

Practice Questions – Cardiovascular System

Note: choices may be used more than once or not at all.

1-5. Matching

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|----------------------|--|-----------------|
| A) Left atrium | receives blood from the pulmonary veins | 1) <u> A </u> |
| B) Right atrium | discharges blood into pulmonary arteries | 2) <u> D </u> |
| C) Left ventricle | receives blood from the coronary sinus | 3) <u> B </u> |
| D) Right ventricle | discharges blood into systemic arteries | 4) <u> C </u> |
| E) None of the above | receives blood from the system veins | 5) <u> B </u> |

6-10. Matching

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|------------------------------|---|------------------|
| A) Mitral valve | located between right ventricle and pulmonary trunk | 6) <u> D </u> |
| B) Right AV valve | located between right atrium and ventricle | 7) <u> B </u> |
| C) Aortic Semilunar valve | located between left atrium and ventricle | 8) <u> A </u> |
| D) Pulmonary semilunar valve | located between left ventricle and aorta | 9) <u> C </u> |
| E) None of the above | also known as the bicuspid valve | 10) <u> A </u> |

11-15. Place the following in the order that blood moves through the heart, starting at the lungs.

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|---------------------------|--------|------------------|
| A) Left atrium | first | 11) <u> A </u> |
| B) Mitral valve | second | 12) <u> B </u> |
| C) Tricuspid valve | third | 13) <u> D </u> |
| D) Aortic semilunar valve | fourth | 14) <u> C </u> |
| E) Pulmonary trunk | fifth | 15) <u> E </u> |

16-20. Matching

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|----------------------------------|--|------------------|
| A) Contraction of the ventricles | sucks blood into ventricles | 16) <u> B </u> |
| B) Relaxation of the ventricles | closes the semilunar valves | 17) <u> B </u> |
| C) None of the above | opens the atrioventricular valves | 18) <u> B </u> |
| | closes the atrioventricular valves | 19) <u> A </u> |
| | discharges blood out of the ventricles | 20) <u> A </u> |

21-25. Matching

- | | | |
|------------------|--|------------------|
| A) Epicardium | composed largely of simple squamous epithelium | 21) <u> D </u> |
| B) Myocardium | very thick in the interventricular septum | 22) <u> B </u> |
| C) Endocardium | also called the visceral pericardium | 23) <u> A </u> |
| D) A and C | composed of cardiac muscle | 24) <u> B </u> |
| E) None of these | lines the inside of the heart | 25) <u> C </u> |

26-30. Matching

- | | | |
|------------------|--|------------------|
| A) Epicardium | analogous to the tunica externa of blood vessels | 26) <u> A </u> |
| B) Myocardium | analogous to the tunica interna of blood vessels | 27) <u> C </u> |
| C) Endocardium | analogous to the tunica media of blood vessels | 28) <u> B </u> |
| D) None of these | also called the visceral pericardium | 29) <u> A </u> |
| | composed of cardiac muscle | 30) <u> B </u> |

31-35. Matching

- | | | |
|--------------------------|---|--------------|
| A) Right coronary artery | is connected to right atrium | 31) <u>C</u> |
| B) Left coronary artery | is connected to ascending aorta | 32) <u>D</u> |
| C) Coronary sinus | branches to form the circumflex artery | 33) <u>B</u> |
| D) A and B | branches to form the right marginal arteries | 34) <u>A</u> |
| | branches to form the anterior descending artery | 35) <u>B</u> |

36-40. Matching

- | | | |
|------------------|--|--------------|
| A) SA node | located near the vena cava | 36) <u>A</u> |
| B) AV node | located near the tricuspid valve | 37) <u>B</u> |
| C) None of these | connects to the AV bundle (of His) | 38) <u>B</u> |
| | directly paces the contraction of the atria | 39) <u>A</u> |
| | directly paces the contraction of the ventricles | 40) <u>B</u> |

41-45. Place the following in the order that signals pass through the cardiac conduction system.

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|-----------------------------|--------|--------------|
| A) Atrial conduction fibers | first | 41) <u>D</u> |
| B) Bundle branches | second | 42) <u>A</u> |
| C) Bundle of His | third | 43) <u>E</u> |
| D) SA node | fourth | 44) <u>C</u> |
| E) AV node | fifth | 45) <u>B</u> |

46-50. Matching

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|-------------------|--|--------------|
| A) Tunica externa | is very thick in arteries | 46) <u>C</u> |
| B) Tunica interna | contains elastic connective tissue | 47) <u>D</u> |
| C) Tunica media | composed mostly of smooth muscle | 48) <u>C</u> |
| D) A and B | contains simple squamous epithelium | 49) <u>B</u> |
| E) None of these | composed mostly of fibrous connective tissue | 50) <u>A</u> |

51-55. Matching

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|------------------------|--|--------------|
| A) Intracellular space | contains blood | 51) <u>C</u> |
| B) Interstitial space | contains cytoplasm | 52) <u>A</u> |
| C) Vascular space | also called extracellular space | 53) <u>E</u> |
| D) A and B | surrounds lymphatic capillaries | 54) <u>B</u> |
| E) B and C | found between connective tissue fibers | 55) <u>B</u> |

56-60. Matching

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|-------------------------|--------------------------------------|--------------|
| A) Right lymphatic duct | collects lymph from the left leg | 56) <u>B</u> |
| B) Thoracic duct | collects lymph from the left arm | 57) <u>B</u> |
| C) A and B | collects lymph from the right leg | 58) <u>B</u> |
| D) None of these | collects lymph from the intestines | 59) <u>B</u> |
| | empty(ies) into the subclavian veins | 60) <u>C</u> |

61-65. Matching

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|------------------------------|-----------------------|--------------|
| A) Carries oxygen poor blood | aorta | 61) <u>B</u> |
| B) Carries oxygen rich blood | coronary sinus | 62) <u>A</u> |
| C) None of these | hepatic portal vein | 63) <u>A</u> |
| | right pulmonary vein | 64) <u>B</u> |
| | left pulmonary artery | 65) <u>A</u> |

66-70. Matching

- | | | |
|--------------------------|---|------------------|
| A) Internal jugular vein | drains blood from the legs | 66) <u> B </u> |
| B) Saphenous veins | drains blood from the brain | 67) <u> A </u> |
| C) Cephalic vein | drains blood from outside of the head | 68) <u> E </u> |
| D) Basilic vein | drains blood from the palm / lower surface of the arm | 69) <u> D </u> |
| E) None of these | drains blood from the back / upper surface of the arm | 70) <u> C </u> |

71-75. Matching

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|--|--------------------------|------------------|
| A) Blood drains into hepatic portal vein | splenic vein | 71) <u> A </u> |
| B) Blood drains directly into vena cava | gastric veins | 72) <u> A </u> |
| | adrenal veins | 73) <u> B </u> |
| | gonadal veins | 74) <u> B </u> |
| | superior mesenteric vein | 75) <u> A </u> |

76-80. Place the following in the order that blood travels to reach the right hand, starting at the aortic arch.

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|---------------------------|--------|------------------|
| A) Radial artery | first | 76) <u> E </u> |
| B) Axillary artery | second | 77) <u> D </u> |
| C) Brachial artery | third | 78) <u> B </u> |
| D) Subclavian artery | fourth | 79) <u> C </u> |
| E) Brachiocephalic artery | fifth | 80) <u> A </u> |

81-85. Place the following in the order that blood travels to reach the anterior brain, starting at the vertebral arteries. Assume damage to the internal carotid arteries in the neck.

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|---|--------|------------------|
| A) Basilar artery | first | 81) <u> A </u> |
| B) Anterior cerebral arteries | second | 82) <u> C </u> |
| C) Posterior cerebral arteries | third | 83) <u> D </u> |
| D) Posterior communicating arteries | fourth | 84) <u> E </u> |
| E) Internal carotid arteries in the skull | fifth | 85) <u> B </u> |

86-90. Matching

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|-----------------------------|--|------------------|
| A) Superior mesenteric vein | drains blood from the arms | 86) <u> C </u> |
| B) External jugular vein | drains blood from the brain | 87) <u> E </u> |
| C) Cephalic veins | drains blood from the ovaries | 88) <u> D </u> |
| D) Gonadal veins | drains blood from outside of the head | 89) <u> B </u> |
| E) None of these | drains blood from the small intestines | 90) <u> A </u> |

91-95. Matching

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|-----------------|------------------------------------|------------------|
| A) Water | another name for white blood cells | 91) <u> C </u> |
| B) Fibrin | major component of blood clots | 92) <u> B </u> |
| C) Leukocytes | makes up about 92% of plasma | 93) <u> A </u> |
| D) Erythrocytes | another name for platelets | 94) <u> E </u> |
| E) Thrombocytes | carry oxygen | 95) <u> D </u> |

96-100. Matching

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|----------------|---|-------------------|
| A) Basophils | release histamine that in turn dilates blood vessel | 96) <u> A </u> |
| B) Monocytes | are subdivided into B, T, and NK cells | 97) <u> E </u> |
| C) Eosinophils | capture/restrain potential pathogens | 98) <u> B </u> |
| D) Neutrophils | engulf and digest parasites | 99) <u> C </u> |
| E) Lymphocytes | engulf debris | 100) <u> D </u> |