

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