

# TEST BANK

# Hole's Human Anatomy & Physiology

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16<sup>th</sup> Edition

# HOLE'S HUMAN ANATOMY & PHYSIOLOGY

Sixteenth Edition



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**Chap 01 16e Welsh****Answers Included** 

- 1) The anatomical term for the forearm is \_\_\_\_\_.
  
- 2) What investigator would conduct an experiment to determine how temperature changes affect the rate at which the heart beats?
  - A) Anatomist
  - B) Physiologist
  - C) Chemist
  - D) Biochemist
  
- 3) Blood plasma is an example of what type of fluid?
  - A) Intracellular
  - B) Extracellular
  - C) Serous
  - D) Acidic
  
- 4) Which of the following lists illustrates the idea of increasing levels of organization?
  - A) Molecules, cells, tissues, organs, organ systems
  - B) Tissues, cells, organs, molecules, organ systems
  - C) Organs, molecules, organ systems, cells, tissues
  - D) Cell, atom, tissue, molecule, macromolecule
  
- 5) In a crisis, the heart beats faster and more forcefully. What affect would this have on hydrostatic pressure?
  - A) An increase in hydrostatic pressure
  - B) A decrease in hydrostatic pressure
  - C) No change in hydrostatic pressure

- 6) The temperature in a room drops to 65°F, causing the heater to turn on. The temperature change is an example of a(an):
- A) effector.
  - B) receptor.
  - C) stimulus.
  - D) response.
- 7) Which of the following is considered one of the characteristics of life?
- A) Digestion
  - B) Respiration
  - C) Metabolism
  - D) Absorption
- 8) The ability of an organism to sense changes in its body is an example of:
- A) movement.
  - B) respiration.
  - C) responsiveness.
  - D) absorption.
- 9) What is the definition of metabolism?
- A) All the cells in the body
  - B) All of the homeostatic setpoints in the body
  - C) All of the chemical reactions in the body
  - D) All of the organs in the body and their parts
- 10) What is/are the origin(s) of many of the terms in anatomy and physiology?
- A) Greek and Latin
  - B) Spanish and Portuguese
  - C) French and German
  - D) Chinese and Japanese

- 11) At what level of organization is skin?
- A) Tissue level
  - B) Cellular level
  - C) Organ level
  - D) System level
- 12) Which of the following is NOT a requirement to maintain the life of humans?
- A) Water
  - B) Heat
  - C) Light
  - D) Pressure
- 13) What gas makes up approximately 1/5th of ordinary air and is used by cells to release energy from food substances?
- A) Oxygen
  - B) Carbon dioxide
  - C) Hydrogen
  - D) Nitrogen
- 14) Which of the following processes are NOT concerned with maintaining the life of an adult organism?
- A) Responsiveness
  - B) Movement
  - C) Reproduction
  - D) Metabolism
- 15) What is the definition of homeostasis?
- A) The changing external conditions
  - B) The maintenance of stable external conditions
  - C) The changing internal conditions
  - D) The maintenance of internal conditions
- 16) The method for testing a hypothesis, then rejecting or accepting it based on the results of experiments or observations, is called the \_\_\_\_\_.

- 17) Which of the following examples illustrates a homeostatic mechanism?
- A) Shivering in response to a drop in body temperature
  - B) Increasing body temperature during exercise
  - C) Decreasing body temperature during prolonged exposure to cold conditions
  - D) Dehydration from lack of water intake
- 18) What requirement of life is also the most abundant chemical in the body and is the major component of extracellular fluid?
- A) Water
  - B) Oxygen
  - C) Cell
  - D) Food
- 19) What term refers to the structures that provide information about the conditions of the internal environment?
- A) Set points
  - B) Effectors
  - C) Receptors
  - D) Homeostasis
- 20) Which of the following directly cause(s) the changes in the internal environment needed to maintain homeostasis?
- A) Receptors
  - B) Effectors
  - C) Setpoint
  - D) Intracellular fluid
- 21) Which of the following causes conditions in the body to move away from the normal state?
- A) Negative feedback
  - B) Homeostasis
  - C) Positive feedback
  - D) Setpoint

- 22) Which of the following best describes a positive feedback mechanisms?
- A) They are the primary means of maintaining homeostasis.
  - B) They cause unstable conditions, at least temporarily.
  - C) They maintain the internal environment.
  - D) They move conditions toward a setpoint.
- 23) What cavities are included in the axial portion of the body?
- A) The cranial cavity only
  - B) The abdominopelvic and thoracic cavities only
  - C) The cranial cavity, vertebral canal, thoracic cavity, and abdominopelvic cavity
  - D) The thoracic cavity only
  - E) The abdominopelvic cavity only
- 24) What does the mediastinum separate?
- A) The thoracic cavity from the abdominal cavity
  - B) The thoracic cavity into right and left parts
  - C) The thoracic cavity from the pelvic cavity
  - D) The abdominal cavity into right and left parts
- 25) Name two types of cavities found in the head.
- A) Paranasal sinuses and nasal cavity
  - B) Oral cavity and mediastinum
  - C) Cranial cavity and vertebral canal
  - D) Middle ear cavities and pleural cavities
- 26) Which organ(s) is/are found in the pelvic cavity?
- A) Urinary bladder
  - B) Kidneys
  - C) Liver
  - D) Spleen

- 27) What is the name of the membrane on the surface of the lung?
- A) Visceral pleura
  - B) Parietal pleura
  - C) Visceral pericardium
  - D) Parietal pericardium
- 28) What term refers to a body part being above another body part?
- A) Posterior
  - B) Superior
  - C) Medial
  - D) Distal
- 29) What plane separates the body into left and right portions?
- A) Frontal plane
  - B) Transverse plane
  - C) Coronal plane
  - D) Sagittal plane
- 30) What is anatomical position?
- A) The body standing erect with the face forward
  - B) The body standing erect with face turned to the side
  - C) The body lying on the back with the face looking upward
  - D) The body standing erect with the upper limbs reaching out to the side
- 31) Observing how bones of the arm differ in shape from bones of the leg is an example of what field of study?
- A) Anatomy
  - B) Physiology
  - C) Cytology
  - D) Histology

- 32) Determining the effects of a hormone on digestive activity is an example of what field of study?
- A) Anatomy
  - B) Physiology
  - C) Cytology
  - D) Histology
- 33) Water, or H<sub>2</sub>O, is an example of which level of organization?
- A) Atom
  - B) Molecule
  - C) Macromolecule
  - D) Cell
- 34) The stomach is an example of which organizational level?
- A) Molecule
  - B) Organ system
  - C) Tissue
  - D) Organ
- 35) The entire digestive tract is an example of which organizational level?
- A) Organelle
  - B) Tissue
  - C) Organ
  - D) Organ system
- 36) Which of the following has the highest organizational level of complexity?
- A) Respiratory system
  - B) Water
  - C) Heart
  - D) Epithelial tissue

- 37) Squinting and blinking the eyes in bright sunlight is an example of what characteristic of life?
- A) Responsiveness
  - B) Reproduction
  - C) Respiration
  - D) Absorption
- 38) Sweating caused by hot weather is an example of what characteristic of life?
- A) Respiration
  - B) Responsiveness
  - C) Absorption
  - D) Circulation
- 39) What organ system includes the kidneys?
- A) Respiratory system
  - B) Digestive system
  - C) Endocrine system
  - D) Urinary system
- 40) What life process is defined as the movement of substances through body fluids?
- A) Responsiveness
  - B) Absorption
  - C) Circulation
  - D) Assimilation
- 41) What life process is defined as the removal of wastes?
- A) Excretion
  - B) Absorption
  - C) Circulation
  - D) Movement

- 42) The passage of substances through membranes and into body fluids is an example of what life process?
- A) Excretion
  - B) Absorption
  - C) Circulation
  - D) Growth
- 43) Rob is camping out when a cold front brings in freezing temperatures. Rob begins to shiver. In this scenario, shivering is an example of what part of the homeostatic mechanism?
- A) Control system
  - B) Effector
  - C) Receptor
  - D) Stimulus
  - E) Response
- 44) What organ is found in the thoracic cavity?
- A) Brain
  - B) Lung
  - C) Liver
  - D) Spleen
- 45) What structure separates the thoracic cavity from the abdominopelvic cavity?
- A) Diaphragm
  - B) Liver
  - C) Mediastinum
  - D) Small intestine
- 46) Which membrane is associated with the surface of the heart?
- A) Parietal pleura
  - B) Visceral pericardium
  - C) Parietal pericardium
  - D) Visceral pleura

## Answer Key

Test name: Chap 01 16e Welsh

- 1) antebrachial
- 2) B
- 3) B
- 4) A
- 5) A
- 6) C
- 7) C
- 8) C
- 9) C
- 10) A
- 11) C
- 12) C
- 13) A
- 14) C
- 15) D
- 16) scientific method
- 17) A
- 18) A
- 19) C
- 20) B
- 21) C
- 22) B
- 23) C
- 24) B
- 25) A
- 26) A
- 27) A
- 28) B
- 29) D
- 30) A
- 31) A
- 32) B
- 33) B
- 34) D
- 35) D
- 36) A
- 37) A