

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

**KEY:** Quiz 5: Digestion, Review of Heart and Blood Vessels

Anatomy and Physiology II Lab, Summer C 2014

1) **Amylase** is secreted from \_\_\_\_\_ glands, and it catalyzes the breakdown of \_\_\_\_\_.

**SALIVARY, CARBOHYDRATES**

2) **Pepsin** digests \_\_\_\_\_ in the \_\_\_\_\_. **PROTEINS, STOMACH**

3) In the small intestine, what occurs at the brush border cells (microvilli)? **ENZYMATIC DEGRADATION OF MACROMOLECULES (CARBS, PROTEINS AND) LIPIDS; ADSORPTION OF NUTRIENTS; SECRETION OF DIGESTIVE ENZYMES**

4) Which of the following enzymes are produced in the pancreas?

a. trypsin

b. pepsin

c. lipase

**d. trypsin and lipase**

5) The smallest building blocks of carbohydrates (sugars) are \_\_\_\_\_. **MONOSACCHARIDES**

6) The smallest building blocks of proteins are \_\_\_\_\_. **AMINO ACIDS**

7) Starch is composed of repeating \_\_\_\_\_ molecules. **GLUCOSE**

8) What characteristic of starch allows iodine to become embedded in its structure? **The amylose component forms a coil in which iodine can become embedded.**

9) Within what region of a carbohydrate molecule does the copper in Benedict's solution react to turn red? **FREE REDUCING ENDS**

10) What is the relationship of the heart sounds to the valves?

**The sounds are caused by blood rushing through the valves while they are CLOSING.**

11) Pulmonary veins carry blood that is **OXYGENATED/DEOXYGENATED** (CHOOSE ONE). **OXYGENATED**

12) Which ventricle has the thickest wall? **LEFT**

13) List the agglutinins (antibodies) present in the following blood types.

Type A \_\_\_\_\_ **anti-B**

Type AB \_\_\_\_\_ **none**

Type B \_\_\_\_\_ **anti-A**

Type O \_\_\_\_\_ **anti-A, anti-B**

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14) Where are the **agglutinogens (antigens)** located in the blood? **On the membrane of red blood cells.**

15) Of the **formed elements** listed below, which of them carries oxygen to tissues?

**a. erythrocytes**

b. leukocytes

c. thrombocytes

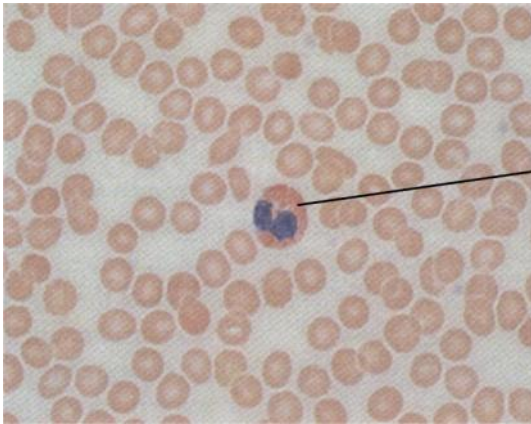
16) Of the **formed elements** listed below, which of them participate in blood clotting?

a. erythrocytes

b. leukocytes

**c. thrombocytes**

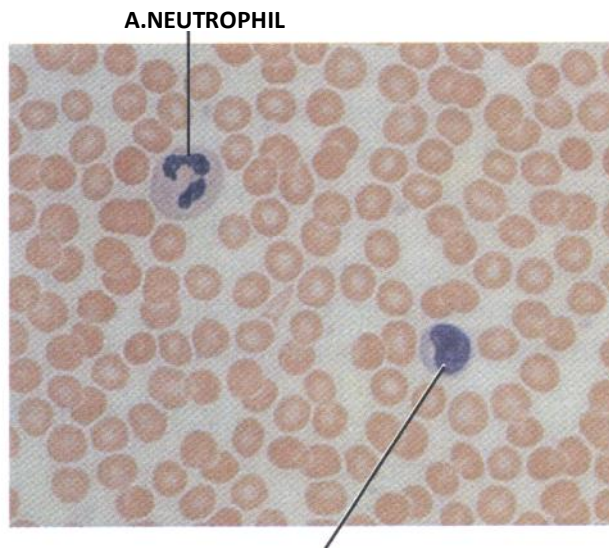
Quiz 5 - Digestion; Review of Blood, Heart and Blood Vessels



1. What subtype of cell is identified at left?  
**EOSINOPHIL**

**2A, 2B.** Please label the two subtypes of cells indicated at right.

**2C.** In what way do the cells labeled "A", at right, interact with bacteria?  
**They phagocytose them.**

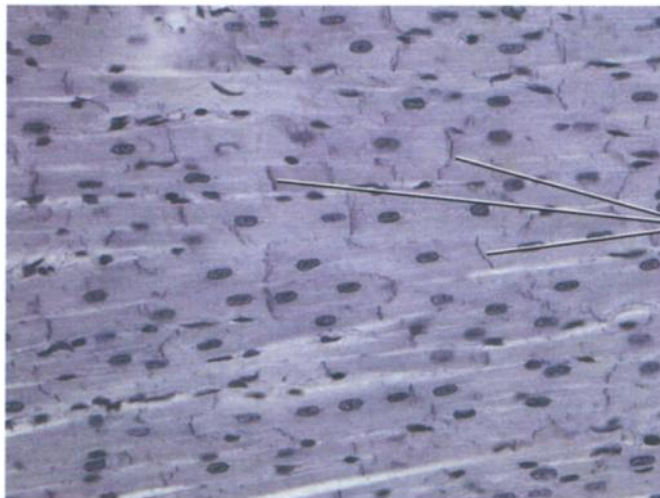


**A. NEUTROPHIL**

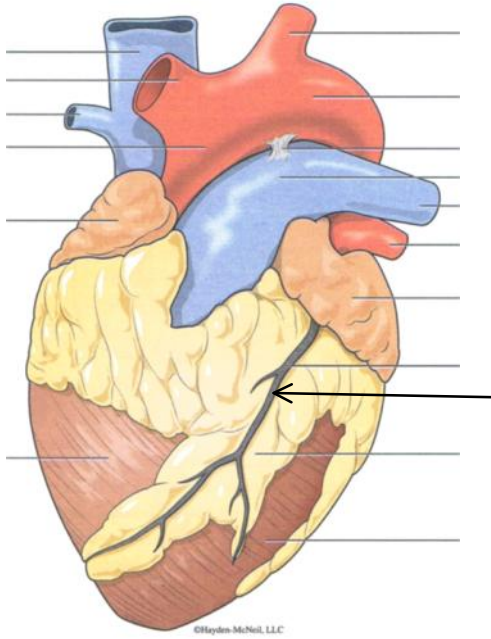
**B. LYMPHOCYTE**

**3A.** Please label the structures indicated in the histological image below.

**3B.** In what organ can they be found? **HEART**



**A. INTERCALATING DISKS**



4. What is the name of the structure at the end of the arrow at left?

**LEFT CORONARY ARTERY**