MULTIPLE CHOICE

1. Which word is derived from the Greek word meaning “cutting up”?
   a. Dissection
   b. Physiology
   c. Pathology
   d. Anatomy

   ANS: D PTS: 1 DIF: Memorization
   REF: P. 3 TOP: Introduction

2. Which word is defined as the study of the function of living organisms and their parts?
   a. Dissection
   b. Physiology
   c. Pathology
   d. Anatomy

   ANS: B PTS: 1 DIF: Memorization
   REF: p. 3 TOP: Introduction

3. Which word is defined as the scientific study of disease?
   a. Dissection
   b. Physiology
   c. Pathology
   d. Anatomy

   ANS: C PTS: 1 DIF: Memorization
   REF: P. 3 TOP: Introduction

4. Cells
   a. are more complex than tissues.
   b. are the first level of organization in the body.
   c. are the smallest living units of structure and function in the body.
   d. both B and C.

   ANS: C PTS: 1 DIF: Application REF: p. 6
   TOP: Structural levels of organization

5. A group of cells that act together to perform a function is called a(n)
   a. molecule.
   b. organ.
   c. tissue.
   d. organism.

   ANS: C PTS: 1 DIF: Memorization
   REF: p. 6 TOP: Structural levels of organization

6. The heart is an example of a(n)
   a. organ.
   b. tissue.
   c. organism.
   d. system.

   ANS: A PTS: 1 DIF: Application REF: p. 6
   TOP: Structural levels of organization

7. The levels of organization from most simple to most complex are
   a. cell → chemical → organ → tissue → system.
   b. tissue → cell → chemical → organ → system.
   c. chemical → tissue → cell → organ → system.
   d. chemical → cell → tissue → organ → system.

   ANS: D PTS: 1 DIF: Memorization
   REF: p. 5 TOP: Structural levels of organization

8. When using directional terms to describe the body, it is assumed that the body is in what position?
   a. Supine
   b. Anatomical
   c. Lateral
   d. Prone

   ANS: B PTS: 1 DIF: Memorization
   REF: p. 7 TOP: Anatomical position

9. The supine position
   a. describes the body lying face up.
   b. is also called anatomical position.
   c. describes the body lying face down.
   d. both A and B.

   ANS: A PTS: 1 DIF: Memorization
   REF: p. 7 TOP: Anatomical position

10. The prone position
    a. describes the body lying face up.
    b. is also called the anatomical position.
    c. describes the body lying face down.
    d. both B and C.

    ANS: C PTS: 1 DIF: Memorization
    REF: p. 7 TOP: Anatomical position

11. Because humans walk upright, the term *dorsal* can be used in place of the term
    a. inferior.
    b. posterior.
    c. anterior.
    d. distal.

ANS: B PTS: 1 DIF: Memorization
REF: p. 7 TOP: Anatomical direction

12. The opposite term for *posterior* in humans is
    a. superior.
    b. anterior.
    c. ventral.
    d. both B and C.

    ANS: D PTS: 1 DIF: Application REF: p. 7
    TOP: Anatomical direction

13. The opposite term for *superficial* is
    a. deep.
    b. inferior.
    c. posterior.
    d. medial.

    ANS: A PTS: 1 DIF: Memorization
    REF: p. 7 TOP: Anatomical direction

14. The body section that divides the right ear from the left ear is a _ section.
    a. frontal
    b. sagittal
    c. coronal
    d. transverse

    ANS: B PTS: 1 DIF: Application REF: p. 9
    TOP: Planes or body sections

15. The body section that divides the nose from the back of the head is a _ section.
    a. frontal
    b. sagittal
    c. midsagittal
    d. transverse

    ANS: A PTS: 1 DIF: Application REF: p. 9
    TOP: Planes or body sections

16. A section that divides the body into mirror images is a _ section.
    a. frontal
    b. coronal
    c. midsagittal
    d. transverse

    ANS: C PTS: 1 DIF: Application REF: p. 9
    TOP: Planes or body sections

17. The two major body cavities are called
    a. thoracic and abdominal.
    b. thoracic and pelvic.

c. dorsal and ventral.
d. mediastinum and pleural.

ANS: C PTS: 1 DIF: Memorization
REF: p. 9 TOP: Body cavities

18. The liver can be found in the
a. upper right quadrant.
b. epigastric region.
c. hypogastric region.
d. both A and B.

ANS: D PTS: 1 DIF: Application REF: p. 10
TOP: Body cavities

19. The word “leg” correctly describes the
a. area from the hip to the foot.
b. area from the knee to the ankle.
c. area between the hip and the knee.
d. femoral area.

ANS: B PTS: 1 DIF: Memorization
REF: p. 13 TOP: Body regions

20. The human body tries to maintain a constant body temperature. This is an example of
a. homeostasis.
b. a positive feedback loop.
c. an effector.
d. a sensor.

ANS: A PTS: 1 DIF: Application REF: p. 14
TOP: The balance of body functions

21. The part of a feedback loop that has the direct effect on the regulated condition is called
a. homeostasis.
b. the effector.
c. the sensor.
d. the control center.

ANS: B PTS: 1 DIF: Memorization
REF: p. 14 TOP: The balance of body functions

22. The part of the feedback loop that detects a change in the regulated condition is called
a. homeostasis.
b. the effector.
c. the sensor.
d. the control center.

ANS: C PTS: 1 DIF: Memorization
REF: p. 14 TOP: The balance of body functions

23. The part of the feedback loop that compares the present condition within a body part or region to its homeostatic condition is called
    a. homeostasis.
    b. the effector.
    c. the sensor.
    d. the control center.

    ANS: D PTS: 1 DIF: Memorization
    REF: p. 14 TOP: The balance of body functions

24. When your body temperature drops below normal, your muscles begin to contract rapidly, making you shiver and generating heat. In this case your muscles are acting as the
    a. sensor.
    b. effector.
    c. control center.
    d. both A and C.

    ANS: B PTS: 1 DIF: Synthesis REF: p. 14
    TOP: The balance of body functions

25. Which of the following body functions is an example of a positive feedback loop?
    a. Maintaining a pH of 7.45 in the body
    b. Forming a blood clot
    c. Uterine contractions during labor
    d. Both B and C

    ANS: D PTS: 1 DIF: Application REF: pp. 15-16
    TOP: The balance of body functions

26. The level of organization that precedes the organ level is the _ level.
    a. system
    b. cellular
    c. tissue
    d. chemical

    ANS: C PTS: 1 DIF: Memorization
    REF: p. 5 TOP: Structural levels of organization

27. Which of these terms cannot be applied to a body in the anatomical position?
    a. Dorsal
    b. Posterior
    c. Supine
    d. Both A and B

    ANS: C PTS: 1 DIF: Memorization
    REF: p. 7 TOP: Anatomical position

28. Which term means *toward the head*?
    a. Anterior
    b. Superior
    c. Superficial

d. Ventral

ANS: B PTS: 1 DIF: Memorization
REF: p. 7 TOP: Anatomical direction

29. Which describes the anatomical relationship of the wrist to the elbow?
    a. The elbow is proximal to the wrist.
    b. The elbow is distal to the wrist.
    c. The elbow is superficial to the wrist.
    d. The elbow is lateral to the wrist.

    ANS: A PTS: 1 DIF: Application REF: p. 7
    TOP: Anatomical direction

30. A coronal plane or section is another term for a _ plane.
    a. sagittal
    b. midsagittal
    c. transverse
    d. frontal

    ANS: D PTS: 1 DIF: Memorization
    REF: p. 9 TOP: Planes or body sections

31. The muscular sheet called the diaphragm divides the
    a. right and left pleural cavities.
    b. thoracic cavity and abdominopelvic cavities.
    c. abdominal and pelvic cavities.
    d. thoracic cavity and mediastinum.

    ANS: B PTS: 1 DIF: Memorization
    REF: p. 9 TOP: Body cavities

32. Which is not a part of the upper abdominopelvic region?
    a. Right hypochondriac region
    b. Epigastric region
    c. Hypogastric region
    d. All of the above are part of the upper abdominopelvic region.

    ANS: C PTS: 1 DIF: Memorization
    REF: p. 10 TOP: Body cavities

MATCHING

Match each term with its corresponding definition or description.

a. Chemical level
b. Cellular level
c. Tissue level
d. Organ level
e. System level
f. Organism

1. The smallest “living” part of the body
2. A word used to denote a living thing
3. Level that includes atoms and molecules
4. Level made up of groups of tissues working together to perform a task
5. Level that is the most complex unit within the organism
6. Level that is made up of a group of cells working together to perform a task

1. ANS: B PTS: 1 DIF: Memorization
   REF: p. 6 TOP: Structural levels of organization
2. ANS: F PTS: 1 DIF: Memorization
   REF: p. 5 TOP: Structural levels of organization
3. ANS: A PTS: 1 DIF: Memorization
   REF: p. 5 TOP: Structural levels of organization
4. ANS: D PTS: 1 DIF: Memorization
   REF: p. 6 TOP: Structural levels of organization
5. ANS: E PTS: 1 DIF: Memorization
   REF: p. 6 TOP: Structural levels of organization
6. ANS: C PTS: 1 DIF: Memorization
   REF: p. 6 TOP: Structural levels of organization

Match each term with its corresponding definition or description.

a. Superior
b. Anterior
c. Medial
d. Proximal
e. Superficial
f. Inferior
g. Posterior
h. Lateral
i. Distal
j. Deep

7. Nearer to the surface of the body
8. Toward the head or above
9. Toward the midline of the body
10. Away from the trunk or point of origin
11. Toward the feet or below
12. Toward the back
13. Farther away from the surface of the body
14. Toward the side
15. Toward the front
16. Nearest to the trunk or point of origin

7. ANS: E PTS: 1 DIF: Memorization
   REF: p. 7 TOP: Anatomical direction
8. ANS: A PTS: 1 DIF: Memorization
   REF: p. 7 TOP: Anatomical direction
9. ANS: C PTS: 1 DIF: Memorization

REF: p. 7 TOP: Anatomical direction

10. ANS: I PTS: 1 DIF: Memorization
REF: p. 7 TOP: Anatomical direction
11. ANS: F PTS: 1 DIF: Memorization
REF: p. 7 TOP: Anatomical direction
12. ANS: G PTS: 1 DIF: Memorization
REF: p. 7 TOP: Anatomical direction
13. ANS: J PTS: 1 DIF: Memorization
REF: p. 7 TOP: Anatomical direction
14. ANS: H PTS: 1 DIF: Memorization
REF: p. 7 TOP: Anatomical direction
15. ANS: B PTS: 1 DIF: Memorization
REF: p. 7 TOP: Anatomical direction
16. ANS: D PTS: 1 DIF: Memorization
REF: p. 7 TOP: Anatomical direction

Match each term with its corresponding definition or description.

a. Frontal plane
b. Transverse plane
c. Sagittal plane
d. Diaphragm
e. Thoracic cavity
f. Abdominopelvic cavity
g. Cranial cavity
h. Mediastinum

17. A muscular sheet dividing the thoracic and abdominopelvic cavities
18. The lower part of the ventral body cavity
19. Divides the body into right and left sides
20. Part of the dorsal cavity that contains the brain
21. Divides the body into upper and lower parts
22. A subdivision of the thoracic cavity
23. Divides the body into front and rear parts
24. Cavity that is subdivided into pleural cavities

17. ANS: D PTS: 1 DIF: Memorization
REF: p. 9 TOP: Body cavities
18. ANS: F PTS: 1 DIF: Memorization
REF: p. 9 TOP: Body cavities
19. ANS: C PTS: 1 DIF: Memorization
REF: p. 9 TOP: Planes or body sections
20. ANS: G PTS: 1 DIF: Memorization
REF: p. 9 TOP: Body cavities
21. ANS: B PTS: 1 DIF: Memorization
REF: p. 9 TOP: Planes or body sections
22. ANS: H PTS: 1 DIF: Memorization
REF: p. 9 TOP: Body cavities
23. ANS: A PTS: 1 DIF: Memorization

REF: p. 9 TOP: Planes or body sections

24. ANS: E PTS: 1 DIF: Memorization
REF: p. 9 TOP: Body cavities

SHORT ANSWER

1. Explain the difference between anatomy and physiology.

   ANS:
   Answers will vary.

   PTS: 1 DIF: Memorization REF: P. 3
   TOP: Introduction

2. Name and explain the structural levels of organization of the body and give an example of each.

   ANS:
   Answers will vary.

   PTS: 1 DIF: Application REF: pp. 5-6
   TOP: Structural levels of organization

3. Describe the anatomical position.

   ANS:
   Answers will vary.

   PTS: 1 DIF: Memorization REF: p. 7
   TOP: Anatomical position

4. Define or explain the words “prone” and “supine.”

   ANS:
   Answers will vary.

   PTS: 1 DIF: Memorization REF: p. 7
   TOP: Anatomical position

5. Name and describe the three planes or body sections.

   ANS:
   Answers will vary.

   PTS: 1 DIF: Memorization REF: p. 9
   TOP: Planes or body sections

6. Name the two major body cavities, and describe what is in each.

ANS:
Answers will vary.

PTS: 1 DIF: Memorization REF: p. 9
TOP: Body cavities

7. Explain the three parts of a negative feedback loop.

ANS:
Answers will vary.

PTS: 1 DIF: Memorization REF: p. 15
TOP: The balance of body functions

8. What is meant by a negative feedback loop? Give an example of a negative feedback loop in the body.

ANS:
Answers will vary.

PTS: 1 DIF: Application REF: p. 15
TOP: The balance of body functions

9. What is meant by a positive feedback loop? Give an example of a positive feedback loop in the body.

ANS:
Answers will vary.

PTS: 1 DIF: Application REF: pp. 15-16
TOP: The balance of body functions

10. List the anatomical directions, and explain each of them. If there are alternate terms for an anatomical direction, give those terms also.

ANS:
Answers will vary.

PTS: 1 DIF: Memorization REF: p. 7
TOP: Anatomical direction

TRUE/FALSE

1. Anatomy is defined as the study of the structure of an organism.

ANS: T PTS: 1 DIF: Memorization
REF: P. 3 TOP: Introduction