

Test Bank for Human Physiology, 2nd Edition
Chapter 01

Package Title: Test Bank
Course Title: Derrickson 2e
Chapter Number: 1

Question Type: Multiple Choice

1) All of the following statements are true according to cell theory EXCEPT

- a) a cell is the basic unit of life
- b) organisms are made of at least one cell
- c) cells are formed from other cells
- d) organs are made of a single type of cell

Answer: d

Difficulty: Easy

Bloom's: Comprehension

Learning Objective 1: LO 1.1 Define physiology, identifying several of its subdisciplines.

Section Reference: 1.1 Physiology Defined

2) A skeleton has been found that appears to be human in origin. What features would you expect it to have?

- a) small skull and use of two limbs for movement
- b) use of four limbs for movement and erect posture
- c) erect posture and large skull
- d) small skull and four limbs for movement

Answer: c

Difficulty: Medium

Bloom's: Application

Learning Objective 1: LO 1.1 Define physiology, identifying several of its subdisciplines.

Section Reference: 1.1 Physiology Defined

3) Which would be an example of physiology?

- a) identification of a new bone
- b) documenting the physical area where a heart is damaged
- c) tracing the blood vessels used from an organ to the heart
- d) explaining how a neuron conducts a signal

Answer: d

Difficulty: Medium

Bloom's: Application

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Learning Objective 1: LO 1.1 Define physiology, identifying several of its subdisciplines.
Section Reference: 1.1 Physiology Defined

Question type: Text Entry

4) Someone who studies the kidneys would be a/an ____ physiologist.

Answer: renal

Difficulty: Easy

Bloom's: Knowledge

Learning Objective 1: LO 1.1 Define physiology, identifying several of its subdisciplines.
Section Reference: 1.1 Physiology Defined

Question type: Multiple choice

5) Which is an incorrect pairing of a structure-function relationship?

- a) a thick layer of cells in an organ allowing exchange
- b) a wide tube in an area where lots of flow is needed
- c) strong bones in an area that bears more weight
- d) elastic tissue in areas that stretch frequently

Answer: a

Difficulty: Medium

Bloom's: Application

Learning Objective 1: LO 1.1 Define physiology, identifying several of its subdisciplines.
Section Reference: 1.1 Physiology Defined

6) Select the molecule from the options below.

- a) N
- b) H₂O
- c) O₂
- d) H₂O and O₂

Answer: d

Difficulty: Medium

Bloom's: Application

Learning Objective 1: LO 1.2 Explain how the organization of the human body affects its functions and life processes.

Learning Objective 2: LO 1.2.1 Describe the levels of organization that make up the human body.

Section Reference: 1.2 Levels of Organization in the Body

Question type: True/False

7) Proteins and RNA are examples of atoms.

Answer: False

Difficulty: Easy

Bloom's: Comprehension

Learning Objective 1: LO 1.2 Explain how the organization of the human body affects its functions and life processes.

Learning Objective 2: LO 1.2.1 Describe the levels of organization that make up the human body.

Section Reference: 1.2 Levels of Organization in the Body

Question type: Multiple choice

8) Place the levels of organization in order from MOST to LEAST complex.

- a) organismal, system, organ, tissue, cell, molecule, atom
- b) organ, system, cell, atom, molecule, organismal, tissue
- c) atom, molecule, cell, tissue, organ, system, organismal
- d) cell, tissue, organ, organismal, system, atom, molecule

Answer: a

Difficulty: Easy

Bloom's: Knowledge

Learning Objective 1: LO 1.2 Explain how the organization of the human body affects its functions and life processes.

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Section Reference: 1.2 Levels of Organization in the Body

Question type: Text Entry

9) Skin is an example of ___ tissue.

Answer: epithelial

Difficulty: Medium

Bloom's: Application

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Learning Objective 2: LO 1.2.1 Describe the levels of organization that make up the human body.

Section Reference: 1.2 Levels of Organization in the Body

Question type: Multiple choice

10) If one is unable to move, even if the tissue is directly stimulated, the first tissue to check would be

- a) epithelial tissue
- b) connective tissue
- c) muscle tissue
- d) nervous tissue

Answer: c

Difficulty: Medium

Bloom's: Application

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Learning Objective 2: LO 1.2.1 Describe the levels of organization that make up the human body.

Section Reference: 1.2 Levels of Organization in the Body

11) Which of the following is a defining feature of organs?

- a) they are composed of two or more different atoms
- b) they are composed of two or more different cells
- c) they are composed of two or more different molecules
- d) they are composed of two or more different tissues

Answer: d

Difficulty: Easy

Bloom's: Knowledge

Learning Objective 1: LO 1.2 Explain how the organization of the human body affects its functions and life processes.

Learning Objective 2: LO 1.2.1 Describe the levels of organization that make up the human body.

Section Reference: 1.2 Levels of Organization in the Body

12) Fluids are not circulating around the body, so the problem is most likely due to the ____ systems.

- a) muscular and endocrine
- b) cardiovascular and lymphatic
- c) immune and skeletal
- d) respiratory and digestive

Answer: b

Difficulty: Medium

Bloom's: Application

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Learning Objective 1: LO 1.2 Explain how the organization of the human body affects its functions and life processes.

Learning Objective 2: LO 1.2.2 Explain the functions of the eleven body systems.

Section Reference: 1.2 Levels of Organization in the Body

13) The gonads, epididymis, vas deferens, uterus, and vagina are all organs that are part of the _____ system, the main function of which is _____.

- a) endocrine; formation of a new organism
- b) reproductive; formation of a new organism
- c) urinary; removal of wastes
- d) integumentary; protects the body

Answer: b

Difficulty: Easy

Bloom's: Comprehension

Learning Objective 1: LO 1.2 Explain how the organization of the human body affects its functions and life processes.

Learning Objective 2: LO 1.2.2 Explain the functions of the eleven body systems.

Section Reference: 1.2 Levels of Organization in the Body

Question type: Text Entry

14) An emergent property of the _____ system is physical breakdown and absorption of nutrients.

Answer: digestive

Difficulty: Medium

Bloom's: Application

Learning Objective 1: LO 1.2 Explain how the organization of the human body affects its functions and life processes.

Learning Objective 2: LO 1.2.2 Explain the functions of the eleven body systems.

Section Reference: 1.2 Levels of Organization in the Body

Question type: Multiple choice

15) Integration between the _____ systems allows the body to maintain pH homeostasis.

- a) respiratory and urinary
- b) endocrine and cardiovascular
- c) immune and lymphatic
- d) integumentary and immune

Answer: a

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Difficulty: Medium

Bloom's: Application

Learning Objective 1: LO 1.2 Explain how the organization of the human body affects its functions and life processes.

Learning Objective 2: LO 1.2.2 Explain the functions of the eleven body systems.

Section Reference: 1.2 Levels of Organization in the Body

16) Which of the following situations would most likely have the greatest increase in catabolic reactions compared to anabolic reactions occurring in the body?

- a) an athlete going through pre-season conditioning
- b) a person on a hunger strike
- c) a child going through a rapid growth spurt
- d) an individual maintaining a healthy eating and exercise plan

Answer: b

Difficulty: Medium

Bloom's: Analysis

Learning Objective 1: LO 1.3 Identify the important life processes of the human body.

Section Reference: 1.3 Life Processes

17) You are watching a cooking show when your stomach suddenly rumbles. This is an example of the life process of

- a) responsiveness
- b) movement
- c) differentiation
- d) reproduction

Answer: a

Difficulty: Easy

Bloom's: Application

Learning Objective 1: LO 1.3 Identify the important life processes of the human body.

Section Reference: 1.3 Life Processes

18) We consider movement to have been observed if it occurs at the ____ level.

- a) intracellular
- b) organismal
- c) organ
- d) All of the choices are correct.

Answer: d

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Difficulty: Easy

Bloom's: Comprehension

Learning Objective 1: LO 1.3 Identify the important life processes of the human body.

Section Reference: 1.3 Life Processes

19) Select the correct relationship between growth and reproduction.

- a) both occur when an individual cell increases in size
- b) both occur when total numbers of cells increase
- c) both occur only when two half-cells merge
- d) both occur when the substances around the cells increase in volume

Answer: b

Difficulty: Medium

Bloom's: Analysis

Learning Objective 1: LO 1.3 Identify the important life processes of the human body.

Section Reference: 1.3 Life Processes

20) Many compounds in our body are regulated to maintain homeostatic levels. Which of the following would NOT be maintained in homeostasis?

- a) oxygen
- b) glucose
- c) temperature
- d) carbon dioxide
- e) All of the choices are normally maintained in homeostasis.

Answer: e

Difficulty: Easy

Bloom's: Knowledge

Learning Objective 1: LO 1.4 Explain how homeostasis is maintained in the body's internal and external environments.

Learning Objective 2: LO 1.4.1 Define homeostasis.

Section Reference: 1.4 Homeostasis

21) The urinary and respiratory systems rely on the cardiovascular system to circulate the blood with which they exchange wastes and gases. This reliance is an example of

- a) equilibrium
- b) emergent properties
- c) integration
- d) differentiation

Answer: c