

Chapter 2: The Human Body in Health and Disease

MULTIPLE CHOICE

1. The processes through which the body maintains a constant internal environment are known as ____.
- a. hematostasis
 - b. homeostasis
 - c. homestasis
 - d. homostasis

ANS: B PTS: 1

2. Which of the following is a characteristic of the anatomic position?
- a. extending the arms upward
 - b. bending the knees
 - c. standing up straight so the body is erect
 - d. turning the palms of the hands toward the back

ANS: C PTS: 1

3. ____ has the specialized ability to contract and relax.
- a. Adipose tissue
 - b. Dense connective tissue
 - c. Muscle tissue
 - d. Nerve tissue

ANS: C PTS: 1

4. When a recessive gene for a disease is inherited from ____.
- a. both parents, the offspring will have a 50-50 chance of developing that condition
 - b. both parents, the offspring will have that condition
 - c. only one parent, the offspring will have that condition
 - d. only one parent, the offspring will have a 50-50 chance of developing that condition

ANS: B PTS: 1

5. A/An ____ is acquired in a hospital or clinic setting.
- a. iatrogenic illness
 - b. idiopathic disorder
 - c. functional disorder
 - d. nosocomial infection

ANS: D PTS: 1

6. The term ____ is the opposite of *anterior*.
- a. dorsal
 - b. posterior
 - c. superior
 - d. ventral

ANS: B PTS: 1

7. A/An ____ divides the body into anterior and posterior portions.
- a. frontal plane
 - b. horizontal plane
 - c. sagittal plane
 - d. transverse plane

ANS: A PTS: 1

8. The organs of reproduction are protected by the ____ cavity.
- a. abdominal
 - b. dorsal
 - c. pelvic
 - d. ventral

ANS: C PTS: 1

9. A transverse plane divides the body into ____ and inferior portions.
- a. anterior
 - b. lateral
 - c. posterior
 - d. superior

ANS: D PTS: 1

10. Which term means toward the lower part of the body?
- a. caudal
 - b. cephalic
 - c. distal
 - d. proximal

ANS: A PTS: 1

11. The ____ body regions are located on the left and right sides and are covered by the lower ribs.
- a. left and right epigastric
 - b. left and right hypochondriac
 - c. left and right iliac
 - d. left and right lumbar

ANS: B PTS: 1

12. The term ____ describes the congenital absence of a normal opening or the failure of a structure, such as the anus, to be tubular.
- a. anaplasia
 - b. aplasia
 - c. atresia
 - d. dysplasia

ANS: C PTS: 1

13. The ____ plane, which is also known as the midline, divides the body into equal left and right halves
- a. coronal
 - b. frontal
 - c. midsagittal
 - d. transverse

ANS: C PTS: 1

14. Which term describes a benign tumor formed from glandular tissue?
- a. adenoma
 - b. adenomalacia
 - c. adenosclerosis
 - d. adenosis

ANS: A PTS: 1

15. Which term means the direction toward or nearer the midline?
- a. distal
 - b. lateral
 - c. medial
 - d. sagittal

ANS: C PTS: 1

16. A physician who specializes in the care of older people is known as a ____.
- a. cardiologist
 - b. geriatrician
 - c. internist
 - d. obstetrician

ANS: B PTS: 1

17. Which condition is the abnormal development or growth of cells, tissues, or organs?
- a. anaplasia
 - b. aplasia
 - c. dysplasia
 - d. hyperplasia

ANS: C PTS: 1

18. Which term refers to an outbreak of a disease occurring over a large geographic area, possibly worldwide?
- a. endemic
 - b. epidemic
 - c. geodemic
 - d. pandemic
- ANS: D PTS: 1
19. Which term means the study of the structure, composition, and function of tissues?
- a. anatomy
 - b. histology
 - c. pathology
 - d. physiology
- ANS: B PTS: 1
20. Which term means toward the side?
- a. distal
 - b. lateral
 - c. medial
 - d. proximal
- ANS: B PTS: 1
21. Which term means the study of the functions of body structures?
- a. anatomy
 - b. cytology
 - c. histology
 - d. physiology
- ANS: D PTS: 1
22. A/An ____ disorder, such as a panic attack, produces symptoms for which no physiological or anatomical cause can be identified.
- a. functional
 - b. infectious
 - c. idiopathic
 - d. organic
- ANS: A PTS: 1
23. ____ is a genetic disorder in which an essential digestive enzyme is missing.
- a. Hemophilia
 - b. Huntington's disease
 - c. Phenylketonuria
 - d. Tay-Sachs
- ANS: C PTS: 1
24. Which of these diseases is NOT spread by bloodborne transmission?
- a. hepatitis B
 - b. human immunodeficiency virus
 - c. sexually transmitted diseases
 - d. tuberculosis
- ANS: D PTS: 1
25. A genome is ____.
- a. also known as a gamete
 - b. made up of 46 chromosomes arranged in 23 pairs
 - c. the complete set of an individual's genetic information
 - d. the genetic structures located within the nucleus of each cell
- ANS: C PTS: 1

COMPLETION

1. The _____ system filters blood to remove waste while maintaining the electrolyte and fluid balance within the body.

ANS: urinary

PTS: 1

2. The _____ system supports and shapes the body. It also protects the internal organs, forms some blood cells, and stores minerals.

ANS: skeletal

PTS: 1

3. The _____ system protects the body against invasion by bacteria. It also aids in regulating the body temperature and water content.

ANS: integumentary

PTS: 1

4. Hormones are secreted by _____ glands.

ANS: endocrine

PTS: 1

5. The term _____ refers to the back of the organ or body. The opposite of this term is ventral.

ANS: dorsal

PTS: 1

6. A/An _____ is a fundamental physical and functional unit of heredity.

ANS: gene

PTS: 1

7. An inflammation of the peritoneum is known as _____.

ANS: peritonitis

PTS: 1

8. Protective padding, insulation, support, and a nutrient reserve are provided by _____ tissue.

ANS: adipose

PTS: 1

9. The enlargement in the bulk of an organ that is not due to tumor formation is known as _____.

ANS: hypertrophy

PTS: 1

10. _____ glands, such as sweat glands, secrete chemical substances into ducts that lead either to other organs or out of the body.

ANS: Exocrine

PTS: 1

11. Abnormal hardening of a gland is known as _____.

ANS: adenosclerosis

PTS: 1

12. An abnormal increase in the number of normal cells in normal arrangement in a tissue is known as _____.

ANS: hyperplasia

PTS: 1

13. Blood and lymph are examples of _____ connective tissues.

ANS: liquid

PTS: 1

14. A/An _____ is a specialist in the study of tissue organization at all levels.

ANS: histologist

PTS: 1

15. A/An _____ is a deviation from what is regarded as normal.

ANS: anomaly

PTS: 1

16. A/An _____ disorder is an abnormal condition that exists at the time of birth.

ANS: congenital

PTS: 1

17. The _____ region is located below the stomach.

ANS: hypogastric

PTS: 1

18. A postmortem (after death) examination is known as a/an _____.

ANS: autopsy

PTS: 1

19. The larynx is part of the _____ system.

ANS: respiratory

PTS: 1

20. The study of the causes of diseases is known as _____.

ANS: etiology

PTS: 1

21. A _____ is a group of specialized epithelial cells that can produce secretions.

ANS: gland

PTS: 1

22. The surgical removal of a gland is known as a/an _____.

ANS: adenectomy

PTS: 1

23. The study of how traits are transferred from parents to their children and the role of genes in health and disease is known as _____.

ANS: genetics

PTS: 1

24. The _____ cavity contains the organs of the digestive system.

ANS: abdominal

PTS: 1

25. _____ syndrome is a genetic disorder that includes characteristic facial features, some degree of mental retardation, vision disorders, and other health problems.

ANS: Down

PTS: 1

TRUE/FALSE

1. The distal end of the humerus (the bone of the upper arm) is located near the shoulder.

ANS: F PTS: 1

2. A sagittal plane divides the body into unequal upper and lower portions.

ANS: F PTS: 1

3. The term *inguinal*, which means relating to the groin, refers to the entire lower portion of the abdomen.

ANS: T PTS: 1

4. DNA is packaged in a chromosome as two spiraling strands that twist together to form a double helix.

ANS: T PTS: 1

5. The epigastric region surrounds the umbilicus.

ANS: F PTS: 1

6. The thoracic cavity surrounds and protects the heart and the lungs.

ANS: T PTS: 1

7. Each chromosome contains 46 genes.

ANS: F PTS: 1

8. A gamete is the only type of cell that does not contain 46 chromosomes.

ANS: T PTS: 1

9. Anatomy means any deviation from what is regarded as normal.

ANS: F PTS: 1

10. Hemophilia is a group of hereditary bleeding disorders in which a blood-clotting factor is missing.

ANS: T PTS: 1

11. Stem cells can be harvested from the bone marrow of a newborn infant.

ANS: F PTS: 1

12. The umbilicus is also known as the belly button or navel.

ANS: T PTS: 1

13. Quadrant means divided into six equal parts.

ANS: F PTS: 1

14. The term *proximal* means situated nearest the midline or beginning of a body structure.

ANS: T PTS: 1

15. Deoxyribonucleic acid (DNA) is found only in gametes.

ANS: F PTS: 1

16. Somatic cell mutation can be transmitted to the offspring.

ANS: F PTS: 1

17. The mesentery attaches parts of the intestine to the interior abdominal wall.

ANS: T PTS: 1

18. The term *retroperitoneal* means located behind the peritoneum.

ANS: T PTS: 1

19. Cytology is the study of the formation, structure, and function of cells.

ANS: T PTS: 1

20. The dorsal cavity contains the body organs that maintain homeostasis.

ANS: F PTS: 1

21. Adult stem cells are undifferentiated cells found among differentiated cells in a tissue or organ.

ANS: T PTS: 1

22. A genetic mutation is a change of the sequence of a DNA molecule.

ANS: T PTS: 1

23. Freckles are a physical trait that is transmitted by a recessive gene.

ANS: F PTS: 1

24. Tay-Sachs disease is a fatal genetic disorder in which harmful quantities of a fatty substance build up in the lungs.

ANS: F PTS: 1

25. Huntington's disease is a genetic disorder causing nerve degeneration that can result in uncontrolled movements and the loss of some mental abilities.

ANS: T PTS: 1

MATCHING

Match each definition with the correct term.

- a. a benign tumor from recognizable glandular structures
- b. abnormal hardening of a gland

- c. abnormal softening of a gland
- d. any disease condition of a gland
- e. inflammation of a gland

- 1. adenitis
- 2. adenoma
- 3. adenomalacia
- 4. adenosclerosis
- 5. adenosis

- 1. ANS: E PTS: 1
- 2. ANS: A PTS: 1
- 3. ANS: C PTS: 1
- 4. ANS: B PTS: 1
- 5. ANS: D PTS: 1

Match each definition with the correct term.

- a. protects the spinal cord
- b. protects the major organs of digestion
- c. protects the heart and the lungs
- d. protects the brain
- e. protects reproductive and excretory system organs

- 6. abdominal cavity
- 7. cranial cavity
- 8. pelvic cavity
- 9. spinal cavity
- 10. thoracic cavity

- 6. ANS: B PTS: 1
- 7. ANS: D PTS: 1
- 8. ANS: E PTS: 1
- 9. ANS: A PTS: 1
- 10. ANS: C PTS: 1

Match each definition with the correct term.

- a. outer layer of membrane that lines the abdominal cavity
- b. membrane that protects and supports organs in the abdominal cavity
- c. located behind the peritoneum of the abdominal cavity
- d. inner layer of membrane that surrounds the organs of the abdominal cavity
- e. suspends parts of the intestine within the abdominal cavity

- 11. mesentery
- 12. parietal peritoneum
- 13. peritoneum
- 14. retroperitoneal
- 15. visceral peritoneum

- 11. ANS: E PTS: 1
- 12. ANS: A PTS: 1
- 13. ANS: B PTS: 1
- 14. ANS: C PTS: 1

15. ANS: D PTS: 1

Match each definition with the correct term.

- a. the defective development or congenital absence of an organ or tissue
- b. incomplete development of an organ or tissue
- c. a change in the structure of cells and in their orientation to each other
- d. abnormal tissue development
- e. abnormal increase in the number of normal cells in normal arrangement

- 16. anaplasia
- 17. aplasia
- 18. dysplasia
- 19. hyperplasia
- 20. hypoplasia

16. ANS: C PTS: 1
17. ANS: A PTS: 1
18. ANS: D PTS: 1
19. ANS: E PTS: 1
20. ANS: B PTS: 1

Match each definition with the correct term.

- a. a disorder with no detectable physical changes to explain the symptoms
- b. a disorder with pathologic physical changes that explain the symptoms
- c. an illness caused by a pathogenic organism
- d. an illness without known cause
- e. any disease transmitted from one person to another

- 21. communicable disease
- 22. functional disorder
- 23. idiopathic disorder
- 24. infectious disorder
- 25. organic disorder

21. ANS: E PTS: 1
22. ANS: A PTS: 1
23. ANS: D PTS: 1
24. ANS: C PTS: 1
25. ANS: B PTS: 1