

# Anatomy and Physiology 11th Edition Patton Test Bank

## Chapter 01: Organization of the Body Patton: Anatomy and Physiology, 11th Edition

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### MULTIPLE CHOICE

1. Which of the following describes anatomy?
  - a. Using devices to investigate parameters such as heart rate and blood pressure
  - b. Investigating human structure via dissections and other methods
  - c. Studying the unusual manner in which an organism responds to painful stimuli
  - d. Examining the physiology of life

ANS: B

DIF: Memorization

REF: p. 3

TOP: Anatomy and Physiology

2. *Systemic anatomy* is a term that refers to:
  - a. physiological investigation at a microscopic level.
  - b. anatomical investigation that begins in the head and neck and concludes at the feet.
  - c. anatomical investigation that uses an approach of studying the body by systems—groups of organs having a common function.
  - d. anatomical investigation at the molecular level.

ANS: C

DIF: Memorization

REF: p. 4

TOP: Anatomy and Physiology

3. Physiology can be subdivided according to the \_\_\_\_\_ studied.
  - a. type of organism
  - b. organizational level
  - c. systemic function

d. All of the above are correct.

ANS: D

DIF: Memorization

REF: p. 4

TOP: Physiology

4. Physiology:

- a. recognizes the unchanging (as opposed to the dynamic) nature of things.
- b. investigates the body's structure.
- c. is concerned with organisms and does not deal with different levels of organization such as cells and systems.
- d. is the science that examines the function of living organisms and their parts.

ANS: D

DIF: Memorization

REF: p. 4

TOP: Physiology

5. One of the basic principles of the standardized terminology is the avoidance of \_\_\_\_\_, or terms that are based on a person's name.

- a. homonyms
- b. antonyms
- c. eponyms
- d. synonyms

ANS: C

DIF: Memorization

REF: p. 5

TOP: Language of Science and Medicine

6. *Metabolism* refers to:

- a. the chemical basis of life.
- b. the sum of all the physical and chemical reactions occurring in the body.
- c. an organization of similar cells specialized to perform a certain function.
- d. a subdivision of physiology.

ANS: B

DIF: Application REF: p. 5

TOP: Characteristics of Life

7. From smallest to largest, the levels of organization of the body are:

- a. organism, chemical, tissue, cellular, organ, system, organelle.
- b. chemical, microscopic, cellular, tissue, organ, system, organism.
- c. organism, system, organ, tissue, cellular, organelle, chemical.
- d. chemical, organelle, cellular, tissue, organ, system, organism.

ANS: D

DIF: Memorization

REF: p. 6

TOP: Levels of Organization

8. The smallest living units of structure and function in the body are:

- a. molecules.
- b. cells.
- c. organelles.
- d. atoms.

ANS: B

DIF: Memorization

REF: p. 7

TOP: Levels of Organization

9. An organization of many similar cells that are specialized to perform a certain function is called a(n):

- a. tissue.
- b. organism.
- c. system.
- d. organ.

ANS: A  
TOP: Tissue Level

DIF: Memorization

REF: p. 7

10. An organ is one organizational level lower than a(n):
- system.
  - cell.
  - organelle.
  - tissue.

ANS: A  
TOP: Organ Level

DIF: Memorization

REF: p. 7

11. The reproductive system includes all of the following except the:
- testes.
  - ovaries.
  - ureter.
  - penis.

ANS: C  
TOP: Body Systems

DIF: Memorization

REF: p. 8

12. The lungs are located in the:
- thoracic cavity.
  - mediastinum.
  - abdominal cavity.
  - cranial cavity.

ANS: A  
TOP: Body Cavities

DIF: Memorization

REF: p. 12

13. The mediastinum contains all of the following except the:
- trachea.
  - venae cavae.
  - right lung.
  - esophagus.

ANS: C  
TOP: Body Cavities

DIF: Memorization

REF: p. 12

14. The gallbladder lies in the:
- abdominal cavity.
  - pelvic cavity.
  - dorsal cavity.
  - mediastinum.

ANS: A  
TOP: Body Cavities

DIF: Memorization

REF: p. 13

15. The number of abdominal regions is:

- a. three.
- b. five.
- c. seven.
- d. nine.

ANS: D                      DIF: Memorization  
TOP: Abdominopelvic Regions

REF: p. 14

16. The abdominal region in which the urinary bladder is found is the:

- a. hypogastric.
- b. epigastric.
- c. right lumbar.
- d. left iliac.

ANS: A                      DIF: Memorization  
TOP: Abdominopelvic Regions

REF: p. 15

17. A surgeon removing a gallbladder should know to find it in the \_\_\_\_\_ region.

- a. right lumbar
- b. right hypochondriac
- c. hypogastric
- d. umbilical

ANS: B                      DIF: Memorization  
TOP: Abdominopelvic Regions

REF: p. 14

18. The abdominal region in which the appendix is found is the:

- a. hypogastric.
- b. right iliac.
- c. right lumbar.
- d. right hypochondriac.

ANS: A                      DIF: Memorization  
TOP: Abdominopelvic Regions

REF: p. 15

19. *Popliteal* refers to the:

- a. calf.
- b. ankle.
- c. cheek.
- d. area behind the knee.

ANS: D                      DIF: Memorization  
TOP: Latin-based Descriptive Terms for Body Regions

REF: p. 16

20. A plane through the body that divides the body into right and left sides is called:

- a. sagittal.
- b. frontal.
- c. coronal.
- d. transverse.

ANS: A                      DIF: Memorization  
TOP: Body Planes and Sections

REF: p. 16

21. The abdominal quadrants are located with what structure as their midpoint?
- Umbilicus
  - Pubic bone
  - Xiphoid process
  - Iliac crest

ANS: A                      DIF: Memorization  
TOP: Abdominopelvic Quadrants

REF: p. 13

22. Humans have similar right and left sides of the body, at least superficially. This is an example of:
- anatomical position.
  - anterior symmetry.
  - ipsilateral position.
  - bilateral symmetry.

ANS: D                      DIF: Memorization  
TOP: Anatomical Position

REF: p. 8

23. Two major cavities of the human body are:
- ventral/dorsal.
  - inferior/superior.
  - visceral/parietal.
  - axial/appendicular.

ANS: A                      DIF: Memorization  
TOP: Body Cavities

REF: p. 9

24. The dorsal cavity contains all of the following except the:
- brain.
  - spinal column.
  - spinal cord.
  - thyroid gland.

ANS: D                      DIF: Memorization  
TOP: Body Cavities

REF: p. 12

25. A plane through the body that divides the body into anterior and posterior portions is:
- sagittal.
  - median.
  - coronal.
  - transverse.

ANS: C                      DIF: Memorization  
TOP: Body Planes and Sections

REF: p. 10

26. The plane that divides the body into upper and lower parts is the \_\_\_\_\_ plane.
- sagittal
  - frontal
  - transverse
  - superficial

ANS: C                    DIF: Memorization  
TOP: Body Planes and Sections

REF: p. 11

27. A somatotype characterized by having a muscular physique is called a(n):
- endomorph.
  - mesomorph.
  - ectomorph.
  - None of the above is correct.

ANS: B                    DIF: Application    REF: p. 17, Connect It  
TOP: Body Type and Disease

28. A somatotype characterized by a thin, fragile physique is a(n):
- ectomorph.
  - mesomorph.
  - endomorph.

ANS: A                    DIF: Memorization                    REF: p. 17, Connect It  
TOP: Body Type and Disease

29. The abdominopelvic cavity contains all of the following except the:
- kidneys.
  - gallbladder.
  - right lung.
  - urinary bladder.

ANS: C                    DIF: Memorization                    REF: p. 13  
TOP: Body Cavities

30. Which of the following is not one of the characteristics of life?
- Digestion
  - Balance
  - Conductivity
  - Circulation
  - Reproduction

ANS: B                    DIF: Memorization                    REF: p. 5  
TOP: Characteristics of Life

31. An idea that is supported by repeated experiments and observation is called a:
- fact.
  - theory.
  - concept.
  - hypothesis.

ANS: B                    DIF: Memorization                    REF: p. 3  
TOP: Science and Society

32. *Molecules* are:
- atoms combined to form larger chemical aggregates.
  - electrons orbiting nuclei.

N

- c. a complex of electrons arranged in concentric shells.  
d. composed of cellular organelles.

ANS: A                    DIF: Memorization  
TOP: Chemical Level: Basis for Life

REF: p. 6

33. Mitochondria, Golgi apparatus, and endoplasmic reticulum are examples of:  
a. molecules.  
b. cytoplasm.  
c. organelles.  
d. plasma membranes.

ANS: C                    DIF: Memorization  
TOP: Levels of Organization

REF: p. 7

34. When many similar cells specialize to perform a certain function, it is referred to as a(n):  
a. tissue.  
b. organelle.  
c. organ system complex.  
d. organism.

ANS: A                    DIF: Memorization  
TOP: Tissue Level

REF: p. 7

35. Several kinds of tissues working together are termed a(n):  
  
a. plasma membrane.  
b. organ.  
c. organism.  
d. organ system.

ANS: B                    DIF: Memorization  
TOP: Organ Level

REF: p. 7

36. Blood production is a function of which system?  
a. Reproductive  
b. Respiratory  
c. Skeletal  
d. Lymphatic

ANS: C                    DIF: Memorization  
TOP: System Level

REF: p. 7

37. The dorsal cavity contains the:  
a. brain and spinal cord.  
b. heart and lungs.  
c. reproductive organs.  
d. digestive organs.

ANS: A                    DIF: Memorization  
TOP: Body Cavities

REF: p. 12

38. The ventral cavity contains the:  
a. thoracic and abdominopelvic cavities.

N R I G