**Chapter 10 Pre-Test A**

**Multiple Choice**

*Identify the choice that best completes the statement or answers the question.*

**\_\_\_\_ 1.** Hemophilia affects blood clotting. Which of the following components of blood is likely not functioning properly?

|  |  |
| --- | --- |
| **a.** | plasma |
| **b.** | platelets |
| **c.** | red blood cells |
| **d.** | white blood cells |



**\_\_\_\_ 2. Use the diagram above to answer the next question.**

In the diagram, the SA node of the heart is labeled as

|  |  |
| --- | --- |
| **a.** | 1. |
| **b.** | 2. |
| **c.** | 3. |
| **d.** | 4. |

**\_\_\_\_ 3.** Which of the following blood vessels will a blood cell enter after the iliac vein?

|  |  |
| --- | --- |
| **a.** | aorta |
| **b.** | iliac artery |
| **c.** | anterior vena cava |
| **d.** | posterior vena cava |

**\_\_\_\_ 4.** In which blood vessels is blood pressure the lowest?

|  |  |
| --- | --- |
| **a.** | veins |
| **b.** | arteries |
| **c.** | arterioles |
| **d.** | capillaries |



**\_\_\_\_ 5. Use the diagram above to answer the next question.**

Which of the indicated blood components is a red blood cell?

|  |  |
| --- | --- |
| **a.** | III |
| **b.** | IV |
| **c.** | V |
| **d.** | VI |

**\_\_\_\_ 6. Use the diagram above to answer the next question.**

Which of the indicated blood components is primarily responsible for the transport of oxygen?

|  |  |
| --- | --- |
| **a.** | I |
| **b.** | II |
| **c.** | IV |
| **d.** | V |

**\_\_\_\_ 7. Use the diagram above to answer the next question.**

Which of the indicated blood components is most responsible for fighting an infection?

|  |  |
| --- | --- |
| **a.** | I |
| **b.** | II |
| **c.** | III |
| **d.** | IV |

**\_\_\_\_ 8.** Which of the following processes is prevented by an atrioventricular valve?

|  |  |
| --- | --- |
| **a.** | blood re-entering the right atrium |
| **b.** | blood re-entering the left ventricle |
| **c.** | blood re-entering the pulmonary vein |
| **d.** | blood re-entering the pulmonary artery |

**\_\_\_\_ 9.** In which pair of vessels is the oxygen level most similar?

|  |  |
| --- | --- |
| **a.** | aorta and pulmonary vein |
| **b.** | aorta and pulmonary artery |
| **c.** | coronary vein and pulmonary vein |
| **d.** | coronary artery and pulmonary artery |



**\_\_\_\_ 10. Use the diagram above to answer the next question.**

Which position indicates the point at which the SA node is activated?

|  |  |
| --- | --- |
| **a.** | P |
| **b.** | Q |
| **c.** | R |
| **d.** | S |

**\_\_\_\_ 11.** How does the blood in the pulmonary artery compare to the blood in the aorta?

|  |  |
| --- | --- |
| **a.** | Oxygen levels in both regions are low. |
| **b.** | Carbon dioxide levels in both regions are high. |
| **c.** | Oxygen levels in the aorta are lower than levels in the pulmonary artery. |
| **d.** | Oxygen levels in the aorta are higher than levels in the pulmonary artery. |

**\_\_\_\_ 12.** Which of the following relationships exists between blood pressure and blood velocity as blood enters a vein?

|  |  |
| --- | --- |
| **a.** | blood pressure increases and blood velocity increases |
| **b.** | blood pressure increases and blood velocity decreases |
| **c.** | blood pressure decreases and blood velocity increases |
| **d.** | blood pressure decreases and blood velocity decreases |

**\_\_\_\_ 13.** In which of the following pairs of structures would oxygen levels be the most similar?

|  |  |
| --- | --- |
| **a.** | coronary artery and renal vein |
| **b.** | coronary artery and hepatic vein |
| **c.** | pulmonary vein and umbilical vein |
| **d.** | pulmonary vein and umbilical artery |

**\_\_\_\_ 14.** Which of the following characteristics describes a venule but not an arteriole?

|  |  |
| --- | --- |
| **a.** | thin walls |
| **b.** | thick walls |
| **c.** | connects veins and capillaries |
| **d.** | only carries deoxygenated blood |

**\_\_\_\_ 15.** Which of the following structures will a blood cell enter before entering a capillary bed in the kidney?

|  |  |
| --- | --- |
| **a.** | a venule connected to the renal vein |
| **b.** | a venule connected to the renal artery |
| **c.** | an arteriole connected to the renal vein |
| **d.** | an arteriole connected to the renal artery |



**\_\_\_\_ 16. Use the diagram above to answer the next question.**

Which of the following functions is performed by the structures in the illustration above?

|  |  |
| --- | --- |
| **a.** | clotting blood |
| **b.** | fighting infections |
| **c.** | transporting glucose |
| **d.** | transporting carbon dioxide |



 

**\_\_\_\_ 17. Use the diagram above to answer the next question.**

Which of the following changes occurs as blood flows through this region of blood vessels in a person’s arm?

|  |  |
| --- | --- |
| **a.** | blood pressure increases and osmotic pressure increases |
| **b.** | blood pressure increases and osmotic pressure decreases |
| **c.** | blood pressure decreases and osmotic pressure increases |
| **d.** | blood pressure decreases and osmotic pressure decreases |

**\_\_\_\_ 18.** Which of the following substances is most responsible for creating the osmotic gradient within a capillary bed?

|  |  |
| --- | --- |
| **a.** | oxygen |
| **b.** | amino acids |
| **c.** | carbon dioxide |
| **d.** | plasma proteins |

**\_\_\_\_ 19.** Which of the following explains how hypertension affects capillary-tissue fluid exchange?

|  |  |
| --- | --- |
| **a.** | Blood pressure is low and so less fluid re-enters the capillaries. |
| **b.** | Blood pressure is high and so less fluid re-enters the capillaries. |
| **c.** | Blood pressure is low and so more fluid re-enters the capillaries. |
| **d.** | Blood pressure is high and so more fluid re-enters the capillaries. |

**\_\_\_\_ 20.** Which of the following pathways can a blood cell travel?

|  |  |
| --- | --- |
| **a.** | aorta  iliac artery iliac vein anterior vena cava |
| **b.** | aorta carotid artery jugular vein anterior vena cava |
| **c.** | aorta coronary vein coronary artery anterior vena cava |
| **d.** | aorta hepatic portal vein hepatic vein anterior vena cava |

**\_\_\_\_ 21.** Which of the following features do a lymph vein and the renal vein have in common?

|  |  |
| --- | --- |
| **a.** | one-way valves |
| **b.** | transport blood |
| **c.** | one cell layer thick |
| **d.** | carry materials to the vena cava |

**\_\_\_\_ 22.** Which of the following events occurs at the same time that blood enters the right atrium?

|  |  |
| --- | --- |
| **a.** | Semi-lunar valves close. |
| **b.** | Atrioventricular valves open. |
| **c.** | Blood leaves the left ventricle. |
| **d.** | Blood enters the right ventricle. |

**\_\_\_\_ 23.** If bacteria are detected in the blood stream, which of the following will be produced in response?

|  |  |
| --- | --- |
| **a.** | lymph |
| **b.** | antigens |
| **c.** | platelets |
| **d.** | antibodies |

**\_\_\_\_ 24.** If atria contract normally, but ventricles do not contract normally, which of the following structures is likely malfunctioning?

|  |  |
| --- | --- |
| **a.** | SA node |
| **b.** | AV node |
| **c.** | pacemaker |
| **d.** | chordae tendinae |

**\_\_\_\_ 25.** Which of the following descriptions refers to an artery?

|  |  |
| --- | --- |
| **a.** | carries nutrients to the liver |
| **b.** | carries oxygen to the left atrium |
| **c.** | carries carbon dioxide to the lungs |
| **d.** | carries waste toward the right atrium |

**Chapter 10 Pre-Test A**

**Answer Section**

**MULTIPLE CHOICE**

 **1.** ANS: B PTS: 1 DIF: K REF: 10

OBJ: Circulatory System LOC: C6-1 TOP: 10.2

KEY: Blood

 **2.** ANS: A PTS: 1 DIF: K REF: 10

OBJ: Circulatory System LOC: C4-1 TOP: 10.3

KEY: Human Heart

 **3.** ANS: D PTS: 1 DIF: K REF: 10

OBJ: Circulatory System LOC: C5-4 TOP: 10.4

KEY: Vascular Pathways

 **4.** ANS: A PTS: 1 DIF: K REF: 10

OBJ: Circulatory System LOC: C5-5 TOP: 10.4

KEY: Vascular Pathways

 **5.** ANS: C PTS: 1 DIF: K REF: 10

OBJ: Circulatory System LOC: C6-1 TOP: 10.2

KEY: Blood

 **6.** ANS: D PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C6-1 TOP: 10.2

KEY: Blood

 **7.** ANS: A PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C6-1 TOP: 10.2

KEY: Blood

 **8.** ANS: A PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C3-1 TOP: 10.2

KEY: Human Heart

 **9.** ANS: A PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C3-1 TOP: 10.3

KEY: Human Heart

 **10.** ANS: A PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C4-1 TOP: 10.3

KEY: Human Heart

 **11.** ANS: D PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C3-1 TOP: 10.4

KEY: Vascular Pathways

 **12.** ANS: C PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C5-2 TOP: 10.4

KEY: Vascular Pathways

 **13.** ANS: C PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C5-7 TOP: 10.5

KEY: Fetal Circulation

 **14.** ANS: C PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C5-2 TOP: 10.1

KEY: Blood Vessels

 **15.** ANS: D PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C5-2 TOP: 10.1

KEY: Blood Vessels

 **16.** ANS: D PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C6-1 TOP: 10.2

KEY: Blood

 **17.** ANS: C PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C5-6 TOP: 10.2

KEY: Blood

 **18.** ANS: D PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C5-6 TOP: 10.2

KEY: Blood

 **19.** ANS: B PTS: 1 DIF: HMP REF: 10

OBJ: Circulatory System LOC: C5-6 TOP: 10.2

KEY: Blood

 **20.** ANS: B PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C5-1 TOP: 10.4

KEY: Vascular Pathways

 **21.** ANS: A PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C7-2 TOP: 10.6

KEY: Lymphatic System

 **22.** ANS: C PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C3-1 TOP: 10.3

KEY: Human Heart

 **23.** ANS: D PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C6-3 TOP: 10.6

KEY: Lymphatic System

 **24.** ANS: B PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C4-1 TOP: 10.3

KEY: Human Heart

 **25.** ANS: C PTS: 1 DIF: U REF: 10

OBJ: Circulatory System LOC: C5-4 TOP: 10.4

KEY: Vascular Pathways