

Anatomy and Physiology 10th Edition Patton Test Bank

Chapter 01: Organization of the Body Patton: Anatomy and Physiology, 10th Edition

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
TOP: Anatomy and Physiology

REF: p. 3

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
TOP: Anatomy and Physiology

REF: p. 4

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:

- recognizes the unchanging (as opposed to the dynamic) nature of things.
- investigates the body's structure.
- is concerned with organisms and does not deal with different levels of organization such as cells and systems.
- 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.

- homonyms
- antonyms
- eponyms
- synonyms

ANS: C

DIF: Memorization

REF: p. 5

TOP: Language of Science and Medicine

6. *Metabolism* refers to:

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

- organism, chemical, tissue, cellular, organ, system, organelle.
- chemical, microscopic, cellular, tissue, organ, system, organism.
- organism, system, organ, tissue, cellular, organelle, chemical.
- 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:

- molecules.
- cells.
- organelles.
- 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):

- tissue.
- organism.
- system.
- organ.

ANS: A

DIF: Memorization

REF: p. 7

TOP: Tissue Level

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

ANS: A

DIF: Memorization

REF: p. 7

TOP: Organ Level

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

ANS: C

DIF: Memorization

REF: p. 8

TOP: Body Systems

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

ANS: A

DIF: Memorization

REF: p. 12

TOP: Body Cavities

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

ANS: C

DIF: Memorization

REF: p. 12

TOP: Body Cavities

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

ANS: A

DIF: Memorization

REF: p. 13

TOP: Body Cavities

15. The number of abdominal regions is:
- three.
 - five.
 - seven.
 - nine.

ANS: D DIF: Memorization
TOP: Abdominopelvic Regions

REF: p. 14

16. The abdominal region in which the urinary bladder is found is the:
- hypogastric.
 - epigastric.
 - right lumbar.
 - 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.
- right lumbar
 - right hypochondriac
 - hypogastric
 - umbilical

ANS: B DIF: Memorization
TOP: Abdominopelvic Regions

REF: p. 14

18. The abdominal region in which the appendix is found is the:
- hypogastric.
 - right iliac.
 - right lumbar.
 - right hypochondriac.

ANS: A DIF: Memorization
TOP: Abdominopelvic Regions

REF: p. 15

19. *Popliteal* refers to the:
- calf.
 - ankle.
 - cheek.
 - 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:
- sagittal.
 - frontal.
 - coronal.
 - transverse.

ANS: A DIF: Memori REF: p. 16
TOP: Body Planes and Sections

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

REF: p. 11

TOP: Body Planes and Sections

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.

- 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.

- b. heart and lungs only.
- c. digestive and reproductive organs.
- d. brain and spinal cord.

ANS: A DIF: Memorization
TOP: Body Cavities

REF: p. 12

39. The axial portion of the body consists of the:
- a. arms, neck, and legs.
 - b. neck, torso, and arms.
 - c. torso, arms, legs, and head.
 - d. head, neck, and torso.

ANS: D DIF: Memorization
TOP: Body Regions

REF: p. 15

40. The abdominopelvic cavity contains all of the following except the:
- a. stomach.
 - b. pancreas.
 - c. heart.
 - d. reproductive organs.

ANS: C DIF: Memorization
TOP: Body Cavities

REF: p. 13

41. Visceral peritoneum would cover which of the following organs?
- a. Heart
 - b. Intestines
 - c. Lungs
 - d. Spinal cord

ANS: B DIF: Memorization
TOP: Body Cavities

REF: p. 13

42. A sagittal section divides the body into _____ portions.
- a. upper and lower
 - b. right and left
 - c. front and back
 - d. proximal and distal

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

REF: p. 10

43. A frontal section divides the body into _____ portions.
- a. upper and lower
 - b. right and left
 - c. front and back
 - d. cortex and medullary

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

REF: p. 10

44. *Axilla* is a term referring to which body region ?
- a. Anterior elbow
 - b. Armpit
 - c. Posterior knee
 - d. Groin

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

REF: p. 15

45. The _____ tissue is not a major tissue of the body.
- cutaneous
 - epithelial
 - connective
 - nervous

ANS: A DIF: Memorization
TOP: Tissue Level

REF: p. 7

46. “Apple-shaped” and “pear-shaped” usually describe subtypes of what major body type?
- Mesomorph
 - Ectomorph
 - Endomorph
 - Polymorph

ANS: C DIF: Memorization
TOP: Body Type and Disease

REF: p. 17, Connect It

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

ANS: D DIF: Memorization
TOP: Organ Level

REF: p. 7

48. Which of the following does not describe anatomical position?
- Head pointing forward
 - Body standing erect
 - Arms extended from the shoulders, palms up
 - All of the above describe the body in the anatomical position.

ANS: C DIF: Memorization
TOP: Anatomical Position

REF: p. 9

49. Someone studying gross anatomy would not study which of the following?
- The location of the heart and chambers of the heart
 - Muscles of the arms and legs
 - The nucleus of the cell
 - All of the above would be studied.

ANS: C DIF: Memorization
TOP: Anatomy

REF: p. 4

50. The parietal pleura covers the ^N
- lungs.
 - heart.
 - walls of the thoracic cavity.
 - Both A and B are correct.

ANS: C DIF: Memorization
TOP: Body Cavities

REF: p. 13