University of Salahaddin Practical Animal Physiology



College of Agriculture Time: 1 hours

Animal Resource Department

Final Examination first trail/ Autumn course (2017-2018)

Q1/A / Answer by True and False and correct the false words: (10 marks)

1. The solid part of blood is about 45% of whole blood composition.
2. For serum preparation anticoagulant is used.
3. If you have to transfer the blood from a syringe to a sample container, the needle did not be removed.
4. If the mother’s Rh is +ve and the baby’s Rh is -ve as the father this cause Erythroblastosis fetalis disease during birth.
5. The Red blood cell’s membrane is permeable therefore it allows the solvent to pass across.
6. When RBCs placed in a hypertonic solution, the water diffuses into the cell causing the cell to shrinkage.
7. Universal donor such as AB blood group can give blood to all other groups.
8. Decreasing of osmotic fragility for RBCs occurs when the volume of the surface is reduced for example, Sickle cell anemia.
9. When the PH of solution is decrease, the fragility of cells is increase.
10. Prokaryotic cells, like bacteria, have no 'nucleus'.

B. Define these following assents: (10 marks)

1. Nitric Oxide. 2. Clean-up. 3. Monocytes. 4. Eesinophile. 5. Anemia.

Q2/ Fill the blanks with correct words: (20 marks)

1. In early embryo Red cells, white cells and platelets(blood cells) are formed by …………………………………………………... While In fetus, blood cells formed by …………………………………………. And…………………………………………….
2. In goat, vinous blood collected from ……………………………………………… and …………………………………
3. ……………………………………………….means the matching of the recipient serum against the RBCs of the donor.
4. ………………………………… is the percentage of volume of blood occupied by red cells.
5. ……………………………………. Organelles are present in all cells and responsible for protein synthesis in the cells.
6. The main function of Golgi Apparatus are …………………………………………………… and……………………………………………………………………………………………………………….
7. To count number of RBCs the blood dilute with …………, it consist of ………, ………. And ………… .
8. Hemoglobin reacts with HCL as result ……………. .
9. Basophile response rapidly to …………….. .

10- White blood cell are mad in ………… and aid …………. .

11- To determination the concentration of hemoglobin we use …………… and ……….. .

Q3/A/ Answer 3 of the following questions: (20 marks)

1. Explain the types of cell membranes?
2. What are the antigens and antibodies in the following blood groups: A-, B-, AB+ and O+ ?
3. What are the main functions of Centriole and Cilia organelles?

B/ Answer the following: (10marks)

1-Describe how carbon dioxide is transport in the blood.

2-How we get this equation x=200\*N.

1. What are the composition and importance of Turky's Solution?

Q4\

A/If the oxygen content of arterial blood is 220 ml per liter and the oxygen content of venous blood is 150 ml per liter and the oxygen consumption rate is equivalent to 350 ml / min. (15marks)

So find all that comes: -

1- The size of one stroke in Camel (number of strokes = 30)

2- The size of one hit in sheep (number of strikes = 75)

3-The size of one stroke in cows (number of strokes = 65)

B/Write the functions of the following parts and devices. (15marks)

1-Tongue

2-Small intestinal

3-Circulatory System

Good Luck

Edres Abdulla

Lecturer