

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








Fill in the Blank (2 points each, each question all or nothing, 60 points total)

1. \_\_\_\_\_ is the ability of cells to move toward microorganisms or sites of tissue damage.
2. The \_\_\_\_\_ processes lymphocytes that move to other lymphatic tissue to respond to foreign substances.
3. Receiving a vaccine exemplifies \_\_\_\_\_, \_\_\_\_\_ immunity.
4. \_\_\_\_\_ circulation involves the transfer of blood from the heart to all parts of the body.
5. The \_\_\_\_\_ valve separates the right atrium from the right ventricle.
6. The tough, outermost covering of the arterial walls is called the \_\_\_\_\_.
7. In a heartbeat, the relaxation of the ventricles is called the \_\_\_\_\_.
8. \_\_\_\_\_ is the disease that involves the weakening of heart muscle.
9. \_\_\_\_\_ is another name for high blood pressure.
10. The site of oxygen binding on hemoglobin is \_\_\_\_\_.
11. The epidermis is primarily made up of cells called \_\_\_\_\_.
12. The part of the dermis that borders the epidermis is called \_\_\_\_\_.
13. The nail bed is pink due to the presence of \_\_\_\_\_.
14. \_\_\_\_\_ is a skin secretion that lubricates the skin and increases its elasticity.
15. The \_\_\_\_\_ and \_\_\_\_\_ layers of the epidermis are involved in the synthesis of vitamin D.
16. Skin color in humans is controlled by three pigments: \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
17. Substances that induce fevers are called \_\_\_\_\_.
18. The process of the capillary walls widening and becoming more porous is called \_\_\_\_\_.
19. \_\_\_\_\_, one of the components of the inflammatory response, is the dysfunction of organs involved in inflammation.
20. Any molecule that is identified as foreign to the body is referred to as a(n) \_\_\_\_\_.
21. The pacemaker of the heart is the \_\_\_\_\_.
22. The device that can measure and monitor the heart's electrical activity through skin is the \_\_\_\_\_.
23. Clonal selection involves what kind of cells?
24. Arterial blood usually has a \_\_\_\_\_ pH than venous blood.
25. About 55% of blood is \_\_\_\_\_.
26. The deficiency of melanin is called \_\_\_\_\_.
27. The form of melanin that causes red to pink color is known as \_\_\_\_\_.
28. \_\_\_\_\_ make up about 90% of epidermal cells.
29. Jaundice is caused by the buildup of the pigment \_\_\_\_\_.
30. Grey hair is caused by a decline in the enzyme \_\_\_\_\_.

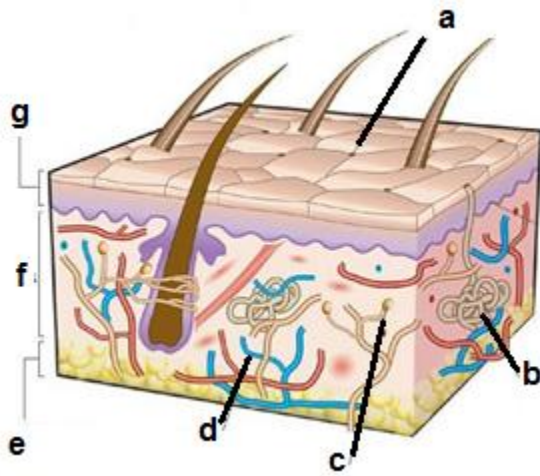
**Short Answer (2 points each, keep them short!, 20 points total)**

31. Differentiate between the functions of the red pulp and the white pulp of the spleen.
32. What is the purpose of lamellar corpuscles located in the skin?
33. Identify the vitamin synthesized by the skin, and name the two organs that convert it into its active form.
34. How is the number of epidermal dendritic cells affected by aging, and what does this cause?
35. Identify and briefly describe the three phases of the hair growth cycle.
36. Identify and briefly describe a general type of contact dermatitis.
37. Distinguish between nonspecific and specific defense systems.
38. Identify and briefly describe the most abundant antibody class.
39. Distinguish between primary and secondary immunity.
40. Distinguish between inborn and acquired immunity.

**Diagram Analysis (1 point each, 25 points total): Answer using the letters given in each corresponding diagram. Multiple OR single letters can be used in an answer**

Blood Type (genotype)	a.	b.	c.	d.
Red Blood Cell Surface Proteins (phenotype)	 A agglutinogens only	 B agglutinogens only	 A and B agglutinogens	 No agglutinogens
Plasma Antibodies (phenotype)	 b agglutinin only	 a agglutinin only	NONE. No agglutinin	 a and b agglutinin

41. the blood type O.
42. have fucose-containing glycan structures.
43. known as the “universal donor”
44. the most common
45. have N-acetylgalactosamine.



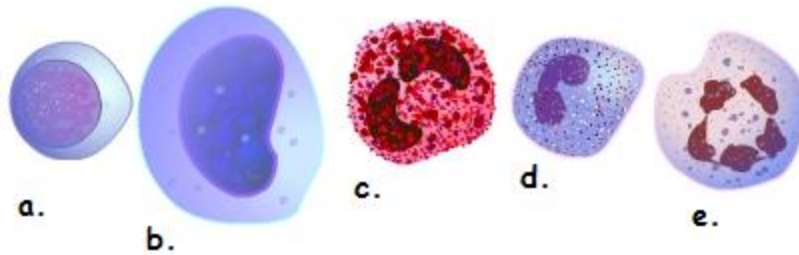
46. the subcutaneous layer

47. the epidermis

48. directly responds to a rise in body temperature level

49. responsible for nutrient and waste transport

50. cells formed through mitosis in this/these layer(s)



51. monocyte

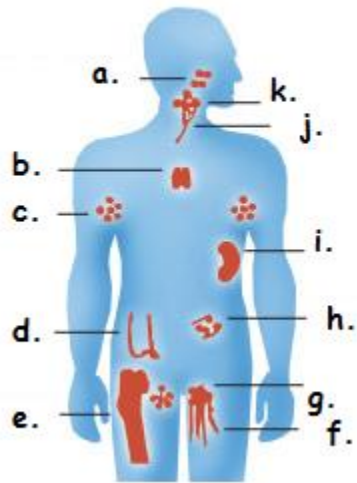
52. phagocyte

53. granulocyte

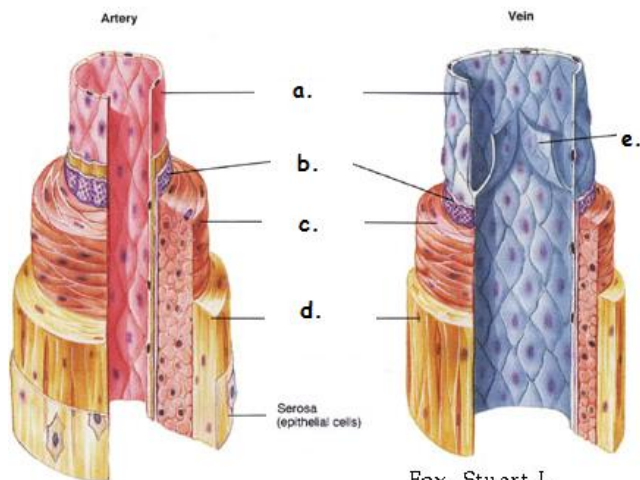
54. B and T cells are this/these type of cell(s)

55. secretes histamine

## ORGANS OF THE IMMUNE SYSTEM



- 56. has yellow tissue in its center responsible for creating white blood cells that eventually become lymphocytes
- 57. spleen
- 58. site of T-cell maturation
- 59. regulates and filters blood
- 60. Peyer's patches



Fox, Stuart I.  
Human Physiology 4th  
Brown Publishers

- 61. contains elastic and collagenous fibers
- 62. layer(s) with varying thickness
- 63. tunica intima
- 64. stretches with each heartbeat
- 65. layer(s) involved in a true aneurysm

**The Heart (.5 points each, 20 points total): fill in the blanks**

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

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

In the \_\_\_\_\_ circuit, blood travels from the left atrium through the \_\_\_\_\_ valve into the \_\_\_\_\_ ventricle. It then goes through the \_\_\_\_\_ valve, into the \_\_\_\_\_ and then to various parts of the body. When blood returns from the body, it enters from the \_\_\_\_\_ into the \_\_\_\_\_ atrium. It then goes through the \_\_\_\_\_ valve to enter the \_\_\_\_\_ ventricle.

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

Cardiac cells called \_\_\_\_\_ cells are responsible for maintaining the electrical impulses that regulate \_\_\_\_\_. The \_\_\_\_\_ 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 \_\_\_\_\_ of the heart. It directly triggers the \_\_\_\_\_ systole. Another node, called the \_\_\_\_\_ node, triggers the \_\_\_\_\_ systole. Two other groups of cells, the \_\_\_\_\_ and the \_\_\_\_\_, spread the signal throughout the ventricle.

**Total Points: 125**