Mnstrviola's SSSS Anatomy Practice Test KEY 2014-2015 (Cardiovascular, Integumentary, and Immune System)

1. chemotaxis
2. thymus
3. active artificial
4. systemic
5. tricuspid (or "right atrioventricular")
6. adventitia
7. diastole
8. cardiomyopathy
9. hypertension
10. iron
11. keratinocytes
12. papillary layer (or "papillary dermis")
13. capillaries
14. sebum
15. stratum basale, stratum spinosum
16. melanin, carotene, hemoglobin
17. pyrogens
18. vasodilation
19. function laesa
20. antigen
21. sinoatrial (SA) node
22. electrocardialgram (EKG)
23. B cells and T cells (lymphocytes)
24. higher
25. plasma
26. albinism
27. pheomelanin
28. keratinocytes
29. bilirubin
30. tyrosinase
31. red pulp: blood filtration; white pulp: blood-borne antigen response
32. sensing vibration and pressure
33. vitamin D; liver, kidney
34. Epidermal dendritic cells decrease with aging: reduced immune response
35. Anagen: growth; Catagen: transition, hair follicle breaks down; Telogen: resting, hair falls out
36. irritant: contact with acidic or alkaline substance, looks like a burn; OR allergic: contact with an allergen
37. nonspecific: targets all; specific: identifies and targets certain pathogens

38. IgG: most versatile, provides majority of antibody-based immunity against invading pathogens
39. primary: first exposure, slower response; secondary: precedented, quicker, more antibodies produced
40. inborn: inherited; acquired: through infection or through medical intervention
41. d
42. a, b, c, d
43. d
44. d
45. a, c
46. e
47. g
48. b
49. d
50. e, f, g
51. b
52. b, e
53. c, d, e
54. a
55. d
56. e
57. i
58. b
59. i
60. h
61. b, d
62. c
63. a
64. c
65. a, b, c, d

The heart is located between the lungs in a location called the mediastinum. It is surrounded by a set of membranes called the pericardium. The two innermost layers, the visceral and parietal, are thin and delicate. The outer layer, the fibrous pericardium, is denser and attaches to surrounding structures. The space between the innermost membrane and the heart is called the pericardial cavity. The visceral and parietal membranes secrete serous fluid which acts as a lubricant for the heart's movement.

In the pulmonary circuit, blood travels between the heart and the lungs. Blood moves from the right ventricle, through the pulmonary valve, into the pulmonary arteries and then to a lung. The site of gas exchange between the alveoli in the lungs and the bloodstream are the capillaries. From the lungs, blood moves from the pulmonary veins into the left atrium.

In the systemic circuit, blood travels from the left atrium through the mitrial valve into the left ventricle. It then goes through the aortic valve, into the aorta and then to various parts of the body. When blood returns from the body, it enters from the vena cava into the right atrium. It then goes through the bicuspid valve to enter the right ventricle.

A cardiac cycle involves a systole, or contraction, and a diastole, or relaxation. During the systole, the atrioventricular valves are relaxed and the semilunar valves are contracted. Blood moves from the atriums into the ventricles. During the diastole, the atrioventricular valves are contracted and the semilunar valves are relaxed. Blood moves from the ventricles into either the pulmonary trunk or the aorta.

Cardiac cells called autorhythmic cells are responsible for maintaining the electrical impulses that regulate heartbeats. The sinoatrial node is a bundle of these cells that has the fastest rhythm. It is located in the upper corner of the right atrium. It is responsible for beginning each cardiac cycle, and is therefore known as the pacemaker of the heart. It directly triggers the atrial systole. Another node, called the atrioventricular node, triggers the ventricular systole. Two other groups of cells, the bundle of His and the Purkinje fibers, spread the signal throughout the ventricle.

Total Points: 125