1. Select the pigment found in equine erythrocytes.
   A saline  B prion
   C heparin  D acid orange
   E acid red  F hemoglobin

2. These cells in the feline testis produce testosterone.
   A parafollicular cells  B hepatocytes
   C Sertoli cells  D Leydig cells
   E thrombocytes  F RBCs

3. In most of our domestic animals, what percent of the body weight is water?
   A 88  B 65
   C 40  D 30
   E 20  F 50

4. Testosterone is:
   A a protein.  B produced by the liver.
   C produced by the spleen.  D a hormone that promotes calmness.
   E a hormone produced by the pineal gland.  F a steroid hormone.

5. The suffix -penia means:
   A high amount  B deficiency
   C blood  D a low point in a body region
   E closed passage  F open passage

6. At times, normal feline and equine blood samples display a(n) __________, where RBCs appear stacked when viewed by a microscope.
   A external conversion  B internal conversion
   C biconcave formation  D rouleau formation
   E apoptosis  F cyanotic appearance

7. The term hypoglycemia means:
   A high blood PCV  B low amounts of fat in the blood
   C high blood sugar  D high amounts of fat in the blood
   E low blood PCV  F low blood sugar
8. Blood collection __________ can be caused by a(n) _____________.

A hemolysis, gentle inversion  
B osmosis, saline solution  
C artifacts, difficult venipuncture  
D hemolysis, saline solution  
E aplasia, dull needle  
F hypertrophy, dull needle

9. These two organs store blood.

A thymus and heart  
B cecum and hypercardiac gland  
C spleen and liver  
D kidney and lungs  
E kidney and pineal gland  
F spleen and kidney

10. Select the correct recipe for physiological saline.

A 10% NaCl in EtOH  
B 0.9% NaCl in water  
C 0.9% KCl in water  
D 15% KCl in EtOH  
E 45% hemoglobin in hypotonic water  
F 45% hemoglobin in water

11. Determine the number of pints of blood in a 1600 lb. draft horse.

A 151  
B 108  
C 124  
D 89  
E 45  
F 69

12. What does a gallon of milk weigh?

A 8.3 pounds  
B 500 grams.  
C 454 grams.  
D 16 oz.  
E 22 pounds  
F 4 pounds

13. Select the formed element of the blood that always contains a nucleus.

A leukocytes  
B glucose  
C albumin  
D RBCs  
E steroid hormones  
F platelets

14. Aural means _____________.

A penis  
B lungs  
C uterus  
D knee cap  
E ears  
F mouth
15. Why do canine erythrocytes appear to have a pale red center when viewed under a microscope?
   A they are biconcave  
   B they undergo homeostasis in a test tube  
   C this is a classic artifact  
   D they undergo apoptosis when taken out of the animal  
   E they contain lead  
   F they undergo hemolysis in a test tube

16. You have drained the total blood volume from a dead sheep and it was 2 gallons. Determine the weight (lbs.) of the animal when it was alive.
   A 350  
   B 650  
   C 100  
   D 75  
   E 240  
   F 50

17. Select the ovine blood cells that have an approx. lifespan of 100-120 days.
   A Leydig cells  
   B RBCs  
   C platelets  
   D hepatocytes  
   E renal cells  
   F leukocytes

18. If you collect 300 cc of blood from a horse, how much serum (ml) could you harvest from that sample?
   A 25  
   B 50  
   C 110  
   D 250  
   E 165  
   F 100

19. In horses, estimation of blood loss can be used to guide the decision to transfuse, with greater than ________ per cent blood loss generally requiring transfusion.
   A 70  
   B 60  
   C 10  
   D 15  
   E 50  
   F 30

20. In the field of hematology, 500 cc of blood = ________ ml of blood.
   A 500  
   B 5  
   C three  
   D one  
   E 50  
   F two

21. Select the prefix or suffix that means red.
   A erythro-  
   B retro-  
   C -oma  
   D -penia  
   E hemato-  
   F renal-
22. In hematology, the buffy layer contains:
   A  testosterone.                     B  only saline.
   C  only RBCs.                     D  leukocytes and thrombocytes.
   E  only anuclear cells.             F  only KCl.

23. A cat with ____________ would have an elevated (above normal) hematocrit.
   A  cancer                  B  a prion infection
   C  neutropenia             D  pyometra
   E  polycythemia                F  neutrolysis

24. Bovine platelets are produced in the bone marrow from these cells: ________________.
   A  RBCs                     B  prions
   C  megakaryocytes            D  hepatocytes
   E  WBCs                         F  Leydig cells

25. Thrombocytes are also termed __________.
   A  WBCs                     B  neutrophils
   C  RBCs                         D  pinealocytes
   E  platelets                    F  leukocytes

26. Mononuclear ____________ arise primarily from the marrow and are released into the blood as monocytes.
   A  Leydig cells                B  erythrocytes
   C  phagocytes                  D  fragments
   E  platelets                   F  RBCs