

BIOL-8 Practice Test 06

Module 10: Tissues

Instructions: This practice test covers material from Module 10 only. Answer all questions to the best of your ability.

Part A: Multiple Choice

1. A group of similar cells working together to perform a specific function is a(n): A) Organ B) Tissue C) Organ system D) Organism
2. Which of the following is NOT one of the four main tissue types? A) Epithelial B) Connective C) Skeletal D) Nervous
3. Epithelial tissue is primarily found: A) Connecting bones to muscles B) Lining body cavities and covering surfaces C) Transmitting electrical signals D) Contracting to move the body
4. An epithelium capable of stretching (like in the bladder) is called: A) Simple squamous B) Stratified squamous C) Pseudostratified D) Transitional epithelium
5. Flattened cells arranged in a single layer would be classified as: A) Simple cuboidal B) Simple squamous C) Stratified squamous D) Simple columnar
6. Which tissue type has the most abundant extracellular matrix? A) Epithelial B) Muscle C) Connective D) Nervous
7. Which specialized connective tissue transports oxygen and nutrients? A) Bone B) Cartilage C) Blood D) Adipose
8. The type of muscle tissue that is voluntary and striated is: A) Skeletal muscle B) Cardiac muscle C) Smooth muscle D) Visceral muscle

9. Cardiac muscle is unique because it contains: A) Multiple nuclei per cell B) Intercalated discs C) No striations D) No mitochondria
10. Where would you find smooth muscle? A) Attached to bones B) In the heart C) In the walls of hollow organs (stomach, blood vessels) D) In the brain
11. The main functional cell of the nervous system is the: A) Neuron B) Glial cell C) Osteocyte D) Fibroblast
12. The part of the neuron that sends signals AWAY from the cell body is the: A) Dendrite B) Axon C) Nucleus D) Synapse
13. Ligaments and tendons are made of: A) Loose connective tissue B) Dense regular connective tissue C) Hyaline cartilage D) Adipose tissue
14. Which cell type produces the fibers in connective tissue? A) Macrophage B) Fibroblast C) Adipocyte D) Erythrocyte
15. Which tissue type is avascular (has no blood supply of its own)? A) Bone B) Skeletal muscle C) Epithelial tissue (and cartilage) D) Adipose tissue
16. Stratified squamous epithelium is found in areas subject to: A) Gas exchange B) Filtration C) Abrasion and mechanical stress D) Absorption of nutrients
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Part B: Fill in the Blank

17. ____ epithelium appears layered but is actually a single layer of cells, often found in the respiratory tract.
18. The specific connective tissue that stores fat is called ____.
19. Bone cells are called ____, while cartilage cells are called ____.
20. The non-living material surrounding connective tissue cells is the ____.
21. ____ cells support and protect neurons in the nervous system.

22. The side of epithelial tissue attached to the basement membrane is the ____ surface.

Part C: Short Answer

23. List the four major tissue types and provide one basic function for each.

24. Compare the three types of muscle tissue (Skeletal, Cardiac, Smooth). Include appearance (striated/non-striated) and control (voluntary/involuntary).

25. Describe how the structure of simple squamous epithelium fits its function of diffusion/filtration.

End of Practice Test 06