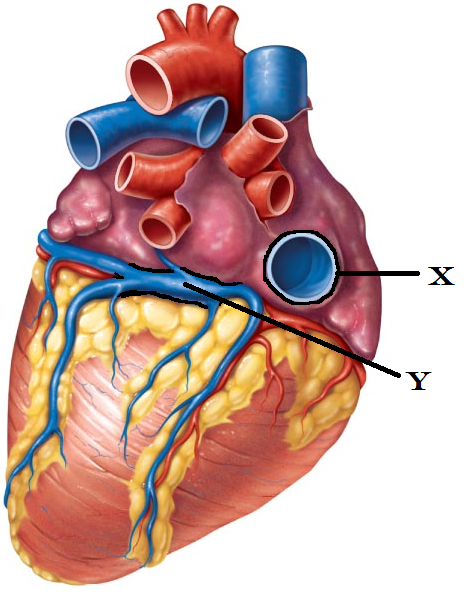
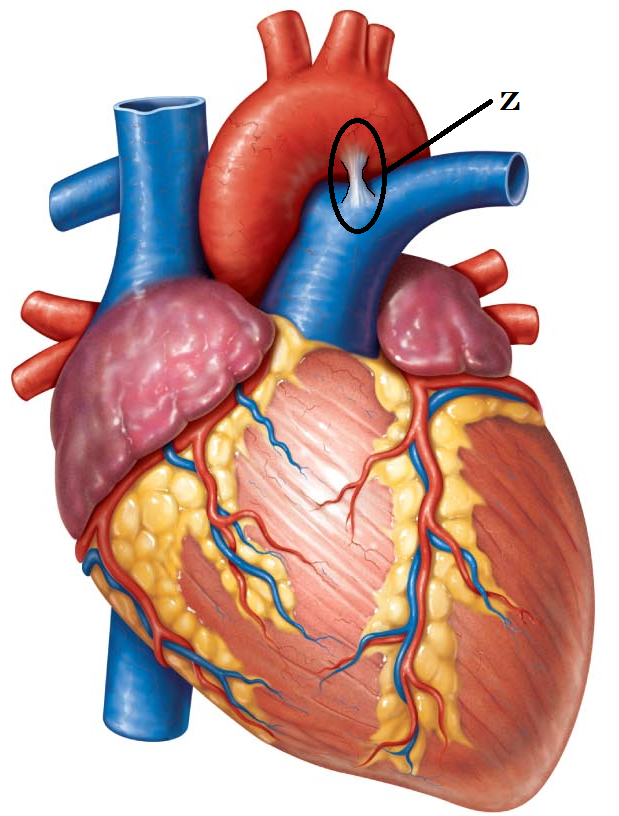
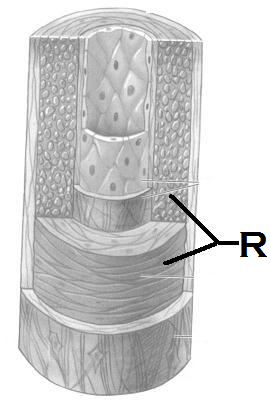
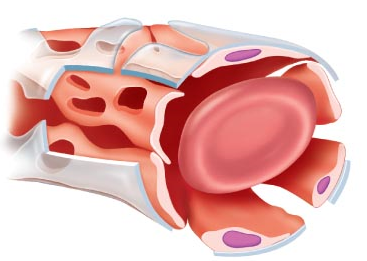
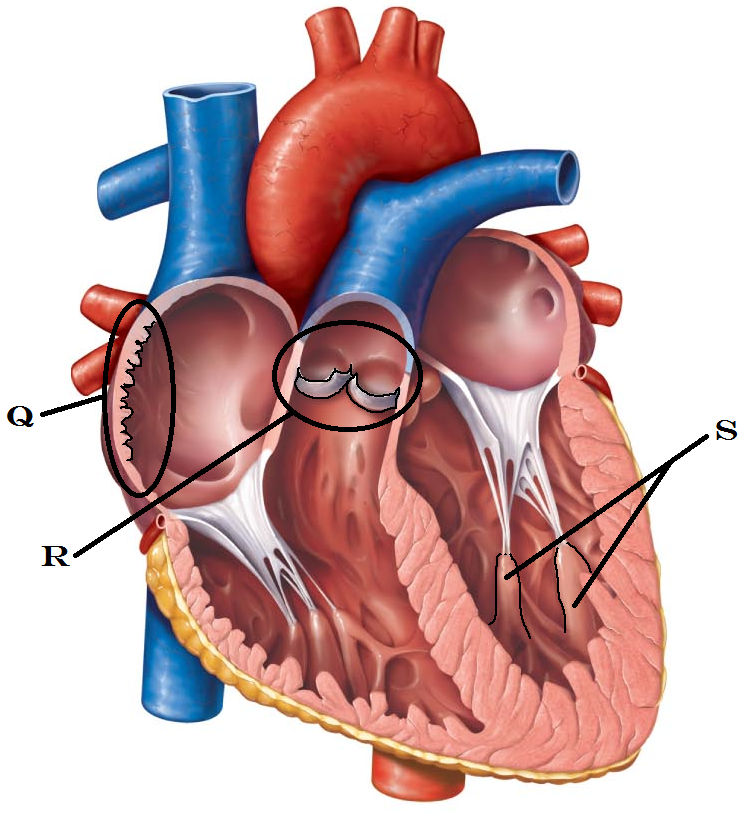
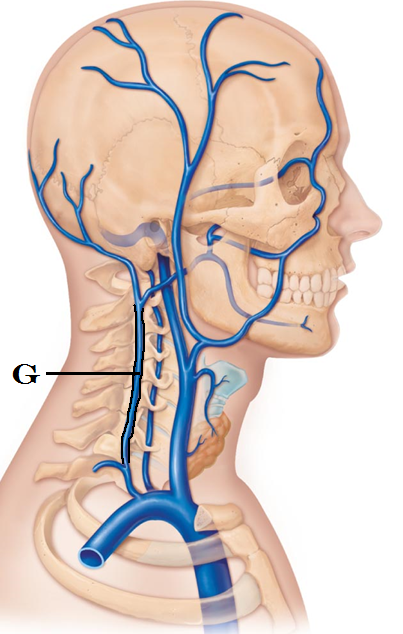
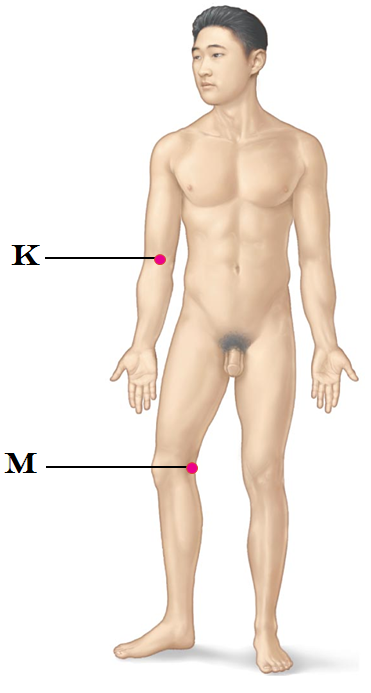
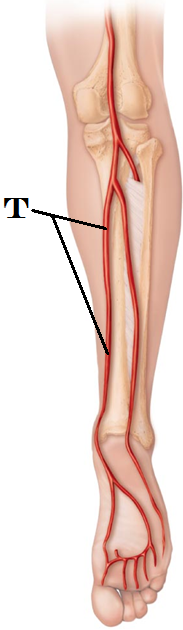
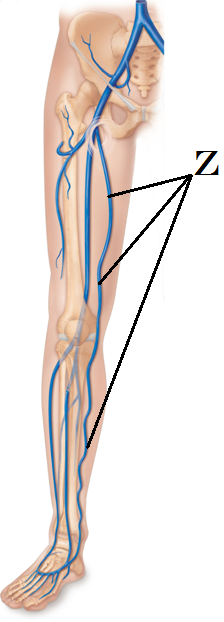
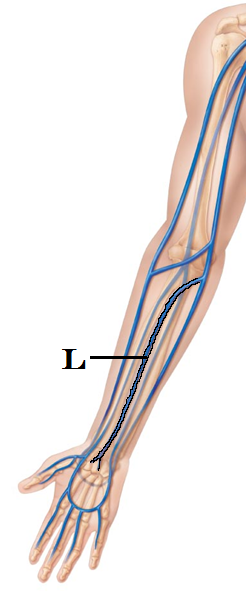
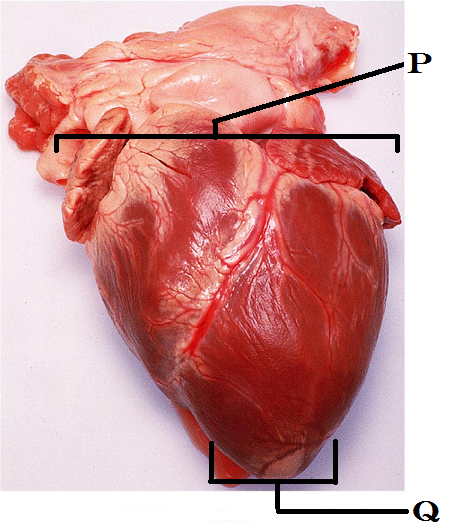
BSC 182 Anatomy and Physiology

Examination II

**Please indicate all answers on your OpScan sheet. Remember that each question will have ONLY one best response*.*  If you have a conflict with a question, go into detail on the back of this exam form. Please remember to set it aside in a separate pile if you’d like me to read your comments.**

1. What is cardiac tamponade
   1. An excess of fluid built up with in the ventricles
   2. Excessive pressure produced during atrial diastole
   3. Excessive fluid within the pericardial space
   4. Embolitic occlusion of the coronary sinus
   5. The silence heard between “lub” and “dub”
2. The valve present between the right atrium and the right ventricle is the
3. aortic semilunar valve
4. tricuspid valve
5. bicuspid valve
6. pulmonary semilunar valve
7. mitral valve
8. A **Foramen ovale** is an opening that allows fetal blood to bypass the lungs. In which structure is it located?
9. Aortopulmonary septum
10. Interatrial septum
11. atrioventricular septum
12. Articulated septum
13. Interventricular septum
14. What are the structures that anchor the semilunar valves to the ventricular walls?
15. chordae tendinae
16. papillary muscles
17. microvilli
18. carina
19. the semilunar valves do not anchor to the ventricular walls
20. Which of the following arteries are responsible for the blood supply to the heart?
21. Iliac artery
22. Posterior Interventricular artery
23. Right Marginal artery
24. Splanchic artery
25. Right lobar artery
    1. 1 and 3 are correct
    2. 1, 2, and 5 are correct
    3. 2, 3, and 4 are correct
    4. 2 and 3 are correct
    5. 3 and 5 are correct
26. Identify “X”
    1. Superior Vena Cava
    2. Pulmonary Trunk
    3. Right Pulmonary Vein
    4. Aorta
    5. Inferior Vena Cava
27. Identify “Y”
    1. Left Atrium
    2. Coronary Sinus
    3. Left Posterior Interventricular Vein
    4. Circumflex Vein
    5. Azygous Vein
28. The “LUBB” sound is in part created from
29. the closing of the aortic semilunar valve
30. the closing of the mitral valve
31. blood regurgitating back into the atria
32. the opening of the tricuspid valve
33. the opening of the mitral valve
34. The myocardium
    1. Is the innermost layer of the pericardium
    2. Is the middle layer of the heart
    3. Is the innermost layer of the heart
    4. Is continuous with the pericardial space
    5. Is the middle layer of the pericardium
35. An EKG is
36. a means of monitoring brain waves
37. a reading of the muscular contraction in the heart
38. a reading of the blood perfusion of the heart
39. a reading of the electrical activity of the heart
40. a reading of the nervous stimulation to the diaphragm
41. Where would one be most likely to find *vasa vasorum*?
    1. In the tunica media of large veins
    2. Associated with the valves of veins
    3. In the tunica externa of large arteries
    4. In fenestrated capillaries
    5. Associated with the precapillary sphincters
42. Viscosity (is)
43. increased with anemia
44. the “stickiness” of the blood
45. decreased with polycythemia
46. defined as the heat produced with blood flow
47. defined as the ease/difficulty with which the lungs expand with inhalation
48. Identify “Z”
    1. Fossa Ovale
    2. Ligamentum Arteriosum
    3. Intervascular coronary Artery
    4. Crista Terminalis
    5. Aortic Pulmonary Fistula
49. Which type of vessel structure is referred to as a “capacitance vessel” and can hold up to 65% of the blood supply?
50. artery
51. lacteal
52. vein
53. precapillary sphincter
54. capillary
55. If you were to listen to a heart beat with a stethoscope, where would you best hear the Mitral Valve? Where is the PMI (PMI = Point of Maximum Intensity)?
    1. Right sternal border, 5th intercostal space
    2. Right sternal border, 2nd intercostal space
    3. Left sternal border, 2nd intercostal space
    4. Left sternal border, 5th intercostal space
    5. Left Midclavicular line, 5th intercostal space
56. In capillaries, biochemicals cross in the following means. Which of the following is the **most important**?
57. filtration
58. perfusion
59. osmosis
60. diffusion
61. endocytosis
62. Identify the “R”
    1. Tunica intima of a vein
    2. Tunica inima of an artery
    3. Tunica media of a vein
    4. Tunica media of an artery
    5. Tunica externa of a vein
63. These capillaries are the **least common type** and are exceptionally permeable.
    1. Fenestrated
    2. Continuous
    3. Muscular
    4. Sinusoidal
    5. Squamousal
64. How does the Autonomic Nervous System affect the heart
65. Parasympathetic system tempers the sinoatrial rate
66. Presence of Acetylcholine causes increased heart rate
67. Sympathetic system is referred to as Vagal tone
68. Norepinephrine causes an increased force of contraction
69. Results in changes to the blood viscosity
    1. 1,2, and 4 are correct
    2. 2 and 4 are correct
    3. 3 and 5 are correct
    4. 2 and 5 are correct
    5. 1 and 4 are correct
70. Identify Q
    1. Crista terminale
    2. Pectinate muscles
    3. Trabeculae carnae
    4. Left auricle
    5. AV node
71. Identify “R”
    1. Aortic semilunar valve
    2. Pulmonary semilunar valve
    3. Mitral Valve
    4. Tricuspid Valve
    5. Chordae tendinae
72. Identify “S”
    1. Trabeculae carnae
    2. Pectinate muscles
    3. Crista terminalis
    4. Papillary Muscles
    5. Coronary Sinus
73. Indicate which **two options** represent **arterial blood pressure** (Identify the correctly numbered responses and find them in the five lettered options below. You will indicate **only ONE letter** for a correct response.)
74. diastolic over systolic
75. systolic over diastolic
76. the pressure of ventricular contraction over ventricular relaxation
77. the pressure of ventricular relaxation over ventricular contraction
78. has nothing to do with ventricular contraction or relaxation
    1. 1 and 5 are correct
    2. 2 and 5 are correct
    3. 2 and 3 are correct
    4. 1 and 3 are correct
    5. 2 and 4 are correct
79. Identify G
    1. Internal Jugular Vein
    2. Basilar Vein
    3. Vertebral Vein
    4. Internal carotid Vein
    5. External Jugular Vein
80. Angina Pectoris
    1. Results in weakened cardiac cells
    2. Results in dead cells being restored with fibrotic changes
    3. Presents as palpitations
    4. Presents as temporary hypertension
    5. Causes both right and left sides of the heart to fail
81. Vasoconstriction (Identify the correctly numbered responses and find them in the five lettered options below. You will indicate **only ONE letter** for a correct response.)
82. is a response of the sympathetic system
83. is a response of the intersplanchnic system
84. results in the vessel diameter becoming larger
85. results in the vessel diameter becoming smaller
86. none of the above are correct
    1. 1 and 3 are correct
    2. 2 and 4 are correct
    3. 1 and 4 are correct
    4. 1, 2, and 3 are correct
    5. 5 is the only correct statement
87. Which pulse can be palpated at “K”
    1. Carotid
    2. Superficial temporal
    3. Radial
    4. Antecubital
    5. Brachial
88. Which pulse can be palpated at “M”
    1. Posterior Tibial
    2. Popliteal
    3. Patellar
    4. Femoral
    5. Anterior tibial
89. The neurons of the vasomotor center are located
90. In the pons
91. In the medulla oblongata
92. In the renal medulla
93. In the adrenal cortex
94. In the cerebral cortex
95. Which of the following is true with regards to **Hyperkalemia**?
96. Increases the heart irritability
97. Causes spastic heart contractions
98. Is a result of elevated calcium in the blood
99. Causes a feeble and irregular heartbeat
100. Interferes with cardiac depolarization and can lead to cardiac arrest
101. Identify the artery at T
     1. Superficial crural artery
     2. Lateral malleolar artery
     3. Posterior tibial artery
     4. Fibular artery
     5. Patellar aretery
102. In the EKG image, which wave form is absent? What is the name of this condition?
     1. P wave is absent; Junctional rhythm
     2. QRS wave is absent; Ectopic focus
     3. P wave is absent; Extrasystole
     4. QRS wave is absent; junctional block
     5. All waves are altered; fibrillation
103. Renin is responsible for
104. Converting angiotensinogen into angiotensin I
105. Converting plasminogen into plasmin
106. Converting angiotensin I into angiotensin II
107. Converting angiotensin II into Aldosterone
108. Converting Aldosterone into ACE
109. Identify the structure at Z
     1. Femoral Vein
     2. Deep Femoral Artery
     3. Internal iliac Artery
     4. External iliac Vein
     5. Great Saphenous Vein
110. Margo has been experiencing sustained elevated heart rate at 120 beats per minute. What term is used to describe her condition?
     1. Cardiomegaly
     2. Bradycardia
     3. Tachycardia
     4. Orthostatic hypercardia
     5. Megalocardia
111. Angiotensin II causes changes in the blood (volume) pressure by
     * + 1. Increasing thirst
         2. Using Aldosterone to retain sodium, which in turn retains water
         3. Excretes (loses) sodium, which in turn loses water
         4. Altering the blood calcium concentrations
         5. Stimulating ADH release
112. 1, 2, and 5 are correct
113. 2, 3, and 4 are correct
114. 1 and 5 are correct
115. 2 and 4 are correct
116. 3, 4, and 5 are correct
117. Which type of circulatory shock occurs when the blood volume is normal and is not related to heart damage?
118. Hypervolemic shock
119. Intrinsic shock
120. Vascular shock
121. Cardiogenic shock
122. Hypovolemic shock
123. The transient (temporary) drop in blood pressure that occurs with a positional change is
124. Hypertrophic proprioception
125. Hypovolemic shock
126. Transient ischemia
127. Orthoscopic hypertension
128. Orthostatic hypotension
129. Which of the following is true with a coarctation of the aorta?
     1. The aorta is unexpectedly enlarged
     2. The right ventricle becomes hypertrophied
     3. The oxygenated and deoxygenated blood will intermingle within the heart
     4. The left ventricle becomes overworked
     5. Both the left and right ventricles have a direct opening into the aorta
130. Given the **Right Pulmonary Vein** as a starting point, which three structures would the blood flow through next (in order)
     1. Pulmonary Trunk 🡪 Lung 🡪 Left Pulmonary Artery
     2. Left atrium 🡪 Mitral Valve 🡪 Left Ventricle
     3. Right ventricle 🡪 Bicuspid valve 🡪 Left ventricle
     4. Right atrium 🡪 Tricuspid Valve 🡪 Right Ventricle
     5. Lung 🡪 Left Pulmonary Artery 🡪 Left Atrium
131. In an EKG, which wave(s) immediately follows **atrial depolarization**
     1. ventricular repolarization
     2. atrial repolarization and ventricular depolarization
     3. atrial repolarization and ventricular repolarization
     4. a moment of rest between cycles
     5. ventricular hyperpolarization
132. Which of the following is going to **increase** peripheral resistance? (Identify the correctly numbered responses and find them in the five lettered options below. You will indicate **only ONE letter** for a correct response.)
133. Increased viscosity
134. Decreased viscosity
135. Blood traveling through a very long vessel
136. Blood traveling through a very short vessel
137. A vessel with a large diameter
138. A vessel with a very small diameter
     1. 1, 3, and 5 are correct
     2. 2, 4, and 5 are correct
     3. 1 and 3 are correct
     4. 2, 3, and 6 are correct
     5. 1, 3, and 6 are correct
139. Which statement describes the location of the AV node?
     1. inferior interatrial septum
     2. carotid bodies
     3. superior interventricular sulcus
     4. right atrium near the opening of the Superior Vena Cava
     5. medullary rhythmicity center
140. Identify the vein at L
     1. Median Antebrachial vein
     2. Brachial vein
     3. Antecubital vein
     4. Median cubital vein
     5. Basilic vein
141. Reggie has a blood pressure of 132/82. What statement below is true?
     1. His systolic pressure is normal
     2. His pulse pressure is 50
     3. His diastolic pressure is low
     4. His pulse pressure is 1.6
     5. Reggie’s blood pressure is dangerously high and he is in need of immediate medical intervention
142. Which statement is true regarding right sided heart failure
     1. It is the primary cause of pulmonary congestion
     2. It is the primary cause of peripheral congestion and edema
     3. It results in exceptionally low arterial blood pressure
     4. The lub/dub heart sounds separates into a lub-lub/dub-dub as the atrial and ventricular contractions lose their coordination
     5. It results in rapid heart rates and low central venous pressure
143. Which statement below is true regarding preload?
     1. It refers to combination of cardiac muscle cell stretch and venous return
     2. It refers to the contractile strength at given muscle length
     3. It refers to the openness of the AV valves
     4. It refers to the pressure ventricles must overcome to eject blood
     5. It refers to the elasticity of the distributing arteries
144. What is the coronary sinus?
     1. A space for coronary venous blood on its way to the right atrium
     2. A space for coronary arterial blood on its way to the left atrium
     3. The site at which the papillary muscles are anchored
     4. The space surrounding the heart in which fluid can be found
     5. The lymphatic tissue of the heart



1. Identify “P”
   1. Apex
   2. Base
   3. Mediastinum
   4. Coronary sinus
   5. Interatrial septum
2. Identify “Q”
   1. Apex
   2. Base
   3. Mediastinum
   4. Chorda tendinae
   5. Pectinate muscles

**Please turn in your OpScan form and Exam packet. If you have made a comment/question for me on your exam, please remember to place it in a separate pile at the front desk. Grades should be posted through ReggieNet within 2 days. Enjoy the rest of your day.**