

RETICULOCYTES AND IRF QUESTIONS

SECTION 1

1. The site of production for erythropoietin (EPO) is
 - a. Liver
 - b. Kidneys
 - c. Lymphatic system
 - d. Pancreas

2. Hemolysis of red cells can be caused by:
 - a. Destruction of immature red cells
 - b. Destruction of mature red cells
 - c. All of the above
 - d. None of the above

3. Between which stages of erythropoiesis is the nucleus of the red cell extruded?
 - a. Rubriblast to prorubricyte
 - b. Rubricyte to metarubricyte
 - c. Metarubricyte to reticulocyte
 - d. Reticulocyte to mature red blood cell

4. The CAP states there must be at least 2 stained granules which have the staining characteristics of reticulum by microscopic methods to identify a red cell as a reticulocyte.
 - a. True
 - b. False

5. The unique features of the reticulocyte does not include
 - a. Presence of messenger and transfer RNA
 - b. Mitochondria with associated Krebs cycle enzymes
 - c. Cessation of hemoglobin synthesis
 - d. Increased cell size relative to the mature red cell

6. Maturation of reticulocytes requires 4 to 4.5 days with the last 24 hours occurring in the peripheral blood
 - a. True
 - b. False

7. Which of the following is not a method for counting reticulocytes
 - a. Image processing systems
 - b. Flow cytometer methods utilizing fluorescent dyes
 - c. Automated hematology CBC and differential analyzers with reticulocyte counting
 - d. Manual chamber count

8. The most commonly used stain for manual eyecount reticulocyte counts is:
 - a. Wright's stain
 - b. New Methylene Blue
 - c. Wright's Giemsa
 - d. All of the above

9. The number of red cells counted to perform a reticulocyte count is
 - a. 100
 - b. 10,000
 - c. 1,000
 - d. 10

10. Normal reticulocyte count values for females are lower than males
 - a. True
 - b. False

11. A "corrected" reticulocyte count is corrected for:
 - a. RBC count
 - b. Hemoglobin
 - c. WBC
 - d. Hematocrit

12. There is large day-to-day variation in a reticulocyte count
 - a. True
 - b. False

13. Less than 5% of the daily workload is reticulocyte counting in which country?
 - a. Japan
 - b. United States
 - c. Germany
 - d. South Africa

