Anatomy and Physiology AVS 371  
Fall Semester 1999

Final Lab Exam (Worth 35 Points)

Fill in the blanks and answer the questions below, as indicated at the lab station.

1. (1) Structure #1 is the __________ bone.
2. (1) This bone is the __________.
3. (2) What is this bone, and where would it go on a skeleton? (Describe using position and direction terms!) - radius & the ulna - they are distal to the humerus and mediate to the carpus bone - the radius is dorsal to the ulna, or the ulna is palmar or ventral to the radius.
4. (1) Name the portion of the brain indicated by #4: __________
5. (1) What tissue or organ is this? __________
6. (1) Which cranial nerve is this #6? __________
7. (1) Name the tissue or organ in this slide: __________
8. (1) What structure is indicated by #8: __________
9. (1) What structure is indicated by #9: __________
10. (1) What effect does aldosterone have on the concentration of urine? __________
11. (1) What structure is indicated by #11: __________
12. (1) Referring to number 11, what is the basic function of this organ? __________
13. (2) What are these structures? __________
14. (1) In which respiratory zone is the structure __________
15. (1.5) What are three ways to evaluate semen? a. __________ b. __________ c. __________
16. (1) In terms of the ultrasound non-echogenic means: __________
17. (1) What muscle is indicted by #17: __________
18. (1) What muscle is indicated by #18?

19. (1.5) Label the structure indicated by the letters a. __________ b. __________ c. __________

20. (2) Label the indicated muscle of the eye and which way they move the eyeball
   a. Lateral rectus direction: ______
   b. Superior rectus direction: ______

21. (3) Trace the flow of blood through the body by diagramming the flow through at least 11 structures.

   Blood flows to the heart (right atrium) (RA)
   via the superior & inferior vena cava
   \[\downarrow\]
   [Diagram: Flowing through the tricuspid valve]
   \[\downarrow\]
   [Diagram: Now it is pumped from the RV out through the pulmonary semilunar valve to the pulmonary artery]
   \[\downarrow\]
   [Diagram: The pulmonary artery takes it to the lungs to be oxygenated. It leaves the lungs and returns to the heart (left atrium (LA)) via the pulmonary vein.]
   \[\downarrow\]
   [Diagram: It then is pumped from the LA to the left ventricle (LV)]
   \[\downarrow\]
   [Diagram: Going through the aortic valve.]
   \[\downarrow\]
   [Diagram: Once in the LV it is pumped out to the rest of the body going through the aortic semilunar valve to the aorta & the other arteries.]
22. (1) What is this organ? pancreas

23. (1) Referring to question 22, what is the basic function of this organ? to secrete insulin enzymes bicarbonate

24. (1) What organ is on this slide? ovary

25. (1) Label the structure indicated by the pin. conduct

26. (1) What WBC is indicated by the pointer? monocyte neutrophil

In questions 27-28, name the structure indicated and a hormone it produces.

27. (1) Gland: pancreas Hormone: insulin

28. (1) Gland: thyroid Hormone: T3 or T4

Extra Credit:

1. (1.5) What three cranial nerves control eye movement? ocular motor, abducens, trochlear

2. (1.5) Follow the flow of digesta in the four stomachs of the ruminant animal. oesophagus reticulum rumen omasum abomasum (regurgitation)

3. What did you like best about the lab, and what can we improve on?

I liked having more than one TA, it made it easier to ask questions & get help.

- The handouts really helped when it came time to study for a test or quiz.

- Try to slow down a little when going through the terms & explanations. I know that we are responsible for getting the information, but if we all do the work to go over it, take 5 more minutes and allow us to keep up.