Anatomy and Physiology AVS 371
Fall Semester 1999

Lab Exam #1 (Worth 35 Points)

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

1. (2) Name the structure labeled with #1: **scapula**. What bone is located just distal to this bone? **humerus**.
2. (1) Which vertebrae are indicated by label #2? **lumbar**.
3. (3) The structure labeled #1 is **zygomatic arch** and is made up of the **temporal** and **malar** bones.
4. (1) These three bones make up the **humero-radioulnar** joint.
5. (1) Which cranial nerve does label #5 indicate? **oculomotor**.
6. (1) The portion of the brain indicated by #6 is the **medulla oblongata**.
7. (1) What part of the brain is indicated by the pin? **cerebellum**.
8. (1) #8 is the **Dura mater**, one of the three layers of the **meninges** covering the brain and spinal cord.
9. (1) This structure is the **sclera**.
10. (1) What is structure #10? **cornea**.
11. (1) Is this muscle an oblique or a rectus muscle? **medial rectus**.

In questions 12-14, name the endocrine gland indicated and a hormone it produces.

12. (1) Gland: **pancreas** 1 hormone: **insulin**
13. (1) Gland: **adrenal** 1 hormone: **glucocorticoids**
14. (1) Gland: **thyroid** 1 hormone: **thyroxin**

Fill in the blanks with the correct structures:

15. (1) This muscle is the **biceps brachii**. It acts to **flexes** the elbow joint.
16. (1) This muscle is the **gastrocnemius**.
17. (1) What muscle is indicated as #17? **semimembranosus**. It flexes the **tibio-femoral** joint.

Answer the following questions regarding the microscopic images.

18. (1) What type of muscle is this? **smooth**
19. (1) This is the **left AV** valve.
20. (1) Name this chamber of the heart: ____________
21. (1) Name the hormone produced by the heart ____________
22. (1) This white blood cell is a/an ____________.
23. (1) What is this cell at the pointer? ____________

Fill in the blanks with the correct terms.

24. (1) If a cell is placed into a solution that is ____________, the cell will shrink because the net flux of water will be ____________ of the cell.
25. (1) What is the name of the fluid in the posterior cavity of the eye? ____________
26. (1) Name 2 structures in the vascular tunic of the eye: ____________ and ____________
27. (1) Two muscles that perform opposite functions are referred to as ____________ muscles.
28. (4) Name 2 white blood cells, categorize them as agranulocytes or granulocytes, and give the basic functions of each.

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<thead>
<tr>
<th>White Blood Cell</th>
<th>Agranulocyte/Granulocyte</th>
<th>Function</th>
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29. (1) Name two components of blood plasma: Proteins and ____________

Extra Credit.
1. (1) What does the term "hematocrit" mean? ____________
2. (1) How many cranial nerves are there? ____________
3. (1) Name a tunic of the eye other than the vascular tunic: ____________