**Final Exam Study Guide**

**Senses**

1. What is conjunctivitis?

2. What is the area of the retina called that lacks photoreceptors?

3. Unequal or imperfect curvatures of the lens or cornea that can cause blurred vision is called:

4. When an image enters the peripheral vision of your LEFT eye, it is interpreted where?

5. What is the pathway of light, going from superficial to the inner most part of the eye?

6. The receptors that detect deep pressure are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ corpuscles.

7. Where are the receptors located that detect dynamic equilibrium in the ear?

8. What is the name of the tube that connects the middle ear and the throat?

9. What receptors are located at the superior part of the nasal cavity that allows you to smell things?

10. Gustatory cells are associated with what sense?

**Endocrine System**

11. What gland releases calcitonin?

12. When glucose levels are high, what hormone does the pancreas produce?

13. What gland releases the hormone needed for you to react to a fight or flight response?

14. What effect does aldosterone do to the kidney?

15. What causes ANP to be secreted in the body?

16. What hormone is released when someone has low glucose levels in the blood?

17. If you’re dehydrated, what hormone would be released due to a decrease in blood pressure?

18. Where is the thyroid gland located?

19. What is an antagonist to insulin when glucose levels are low?

20. What hormone increases the absorption of glucose in cells?

**Blood**

21. What do erythrocytes do?

22. What will happen to an Rh- person if they receive Rh+ blood the first time?

23. What are the functions of leukocytes?

24. In what circumstance do neutrophils increase in the bloodstream?

25. What is given to a pregnant Rh- mother after she has an Rh+ baby to prevent the second baby from having erythroblastosis fetalis?

26. What is the function of thrombocytes?

27. What do blood banks have to add to donated blood before it is given to a recipient?

28. What is the normal range for hemoglobin?

29. What are the functions of basophils?

30. List nonliving components of blood.

**Lymphatic and Immune System**

31. What organ destroys worn out red blood cells and recycles some of the products back to the liver?

32. What are the first lines of defense of the body?

33. What are the proteins called that protect nearby cells and stop multiplication of viruses?

34. Where do B cells develop immunocompetence?

35. What are the functions of macrophages?

36. What is responsible for stopping or slowing the activity of B and T cells once the infection is over?

37. What type of cell can respond years later in response to an infection you have had before (long term immunity)?

38. What are the antigens called that are found on our own cells that identify them as “self”, preventing your body from attacking them?

39. What does the spleen hide during bacterial infections?

40. When does the primary response peak?

**Heart**

41. What is the function of pericardial fluid?

42. List the correct direction of blood flow in relation to pulmonary circulation:

43. List the correct direction of blood flow in relation to systemic circulation:

44. What is the function of the semilunar valves?

45. Oxygen poor blood moves from the right atria through what valve to get to the right ventricle?

46. Oxygen rich blood moves from the left atria through what valve to get to the left ventricle?

47. The “dup” sound occurs when what valves close?

48. What do heart murmurs typically indicate?

49. The pacemaker of the heart is what structure?

50. In an electrocardiogram, the wave that indicates atrial depolarization is the:

**Circulatory System**

51. What artery serves the tissues external to the skull?

52. What is the name of the largest vein inferior to the thorax?

53. What vein drains the liver?

54. Blood vessels that always carry blood away from the heart, and usually carry oxygen are called:

55. What factors can influence arterial blood pressure?

56. What is the name of the vessel that brings blood to the kidneys?

57. What artery would you listen to in order to determine blood pressure?

58. What vessel carries nutrient rich blood from digestive organs to the liver for processing?

59. What special circulation protects the brain by supplying more than one route to reach all brain tissue?

60. If someone has a blood clot behind their knee, what artery is affected?

**Respiratory System**

61. What closes off the lumen of the larynx when swallowing?

62. Where is the actual site of gas exchange?

63. When the diaphragm contracts, air

a. rushes out of the lungs c. rushes out of the nose

b. rushes into the lungs d. all of the above

64. What happens to the pressure inside the lungs when the diaphragm contracts?

65. What happens to the internal volume of the thorax when the diaphragm contracts?

66. Where will the carbon dioxide go if the alveolar air PCO2 is 40, and the plasma PCO2 is 45? What type of respiration is this an example of?

67. The PCO2 of the veins is

a. higher than the PCO2 of air c. lower than the PCO2 of air

b. lower than the PCO2 of arteries d. all of the above

68. Control of respiration in the nervous system is centered where?

69. Surfactant helps to prevent the alveoli from collapsing by:

70. What are the characteristics of cystic fibrosis and tuberculosis?

**Digestive System**

71. In what places does chemical digestion occur?

72. List the correct pathway of food through the alimentary canal.

73. In the stomach, pepsin is produced by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to begin digestion of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_

74. What is the main function of the small intestine?

75. In the duodenum, protein is broken down by the enzyme \_\_\_\_\_\_\_\_\_\_\_\_\_\_ secreted by the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

76. What is the name for the process of making glucose from non-carbohydrate substances within the liver?

77. What process will the liver start if it receives hypoglycemic blood?

78. What are the things the large intestine CAN absorb?

79. If your TMR is greater than your calorie consumption, what will happen to your weight?

80.Where are protein digesting enzymes produced (name two)?

**Urinary System**

81. What structure is where high blood pressure forces out fluids and solutes out of the plasma?

82. What does pressure filtration remove?

83. The difference between the blood in the renal artery and the renal vein is:

84. Stretch receptors in the heart monitor high blood volume and release:

85. If low arterial blood pressure is excessive, the glomerular pressure:

86. What area of the kidney contains the glomeruli?

87. What is the function of ADH?

88. What is the function of ANH?

89. What is the flow of urine from the collecting tubules?

90. What is the name of the structure that has the renal artery, renal vein, and ureter all join together?

**Reproductive System**

91. What hormones do the ovaries make?

92. What structure receives, retains, and nourishes fertilized ovum?

93. Where does fertilization occur?

94. What membrane forms the site of the umbilical cord?

95. What are the functions of the placenta?

96. Between \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the spinal cord becomes myelinated.

97. What do the lungs lack if the baby is born prematurely?

98. What part of the brain is unable to control temperature in a premature baby?

99. Increased estrogen at mid-cycle stimulates the secretion of what hormone?

100. What inhibits FSH and LH secretions?