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**College of Education**  
**Department of Biology**

**Subject: Question Bank of Histology**

**Question// Fill the following blanks with suitable scientific terms and phrases:**

1. The first step in tissue preparation is \_\_\_\_\_
2. The Components of connective tissue includes \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_
3. \_\_\_\_\_ The capacity of muscle to respond to a stimulus
4. A decrease in WBC count in the blood creates a condition called \_\_\_\_\_ while an increase in WBC count in the blood creates a condition called \_\_\_\_\_
5. Osteon is the structural unit of \_\_\_\_\_
6. Dense regular connective tissue makes structures such as \_\_\_\_\_ and \_\_\_\_\_
7. \_\_\_\_\_ are tiny, a nucleated, blood cells, fragments of megakaryocyte cytoplasm
8. Leukocytes send extensions through the openings between the endothelial cells, in a process called \_\_\_\_\_
9. A granulocyte WBC include \_\_\_\_\_ and \_\_\_\_\_
10. The sharing of cytoplasm is important in cardiac muscle, by the movement of ions through \_\_\_\_\_ junctions
11. \_\_\_\_\_ is used for cutting thin sections of tissue, while xylene is used for \_\_\_\_\_
12. \_\_\_\_\_ The ability of a muscle to shorten with force
13. The most abundant plasma protein in blood is \_\_\_\_\_
14. Connective tissue covering the cartilage called \_\_\_\_\_ which contains \_\_\_\_\_ cells
15. The cytoplasm of the skeletal muscle shows alternative dark band is called \_\_\_\_\_ and light band is called \_\_\_\_\_
16. Types of fiber in connective tissue includes \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_
17. Blood after centrifugation separated into \_\_\_\_\_ and \_\_\_\_\_
18. Dehydration is defined as \_\_\_\_\_
19. Cardiac muscle is characterized by having a structure between cells called \_\_\_\_\_
20. According to mode of secretion exocrine glands classified into \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_

- 21.----- is the process of attraction neutrophils to bacteria
- 22.The plasma membrane of a muscle cell called-----
- 23.In Traditional histological sectioning the tissues are hardened by-----, while in Cryosection Water-rich tissues are hardened by-----
- 24.----- are specialized junctions through which neurons signal to each other and non-neuronal cells such as those in muscles or glands.
25. Glands classify according to presence or absence of ducts into -----and -----
- 26.blocking the movement of bacteria and small molecules from the lumen of the gut into the intercellular space are function of ----- junction
- 27.Exocrine glands Histologically, composed from two parts-----and -----
- 28.Cellularity is main characteristics of ----- tissue
- 29.Intermediate filaments of the Desmosomes junction are ----- filaments in most epithelial cells and ----- filaments in heart and muscle cells.
- 30.Simple columnar ep. T with microvilli or brush border lining the -----in the body
- 31.Gap junction found in -----, -----
- 32.The volume of fixative to tissue ratio should be-----
- 33.Most common dehydrating agent is \_\_\_\_\_while \_\_\_\_\_is used for clearing tissues.
- 34.Example of Unicellular gland is \_\_\_\_\_and multicellular gland such as \_\_\_\_\_
- 35.Gap junction are cell attachments located at \_\_\_\_\_of cells, which is used for\_\_\_\_\_.
- 36.Pseudostratified have \_\_\_\_\_layer of cells, while stratified cuboidal tissue composed of ----- layer.
- 37.Compound tubulo-acinar gland found in -----, Compound acinar gland-----

**Question// A- Match the following cell and tissue with their function:**

Cell	Answer	Function
<b>Bone</b>		a. Provides heat for newborns
<b>Plasma cells</b>		b. Supplies the cartilage with blood and nourishment
<b>Erythrocyte</b>		c. Mineral homeostasis
<b>Brown adipose CT</b>		d. Secrete antibodies
<b>Perichondrium</b>		e. Carry O <sub>2</sub> to the tissues
		f. Release histamine

**B- What is the location of the following tissue:**

No.	Tissue	Location (site)
2	Adipose tissue	
4	Mesenchymal connective tissue	
8	Simple columnar non ciliated	
9	Gap junction	
10	Cardiac muscle	

**Question// A- Match the following cell with their function:**

Cell	Answer	Function
<b>Eosinophil</b>		a. Storage of fats
<b>Chondrocyte</b>		b. Resorption(digestion) of matrix
<b>Adipocyte</b>		c. Cartilage forming cells
<b>Osteoclast</b>		d. Kill parasites
<b>Neutrophil</b>		e. Carry O <sub>2</sub> to the tissues
		f. Phagocytosis of bacteria

**B- What is the location of the following tissue:**

No.	Tissue	Location (site)
1	Elastic cartilage	
2	Dense regular connective tissue	
3	Muroid connective tissue	
4	Reticular Tissue	
5	Smooth Muscle	

**Question// State 3 differences between the following:**

1. Exocrine and Endocrine
2. Smooth Muscle and Cardiac Muscle
3. White blood cell and Red blood cell
4. Bone and cartilage
5. Skeletal Muscle and Smooth muscle

6. Hyaline cartilage and Fibrocartilage
7. White adipose and Brown adipose connective tissue

**Question// // Enumerate the following (4 for each one)**

1. Type of gland based on nature of secretion
2. Fixed cells in connective tissue
3. Functions of blood
4. Function of Muscular system

**Question// A- Write the type of epithelial tissue in the following body parts:**

- 1- Epidermis of the skin
- 2- Stomach
- 3- Sweat gland
- 4- Urinary bladder
- 5- Surface of the ovary

**B- Write the name of one substance used in the following stages of tissue processing:**

- 1- Fixation
- 2- Dehydration
- 3- Clearing
- 4- Embedding
- 5- Staining

**C- Classify the following:**

1. Glands according to mode of secretion with example on each one
2. Stratified epithelial tissue with example for each one

Question// Identify and label the following figures:

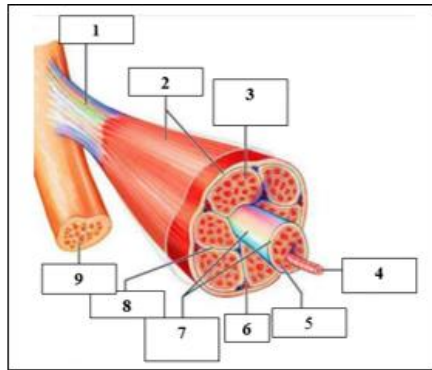


Fig. 1

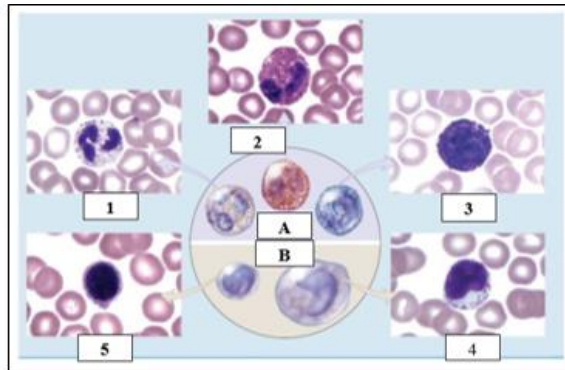


Fig. 2

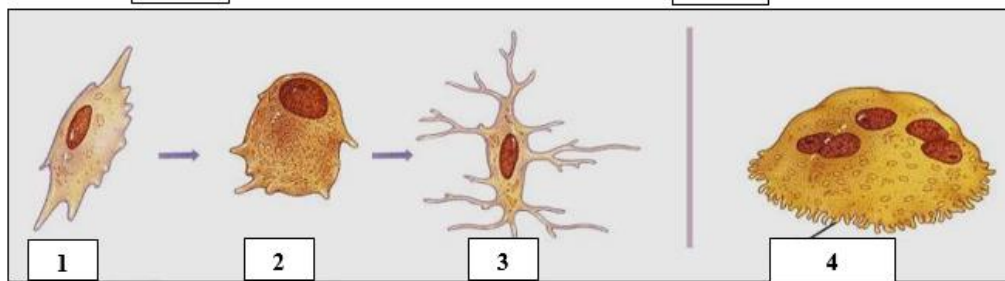


Fig. 3

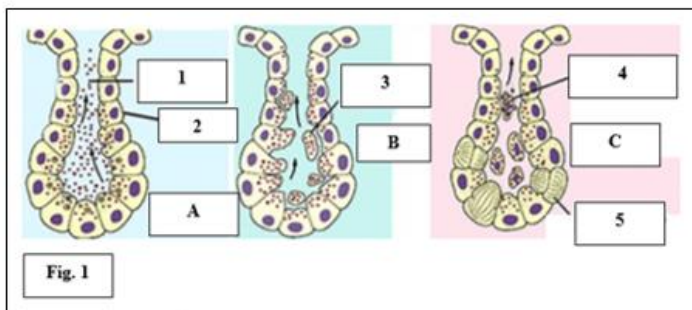


Fig. 1

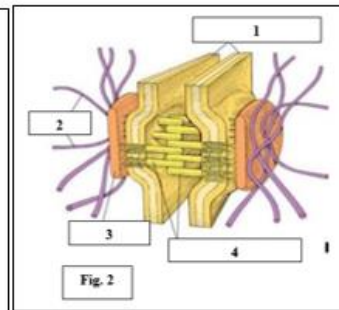


Fig. 2

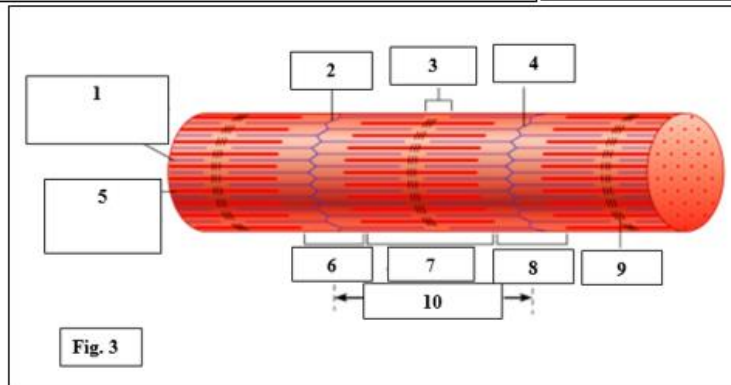


Fig. 3

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