

Quiz 5B February 8, 2006

1. Atrial repolarization on a normal electrocardiogram:
 - a. Is the P wave.
 - b. Is the T wave.
 - c. Is the QRS complex.
 - d. Is masked by the QRS complex.
 - e. None of the above.

2. Atrial repolarization on a normal electrocardiogram:
 - a. Is the P wave.
 - b. Is the T wave.
 - c. Is the QRS complex.
 - d. Is masked by the QRS complex.
 - e. None of the above.

3. Bradycardia is:
 - a. A faster heart rate.
 - b. A slower heart rate.
 - c. An increased force of contraction.
 - d. A decreased force of contraction.
 - e. Insufficient oxygen supply to the heart.

4. If the ejection fraction increases, there will be a decrease in:
 - a. Cardiac output.
 - b. End diastolic volume.
 - c. End systolic volume.
 - d. Heart rate.
 - e. Stroke volume.

5. A cardiac arrhythmia is due to:
 - a. Abnormal patterns of electrical activity.
 - b. Abnormal calcium release.
 - c. Abnormal closing of the valves of the heart.
 - d. Abnormal cross bridge formation.
 - e. None of the above.

6. The direct stimulus to release calcium from the sarcoplasmic reticulum for cardiac contraction is the:
- Sodium entering from the sarcolemma.
 - Calcium entering from the sarcolemma.
 - Direct interactions with proteins in the sarcolemma.
 - Action potential.
 - None of the above.
7. The amount of blood pumped out of each ventricle during a single beat is the:
- End diastolic volume.
 - Cardiac output.
 - Ejection fraction.
 - End systolic volume.
 - Stroke volume
8. Baroreceptors are free nerve endings within the elastic tissue of the carotid sinus that senses:
- Oxygen.
 - CO₂.
 - Pressure.
 - pH.
 - Cardiac output.
9. Which of the following equations is correct?
- $CO = HR \times EDV$.
 - $CO = HR \times ESV$.
 - $CO = HR \times SV$.
 - $SV = CO - ESV$.
 - $SV = ESV - EDV$.
10. The maximum amount of blood each ventricles will hold occurs at the end of atrial systole and is known as the:
- Stroke volume.
 - End diastolic volume.
 - Ejection fraction.
 - End systolic volume.
 - None of the above.

11. The ventricles are completely depolarized during which isoelectric portion of the electrocardiogram (ECG)?
 - a. PR interval.
 - b. QRS complex.
 - c. QT interval.
 - d. ST segment.
 - e. T wave.

12. In cardiac muscle there is a period during which a second action potential will not occur no matter how strong the stimulus. This is known as the:
 - a. Relative refractory period.
 - b. Latent period.
 - c. Absolute refractory period.
 - d. Resting period.
 - e. Repolarization period.

13. The rapid depolarization during the beginning of a cardiac action potential is due to:
 - a. Sodium channels opening.
 - b. Calcium channels opening.
 - c. Potassium channels opening.
 - d. Chloride channels opening.
 - e. None of the above.

14. The QRS complex of an EKG recording refers to:
 - a. Atrial depolarization.
 - b. Atrial contraction.
 - c. Ventricular Depolarization.
 - d. Ventricular repolarization.
 - e. Ventricular contraction.

15. The primary pacemaker of the heart is located in the:
 - a. Atrioventricular node.
 - b. Purkinje fibers.
 - c. Sinoatrial node.
 - d. Bundle of His.
 - e. None of the above.

16. Coronary ischemia is:
- Inadequate blood supply to the heart.
 - A plaque in the wall of a blood vessel.
 - A blockage of the coronary arteries.
 - A blood clot.
 - None of the above.
17. Thrombin converts:
- Prothrombin into thrombin.
 - Factor X into prothrombinase.
 - Thrombin into fibrin.
 - Fibrinogen into fibrin.
 - Fibrin into Factor X.
18. Which of the following are phases during the clotting process?
- Vascular.
 - Platelet.
 - Coagulation.
 - a and c.
 - a, b and c.
19. Blood types are categorized by:
- Differential staining of red blood cells.
 - Hematocrit.
 - Cell Surface antigens.
 - Presence of antibodies.
 - None of the above.
20. Erythropoiesis is:
- Red blood cell damage.
 - Red blood cell formation.
 - Red blood cell loss.
 - Red blood cell count.
 - None of the above.

21. I belong to the second largest group of white blood cells. I have a large round nucleus with a thin halo of cytoplasm. I am a:
- Neutrophil.
 - Basophil.
 - Monocyte.
 - Lymphocyte.
 - Eosinophil.
22. Characteristics of white blood cells that differ from mature red blood cells include:
- Absence of hemoglobin.
 - Presence of a nucleus.
 - Most are present in organs and tissues.
 - All can migrate out of the circulatory system.
 - All of the above.
23. Which of the following are not considered white blood cells or leucocytes?
- Neutrophils.
 - Eosinophils.
 - Basophils.
 - Lymphocytes.
 - Platelets.
24. Each hemoglobin chain contains a single molecule of heme that is complexed with:
- Cu ion.
 - Pb ion.
 - Fe ion.
 - Mn ion.
 - Mg ion.
25. The hematocrit is a diagnostic test that measures the percentage of whole blood contributed by:
- Formed elements.
 - Plasma.
 - White blood cells.
 - Platelets.
 - None of the above.