

# Chapter 1 An Introduction to Anatomy and Physiology

## Test Bank for Fundamentals of Anatomy & Physiology, 12th Edition

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### Multiple Choice Questions

- 1) The analysis of the internal structure of individual cells is called
- A) cytology.
  - B) histology.
  - C) embryology.
  - D) physiology.
  - E) anatomy.

Answer: A

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 2) The study of the general form and superficial markings of an organism is called\_\_\_\_\_anatomy.
- A) gross
  - B) surface
  - C) systemic
  - D) regional
  - E) surgical

Answer: B

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 3) The study of the superficial and internal features in a specific area of the body is called\_\_\_\_\_anatomy.
- A) surface
  - B) regional
  - C) surgical
  - D) pathological
  - E) radiographic

Answer: B

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 4) Anatomical features that change during illness are studied in\_\_\_\_\_anatomy.
- A) gross
  - B) surface
  - C) microscopic
  - D) pathological
  - E) regional

Answer: D

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 5) The study of the liver is to gross anatomy as the study of the liver cell is to
- A) physiology.
  - B) regional anatomy.
  - C) cytology.
  - D) systemic anatomy.
  - E) radiographic anatomy.

Answer: C

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 6) The study of the first two months of development is termed
- A) histology.
  - B) embryology.
  - C) cytology.
  - D) pathology.
  - E) organology.

Answer: B

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 7) The study of the function of specific organ systems is called
- A) systemic physiology.
  - B) organ physiology.
  - C) cell physiology.
  - D) pathological physiology.
  - E) histology.

Answer: A

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 8) Cardiovascular physiology is an example of
- A) histophysiology.
  - B) organ physiology.
  - C) systemic physiology.
  - D) pathological physiology.
  - E) physiological chemistry.

Answer: C

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 9) Which of the following is arranged in correct order from the most COMPLEX to the SIMPLEST?
- A) cellular, tissue, molecular, system, organ, organism
  - B) molecular, cellular, tissue, organ, system, organism
  - C) tissue, cellular, molecular, organ, system, organism
  - D) organ, organism, molecular, cellular, tissue, system
  - E) organism, system, organ, tissue, cellular, molecular

Answer: E

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 10) Which organ system provides support, protection of soft tissue, mineral storage, and blood formation?
- A) integumentary
  - B) muscular
  - C) skeletal
  - D) nervous
  - E) endocrine

Answer: C

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

11) Which organ system transports nutrients, metabolic wastes, gases, and defense cells?

- A) cardiovascular
- B) digestive
- C) muscular
- D) respiratory
- E) urinary

Answer: A

Diff: 2

Skill: Level 1 Questions: Reviewing Facts and Terms

12) Which organ system includes the spleen and the tonsils?

- A) digestive
- B) endocrine
- C) nervous
- D) cardiovascular
- E) lymphatic

Answer: E

Diff: 2

Skill: Level 1 Questions: Reviewing Facts and Terms

13) The kidneys and ureters are organs of the \_\_\_\_\_ system.

- A) endocrine
- B) digestive
- C) respiratory
- D) urinary
- E) lymphatic

Answer: D

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

14) The pituitary gland and thyroid gland are organs of the \_\_\_\_\_ system.

- A) endocrine
- B) cardiovascular
- C) respiratory
- D) lymphatic
- E) digestive

Answer: A

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

15) Which organ system removes carbon dioxide from the bloodstream?

- A) cardiovascular
- B) lymphatic
- C) respiratory
- D) digestive
- E) endocrine

Answer: C

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

16) Lungs are to the respiratory system as the liver is to the \_\_\_\_\_ system.

- A) lymphatic
- B) urinary
- C) digestive
- D) cardiovascular
- E) both B and D

Answer: C

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

17) Skin, hair, and nails are associated with the \_\_\_\_\_ system.

- A) skeletal
- B) muscular
- C) integumentary
- D) endocrine
- E) both A and B

Answer: C

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

18) The maintenance of a constant internal environment in an organism is termed

- A) positive feedback.
- B) homeostasis.
- C) negative feedback.
- D) effector control.
- E) integration.

Answer: B

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

19) When body temperature rises, a center in the brain initiates physiological changes to decrease the body temperature. This is an example of

- A) negative feedback.
- B) positive feedback.
- C) nonhomeostatic regulation.
- D) diagnostic regulation.
- E) fever.

Answer: A

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

20) In general, the nervous system does each of the following, **except**

- A) helps to maintain homeostasis.
- B) responds rapidly to change.
- C) directs long-term responses to change.
- D) directs very specific responses.
- E) both B and D

Answer: C

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 21) Which one of the following is **not** a characteristic of the endocrine system?
- A) releases chemical messengers called hormones
  - B) produces a more rapid response than the nervous system
  - C) produces effects that last for days or longer
  - D) produces an effect that involves several organs or tissues at the same time
  - E) important homeostatic system

Answer: B

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 22) A person facing forward with hands at the sides and palms facing forward is in the
- A) supine position.
  - B) prone position.
  - C) anatomical position.
  - D) frontal position.
  - E) sagittal position.

Answer: C

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 23) An anatomical term that means the **same** as *ventral*:
- A) posterior
  - B) inferior
  - C) abdominal
  - D) anterior
  - E) superior

Answer: D

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 24) The heart is \_\_\_\_\_ to the lungs.
- A) lateral
  - B) medial
  - C) posterior
  - D) proximal
  - E) distal

Answer: B

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 25) The wrist is \_\_\_\_\_ to the elbow.
- A) proximal
  - B) distal
  - C) lateral
  - D) medial
  - E) horizontal

Answer: B

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

26) The chin is\_\_\_\_\_to the nose.

- A) anterior
- B) superior
- C) posterior
- D) inferior
- E) medial

Answer: D

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

27) Which of the following regions corresponds to the buttocks?

- A) pelvic
- B) cephalic
- C) gluteal
- D) lumbar
- E) thoracic

Answer: C

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

28) Which of the following terms refers to the foot?

- A) cervical
- B) brachial
- C) antebrachial
- D) femoral
- E) pedal

Answer: E

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

29) Which plane divides the body into right and left parts?

- A) proximal
- B) frontal
- C) orthogonal
- D) transverse
- E) sagittal

Answer: E

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

30) The muscle known as the diaphragm separates the\_\_\_\_\_from the\_\_\_\_\_.

- A) pleural cavity; mediastinum
- B) thoracic cavity; abdominopelvic cavity
- C) pericardial cavity; pleural cavity
- D) abdominal cavity; pelvic cavity
- E) pericardial sac; pericardial cavity

Answer: B

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

31) The thoracic cavity contains the

- A) coelom.
- B) pericardial cavity.
- C) pelvic cavity.
- D) pleural cavities.
- E) both B and D

Answer: E

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

32) A midsagittal section would pass through the

- A) kidney.
- B) lung.
- C) heart.
- D) spleen.
- E) leg.

Answer: C

Diff: 2

Skill: Level 2 Questions: Reviewing Concepts

33) The serous membrane covering the stomach and most of the intestines is called the

- A) pericardium.
- B) peritoneum.
- C) pleura.
- D) mediastinum.
- E) abdomen.

Answer: B

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

34) Mary, who is 6 months pregnant, goes to her physician for a test to check the development of her fetus. The physician uses a device that emits sound waves to produce an image of the fetus. This technique is known as

- A) X-ray.
- B) CT.
- C) MRI.
- D) ultrasound.
- E) radiography.

Answer: D

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

35) An imaging technique that uses a magnetic field and radio waves to produce views inside the body is the

- A) angiogram.
- B) radiograph.
- C) CT scan.
- D) MRI scan.
- E) ultrasound.

Answer: D

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

36) If a response **decreases** a disturbance, the system is classified as a \_\_\_\_\_ feedback system.

- A) deficit
- B) negative
- C) neutral
- D) polarized
- E) positive

Answer: B

Diff: 1

Skill: Level 2 Questions: Reviewing Concepts

37) If a response **increases** a disturbance, the system is classified as a \_\_\_\_\_ feedback system.

- A) deficit
- B) negative
- C) neutral
- D) polarized
- E) positive

Answer: E

Diff: 1

Skill: Level 2 Questions: Reviewing Concepts

38) Which of the following organs is located between the peritoneum and the body wall?

- A) stomach
- B) kidney
- C) urinary bladder
- D) large intestine
- E) spleen

Answer: B

Diff: 2

Skill: Level 1 Questions: Reviewing Facts and Terms

39) Anatomy is to \_\_\_\_\_ as physiology is to \_\_\_\_\_.

- A) function; form
- B) form; structure
- C) structure; function
- D) structure; form
- E) growth; form

Answer: C

Diff: 2

Skill: Level 2 Questions: Reviewing Concepts

40) The central principle of physiology is

- A) nutrition.
- B) reflexes.
- C) homeostasis.
- D) stimulation.
- E) temperature regulation.

Answer: C

Diff: 2

Skill: Level 2 Questions: Reviewing Concepts

- 41) An example of a receptor in a negative feedback loop controlling body temperature would be
- A) temperature sensors on the skin that detect a stimulus.
  - B) sweat glands that increase secretion.
  - C) regulatory centers that send commands to an effector.
  - D) effectors that cause blood vessels to dilate.
  - E) sweat glands that act like effectors.

Answer: A

Diff: 2

Skill: Level 2 Questions: Reviewing Concepts

- 42) The integrating center for the negative feedback loop that regulates body temperature is the
- A) hypothalamus.
  - B) skin.
  - C) temperature sensor.
  - D) positive feedback center.
  - E) thermostat.

Answer: A

Diff: 2

Skill: Level 1 Questions: Reviewing Facts and Terms

- 43) A cell or organ that responds to commands of the control center in negative feedback is termed a(n)
- A) receptor.
  - B) thermoregulator.
  - C) hypothalamus.
  - D) effector.
  - E) stimulus.

Answer: D

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 44) This type of feedback exaggerates the effects of variations from normal.
- A) negative
  - B) positive
  - C) neutral
  - D) depressing
  - E) all of the above

Answer: B

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 45) Organ physiology is to \_\_\_\_\_ as gross anatomy is to \_\_\_\_\_.
- A) cell physiology; microscopic anatomy
  - B) macroscopic anatomy; unbalance
  - C) equilibrium; macroscopic anatomy
  - D) balance; equilibrium
  - E) imbalance; microscopic anatomy

Answer: A

Diff: 2

Skill: Level 2 Questions: Reviewing Concepts

- 46) The quadrants of the abdominopelvic region include all of the following **except**
- A) right upper quadrant (RUQ).
  - B) right lower quadrant (RLQ).
  - C) left upper quadrant (LUQ).
  - D) left lower quadrant (LLQ).
  - E) pelvic quadrant.

Answer: E

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 47) Which of the following is **not** considered an abdominopelvic region?
- A) right hypochondriac
  - B) right inguinal region
  - C) left lumbar
  - D) left hypochondriac
  - E) upper

Answer: E

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms

- 48) Identify a structure located within the mediastinum.
- A) pericardial sac
  - B) small intestine
  - C) lung
  - D) spleen
  - E) stomach

Answer: A

Diff: 1

Skill: Level 2 Questions: Reviewing Concepts

- 49) A person is lying on the bed gazing at the ceiling. She is in the \_\_\_\_\_ position.
- A) prone
  - B) supine
  - C) anatomical
  - D) dorsal
  - E) caudal

Answer: B

Diff: 2

Skill: Level 2 Questions: Reviewing Concepts

- 50) The right pleural cavity contains the
- A) heart.
  - B) trachea.
  - C) left lung.
  - D) right lung.
  - E) both lungs.

Answer: D

Diff: 1

Skill: Level 1 Questions: Reviewing Facts and Terms