

Physiology Homework #1

Name _____

Due Wednesday, January 13, 2010 – Day
Due Thursday, January 14, 2010 - Night
Required for All Students

You will need to use *Human Physiology* by Stuart Ira Fox to do this assignment.

Do not use abbreviations in your answers.

1. Send me an e-mail message with the e-mail address you would like me to send any messages to you this summer. Include your name and your major. I need your e-mail message sent to loreeg@cameron.edu by 8 AM on Wednesday, January 13, 2010 for the day class and by 5 PM on Thursday, January 14, 2010 for the night class. **Do not** include your e-mail address on the homework itself.

One study technique is to look over the material that will be covered in class that day BEFORE coming to class. Here are some steps you may find helpful:

- a. Survey the material to be covered. Glance at the topics and read the paragraph(s) that you will find at the beginning of each section before coming to class and before beginning to study.
 - b. Outline each chapter after lecture.
 - c. Write three (3) questions over the material you think will be covered in that section.
 - d. Write down your answers to your questions.
 - e. You may write more than three (3) questions per section if you want (some major sections have more than three (3) subtopics).
2. Here is a sample outline for Chapter one. On a separate piece of paper, pick **one** of the sections (I, II, or III) to write three (3) questions over the material in this section. I **only** want the questions. **You do not need to turn your answers in for question #2.**

- Chapter 1 – The Study of Body Function
 - I. Homeostasis and Feedback Control
 - A. Negative Feedback Loops
 1. Sensor
 - a. Its stimulus
 - b. Its Response
 2. Integrating Center
 - a. Its stimulus
 - b. Its Response
 3. Effector
 - a. Its stimulus
 - b. Its Response
 4. Response
 - B. Positive Feedback Loops

These are Subsections. Your questions can be from any of the subsections of this section or from any of the subsections from the other sections.

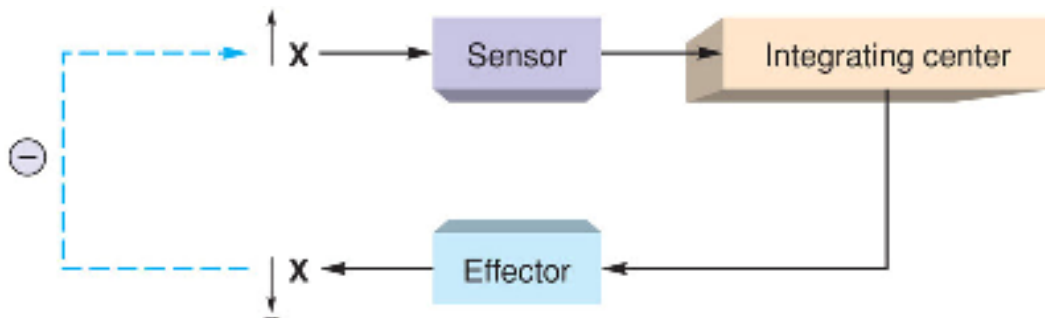
- C. Neural and Endocrine Regulation
- D. Feedback Control of Hormone Secretion
- II. The Primary Tissues
 - A. Muscle Tissue
 - 1. Skeletal
 - 2. Cardiac
 - 3. Smooth
 - B. Nervous Tissue
 - C. Epithelial Tissue
 - 1. Types
 - a. Simple
 - b. Stratified
 - 2. Shape
 - a. Squamous
 - b. Cuboidal
 - c. Columnar
 - 3. Structure and Function
 - 4. Location
 - D. Connective Tissue
- III. Organs and Systems
 - A. Systems
 - B. Body-Fluid Compartments

As you can see this is NOT a complete outline of the material we will be covering in Chapter 1, but it gives you an idea of how to start an outline.

3. What does the Medical Abbreviation “s.v.r.” mean? (The answer **IS** in your text.)

4. What is the definition of antiport in the Glossary of your text?

5. Explain what is happening in this figure on Negative Feedback Loops.



6. Drug Calculation. There will be at least one drug calculation per homework set. You need to show all your steps and show all your units throughout the problem to get full credit. Here is your problem. Decadron, is a corticoid drug that is used to reduce inflammation and relieve symptoms in a variety of disorders, including rheumatoid arthritis and severe cases of asthma. The dosage for decadron is 0.75 mg/kg SID. How much decadron is needed for each dose for a person weighing 175 pounds? (HINT: You will need to convert the cat's weight from pounds to kg. The conversion factor is 1 kg = 2.2 pounds.) (Drug dosages may be altered on drug calculation problems and should not be the dosage used to treat patients.)