

## Chapter 1: Introduction to Anatomy and Physiology

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### MULTIPLE CHOICE

1. The anatomic term \_\_\_\_\_ means toward the midline.
  - a. anterior
  - b. posterior
  - c. medial
  - d. cranial

ANS: C

The term medial indicates an anatomic direction toward the midline.

DIF: Cognitive Level: Knowledge      REF: Page 1      OBJ: 2  
TOP: Anatomic terminology      KEY: Nursing Process Step: Assessment  
MSC: NCLEX: Physiological Integrity

2. What are the smallest living components in our body?
  - a. Cells
  - b. Organs
  - c. Electrons
  - d. Osmosis

ANS: A

Cells are considered to be the smallest living units of structure and function in our body.

DIF: Cognitive Level: Knowledge      REF: Page 4      OBJ: 6  
TOP: Structural levels of organization      KEY: Nursing Process Step: N/A  
MSC: NCLEX: Physiological Integrity

3. What is the largest organelle, responsible for cell reproduction and control of other organelles?
  - a. Nucleus
  - b. Ribosome
  - c. Mitochondrion
  - d. Golgi apparatus

ANS: A

The nucleus is the largest organelle within the cell.

DIF: Cognitive Level: Knowledge      REF: Page 5      OBJ: 8  
TOP: Parts of the cell      KEY: Nursing Process Step: Assessment  
MSC: NCLEX: Physiological Integrity

4. When the patient complains of pain in the bladder, the patient will indicate discomfort in which body cavity?
  - a. Pelvic
  - b. Mediastinum
  - c. Dorsal
  - d. Abdominal

ANS: A

A subdivision called the pelvic cavity contains the lower portion of the large intestine (lower sigmoid colon, rectum), urinary bladder, and internal structures of the reproductive system.

DIF: Cognitive Level: Comprehension REF: Page 3, Figure 1-4  
OBJ: 5 TOP: Body cavity KEY: Nursing Process Step: Assessment  
MSC: NCLEX: Physiological Integrity

5. The four phases of cell division all occur in:
- diffusion.
  - mitosis.
  - osmosis.
  - filtration.

ANS: B

During mitosis, the cell goes through four phases: prophase, metaphase, anaphase, and telophase.

DIF: Cognitive Level: Knowledge REF: Page 7 OBJ: 9  
TOP: Cell division KEY: Nursing Process Step: N/A  
MSC: NCLEX: Physiological Integrity

6. Telophase is which phase of cell reproduction during mitosis?
- First phase
  - Latent phase
  - Final phase
  - Spindle phase

ANS: C

During mitosis, the cell goes through four phases: prophase, metaphase, anaphase, and telophase.

DIF: Cognitive Level: Knowledge REF: Page 7 OBJ: 9  
TOP: Cell division KEY: Nursing Process Step: N/A  
MSC: NCLEX: Physiological Integrity

7. The nurse is aware that which muscle group is both striated and involuntary?
- Skeletal
  - Glial
  - Cardiac
  - Visceral

ANS: C

The cardiac muscle is both striated and involuntary.

DIF: Cognitive Level: Knowledge REF: Page 9-10, Figure 1-12  
OBJ: 11 TOP: Tissues KEY: Nursing Process Step: Planning  
MSC: NCLEX: Physiological Integrity

8. What is a group of several different kinds of tissues arranged so that together they can perform a more complex function than any tissue alone?
- Organ

- b. System
- c. Cell
- d. Endoplasmic reticulum

ANS: A

When several kinds of tissues are united to perform a more complex function than any tissue alone, they are called organs.

DIF: Cognitive Level: Knowledge REF: Page 11 OBJ: 7  
TOP: Organs KEY: Nursing Process Step: N/A  
MSC: NCLEX: Physiological Integrity

9. What traits describe visceral muscles?
- a. Smooth and voluntary
  - b. Smooth and involuntary
  - c. Striated and voluntary
  - d. Striated and involuntary

ANS: B

Visceral (smooth) muscles will not function at will; thus, they act involuntarily.

DIF: Cognitive Level: Knowledge REF: Page 9, Figure 1-12  
OBJ: 7 TOP: Tissues KEY: Nursing Process Step: Assessment  
MSC: NCLEX: Physiological Integrity

10. How are the thoracic and abdominal cavities separated?
- a. By the pleura
  - b. By the diaphragm
  - c. By the sagittal plane
  - d. By the peritoneum

ANS: B

The diaphragm (a muscle directly beneath the lungs) separates the ventral cavity into the thoracic (chest) and abdominal cavities.

DIF: Cognitive Level: Knowledge REF: Page 10, Figure 1-3  
OBJ: 3 TOP: Ventral cavity  
KEY: Nursing Process Step: Assessment MSC: NCLEX: Physiological Integrity

11. What is the broad section of biology dealing with the description of human structure?
- a. Hematology
  - b. Anatomy
  - c. Kinesiology
  - d. Physiology

ANS: B

Anatomy is the study, classification, and description of the structure and organs of the body.

DIF: Cognitive Level: Knowledge REF: Page 1 OBJ: 1  
TOP: Terminology KEY: Nursing Process Step: N/A  
MSC: NCLEX: Physiological Integrity