

اسم الطالب: .....

رقم الجلوس: ..... رقم اللجنة .....

**I Answer the followings:** (19 marks, quarter for each)

**a) Choose the correct answer:-**

1- Reticulocytes may be identified by light microscopy due to their containing basophilic

- a- Amino acids                      b- DNA                      c- Lipids                      d- RNA

2- The agranulocyte lineage of leukocytes contains the lymphocytes and what other cell type?

- a- Macrophages                      b- Megakaryocytes                      c- Monocytes                      d- Neutrophils

3- Platelets are cell fragments that derive from which cell type?

- a- Megakaryocytes                      b- Neutrophil                      c- CFU                      d- Liver

4- Platelets possess contractile activity, and play an important role in repairs to blood vessels. This contractile activity in platelets is mediated in part by

- a- Actin and myosin filaments                      b- Granulomeres  
c- Megakaryocytopoiesis                      d- Smooth muscle

5- -Inactive marrow that functions primarily to store fat is termed

- a- Multilocular                      b- Red                      c- Unilocular                      d- White

6- Basophils, neutrophils, and eosinophils differentiate through a final common granulocytic precursor cell termed the

- a- Erythroblast                      b- Lymphoblast                      c- Platelet I                      d- Promyelocyte

7- In the pathway of erythrocytopoiesis, the final defined precursor cell before the formation of a mature erythrocyte is called a

- a- Erythroblast                      b- Myeloblast                      c- Platelet                      d- Reticulocyt

8- Your patient is suffering from an infestation of parasites. To determine the proper therapy, you perform an analysis of a peripheral blood sample. Which of the following cells would you expect to be increased in a peripheral blood smear?

- a-Neutrophil                      b- Basophil                      c- Eosinophil                      d- Monocyte

9- A decrease in the number of tissue macrophages would result from reduced activity of precursor cells to which of the following cell types?

- a- Basophils                      b-. Monocytes                      c.. Neutrophils                      d-. Megakaryocytes

10- Hemoglobin is first seen in which of the following cells of the erythrocytic series?

- a-. Basophilic erythroblast                      b- Polychromatophilic erythroblast  
c- Acidophilic erythroblast                      d-. Reticulocytes

11- In which of the following cells of the erythrocytic series is the nucleus extruded?

- a-. Basophilic erythroblast                      b- Polychromatophilic erythroblast

c- Acidophilic erythroblast

d-. Reticulocytes

**12- Which of the four basic tissue types does blood belong to?**

a. Epithelium

b. Connective tissue

c. Muscle

d. Nervous tissue

**13- Which of the following formed elements do not contain a nucleus in mammals?**

a. Platelets

b. Erythrocytes

c. Leukocytes

d. Both a and b

**14- Which leukocyte has a multi-lobed (3-5 lobes) nucleus?**

a. Neutrophil

b. Lymphocytes

c. Monocytes

d. Eosinophil

*With Our Best Wishes*

**Dr. Mohamed kassab**