All review questions for the Introduction to Physiology course were adapted from our physiology textbook and its website, and also from 1700+ Review Questions for Anatomy and Physiology II (3rd edition) by R. Michael Anson, Ph.D.

Also note that the review problems are numbered but that a few problem numbers are missing. This is intentional because a few of the review problems were deliberately deleted.

Review questions for Introduction to Physiology lecture

Multiple choice review questions

1) Pathophysiology is the study of
   A) How physiological processes are altered in disease or injury.
   B) How the body works in tasks essential for life.
   C) Other animal structures and functions as they compare to humans.
   D) The scientific method and its application to humans.

2) In a negative feedback loop used to maintain homeostasis, which of the following is used?
   A) sensor.
   B) integrating center.
   C) effector.
   D) all of the above.

3) Homeostasis is best conceived as a state of
   A) regulation by negative feedback.
   B) constancy of internal conditions
   C) regulation by positive feedback.
   D) isolation from external environment

5) Most often, the integrating center in a homeostasis system will be located within the:
   A) Sensor
   B) Brain
   C) Effectors
   D) Set Point

Answers to multiple choice questions:

1) A
2) D
3) B
5) B

Fill-in-the-blank review questions

1) Anatomy is the study of the _____ and _____ of the body parts, while physiology is the study of the _____ of the body parts in the normal (healthy) state.

2) The study of physiological processes of disease or injury is called _____.

3) Physiological processes maintain _____ in the body.

4) Effectors that have opposing effects are said to have _____ actions.

5) In a _____ feedback loop, a change in a condition is sensed by an integrating center and then the integrating center stops the effector that caused the change.

6) Although physiology is classified as one of the biological sciences, much of physiology is involves the study of the _____ of the body.

7) An organism's ability to maintain steady internal conditions despite changes in the environment (for example, our ability to maintain a constant body temperature) is called _____.

8) The three components of a system which maintains homeostasis are a(n) _____, a(n) _____ and a(n) _____.

9) To maintain homeostasis, a(n) _____ must monitor the internal or external environment to detect changes.

10) To maintain homeostasis, a(n) _____ must respond to signals indicating that a change has occurred by triggering events which will counteract the change.

11) To maintain homeostasis, a(n) _____ must be capable of altering the condition that is being maintained.

Answers to fill-in-the-blank review questions:

1) Structure
   Location
   Function
2) Pathophysiology
3) Homeostasis
4) Antagonistic
5) Negative
6) Chemistry
7) Homeostasis
8) Sensor
   Integrating center
   Effectors
9) Sensor
10) Integrating center
11) Effector