Self Assessment – Circulatory System (Module E)

1. Write the correct medical terminology used to describe:

   A. RBC **RED BLOOD CELL COUNT; ERYTHROCYTES**

   B. WBC **WHITE BLOOD CELL COUNT; LEUKOCYTES**

   C. Platelets **THROMBOCYTES**

2. What are the normal values for each of the following?

   A. RBC **4 TO 6 MILLION mm^3**

   B. WBC **4,600 TO 10,000 mm^3**

   C. Platelets **150,000 – 400,000 mm^3**

3. Name the three polymorphonuclear granulocytes

   A. **NEUTROPHILS**
   B. **EOSINOPHILS**
   C. **BASOPHILS**

4. Define:

   A. Leukocytosis: **ELEVATED WHITE BLOOD COUNT**
   B. Anemia: **REDUCED LEVEL OF RBC OR HEMOGLOBIN**
   C. Thrombocytopenia: **REDUCED LEVEL OF PLATELETS**

5. Which WBC is elevated in asthma? **EOSINOPHILS**

6. Which WBC is involved in the production of antibodies? **LYMPHOCYTES**

7. List the normal values for the following electrolytes:

   A. Na^+ **135 – 145 mEq/L**
   B. K^+ **3.5 –4.5 mEq/L**
   C. Cl^- **85 – 100 mEq/L**
   D. HCO_3^- **22 – 26 mEq/L**

8. Which heart valve separates the right atrium from the right ventricle? **TRICUSPID VALVE**

9. Which heart valve separates the left ventricle and aorta? **AORTIC VALVE**

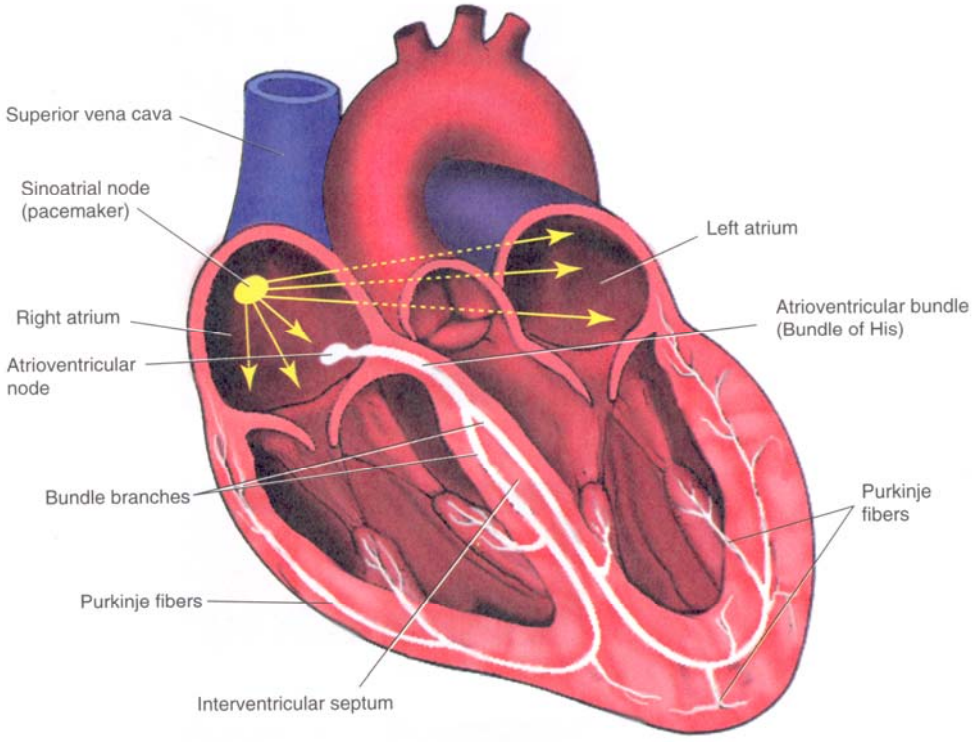
10. Name the 3 branches off the aortic arch.

    A. **INNOMNIATE (BRACHIOCEPHALIC) ARTERY**
    B. **LEFT COMMON CAROTID**
    C. **LEFT SUBCLAVIAN**

11. Name the two branches of the left coronary artery

    A. **LEFT ANTERIOR DESCENDING**
    B. **LEFT CIRCUMFLEX**

12. Draw a picture of the conduction system and label the divisions.



13. Which WBC constitutes the largest number in the body? **NEUTROPHILS**

14. What is the primary function of the platelets? **BLOOD COAGULATION**

15. What is the primary function of the RBC? **TRANSPORT OF OXYGEN ATTACHED TO HEMOGLOBIN**

16. What is the primary function of the WBC? **To protect the body against invasion of bacteria and other foreign agents.**

17. Blood minus the cells is called **PLASMA**

18. Plasma minus the protein clotting factors is called **SERUM**.

19. Name the two A-V valves in the heart? **BICUSPID (MITRAL) & TRICUSPID**.

20. The A-V valves are prevented from inversion during ventricular contraction by fibers that attach from the valves to the papillary muscles. These fibers are called **CHORDAE TENDINAE**.

21. The right pulmonary artery carries
    A. Oxygenated blood
    B. Deoxygenated blood

22. The SA node is innervated with nerve fibers from the
    A. Sympathetic nervous system.
    B. Parasympathetic nervous systems.
    C. Both sympathetic and parasympathetic nervous systems.

23. How does sympathetic stimulation affect heart function?
    INCREASES RATE AND FORCE OF CONTRACTION. ALSO INCREASES VASCULAR RESISTANCE, WHICH REDUCES CARDIAC OUTPUT.

24. How does parasympathetic stimulation affect heart function?
    DECREASES HEART RATE AND FORCE OF CONTRACTION. ALSO DECREASES VASCULAR RESISTANCE.