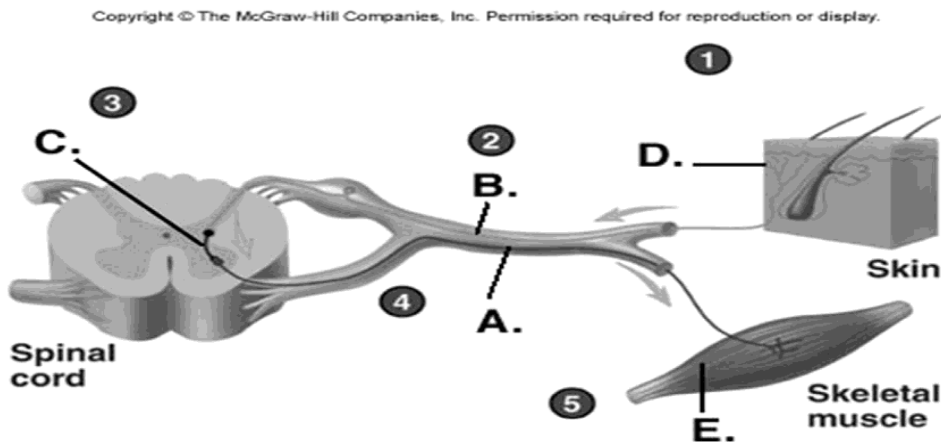


Anatomy & Physiology Spring Benchmark #3 Exam Review

Chapter 11: Nervous System II

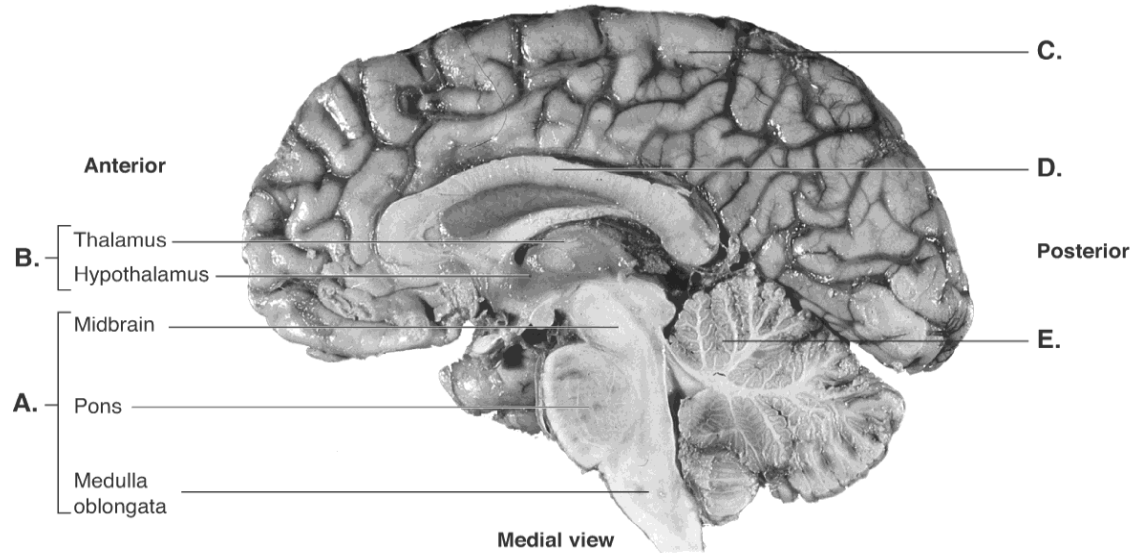
1. If the area of the cerebral hemisphere corresponding to Broca's area is damaged, what is the result?
2. Gray matter of the spinal cord is mostly composed of _____.
3. In the case of a subdural hematoma resulting from a blow to the head, blood accumulates between the _____ and the _____.
4. An inflammation of the meninges called meningitis most commonly involves the _____ and the _____.
5. Parkinson's disease, which is characterized by slow movements and difficulty initiating voluntary muscular actions, results from a disorder in the _____.
6. The right hemisphere of the cerebrum receives sensory impulses originating on the _____ side of the body and vice versa.
7. Basal ganglia are located in the _____ and function to _____.
8. The somatic nervous system consists of nerve fibers that connect the CNS to the _____, whereas the autonomic nervous system consists of fibers that connect the _____.
9. The gray commissure of the spinal cord surrounds the _____.
10. The arbor vitae is found in the _____.
11. Cerebrospinal fluid is produced by _____ and it functions to _____.
12. The spinal cord is contiguous superiorly with the _____.
13. The thickest of the meninges is the _____.
14. The sensory root of a spinal nerve is also referred to as _____.

Label the identified structures on the diagram below:



15. A small lesion in the brainstem which resulted in a rapid heart rate, intense vasoconstriction, and elevated blood pressure would probably be located in the _____.
16. The _____ maintains alertness and attention.
17. An individual who has an eating disorder along with intense thirst and wildly varying body temperatures may have a dysfunction of the _____.
18. The gray matter on the outer surface of the cerebrum is called the _____.
19. The large C-shaped mass of white matter that consists of nerve fibers that connect the two cerebral hemispheres is called the _____.

Label the identified structures on the diagrams below:



20. The ventricles of the brain contain _____.
21. A shallow groove on the surface of the cerebral cortex is called a _____.
22. The primary motor cortex is located in the _____ lobe.
23. The primary visual area is located in the _____ lobe.
24. There are ____ pairs of cranial nerves and ____ pairs of spinal nerves.
25. Restful activities are governed by the _____ nervous system.

Chapter 12: Nervous System III

1. If you enter a room and smell a strong odor but the odor soon seems to fade away, you have experienced _____.
2. The olfactory receptors are examples of _____.
3. What are the primary taste sensations?
4. The sets of color receptors within the retina are sensitive to lights that are _____, _____, and _____.
5. Rhodopsin is found in _____ cells.
6. Treatment for cataract usually involves removal of the _____.
7. A _____ is a feeling that results from sensory stimulation while _____ is the brain causing it to seem to come from the receptors being stimulated
8. Specialized senses are primarily found in the _____.
9. The auditory ossicles are located within the _____ ear.
10. The _____ is a layer of tissue that lines the inner surface of the eyelids and covers the anterior surface of the eye.
11. Tears contain an _____ that functions to reduce the chances of developing an eye infection.
12. The sense of taste is called _____.
13. Palpebrae is another name for the _____.
14. The _____ glands produce tears.
15. Explain why a person's nose run when he cries?

16. The outermost tunic of the eyeball is the _____.
17. The transparent anterior portion of the sclera is the _____.
18. The contractile structure that surrounds the pupil is the _____.
19. The area of greatest visual acuity is the _____.
20. The _____ contains no photoreceptor cells.
21. The _____ helps to hold the lens and retina in place.
22. The _____ focuses light on the retina.
23. The _____, _____, & _____ transmit vibrations from the eardrum to the oval window.
24. Sensory receptors for balance are found in the _____.
25. The sensory cells for _____ are located in the organ of Corti.
26. The feeling of pain on the body surface that has its origin in an internal organ is called _____.
27. Photoreceptors are located in the _____.
28. Changing the shape of the lens to correctly focus light on the retina is called _____.
29. What is the function of the auditory (eustachian) tube?

Chapter 14: Blood

1. The percentage of solids in a sample of human blood is normally about _____.
2. The biconcave cells in blood that lack nuclei when they are mature are the _____.
3. Identify the granulocytes and agranulocytes.
4. The normal white blood cell count is _____.
5. The condition called cyanosis is caused by an increased blood concentration of _____.
6. Biliverdin and bilirubin are pigments that result from the breakdown of RBCs; biliverdin is _____ in color and bilirubin is _____ in color.
7. Compounds produced by the immune system to combat specific antigens are called _____.
8. Plasma is the _____ while formed elements are the _____.
9. The plasma component that forms fibrin, the insoluble protein, in a blood clot is _____.
10. For a person whose hematocrit is 45%, correct ranking of the components of blood in order of decreasing percent volume is _____, _____, & _____.
11. The only formed elements that possess a nucleus when mature are the _____.
12. _____ transports oxygen in the blood.
13. _____ is needed to produce hemoglobin.
14. In adults, red blood cells are made in the _____, spend most of their lifespan in the _____, and most are finally destroyed in the _____.
15. _____ are the largest of the formed elements.
16. The most numerous of the leukocytes is the _____.
17. The ability of white blood cells to leave the circulation and enter tissues is called _____.
18. A person with an increased _____ count might be suffering from an allergic reaction.
19. Type _____ blood has both A and B antigens on the RBC's, while type _____ blood has no antigens on the RBC's.
20. When the oxygen content of the blood is low, _____ is released by the kidneys to increase red blood cell production in the red bone marrow.

21. A _____ is a type of leukocyte has granules that release histamine and heparin?

22. _____ are cell fragments and are also called _____.

23. Blood type is determined by _____ on red blood cells.

24. Type _____ blood considered the universal recipient?

25. Mr. Jones has Type A blood and needs a transfusion. What type(s) could he safely be given?

26. Formation of RBC is initiated by a _____-feedback system whereas the blood clotting process is caused by a _____ - feedback system.

27. Average life span of a RBC is on average _____ months.

Chapter 15: Cardiovascular System

1. List the correct sequence of parts through which blood moves in passing from the vena cava to the lungs?

2. Blood from the face and scalp is drained by the _____ vein

3. The blood pressure in the systemic arteries is greatest during _____.

4. The inner lining of the heart is the _____.

5. The normal pacemaker of the heart is the _____ node.

6. When a person's pulse is taken by palpation near the thumb on the wrist, the _____ artery is being felt.

7. The _____ circuit sends deoxygenated blood to the heart.

8. Another name for the visceral pericardium is the _____.

9. The _____ forms the bulk of the heart wall?

10. Blood vessels enter and exit from the _____ of the heart.

11. Blood in the pulmonary veins returns to the _____.

12. The blood vessel carries blood from the left ventricle to the body is the _____.

13. In a normal electrocardiogram, the _____ complex results from ventricular depolarization.

14. What is the order of the blood vessels that a red blood cell would pass through as the blood leaves the heart, travels to a tissue, and then returns to the heart.

15. The exchange of nutrients and gases between the blood and tissue cells is the primary function of _____;

16. Veins contain _____ and arteries do not.

17. Strong, elastic vessels that carry blood under high pressure describes _____.

18. The longest vein in the body is the _____

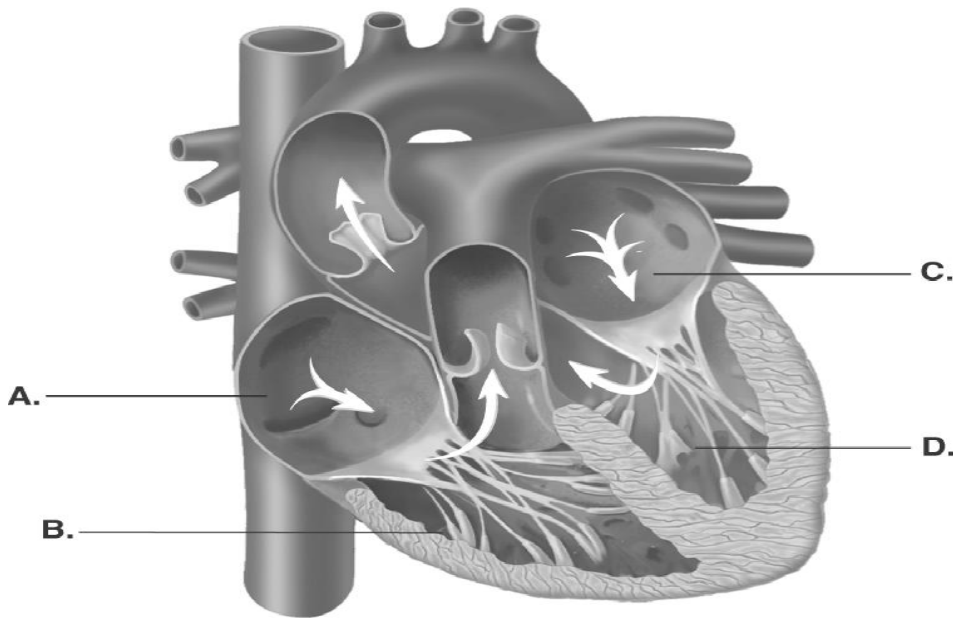
19. The measure of force blood exerts against blood vessel walls is _____.

20. Why does the left ventricle have a thicker myocardial wall? 21. Diastole refers to _____.

22. During the ventricular systole, the AV valves _____ and the semilunar valves _____.

23. Sympathetic stimulation of the heart causes the heart rate to _____.
24. The _____ artery is usually used to determine blood pressure.
25. For a blood pressure reading of 125/86, the 86 represents the _____.
26. The left side of the heart acts as a pump for the _____ circulation.

Identify the labeled structure in the diagrams below:



Chapter 17: Digestive System

1. The material that leaves the mouth and enters the pharynx is called _____.
2. The external surface of the crown of a tooth is covered with the _____.
3. Deep folds in the wall of the stomach called _____ help it to expand to hold food.
4. Gastric glands that secrete HCl are called _____.
5. Food leaving the stomach is called _____.
6. The first portion of the small intestine is the _____.
7. Why are the pancreas and liver referred to as accessory organs?
8. Pancreatic juice and bile are both released into the _____.
9. The _____ ONLY transports food.
10. The _____ digests ONLY starch.
11. The _____ absorbs nutrients.
12. Chemical digestion begins in the _____.
13. Arrange the following structures in order from the small intestine to the rectum.
 - (1) ascending colon
 - (2) descending colon
 - (3) sigmoid colon
 - (4) transverse colon
14. _____ emulsifies fats in the small intestine.

15. Damage to the liver would hamper digestion of _____.

16. Bile is produced by cells of the _____.

17. Which layer of the small intestine wall contains cells with microvilli?

18. The _____ stores bile.

19. The salivary glands located just anterior to the ear are the _____.

20. What are the correct sequence for the layers within the walls of the alimentary canal from inside to outside?

21. The root canal of a tooth contains _____ & _____.

22. The parietal cells of gastric glands secrete _____.

23. _____ occurs in the digestive tract from the pharynx to the anus.

24. The effects of sympathetic nerve impulses on the alimentary canal are _____ and parasympathetic impulses are _____.

25. Which layer of the alimentary canal is responsible for absorption of nutrients? _____

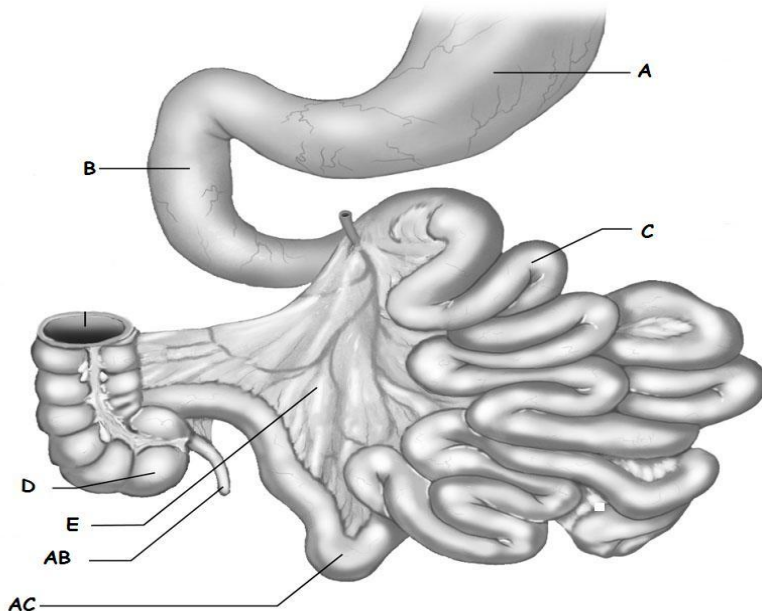
26. What is a function of the large intestine?

27. Mixing in the small intestine is accomplished by _____.

28. The epiglottis is attached to the _____.

Identify the labeled structure in the diagrams below:

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Chapter 20: Urinary System

1. Urea is a by-product of _____ metabolism.

2. When the oxygen-carrying capacity of the blood is low, the kidneys release _____ which will cause an increase in red blood cell production.

3. The _____ carries urine from the kidney to the urinary bladder.

4. The three openings of the bladder form the _____.

5. The _____ extends from the urinary bladder to an external opening?

6. Another name for urination is _____.

7. The three regions of a kidney are the renal _____, _____, and _____.

8. The _____ is the functional unit of the kidney that produces urine.

9. The glomerular capsule and both the proximal and distal convoluted tubule are found in the renal _____, while the loop of Henle is found in the renal _____.

10. Approximately _____ water is filtered by the kidneys per day.

11. Water and needed nutrients are returned to the blood in the _____ tubule.

12. Significant amounts of protein and _____ are normally NOT found in urine.

13. Water makes up approximately _____ percent of the volume of urine.

14. Urine drains from the _____ into the calyces of the kidney then into the renal _____, and finally exits the kidney through the _____.

15. The network of capillaries that is located in Bowman's capsule is called the _____.

16. The renal corpuscle consists of the _____ and the _____.

17. The amount of filtrate produced per minute is called the _____.

18. Kidneys are located behind the peritoneum, which is referred to as _____.

19. Urine is stored in the _____ until it is voided from the body.

20. The process of _____ depends on a pressure gradient.

21. To some degree the micturition reflex can be voluntarily controlled by contracting the urethral _____.

Identify the structures in the diagrams below:

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