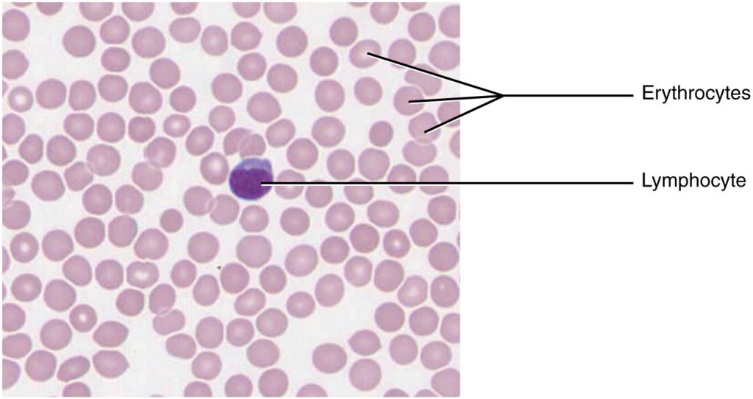
**The 1st Examination Animal Biology Model Answer**

**A) Tick the correct answer:**

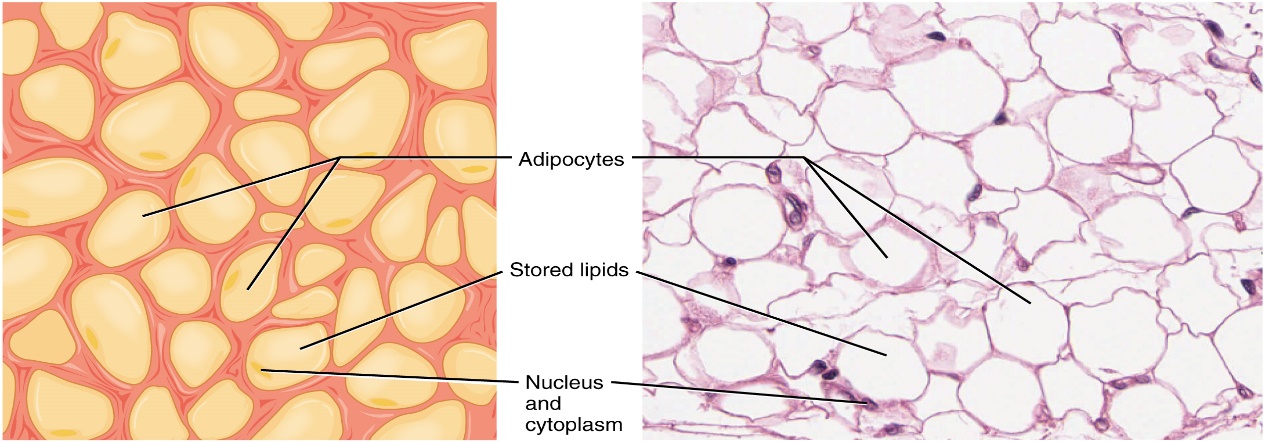
1. Where can pseudostratified columnar epithelium primarily be found in the human body? **Correct Answer: c) Respiratory tract**
2. Which type of epithelial tissue lines the inner surfaces of blood vessels and the heart? Correct Answer: a) Simple squamous epithelium
3. Which type of glandular epithelium releases its secretions directly into the bloodstream? Correct Answer: b) Endocrine glands
4. What is a characteristic feature of merocrine glands? Correct Answer: a) They lose parts of their cytoplasm during secretion.
5. What distinguishes exocrine glands from endocrine glands? Correct Answer: b) Endocrine glands secrete hormones. ELIMINATED
6. Which type of muscle tissue is striated and under voluntary control? Correct Answer: c) Skeletal muscle
7. Where can smooth muscle tissue primarily be found in the human body? Correct Answer: b) Digestive tract
8. Which type of muscle tissue is found in the walls of hollow internal organs and blood vessels? Correct Answer: b) Smooth muscle
9. What is the primary cell type responsible for transmitting electrical signals in the nervous system? Correct Answer: a) Neurons
10. What is the substance that surrounds axons and aids in signal transmission? Correct Answer: c) Myelin
11. Which part of the neuron receives incoming signals from other neurons or sensory receptors? Correct Answer: c) Dendrites
12. Which type of glial cell provides support and nutrients to neurons in the central nervous system (CNS)? Correct Answer: b) Astrocytes
13. What is the junction between two neurons called, where signal transmission occurs. Correct Answer: a) Synapse
14. Which type of cartilage is found in the external ear and epiglottis? Correct Answer: a) Elastic cartilage
15. Where is hyaline cartilage predominantly found in the human body? Correct Answer: b) Nose, trachea, and larynx
16. What is the name of the cells responsible for maintaining the matrix of cartilage tissue? Correct Answer: b) Chondrocytes
17. What is the primary mineral found in bone tissue that contributes to its hardness and strength? Correct Answer: a) Calcium phosphate
18. What is the basic structural unit of compact bone called? Correct Answer: a) Osteon (Haversian system)
19. Where is red bone marrow primarily found in adultsCorrect Answer: d) In the spongy bone of flat bones
20. What type of cells are responsible for bone resorption and remodeling? Correct Answer: c) Osteoclasts

**B) Answer the following questions with true or false, and correct the false statements (4pts)**

1. **FALSE**: Cartilage is avascular, lacking blood vessels within its matrix.
2. **FALSE**: Connective tissue provides structural support, protection, and connection between different tissues and organs.
3. **TRUE:** Adipose tissue serves as an energy reserve, insulates the body, and cushions organs.
4. **FALSE**: Ligaments are fibrous connective tissues that connect bones to other bones, not muscles to bones. Muscles are connected to bones by tendons.
5. **Fluid conncective tissue (Blood)**



1. **Adipose Tissue**



3**. The respiratory Mucosa with in it surface a pseudo-stratified Columnar ciliated epithelium**

