

**These review questions for the Introduction to Anatomy and Physiology lecture were adapted from several sources, including 1700+ Review Questions for Anatomy and Physiology II (3rd edition) by R. Michael Anson, Ph.D.**

**Multiple choice questions:**

- 1) Anatomy
  - a) The study of atoms
  - b) The study of molecules
  - c) The male and female reproductive organs
  - d) The study of organ function and biological chemistry
  - e) The study of the structure and location of organs
  
- 2) Physiology
  - a) The study of organ structure
  - b) The study of how organs function
  - c) The study of organ names
  - d) The study of the mind
  - e) The study of behavior
  
- 3) Much of physiology is the study of the \_\_\_\_\_ of the body.
  - a) Chemistry
  - b) Anatomy
  - c) Botany
  - d) Physics
  - e) Diseases
  
- 4) There are \_\_\_\_ organ systems in the human body
  - a) 5
  - b) 12
  - c) 20
  - d) 206
  - e) 614
  
- 5) Which is the correct order (from smallest to largest) of structures that make up the human body?
  - a) Organ systems, organs, tissues, molecules, cells, atoms
  - b) Tissues, cells, organs, organ systems, molecules, atoms
  - c) Atoms, molecules, cells, tissues, organs, organ systems
  - d) Molecules, cells, organs, tissues, organ systems, atoms
  - e) Molecules, atoms, cells, organs, organ systems, tissues
  
- 6) Homeostasis is best conceived as a state of
  - a) Regulation by hormones
  - b) Steady internal conditions
  - c) Regulation by medical intervention (drugs and surgery)
  - d) Equality between the internal and external environments

e) Lack of evolution in the human species

7) The body has a process to increase potassium when it is too low in the body, and a process to decrease potassium when it is too high in the body. Any pair of processes like these, that have opposing effects, are said to have a(n) \_\_\_\_\_ relationship.

- a) Chemical
- b) Biological
- c) Co-regulatory
- d) Antagonistic
- e) Mutual

**Answers to multiple choice questions:**

- 1) E
- 2) B
- 3) A
- 4) B
- 5) C
- 6) B
- 7) D

**Fill-in-the-blank review questions**

1) Anatomy is the study of the \_\_\_\_\_ and \_\_\_\_\_ of the body parts, while physiology is the study of \_\_\_\_\_.

2) Although physiology is classified as one of the biological sciences, much of physiology is involves the study of the \_\_\_\_\_ of the body.

3) After each statement below, write A if it describes the anatomy of an organ. Write P if it describes the physiology of an organ.

- a) The kidneys are located at the level of your lowest ribs. \_\_\_\_\_
- b) The innermost part of the kidney is called the renal pelvis \_\_\_\_\_
- c) The kidneys use salt to remove water from the urine \_\_\_\_\_
- d) Nerve cells use electricity to send signals between body parts \_\_\_\_\_
- e) The brain and the spinal cord are made of nervous tissue \_\_\_\_\_

4) There are \_\_\_\_\_ (a number) organ systems in the human body.

5) An organ is a structure made of several types of \_\_\_\_\_ working together for a common task.

- 6) Several organs working together on a common task form a(n) \_\_\_\_\_.
- 7) Arrange the following terms in the proper order, from smallest to largest:  
 Organ  
 Tissue  
 Organ system  
 Cell  
 Organelle
- 8) An organism's ability to maintain steady internal conditions in its internal environment (for example, our ability to maintain a constant body temperature) is called \_\_\_\_\_.
- 9) From a physiological perspective, injury and disease are harmful because they cause loss of \_\_\_\_\_.
- 10) Any two process that have opposing functions are called \_\_\_\_\_ processes.

**Answers to review questions:**

- 1) Structure  
 location  
 how organs function
- 2) Chemistry
- 3) A  
 A  
 P  
 P  
 A
- 4) 12
- 5) Tissues
- 6) Organ system
- 7) Organelle  
 Cell  
 Tissue  
 Organ  
 Organ system
- 8) Homeostasis
- 9) Homeostasis
- 10) Antagonistic

