## Anatomy and Physiology II MED 165 Cardiac Anatomy Study Guide

- 1. What are the three components of the cardiovascular system?
- 2. In what region of the thoracic cavity is the heart found?
- 3. What is the name of the sac that surrounds the heart?
- 4. Where do you find the visceral pericardium?
- 5. Where do you the parietal pericardium?
- 6. What is the function of pericardial fluid?
- 7. What are the three layers of heart tissue?
- 8. What is function of the inner layer of heart tissue?
- 9. What tissue makes up the middle layer of the heart?
- 10. What is the septum?
- 11. What is the epicardium?
- 12. What is the right atrium? What type of blood is contained in the right atrium? Where does it receive blood from? Where does it send blood?
- 13. What is the right ventricle? What type of blood is contained in the right ventricle? Where does it send blood?
- 14. How does the wall of the right atrium compare to the right ventricle?
- 15. What is the left atrium? What type of blood is contained in the left atrium? Where does it receive blood from? Where does it send blood?
- 16. What physical structure of the heart is made from the left ventricle?
- 17. What is opening in the interatrial septum found in infants?
- 18. What is the name of the remnant of that opening called?
- 19. What is the function of the heart valves?
- 20. What are the two types of heart valves?
- 21. How does the heart control the valves?
- 22. What are the two semi-lunar heart valves?
- 23. What are the two atrio-ventricular valves?
- 24. What portion of the atrioventricular valves connect to papillary muscles?
- 25. What connects the papillary muscles to the AV valve?
- 26. How many cusps are on the left valve? How many on the right?
- 27. What are the names of the two veins that carry blood to the right atrium?
- 28. What is the name of the artery that carries blood from the right ventricle to the lungs?
- 29. What is the name of the vein that carries blood from the lungs to the left atrium?
- 30. What is the name of the artery that carries blood from the left ventricle to the body?
- 31. How many arteries supply the myocardium with the blood and oxygen it needs?
- 32. What is the name of the main vein that drains into the right atrium?
- 33. How do cardiac myocytes differ from skeletal muscle cells?

- 34. How does the action potential differ from skeletal myocytes and cardiac myocytes?
- 35. What additional ion is involved in cardiac cell depolarization?
- 36. What unique property is found in conduction cells of the cardiac system?
- 37. Where are they found?
- 38. What three regions are capable of beginning an electrical impulse and what are their intrinsic rates?
- 39. What EKG wave symbolizes depolarization of the SA node?
- 40. What EKG interval symbolizes the delay between depolarization of the SA node depolarization of the AV node?
- 41. What EKG complex symbolizes depolarization of the ventricular depolarization?
- 42. What EKG wave symbolizes repolarization of the ventricular system?
- 43. What are the effects of sympathetic stimulation of cardiac tissue?
- 44. What are the effects of parasympathetic stimulation of cardiac tissue?
- 45. List all vessels, chambers, valves that blood must flow through from the vena cava through the heart until it reaches the aorta?