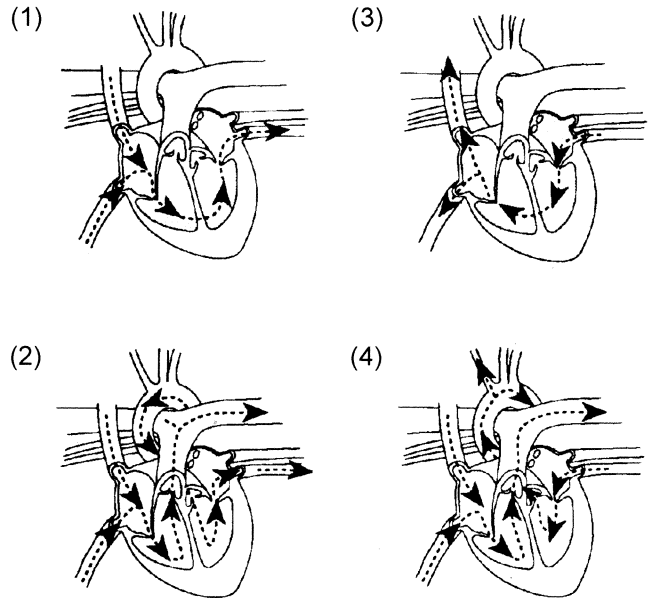
- The principal function of perspiration is to
  - regulate hormone secretion
  - remove oils from the surface of the skin
  - deposit antibodies on the surface of the skin
  - regulate body temperature
- Which sequence represents the correct pathway for the removal of urine from the human body?
  - kidney → ureter → urinary bladder → urethra
  - kidney → urethra → urinary bladder → ureter
  - ureter → kidney → urinary bladder → urethra
  - urethra → kidney → urinary bladder → ureter
- A major function of the human urinary bladder is
  - transforming urine into a nitrogenous waste
  - releasing urine directly into the bloodstream
  - storing urine until it is eliminated
  - filtering urine out of the blood
- What is the main function of a nephron?
  - It breaks down red blood cells to form nitrogenous wastes.
  - It regulates the chemical composition of the blood.
  - It forms urea from the waste products of protein metabolism.
  - It absorbs digested food from the contents of the small intestine.
- In humans, microscopic nephrons are found in the
 

(1) liver	(3) bladder
(2) kidney	(4) lung
- The space marked X in the diagram at the right would normally contain
 

(1) hemoglobin	(3) intercellular fluid
(2) neurotransmitters	(4) hydrolytic enzymes
- In humans, a function of intercellular fluid is to
  - produce red blood cells
  - serve as a transport medium
  - produce white blood cells
  - serve as a filter for uric acid
- Which chamber of the human heart receives most of the blood returning from the brain?
 

(1) left ventricle	(3) left atrium
(2) right ventricle	(4) right atrium

- In which heart diagram do the arrows correctly represent the path of blood flow?



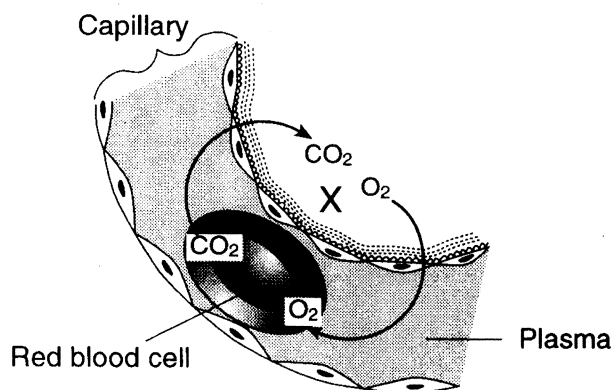
- |              |                 |
|--------------|-----------------|
| (1) arteries | (3) capillaries |
| (2) veins    | (4) villi       |
- The exchange of materials between the blood and the intercellular fluid (ICF) occurs readily through structures known as
 

(1) arteries	(3) capillaries
(2) veins	(4) villi
  - Which statement best describes arteries?
    - They have thick walls and transport blood away from the heart.
    - They have thick walls and transport blood toward the heart.
    - They have thin walls and transport blood away from the heart.
    - They have thin walls and transport blood toward the heart.
  - Which statement does *not* identify a characteristic of antibodies?
    - They are produced by the body in response to the presence of foreign substances.
    - They may be produced in response to an antigen.
    - They are nonspecific, acting against any foreign substance in the body.
    - They may be produced by white blood cells.
  - A substance which causes an immunological reaction when introduced into the body of man is
 

(1) glucose	(3) an antibody
(2) insulin	(4) an antigen

## Anatomy/Physiology Q's

14. Which antigens are present on the red blood cells of a person who has type O blood?  
 (1) A, only (3) both A and B  
 (2) B, only (4) neither A nor B
15. An injection containing weakened forms of a disease-causing organism will usually trigger  
 (1) absorption of histamines throughout the body  
 (2) secretion of antigens by lymphocytes  
 (3) production of temporary resistance to the disease  
 (4) production of antibodies providing active immunity
16. Bleeding from a small cut soon stops due to the release of enzymes from  
 (1) platelets (3) hemoglobin  
 (2) activated antibodies (4) white blood cells
17. A function of human blood is to  
 (1) maintain homeostasis (3) produce new cells  
 (2) produce energy (4) keep the heart beating
18. Which sequence correctly indicates the branching pattern of the human respiratory system?  
 (1) trachea → bronchi → bronchioles → alveoli  
 (2) trachea → bronchioles → bronchi → alveoli  
 (3) alveoli → trachea → bronchioles → bronchi  
 (4) alveoli → bronchioles → trachea → bronchi
19. The diagram below represents part of a capillary in a specific region of the human body.



- The region labeled X represents part of  
 (1) a glomerulus (3) avillus  
 (2) an alveolus (4) the liver

20. Which part of the human respiratory system is a thin, moist membranous structure where gas exchange occurs?  
 (1) trachea (3) epiglottis  
 (2) bronchus (4) alveolus
21. In vertebrates, organs adapted for respiratory gas exchange are characterized by the  
 (1) lack of blood vessels  
 (2) presence of villi  
 (3) presence of many capillaries  
 (4) lack of cell membranes
22. A list of life activities is given below.

### Life Activities

- (A) Ingestion of protein  
 (B) Removal of nitrogenous wastes  
 (C) Breakdown of protein  
 (D) Formation of nitrogenous wastes

Which sequence of these activities would most likely occur in humans during the processing of a single protein molecule?

- (1) A → C → D → B (3) A → B → D → C  
 (2) A → D → B → C (4) A → C → B → D
23. Choking on food is most likely caused by an interference with the proper functioning of the  
 (1) diaphragm (3) bronchial tubes  
 (2) nasal cavity (4) epiglottis
24. In humans, the chemical digestion of proteins, lipids, and carbohydrates is completed in the  
 (1) stomach (3) small intestine  
 (2) pancreas (4) large intestine
25. Extensive damage to the large intestine would have the greatest effect on  
 (1) glucose metabolism (3) enzyme secretion  
 (2) protein synthesis (4) water reabsorption