**Test Paragraphs**

**Biology Test 9 – Anatomy and Physiology – Standard 3/Objectives 1-2**

Question 1:

* List all of the structures of the heart and their individual functions.

Question 2:

* List all three types of muscle. Explain how each is structured (number of nuclei, voluntary/involuntary, striated/not striated, shape, etc.) and how that structure allows it to function.
* Where would we find each type of muscle? What is the function of each type of muscle?

Question 3:

* List all of the structures of the heart and their individual functions.

Question 4:

* What is the function of the heart valves?
* How would a valve that didn’t perform properly affect the rest of the heart?

Question 5:

* Describe the structure of arteries. What is their function?
* Describe the structure of veins. What is their function?
* Describe the structure of capillaries. What is their function?

Question 6:

* Use the diagrams in the slides for Std 3/Obj 1 to answer the following:
* List all of the structures in a plant’s roots. What are the functions of the roots?
* List all of the structures in a plant’s stem. What are the functions of the stem?
* List all of the structures in a plant’s leaves. What are the functions of the leaf?
* Why are the stomata in a leaf and the alveoli in the lungs similar in function?

Question 7:

* List all of the structures of respiratory system.
* What is the function of each of these structures?

Question 8:

* What is bile?
* Where is bile produced?
* Where is bile stored?

Question 9:

* Give a good explanation of the function and purpose of the nervous system.
* Give a good explanation of the function and purpose of the respiratory system.

Question 10:

* List all of the structures of the digestive system.
* Give the function of each structure.

Question 11:

* List all of the structures of the bird’s digestive system and give the function of each.
* List all of the structures of a ruminant’s digestive system and give the function of each.
* Why do ruminants need four compartments in their digestive system?

Question 12:

* List all the structures of the digestive system.
* Explain the function of each individual structure.

Question 13:

* List all the structures of the digestive system.
* Explain the function of each individual structure.

Question 14:

* List all of the structures of the digestive system.
* Explain the function of each of these structures.

Question 15:

* List all of the functions of the skeletal system.
* Describe the process of each of these functions.

Question 16:

* Define “homeostasis.”
* List all of the structures of the nervous system and explain the function of each.
* List all of the structures of the integumentary system and explain the function of each.
* List all of the structures of the muscular system and explain the function of each.
* How does this example show that each of these systems are working together to maintain homeostasis?

Question 17:

* What is the function of the endocrine system? What are the structures included in the endocrine system?
* What is the function of the exocrine system? What are the structures included in the endocrine system?
* How is the exocrine system different from the endocrine system?
* Which of these systems is involved in this example of homeostasis? Explain why.

Question 18:

* Describe the organ systems of a pig and explain how they are similar to humans.

Question 19:

* List the animals that have a two-chambered heart. How does a two-chambered heart oxygenate the blood? What is the structure and function of a two-chambered heart?
* List the animals that have a three-chambered heart. How does a three-chambered heart oxygenate the blood? What is the structure and function of a three-chambered heart?
* List the animals that have a four-chambered heart. Why do these animals need a four-chambered heart? How does a four-chambered heart oxygenate the blood? What is the structure and function of a four-chambered heart?

Question 20:

* List the animals that have a two-chambered heart. How does a two-chambered heart oxygenate the blood? What is the structure and function of a two-chambered heart?
* List the animals that have a three-chambered heart. How does a three-chambered heart oxygenate the blood? What is the structure and function of a three-chambered heart?
* List the animals that have a four-chambered heart. Why do these animals need a four-chambered heart? How does a four-chambered heart oxygenate the blood? What is the structure and function of a four-chambered heart?

Question 21:

* How do the waste products from cellular respiration get into the blood stream?
* Where does the blood take those waste products?
* How does the blood exchange that waste, with the help of another organ system, to rid the entire body of the waste?

Question 22:

* List all of the structures of a plant’s roots, stem and leaves. Explain the function of each structure.

Question 23:

* Define “homeostasis.”
* Which organ system monitors body temperature? How does it do that?
* What are the ways the body maintains its optimum temperature (see slide #23 from Std 3/Obj 2)?

Question 24:

* Describe the respiratory and circulatory systems in fish and mammals.
* Describe the process of blood oxygenation in fish.
* Describe the process of blood oxygenation in mammals.

Question 25:

* Explain the role of a scientist vs. the role of government, religion and community.

Question 26:

* Review the videos: “Corpus Luteum” and “Ovulation” on mrscbiology.com, Study Stuff tab.
* Explain the entire ovulation cycle, step-by-step.
* What happens if fertilization occurs?
* What happens if fertilization does not occur?

Question 27:

* List all of the structures of the male reproductive system in a flower. What is the function of each individual structure?
* List all of the structures of the female reproductive system in a flower. What is the function of each individual structure?

Question 28:

* Explain how muscles work. How do they pull? What do they pull against? How does this create movement?

Question 29:

* Go to this website: *pick-a-pepper.com/the-life-cycle-of-a-peach-tree*
* Explain the process of reproduction in a fruit tree.

Question 30:

* Using your Chrome browser, go to this fern reproduction link: <https://www.sciencelearn.org.nz/resources/1103-what-is-a-fern>.
* Scroll to the bottom of that page – “Fern Life Cycle”.
* Click on each part of the diagram at that link.
* Explain, in detail, the entire reproduction process of ferns.
* Also, use the slides from Std 3/Obj 2 to help you.