

**ANATOMY AND PHYSIOLOGY CAPTAINS TRYOUT TEST-  
WAUBONSIE VALLEY HIGH SCHOOL**

NAMES: \_\_\_\_\_  
\_\_\_\_\_

**Multiple choice** (1 pt per question)

1. What percentage of blood plasma is not reabsorbed by the blood capillaries?
  - a. 10%
  - b. 15%
  - c. 20%
  - d. 25%
2. What is the tunica interna?
  - a. Endothelium; valves to direct fluid
  - b. Elastic fibers
  - c. Smooth muscle
  - d. Thin outer layer
3. What are the two collecting ducts called?
  - a. Left node and Lymphatic
  - b. Thymus and Right Lymphatic
  - c. Bronchial and Mucosal
  - d. Right Lymphatic and Thoracic
4. What are dense clusters in the distal portion of the small intestine called?
  - a. Lymph nodes
  - b. Red pulp
  - c. Peyer's patches
  - d. Mucosa
5. What is the function of lymph nodes?
  - a. To clean the lymph
  - b. Site for T and B cell activation
  - c. Insulation
  - d. Both A and B
  - e. All of the above
6. What is the largest lymphatic organ?
  - a. Spleen
  - b. Thymus
  - c. Appendix
  - d. Tonsils
7. What is the acid mantle?

- a. An enzyme in mucus that breaks down bacterial cell walls
  - b. The region of the spleen composed of lymphatic tissue
  - c. A thin film of lactic acid which inhibits bacterial growth
  - d. Organ located at the entrance to the pharynx that guards against pathogens
8. What are secreted by cells infected by viruses and act as an alert?
- a. Monocytes
  - b. Interferons
  - c. T cells
  - d. Lysosomes
9. What is the process of eating foreign matter called?
- a. Monocytosis
  - b. Pinocytosis
  - c. Phagocytosis
  - d. Lysis
10. What makes up the first line of defense?
- a. Mouth and saliva
  - b. Skin and Mucous
  - c. Skin and Sweat
  - d. Nails and Hair
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11. What is the valve located between the right atrium and right ventricle called?
- a. Pulmonary
  - b. Aortic
  - c. Bicuspid
  - d. Tricuspid
12. Muscles attached to the chordae tendinae are called \_\_\_\_\_ muscles.
- a. Semilunar
  - b. Pulmonary
  - c. Aortic
  - d. Papillary
13. What vein carries blood from the upper extremities, head, neck, and chest into the heart?
- a. Inferior vena cava
  - b. Superior vena cava
  - c. Pulmonary vein
  - d. Communicating vein
14. What chamber of the heart receives oxygen depleted blood from the vena cava and pumps through the tricuspid valve into its ventricle?
- a. Right atrium
  - b. Right ventricle

- c. Left atrium
  - d. Left ventricle
15. The pulmonary \_\_\_\_\_ is a large vessel that carries blood from the right ventricle to the pulmonary arteries.
- a. Ventricle
  - b. Atrium
  - c. Channel
  - d. Trunk
16. What is the septum?
- a. Blood vessel that carries blood away from the heart
  - b. Serves as communication between the lungs and the heart
  - c. Microscopic vessel through which exchanges take place between the blood and cells of the body
  - d. Muscular wall that divides the right and left sides of the heart
17. True or False: The right atrium is the chamber of the heart that receives oxygenated blood from the right and left pulmonary veins.
18. True or False: Deoxygenated blood usually travels in veins under low pressure.
19. True or False: Tachycardia happens when there is abnormally slow heart action.
20. True or False: Muscles attached to the chordae tendineae are called capillary muscles.
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21. What is the sac-like muscular organ that stores urine until it is eliminated from the body called?
- a. Urinary bladder
  - b. Ureter
  - c. Kidney
  - d. Urethra
22. What is the excretory system in charge of?
- a. Breaking down food so it can be used by the body
  - b. Giving the body support and strength
  - c. Removing wastes and excess fluid from the body
  - d. Aiding in the communication of signals throughout the body
23. What is produced in the liver by protein metabolism?
- a. Uric acid
  - b. Urea
  - c. Creatinine
  - d. Sodium
24. What is the process involving movement of a solute across a membrane and incorporation into the body?
- a. Secretion
  - b. Combination

- c. Excretion
  - d. Absorption
25. What is the main function of the collecting duct?
- a. Site of secretion of any extra wastes
  - b. Absorption of more water
  - c. Removes waste
  - d. Forces fluids and solutes into the glomerular capsule
26. The average human kidney contains \_\_\_\_\_ nephrons.
- a. 500,000-750,000
  - b. 800,000-1.5 million
  - c. 2-3 million
  - d. 1-2 billion
27. What is the name of the disease in which increasing amounts of nephrons are damaged, leading to kidney failure?
- a. Diabetes
  - b. Renal failure
  - c. Chronic Glomerulonephritis
  - d. Incontinence
28. True or False: Kidney stones are caused by wastes crystallizing and creating blockage.
29. True or False: Antidiuretic hormone stimulates kidneys to retain sodium and conserve water.
30. True or False: The urethra is the narrow tube that carries urine from one of the kidneys to the urinary bladder.
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**Short Answer** (3 pts per question)

31. Describe TWO symptoms and ONE possible treatment for Congestive Heart Failure.

32. What is the structure and function of the thymus?

33. Describe TWO important functions of the kidneys.

34. Describe the effects of THREE of the following on the cardiovascular system: exercise, smoking, alcohol, caffeine, and drugs.

35. Describe ONE cause and TWO symptoms of renal failure.

36. What is the structure and function of the nephron?

37. Describe the difference between systolic and diastolic pressure.

38. Describe the structure and function of arteries.

39. Name THREE possible forms of treatment for atherosclerosis

40. Describe, in detail, how urine is formed.

SCORE: \_\_/60