Chapter 13

** The exchange of gases and nutrients between the blood and the tissues occur in blood vessels called _____. --> capillaries

**A normal hematocrit value of 45 means that _____. --> 45% if the formed elements are erythrocytes

**A person whose blood genotype is IAi has red blood cells with _____ antigens bound to the outer membrane surface and anti-_____ antibodies floating in the plasma. --> A; B

**Action potentials in myocardial cells have a characteristic plateau phase, which is caused primarily by the _____. --> slow inward diffusion of Ca2+

**Aplastic anemia results in an abnormally low red blood cell count due to _____. --> destruction of the bone marrow, perhaps by chemicals in the environment or chemotherapy

**At rest the heart of an average human will pump _____ liters of blood per minute. --> 5

**At rest, each complete cardiac cycle lasts about 0.8 secs. of which diastole lasts _____ seconds and systole lasts _____ seconds. --> 0.5; 0.3

**Blood clotting would not occur of the plasma was deficient in _____. --> fibrinogen

**During one cardiac cycle, the major difference between the left and the right halves of the heart is that the _____. --> the left side of the heart to the right

**Erythrocytes _____. --> lack both a nucleus and mitochondria organelles

**In a normal ECG tracing _____. --> the repolarization of the atria is hidden by the QRS wave

**In the ABO system of red blood cell typing, which of the following genotypes would produce type O blood? --> ii

**Lymph contains all of the following substances except _____. --> red blood cells and platelets

**Normal venous return relies upon all of the following except _____. --> standing upright, perfectly still

**Pacemakers may be useful in treating _____. --> a third degree AV node block

**Platelets _____. --> release a chemical called seratonin that constricts blood vessels

**The "buffy coat" that forms when whole blood is centrifuged in a test tube, is composed of _____. --> white blood cells and platelets

**The atrioventricular (AV) valve _____. --> is called the mitral valve, separates the left atrium and left ventricle, and is also called the bicuspid

**The endothelial cells of the blood vessel produce two important chemicals involved in hemostasis; prostacyclin and _____. --> von Willebrand factor

**The lymph eventually enters the circulation by draining into two specific _____. --> veins

**The most important ion involved in the blood clotting sequences is _____. --> Ca2+

**The presence of _____ in the circulatory system would be considered abnormal. --> Kreb's cycle enzymes

**The SA node is the normal pacemaker of the heart because the SA node _____ --> depolarizes to its threshold potential before other pacemakers in the heart

**The second heart sound results from vibrations generated by the _____. --> closing of the semilunar valves at the start of diastole

**The semilunar valves _____. --> regulate the passage of blood from the ventricles into the pulmonary artery and the aorta

**The terms "systole" and "diastole" refer, respectively, to the _____ --> contraction phase and relaxation phase of the ventricles

**Which of the following does not belong to the class of granular leukocytes? --> lymphocyte

**Which of the following events is the first to occur during the process of hemostasis after a blood vessel becomes injured? --> The endothelial lining is damaged, exposing collagen proteins to the blood.

**Which of the following is not a broad area of function within the circulatory system? --> neurochemical release

**Which of the following leukocytes usually accounts for less than 1% of white blood cells present? --> basophils

**Which of the following statements about arteries and veins is false? --> Veins can collapse, serving as the blood vessel with the greatest resistance to blood flow in the circulatory system.

**Which statement about erythroblastosis fetalis (hemolytic disease of the newborn) is false? --> The baby is born with an abnormally high number of red blood cells (anemia)

**Within the pulmonary circulation, the _____. --> pulmonary arteries carry oxygen-poor blood

0.12 to 0.20 second is the duration of the _____ in a normal heart. --> P-R interval

_____ AV node block occurs when the rate of impulse conduction through the AV node exceeds 0.20 seconds --> First-Degree