Blood Study Questions
Dr. J. Lim

1. Blood is more viscous than water. This agrees with the old adage that blood is ______________ than water.

2. Is circulating blood warmer or cooler than the average body temperature? State blood’s expected temperature.

3. Name four substances transported in the blood.

4. State the two components that comprise blood. Give at least one example of each component.

5. Where are the formed elements of the blood manufactured?

6. Which type of blood cell is most numerous by a large margin?

7. What is the shape of an erythrocyte? ______________________

8. State the three components of red blood cells.

9. Erythrocytes are well designed and efficient transporters of ______________.

10. This part of hemoglobin can bind with an oxygen molecule. __________________________

11. One hemoglobin molecule combines with ____ oxygen molecules

12. One red blood cell has ____ million hemoglobin molecules.

13. One red blood cell can transport ______________ oxygen molecules.

14. Another name for white blood cells is ______________________.

15. State the major function of white blood cells. ______________________

16. Another name for platelets is ______________________.

17. State the major function of platelets. ______________________

18. Plasma is 90% ____________.

19. By volume, does blood contain more formed elements or plasma? ____________
Blood Study Questions KEY
Dr. J. Lim

1. Blood is more viscous than water. This agrees with the old adage that blood is thicker than water.
2. Is circulating blood warmer or cooler than the average body temperature? State blood’s expected temperature. Warmer at about 100.4°F
3. Name four substances transported in the blood. Oxygen, carbon dioxide, nutrients (ex: glucose) ions (ex: calcium), plasma proteins (ex: fibrinogen), hormones, cellular waste products, water, formed elements (WBC, RBC & platelets)
4. State the two components that comprise blood. Give at least one example of each component. Formed elements – RBC, WBC (leukocytes), thrombocytes (platelets) Plasma – nutrients, ions, gases, hormones, plasma proteins, waste
5. Where are the formed elements of the blood manufactured? Red bone marrow
6. Which type of blood cell is most numerous by a large margin? Erythrocytes (red blood cells or RBCs)
7. What is the shape of an erythrocyte? Biconcave disc
8. State the three components of red blood cells. Hemoglobin, plasma membrane and cytosol
9. Erythrocytes are well designed and efficient transporters of oxygen.
10. This part of hemoglobin can bind with an oxygen molecule. Iron ion
11. One hemoglobin molecule combines with four (4) oxygen molecules
12. One red blood cell has 250 million hemoglobin molecules.
13. One red blood cell can transport (250 million X 4 =) 1 billion oxygen molecules.
14. Another name for white blood cells is leukocyte.
15. State the major function of white blood cells. Body defense
16. Another name for platelets is thrombocyte.
17. State the major function of platelets. Aid in blood clotting
18. Plasma is 90% water.
19. By volume, does blood contain more formed elements or plasma? Plasma (55%)