

Medical Terminology



Study Guide

Illustrated Guide to Medical Terminology

Introduction

Have you ever visited your doctor's office, a diagnostic center, or a hospital and wondered what the medical professionals were talking about? It probably sounded like a foreign language to you. In many ways, "medical terminology" is a language all its own. There is a name for every part of the human body and a term to describe diseases, disorders, etc., of every organ and system. The *Illustrated Guide to Medical Terminology* is a comprehensive approach to understanding anatomy, physiology, medical terminology, and pathology. The book's theme is "Read, Look, and Listen," meaning you should read the text in the book, look at the pictures and diagrams, and listen to the terms pronounced on the accompanying audio CD. This course is ideal for the student who would like to pursue a career in medicine—as a medical transcriptionist or any of the other various choices—or just has a general interest in medicine.

Chapter 1

Basic Word Structure

Objective

- Define a “root,” “suffix,” and prefix
- Recognize roots, suffixes, and prefixes in a medical term
- Learn the basic rules of medical word structure
- Write the meaning of the suffixes, roots, and prefixes found in the chapter
- Build medical terms
- Define medical terms

Parts of Medical Words

The main part of a medical word is called the **root**.

The first part of a word is the **prefix**.

The last part of a medical word is called the **suffix**.

You learn medical terms by identifying the suffix first, then the root, and finally the prefix.

However, some words only have one or two parts.

Basic Word Structure

The root of a medical word often refers to a body part. For a medical term to make sense, a **combining vowel** is often added. The combining vowel is used when a suffix starts with a consonant.

The **combining form** is a root followed by a combining vowel.

Remember to do the practice for learning questions and review exercises found in each chapter. They will help you gain a better understanding of the subject matter but you DO NOT have to return them for grading.

Exam 1

Multiple Choice - Select the one best answer:

1. The main part of a medical term is the
 - A. prefix
 - B. combining form.
 - C. root.
 - D. suffix.

2. The first part of a medical term is the
 - A. prefix.
 - B. suffix.
 - C. root.
 - D. combining vowel.

3. The suffix
 - A. is at the beginning of a medical term.
 - B. joins two medical terms together.
 - C. is at the middle of a medical term.
 - D. is at the end of a medical term.

4. When analyzing a medical word to determine the meaning, you should identify and define the
 - A. root first.
 - B. suffix first.
 - C. combining form first.
 - D. prefix first.

5. A combining vowel is used when the
 - A. suffix starts with a vowel.
 - B. prefix starts with a consonant.
 - C. prefix ends with a vowel.
 - D. suffix starts with a consonant.

Continued on the next page

True/False

Answer each question true (T) or false (F).

6. T F A combining vowel is not used if it is not needed for pronunciation.
7. T F In medical language, the root is almost always written in the combining form.
8. T F A suffix is found at the beginning of the word and is attached to a root or a prefix.
9. T F A prefix can be attached to the beginning of the word root or sometimes a suffix.
10. T F Always use a combining vowel before a suffix that begins with a vowel.
11. T F Never use a combining vowel between two roots.
12. T F Most medical terms have two or more parts.

Definitions – Choose the correct definition for each term

- | | |
|---------------------------|------------------------|
| A. study of blood | D. difficulty speaking |
| B. inflammation of joints | E. tumor of bone |
| C. tumor of glands | F. mass of blood |

13. hematoma _____

14. dysphasia _____

15. arthritis _____

16. adenoma _____

17. osteoma _____

18. hematology _____

Continued on the next page

Matching

Match the definition in column I with the correct term in column II.

Column I

A. -logy

B. oste-

C. poly-

D. -it is

E. dys-

F. arthr-

G. -phasia

Column II

19. _____ Inflammation

20. _____ Many

21. _____ Joint

22. _____ Difficult

23. _____ Study of

24. _____ Speech

25. _____ Bone

This is the End of this exam. Move on to the next lesson. You will need a NEW answer sheet for your next exam.

Chapter 2

Basic Body Structure

Objective

- Define “anatomy” and “physiology”
- Describe how the body is organized
- Define “cells,” “tissues,” “organs,” and “systems”
- Name 12 body systems and the common organs found in each system
- Define “roots” pertaining to the body systems

Anatomy and Physiology

Anatomy is the study of the structure or parts of the body

Physiology is the study of how a body part functions

Levels of Organization

A **cell** is living matter than can be seen only with a microscope

Similar cells working together to perform a specific function make up **tissues**

Tissues of all types combine to form **organs**

Related organs make up **body systems**

All body systems combine to form a **human being**

Body Systems

The human body is composed of twelve (12) body systems that work together to perform the necessary functions of life

Exam 2

Multiple Choice

Select the one best answer:

1. The study of how the human body works is

- A. anatomy.
- B. histology.
- C. physiology.
- D. scientology.

2. The first level of body organization is

- A. tissues
- B. cells
- C. systems
- D. organs

3. The human body consists of

- A. 9 systems.
- B. 10 systems.
- C. 11 systems.
- D. 12 systems.

4. The term "lipoma" means

- A. fatty tumor.
- B. disease of fatty cells.
- C. fat lip.
- D. fat removal.

5. Pathology is the study of

- A. life.
- B. tissues.
- C. disease.
- D. the human body.

Continued on next page

Completion

Choose the letter for the correct answer and write it on your answer sheet.
For question number six (6), choose the letter for the correct GROUP of words that answer the question.

6. List the organization of the human body:

_____ = Human Body

- A. organs, body systems, human body, tissues
 - B. human body, cells, organs, body systems
 - C. cells, tissues, organs, body systems
 - D. cells, tissues, human body, organs
7. The _____ system is the largest system in the body and consists of nails, hair, and skin.
- A. cardiovascular
 - B. integumentary
 - C. skeletal
 - D. endocrine
8. The _____ system provides support, protection, and movement and consists primarily of bone.
- A. skeletal
 - B. nervous
 - C. lymphatic
 - D. muscular

Continued on the next page

9. The _____ system is responsible for circulating blood, oxygen, and nutrients throughout the body.
- A. nervous
 - B. muscular
 - C. skeletal
 - D. cardiovascular
10. The _____ system is responsible for filtering and removing liquid wastes; its primary organs are the kidneys and bladder.
- A. urinary
 - B. respiratory
 - C. lymphatic and immune
 - D. digestive
11. _____ is inflammation of the mouth.
- A. arthritis
 - B. stomatitis
 - C. tendonitis
 - D. tonsillitis
12. _____ is the study of the skin.
- A. hematology
 - B. endocrinology
 - C. dermatology
 - D. urology
13. An inflammation of the tendons is _____.
- A. arthritis
 - B. bursitis
 - C. hepatitis
 - D. tendonitis

14. The study of the eyes is called _____.

- A. optometry
- B. ophthalmology
- C. meteorology
- D. neurology

15. The study of the blood is called _____.

- A. anthropology
- B. hematology
- C. endocrinology
- D. dermatology

Identify the root for each of the following:

16. neurology

- A. logy
- B. neuro

17. myelography

- A. myelo
- B. graphy

18. cardiovascular

- A. vascular
- B. cardio

19. phlebotomy

- A. phlebo
- B. tomy

Continued on the next page

Identify the prefix for each of the following:

20. pericarditis

- A. it is
- B. cardi
- C. peri

21. polymyositis

- A. myos
- B. poly
- C. itis

22. dysplasia

- A. dys
- B. plasia

Identify the suffix for each of the following:

23. biology

- A. bio
- B. logy

24. appendicitis

- A. itis
- B. appendic

25. myeloma

- A. myel
- B. oma

**This is the End of this exam. Move on to the next lesson. You will need a
NEW answer sheet for your next exam.**

Chapter 3

Common Suffixes

Objectives

- Spell and define common suffixes
- Identify suffixes used to convert medical nouns to adjectives
- Pronounce, spell, define, and write medical terms found in the chapter

Vocabulary

Excision: to cut out

Incision: to cut into

Prognosis: forecast of the outcome of the disease

Radiography: images that are taken of any internal body structure

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Also, pay attention to the pictures, graphics, and X-Rays throughout the chapter. They are there to help you understand the terms and how they apply to specific body parts

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Exam 3

Multiple Choice – Select the one best answer

1. Cutting into the skin for a surgical procedure involves a/an _____.
 - A. incision
 - B. knifectomy
 - C. surgicalotomy
 - D. excision

2. The physician removes a lipoma from the patient in surgery. This type of procedure is a/an _____.
 - A. tumorostomy
 - B. tumorectomy
 - C. excision
 - D. incision

3. A physician who studies and interprets X-rays is a/an _____.
 - A. cardiologist
 - B. radiologist
 - C. urologist
 - D. proctologist

4. Appendicitis is a/an _____.
 - A. tumor of the appendix
 - B. bursting of the appendix
 - C. inflamed appendix
 - D. collection of blood in the appendix

5. The surgical procedure that involves removal of the thyroid gland is a/an _____.
 - A. thyroidotomy
 - B. thyroidostomy
 - C. thyroidoma
 - D. thyroidectomy

Continued on the next page

6. A bronchoscopy involves _____
- A. using an instrument to look into the bronchi (lungs).
 - B. removing a mass from the bronchus.
 - C. incising an abnormality of the bronchi.
 - D. using X-ray to diagnose a condition of the bronchi.
7. A patient complains of pain and discomfort in the bladder during urination. The physician states she has cystitis. From your knowledge of medical terminology, you this is a/an _____
- A. enlarged prostate gland.
 - B. inflammation of the bladder.
 - C. cyst of the urinary system.
 - D. stone in the ureter.
8. A patient with lymphadenopathy has _____
- A. widespread lymphatic disease.
 - B. cancer of the lymphatic system.
 - C. a diseased lymph node.
 - D. had a biopsy of the lymphatic system.

Definition – Define the following terms

9. Cephalgia A. inflammation of the tonsils
10. Tonsillitis B. abnormal condition of the kidney
11. Arteriogram C. inflammation of the area (sac) surrounding the heart
12. Hysterectomy D. surgical removal of the uterus
13. Pericarditis E. record (image) of an artery
14. Laryngectomy F. removal of the larynx (voice box)
15. Nephrosis G. headache; pain in the head

Continued on next page

Matching – Match the definition with the correct term

- | | |
|---|-----------------|
| 16. Surgical opening into the colon | A. gastritis |
| 17. Physician who specializes in female reproductive conditions | B. myalgia |
| 18. Inflammation of the stomach | C. gastrostomy |
| 19. Muscular tumor | D. enteritis |
| 20. Tumor that arises in nerve cells | E. orchidectomy |
| 21. Surgical removal of testis | F. colostomy |
| 22. X-ray of the fallopian tubes | G. neuroma |
| 23. Surgical opening into the stomach | H. myoma |
| 24. Inflammation of the small intestine | I. salpingogram |
| 25. Muscular pain | J. gynecologist |

This is the End of this exam. Move on to the next lesson. You will need a NEW answer sheet for your next exam.

Chapter 4

Common Prefixes

Objectives

- **State the meaning of prefixes found in this chapter**
- **Pronounce, spell, define, and write medical terms that use prefixes in this chapter**
- **Identify prefixes that have the same meaning**
- **Identify prefixes that have the opposite meaning**

In your textbook, make sure you review the sections on New Roots And Prefixes and follow the directions for Learning The Terms.

Also, pay attention to the pictures, graphics, and X-Rays throughout the chapter. They are there to help you understand the terms and how they apply to specific body parts

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Exam 4

Multiple Choice – Select the one best answer

1. Pneumothorax is _____
 - A. air in the chest cavity.
 - B. breathing in air.
 - C. injection of air.
 - D. air in the lungs.

2. The prefix “ante-“ means _____
 - A. around
 - B. after
 - C. before
 - D. against

3. A symptom or symptoms occurring before the onset of disease is a/the _____
 - A. prognosis
 - B. post mortem
 - C. perimortem
 - D. prodrome

4. Dyspnea is _____
 - A. difficulty digesting food
 - B. difficulty breathing
 - C. painful activity
 - D. worsening pain

5. A sublingual medication is given _____
 - A. under the skin
 - B. via inhalation
 - C. under the tongue
 - D. in the rectum

6. A patient with a urinary tract infection has dysuria and hematuria. You know this means _____
 - A. difficult, painful urination and blood in the urine.
 - B. pain in the kidneys and a stone in the bladder.
 - C. pain in the bladder and burning on urination.
 - D. urine that is abnormal in appearance with mucous.

Matching – Match the definition with the correct term

- | | |
|-----------------------|-----------|
| 7. Above, excessive | A. hypo- |
| 8. New | B. bi- |
| 9. Between | C. ex- |
| 10. Below, deficient | D. dia- |
| 11. Through, complete | E. hyper- |
| 12. No, not | F. epi- |
| 13. Many | G. ne/o |
| 14. Upon, above | H. poly- |
| 15. Two | I. inter- |
| 16. Out | J. a(n)- |

True/False – Use your knowledge of medical terminology and prefixes to answer each question

17. The antepartum patient is expecting a baby.

T(True) or F (False)

18. The patient who is in renal failure and cannot produce urine is antiuric.

T (True) or F (False)

19. An endotracheal tube is placed into the trachea to deliver oxygen.

T (True) or F (False)

20. The intercostal muscles are between the ribs.

T (True) or F (False)

21. A hypothermic patient has a high fever.

T (True) or F (False)

22. A neoplasm is an area that has been present since birth.

T (True) or F (False)

23. The preoperative patient has just had surgery.

T (True) or F (False)

24. A patient with bilateral cataracts (clouding of the lens) has cataracts in both eyes.

T (True) or F (False)

25. Nurses in the postanesthesia care unit (PACU) care for patients who are recovering after being given anesthesia.

T (True) or F (False)

This is the End of this exam. Move on to the next lesson. You will need a NEW answer sheet for your next exam.

Chapter 5

Body Organization

Objectives

- Name the cavities of the body and their related organs
- Define the anatomical position
- Define common terms used for directions
- Name and locate the abdominopelvic regions
- Name and locate the abdominopelvic quadrants
- Pronounce, spell, define, and write medical terms common to the body as a whole
- Listen, read, and study so you can speak and write effectively

Body Cavities

The body has empty spaces inside of it that are called **cavities**

The body's two main cavities are the **dorsal** and the **ventral**. Both cavities have subdivisions.

The dorsal cavity is comprised of the cranial and vertebral cavities

The ventral cavity contains several organs including the heart, lungs, and kidneys; the ventral cavity is divided into the thoracic cavity and the abdominal cavity

Directional Terminology

Anatomical position occurs when the body is standing erect, arms by the side, with head, palms, and feet facing forward

Body Planes

A **plane** is created when the body or an organ is sectioned and an internal flat surface is exposed

Abdominopelvic Regions

The abdominopelvic area can be divided into nine regions and four quadrants

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Exam 5

Multiple Choice – Select the one best answer

1. The dorsal cavity is at the _____
 - A. side of the body
 - B. front of the body
 - C. back of the body
 - D. top of the body
2. The ventral cavity is _____
 - A. a lateral cavity
 - B. a posterior cavity
 - C. an inferior cavity
 - D. an anterior cavity
3. The cranial cavity is in the _____
 - A. spinal cavity
 - B. dorsal cavity
 - C. ventral cavity
 - D. thoracic cavity
4. The two major body cavities are the _____
 - A. dorsal and ventral cavities
 - B. cranial and abdominopelvic cavities
 - C. thoracic and vertebral cavities
 - D. anterior and cranial cavities
5. When using proper anatomic terms, the front of the body is _____
 - A. superior
 - B. inferior
 - C. anterior
 - D. posterior
6. When using proper anatomic terms, the middle of the body is _____
 - A. lateral
 - B. medial
 - C. proximal
 - D. superior

7. The finger tip is _____
- A. proximal to the hand
 - B. superior to the hand
 - C. medial to the hand
 - D. distal to the hand
8. The patient is positioned in the prone position for a procedure. You know this means he or she is on the _____
- A. abdomen
 - B. back
 - C. left side
 - D. back with head elevated
9. The dorsum of the foot is on the _____
- A. bottom
 - B. top
 - C. left side
 - D. right side
10. The chest is _____
- A. medial to the foot
 - B. superior to the head
 - C. inferior to the neck
 - D. lateral to the forehead

Completion – Pick the correct answer for each sentence

11. Empty spaces within the body are called _____
- A. chambers
 - B. cavities
 - C. sections
 - D. planes
12. The _____ divides the ventral cavity into upper and lower cavities.
- A. rib cage
 - B. vertebra
 - C. stomach
 - D. diaphragm

13. The internal organs such as the heart, lungs, digestive organs, and kidneys are called _____

- A. viscera
- B. dorsum
- C. cavities
- D. regions

14. The ventral cavity consists of the abdominopelvic and _____ cavities.

- A. anatomic
- B. posterior
- C. thoracic
- D. anterior

15. The diaphragm is located _____ to the stomach

- A. superior
- B. proximal
- C. medial
- D. inferior

16. An abrasion (scrape) is a _____ injury to the skin.

- A. topical
- B. external
- C. distal
- D. superficial

17. The bottom of the foot is the _____ surface.

- A. plantar
- B. dorsum
- C. lateral
- D. dorsal

18. If the sagittal section divides the body into equal portions, it is called a _____ section.

- A. midsagittal
- B. ventral
- C. proximal
- D. distal

19. The medical abbreviation for the right lower quadrant of the abdomen is _____

- A. PDQ
- B. ADO
- C. RLQ
- D. RUQ

20. The epigastric area refers to the _____

- A. esophagus
- B. stomach
- C. small intestines
- D. liver

Matching – Match the definition with the correct term

- | | |
|--|-------------|
| 21. Pertaining to the hip | A. sagittal |
| 22. Near a specific point | B. inguinal |
| 23. Separates structure into right and left portions | C. iliac |
| 24. Pertaining to the groin | D. medial |
| 25. Pertaining to the middle | E. proximal |

This is the End of this exam. Move on to the next lesson. You will need a NEW answer sheet for your next exam.

Chapter 6

The Skin and Related Structures

Objectives

- Identify the cells, tissues, and organs of the system.
- Identify the layers of the skin and describe the structures found in these layers.
- List the functions of the skin.
- Pronounce, spell, define, and write medical terms common to this system.
- Describe common diseases of the system
- Listen, read, and study so you can speak and write effectively

Layers of the Skin

The **epidermis** is the outer layer of skin

The **dermis** is under the epidermis

Subcutaneous tissue is under the dermis

Vocabulary

Epithelium: the tissue that makes up the epidermis; its cells are called **epithelial**

Melanin: substance produced by the epidermis that protects skin from the sun's rays; its cells are called **melanocytes**

Pathology

A **burn** is an injury to the skin caused by heat, chemicals, electricity, or radiation

Psoriasis is a chronic skin inflammation identified by its red, scaly appearance

Tumors are abnormal growth of tissue cells. They can either be **benign (non-cancerous)** or **malignant (cancerous)**.

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Exam 6

Multiple Choice – Select the best answer

1. The outer layer of skin is the _____
 - A. dermis
 - B. epidermis
 - C. subcutaneous tissue
 - D. sebaceous tissue

2. A patient receiving cryotherapy is receiving a treatment that is _____
 - A. hot
 - B. wet
 - C. medicated
 - D. cold

3. A first-degree burn affects the _____
 - A. muscle, subcutaneous tissue, dermis, and epidermis
 - B. dermis and epidermis
 - C. epidermis
 - D. subcutaneous tissue, dermis, and epidermis

4. Chemotherapy is _____
 - A. drug therapy
 - B. use of radiation
 - C. use of lasers
 - D. a surgical treatment

5. Sebaceous glands secrete oil called _____
 - A. melanin
 - B. sebum
 - C. papilloma
 - D. lipoma

True or False – Answer each question true (T) or false (F)

6. The skin is the largest organ in the body. True (T) or False (F)
7. Subcutaneous tissue is part of the dermis. True (T) or False (F)
8. The dermis is made of connective tissue. True (T) or False (F)

9. Benign tumors commonly metastasize. True (T) or False (F)
10. A person who is bald has alopecia. True (T) or False (F)
11. The presence of necrotic tissue indicates the wound is healing. True (T) or False (F)
12. Erythematous tissue is black in color. True (T) or False (F)

Completion – Choose the correct answer

13. The nurse notices the patient has a blue color of the lips and nailbeds; this condition is called _____
- A. onychomycosis
 - B. cyanosis
 - C. tonsillitis
 - D. thrombosis
14. The patient developed a disease in which blisters, or _____, appeared on the skin.
- A. scales
 - B. moles
 - C. warts
 - D. vesicles
15. To verify the diagnosis, the physician did a _____, in which she removed breast tissue for microscopic analysis.
- A. biopsy
 - B. lumpectomy
 - C. incision
 - D. excision
16. Mr. Rabb fell from his bicycle, sustaining an _____, or scrape on his leg.
- A. cut
 - B. abrasion
 - C. vesicle
 - D. plantar

17. The _____ tissue is the layer beneath the dermis.
- A. subcutaneous
 - B. epidermis
 - C. melanin
 - D. integumen
18. A _____ injection involves giving medication through a needle inserted into (under) the skin.
- A. hyperdermic
 - B. subcutaneous
 - C. hypodermic
 - D. endodermic
19. A _____ is a benign tumor of fatty tissue.
- A. melanoma
 - B. lipoma
 - C. blastoma
 - D. papilloma
20. _____ is a fungal infection of the skin.
- A. psoriasis
 - B. seborrhea
 - C. dermatitis
 - D. onychomycosis

Matching – Match the definition with the correct term

- | | |
|-------------------|-------------|
| 21. Skin | A. sub- |
| 22. Death | B. -tic |
| 23. Under | C. necr/o |
| 24. Pertaining to | D. dermat/o |
| 25. Away from | E. ab- |

This is the End of this exam. Move on to the next lesson. You will need a NEW answer sheet for your next exam.

Chapter 7

Skeletal System

Objectives

- Name and locate the major bones of the body
- Pronounce, spell, define, and write the medical terms related to the skeletal system
- Describe the common diseases related to the skeletal system
- Listen, read, and study so you can speak and write effectively

Major Bones of the Body

Refer to the list on page 110 of your textbook and locate the bone or groups of bones in the diagram on page 111

Bone Structure and Function

Immature bone cells are called **osteoblasts**; **osteocytes** are mature bone cells

Osteocytes form **osseous**, or bone tissue

Calcium and **phosphorus** are minerals that make bones hard

Bones protect, support, and allow movement

Vertebral Column

There are 33 bones that make up the vertebral column (also known as the spine or backbone); they are divided into five groups.

Each bone, called a vertebra, has a hole in the middle. The vertebrae protect the spinal cord, which passes through them.

Joints

A **joint** is the place where two bones meet

A combination of cartilage and fluid helps joints work properly together.

The joint cavity also includes **tendons**, **ligaments**, and **bursae**.

Pathology

Fractures – breaks or cracks in bones

Herniated Intervertebral Disc; Slipped Disc – a portion of the intervertebral disc moves out of place (herniates)

Osteoarthritis – chronic progressive degeneration of articular cartilage; the most common form of arthritis

Osteoporosis – loss of bone mass

Rheumatoid Arthritis – a chronic autoimmune disease that starts by attacking joints

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Exam 7

Multiple Choice – Select the best answer

1. The skeletal system consists of _____
 - A. 188 bones.
 - B. 206 bones.
 - C. 322 bones.
 - D. 602 bones.
2. The medical term for “mature bone cells” is _____
 - A. osseus.
 - B. osteoblasts.
 - C. osteocytes.
 - D. osteoclasts.
3. The bone of the upper arm is called the _____
 - A. metacarpal.
 - B. ulna.
 - C. radius.
 - D. humerus.
4. The skeletal system does all of the following *except* _____
 - A. filter and excrete toxins and impurities.
 - B. provide support and protection for internal organs.
 - C. store calcium and phosphorus.
 - D. provide mobility.
5. The vertebral column consists of _____
 - A. 8 cervical, 10 thoracic, and 6 lumbar vertebrae, sacrum, and coccyx.
 - B. 7 cervical, 10 thoracic, and 4 lumbar vertebrae, sacrum, and coccyx.
 - C. 7 cervical, 12 thoracic, and 5 lumbar vertebrae, sacrum, and coccyx.
 - D. 6 cervical, 14 thoracic, and 7 lumbar vertebrae, sacrum, and coccyx.
6. The bursae _____
 - A. attach bone to muscle.
 - B. cover and protect bone.
 - C. attach bone to bone.
 - D. prevent friction.

7. Chondromalacia is _____

- A. a tumor of cartilage.
- B. softening of cartilage.
- C. a cartiliate cell.
- D. an area on the ribs.

Spelling – Some of the following medical terms are misspelled. After you identify them, find their correct spellings among the choices and write the correct answer on your answer sheet.

8. falanges

- A. phalanges
- B. phylanjes
- C. phalenges
- D. word is spelled correctly

9. olicranum

- A. olecrinum
- B. olecranon
- C. olecrynon
- D. word is spelled correctly

10. ilium

- A. ileum
- B. illeam
- C. ileume
- D. word is spelled correctly

11. zygummatic

- A. zygumatac
- B. zygomatic
- C. zygomatec
- D. word is spelled correctly

12. coxyx

- A. coccix
- B. coxxaec
- C. coccyx
- D. word is spelled correctly

13. intervertebral

- A. intraverteebrul
- B. intervetrebal
- C. innervertible
- D. word is spelled correctly

14. arthracenteses

- A. arthrocentesis
- B. arthrosentises
- C. arthresentesis
- D. word is spelled correctly

True/False – Answer each question true (T) or false (F)

15. Ligaments attach bone to bone.

True (T) or False (F)

16. An autoimmune disease is a condition in which the immune system destroys the body.

True (T) or False (F)

17. An orthopedic physician specializes in the care of children with fractures.

True (T) or False (F)

18. Disc herniation is most common in the cervical spine.

True (T) or False (F)

19. Osteoarthritis is caused by progressive degeneration.

True (T) or False (F)

20. Osteoporosis is caused by excess calcium deposits.

True (T) or False (F)

21. Rheumatoid arthritis is an autoimmune disease.

True (T) or False (F)

Completion – Choose the correct answer

22. _____ is increased potassium in the blood.

- A. Diabetes
- B. Leukemia
- C. Hyperkalemia
- D. Calcimia

23. A _____ is the stretching or tearing of a tendon or muscle.

- A. strain
- B. break
- C. fracture
- D. overextension

24. The long bone at the top of the leg is the _____.

- A. femur
- B. tibia
- C. fibula
- D. humerus

25. A fracture is treated with reduction and _____.

- A. traction
- B. immobilization
- C. tension
- D. rehabilitation

**This is the End of this exam. Move on to the next lesson. You will need a
NEW answer sheet for your next exam.**

Chapter 8

The Muscular System

Objectives

- Name three types of muscle tissue and state the location of each.
- Name and define types of muscular movement.
- Name and locate common skeletal muscles.
- Pronounce, spell, define, and write the medical terms related to the muscular system.
- Describe common diseases related to the muscular system.
- Describe the diagnostic tests related to the muscular system.
- Listen, read, and study so you can speak and write effectively.

Major Muscles of the Body

Refer to the list on page 138 of your textbook and locate the muscles or groups of muscles in the diagram on page 139

Types of Muscle Tissue

Muscle fibers are the cells found in muscle

The three types of muscle tissue are **cardiac**, **visceral**, and **skeletal**

Fascia is a connective tissue found wrapped around all muscle

Movements of Skeletal Muscle

All skeletal muscles are connected to two bones by bands of connective tissue

Refer to the terms, definitions, and Figures 8-3 to 8.8 on pages 142-145 of the textbook to understand the types of muscle movements

Pathology

Muscular dystrophy – a broad term for a variety of inherited disorders of the skeletal muscles

Rotator Cuff Tendinitis – inflammation of the tendons that hold the shoulder joint in place

Strain – overstretching or tearing a muscle

In your textbook, make sure you review the sections on New Roots And Prefixes and follow the directions for Learning The Terms.

Also, pay attention to the pictures, graphics, and X-Rays throughout the chapter. They are there to help you understand the terms and how they apply to specific body parts

Remember to do some of the questions in the Review Exercises. They will help prepare you for the exam.

Exam 8

Multiple Choice – Select the best answer

1. All of the following cells form muscle *except* _____
 - A. cardiac
 - B. visceral
 - C. epithelial
 - D. skeletal
2. The connective tissue that wraps around muscle is _____
 - A. aponeuroses.
 - B. ligaments.
 - C. tendons.
 - D. fascia.
3. Inflammation of the fascia is _____
 - A. fascitis.
 - B. fascilitis.
 - C. fasciatis.
 - D. fasitis.
4. Decreasing the angle between two bones or bending a limb is _____
 - A. flexion.
 - B. hyperextension.
 - C. extension.
 - D. adduction.
5. The act of moving a muscle toward the midline of the body is _____
 - A. abduction.
 - B. extension.
 - C. adduction.
 - D. supination.

Continued on the next page

Matching – match the definition with the correct term

- | | |
|---|--------------------|
| 6. Flexing the ankle so toes point down | A. pronation |
| 7. Moving the sole of the foot inward | B. extension |
| 8. Increasing the angle between two bones | C. plantar flexion |
| 9. Moving an extremity away from the midline | D. hyperextension |
| 10. Turning the palm down | E. dorsiflexion |
| 11. Overextending a joint beyond its normal position | F. inversion |
| 12. Flexing the ankle so the toes move toward your body | G. abduction |

Defining Terms – Pick the word that correctly defines the term

13. Inflammation of a tendon is (A. tendinous/B. tendinitis).
14. A patient with (A. dystonia/B. atonia) has abnormal muscle tone.
15. A patient with (A. bradykinesia/B. dyskinesia) has slow muscle movement.
16. Stretching or tearing a muscle causes an injury known as a (A. sprain/B. strain).
17. A diagnostic test for recording activity in the spinal cord is (A. myelography/B. myography).
18. The (A. peroneal/B. perineal) muscles are over the fibula.
19. (A. Flexor/B. Flexure) is the portion of the structure that is bent.
20. Moving your arm away from the body is (A. abduction/B. adduction).

Completion – Choose the correct answer

21. _____ muscles move bone by pulling on it.
- A. Cardiac
 - B. Visceral
 - C. Skeletal
 - D. Fascia

22. _____ attach muscle to bone.

- A. Ligaments
- B. Bursae
- C. Connectors
- D. Tendons

23. _____ attach muscle to muscle.

- A. Ligaments
- B. Tendons
- C. Biceps
- D. Bursae

24. _____ is a condition that occurs when the patient has chronic muscle pain.

- A. Muscular dystrophy
- B. Bursitis
- C. Fibromyalgia
- D. Arthritis

25. _____ is a condition in which the patient has no muscular coordination.

- A. Ataxia
- B. Aphasia
- C. Neuralgia
- D. Angina

**This is the End of this exam. Move on to the next lesson. You will need a
NEW answer sheet for your next exam.**

Chapter 9

Nervous System

Objectives

- Name and describe the divisions of the nervous system
- State the functions of nerve cells
- Name and describe the structures of the brain and spinal cord
- Describe the peripheral nervous system
- Pronounce, spell, define, and write the medical terms related to the nervous system
- Describe common diseases related to the nervous system
- Listen, read, and study so you can speak and write effectively

Major Organs of the Nervous System

Review section 9.1 in your textbook for a list of the major organs; a diagram of the organs is found on page 163

Divisions of the Nervous System

The two main divisions of the nervous system are the:

central nervous system: brain and spinal cord

peripheral nervous system: consists mostly of nerves

Nerve Cells and Nerves

Nerve cells are called **neurons**

Myelinated neurons are covered with a white fatty substance called a **myelin sheath (white matter)**. Those without a myelin sheath are called **unmyelinated (gray matter)**.

Nerves are made of bunched together neurons.

Nerves either carry impulses to the brain and spinal cord or carry messages from the brain and spinal cord.

Central Nervous System

Review page 165-166 in the textbook for the parts of the brain and their functions; and identify them in Figure 9-3

The **spinal cord** is made of nerves that extend outward to the body

The **peripheral nervous system** includes nerves extending from the brain and spinal cord to body organs

Pathology

Alzheimer's disease, a form of dementia, is caused by the degeneration of brain cells

Gliomas are malignant tumors of the brain

Meningiomas are benign tumors

Multiple sclerosis is a condition that occurs when the myelin sheath covering the brain and spinal cord's neurons are destroyed

A chronic, progressive condition called **Parkinson's disease** is characterized by slow movement, muscular rigidity, and resting tremors.

Seizure disorder or epilepsy is a condition that causes the electrical impulses in the brain to become disorganized, uncoordinated, and excessive. Symptoms include abnormal movement and sensations.

A defect in fetal development in which the vertebrae do not form a complete circle around the spinal cord is known as **spina bifida**

In your textbook, make sure you review the sections on New Roots And Prefixes and follow the directions for Learning The Terms.

Also, pay attention to the pictures, graphics, and X-Rays throughout the chapter. They are there to help you understand the terms and how they apply to specific body parts

Remember to do some of the questions in the Review Exercises. They will help prepare you for the exam.

Exam 9

Multiple Choice – Select the best answer

1. The brain and spinal cord make up the _____
 - A. central nervous system.
 - B. meningeal nervous system.
 - C. peripheral nervous system.
 - D. cephalic nervous system.
2. The special cells that carry electrical impulses to and from the brain and spinal cord are _____
 - A. dendrites.
 - B. astrocytes.
 - C. neurons.
 - D. ganglions.
3. Electrical messages that are sent and received by various parts of the body travel via the _____
 - A. meningeal nervous system.
 - B. central nervous system.
 - C. cephalic nervous system.
 - D. peripheral nervous system.
4. Gliomas _____
 - A. are benign.
 - B. are always slow growing.
 - C. are malignant.
 - D. affect intelligence.
5. The diagnostic test that detects electrical impulses in the brain and registers them as brain waves is _____
 - A. electromyography.
 - B. electroencephalography.
 - C. electrocardiography.
 - D. electroacoustic.

Continued on next page

6. The myelin sheath acts as a/an _____

- A. insulator.
- B. conductor.
- C. barrier.
- D. lubricator.

7. A medical condition in which the myelin sheath is destroyed, resulting in neurologic problems is _____

- A. Parkinson's disease.
- B. Alzheimer's disease.
- C. post polio syndrome.
- D. multiple sclerosis.

8. A patient who is paralyzed from the waist down has _____

- A. tetraplegia.
- B. paraplegia.
- C. hemiplegia.
- D. diplegia.

Spelling – Some of the medical terms are misspelled. From the list below them, choose the correct spelling of the word or indicate the word is already spelled correctly

9. miningeoma

- A. meningioma
- B. meningeoma
- C. maningeoma
- D. word is spelled correctly

10. gleeoma

- A. glioma
- B. gleaoma
- C. gliomma
- D. word is spelled correctly

11. meningomyelocele

- A. maningeomyelosele
- B. menningeomyeloseal
- C. maningomyeloscele
- D. word is spelled correctly

12. hypothalamus

- A. hypothallamas
- B. hipeothalamas
- C. hypothalamus
- D. word is spelled correctly

13. serebellam

- A. cerrabellum
- B. cerebellum
- C. cerebellam
- D. word is spelled correctly

Defining Terms – Choose the word that correctly defines the term.

- 14. The patient who had a stroke has (A. aphagia/B. aphasia) and is receiving speech therapy to relearn to speak.
- 15. The patient with Huntington's disease walks with an (A. ataxic/B. attacksic) gait.
- 16. The physician has ordered a diagnostic test called (A. C&S/B. CNS) to determine which antibiotic will eliminate the illness.
- 17. The patient has a past history of taking (A. elicit/B. illicit) drugs.
- 18. The nursing assistant is assigned to walking the patient with a (A. gait/B. gate) belt each day.

Completion – Choose the correct answer for each sentence

- | | | |
|-----------------------|----------------------|-------------------------------------|
| A. meningitis | D. dysphasia | F. hydrocephalus |
| B. paresthesia | E. hemiplegia | G. neurological (neurologic) |
| C. dementia | | |

- 19. Mrs. Wilder has _____, a condition that causes her to have abnormal sensations such as numbness and tingling in her feet.
- 20. Mr. Romcevich had a stroke, leaving him with _____, a condition in which his right arm and leg are paralyzed.
- 21. Dr. Huynh has Alzheimer's disease, which is the most common cause of a condition called _____. Patients with this condition have mental deterioration, and lack of brain function including memory, judgment, reasoning, and personality changes.

22. Ever since Ms. Bugee's brain tumor was removed, she has experienced _____, or difficulty speaking.
23. Mr. Hernandez has post polio syndrome, a common _____ condition that occurs in people who had polio years ago.
24. Chad Stone, a 1-year-old toddler, was recently diagnosed with viral _____, a condition that causes inflammation of the membranes surrounding the brain and spinal cord.
25. Initially, the physician thought Mrs. Ardelean had Alzheimer's disease, but further diagnostic tests revealed she has _____, a condition in which cerebrospinal fluid accumulates in the brain, causing pressure on the sensitive tissue.

This is the End of this exam. Move on to the next lesson. You will need a NEW answer sheet for your next exam.

Chapter 10

The Eyes and Ears

Objectives

- Name and describe the structures and functions of the eyeball
- Describe the pathway of vision to the brain
- Pronounce, spell, define, and write the medical terms related to the eyes
- Describe common diseases related to the eyes
- Name and describe the structures and functions of the ear
- Describe the pathway of hearing to the brain
- Pronounce, spell, define, and write the medical terms related to the ears
- Describe common diseases related to the ear
- Listen, read, and study so you can speak and write effectively

Major Structures of the Eyeball

Review section 10.1 in your textbook for a list of the eye's major structures and a diagram of the eye

Layers of the Eyeball

The **outer layer** is composed of the cornea and the sclera

The **uvea**, or **middle layer**, is made up of three parts: the choroid, the iris, and the ciliary body

The **inner layer** of the eye is called the retina

The **lens** is behind the iris; it bends light rays

The **anterior cavity**, in front of the lens, is filled with **aqueous humor** (fluid), which maintains proper pressure in the eye

The **posterior cavity**, behind the lens, contains **vitreous** (gel), which helps the eyeball maintain its shape and holds the retina in place

Refraction occurs when the eye bends light rays so that they come together at the retina at the same time

Visual Pathway

Review section 10.4 concerning how various structures work together to make sight possible. Trace the path of light along the visual pathway in Figure 10-3

Pathology of the Eye

Cataracts – fogging of the lens

Errors of Refraction – **myopia** (nearsightedness); **hyperopia** (farsightedness); **astigmatism** (near and far blurred vision)

Glaucoma – damage to the retina and optic nerve from increased intraocular pressure

Macular Degeneration – progressive condition that is characterized by the deterioration of the macula lutea

Retinal Tears – holes that develop on the retina when it is pulled by the vitreous humor

Major Structures of the Ear

Review section 10.8 (pages 201-204) in your textbook for a list of the ear's major structures and diagrams of the ear (external, middle, and inner)

Auditory Pathway

Review section 10.9 concerning how various structures work together to make hearing possible. Trace sound waves along the auditory pathway in Figure 10-10

Pathology of the Ear

Hearing Impairment – loss of hearing and inability to distinguish between sounds

Meniere's Disease – an inner ear condition marked by ringing in the ears, dizziness, and hearing loss

Perforated Tympanic Membrane – rupture of the tympanic membrane

In your textbook, make sure you review the sections on New Roots, Prefixes, and Suffixes, and follow the directions for Learning The Terms.

Also, pay attention to the pictures, graphics, and X-Rays throughout the chapter. They are there to help you understand the terms and how they apply to specific body parts

Remember to do some of the questions in the Review Exercises. They will help prepare you for the exam.

Exam 10

Multiple Choice – Select the best answer

1. When the curve of the cornea is uneven, vision becomes blurred; this condition is called _____.
 - A. myopia
 - B. glaucoma
 - C. astigmatism
 - D. hyperopia
2. Macular degeneration _____.
 - A. is a serious condition that progressively worsens.
 - B. can be corrected with special glasses.
 - C. is caused by a buildup of pressure in the eye.
 - D. causes clouding of the lens of the eye.
3. The medical term for the “eardrum” is _____.
 - A. internal meatus.
 - B. pinna.
 - C. auricle.
 - D. tympanic membrane.
4. The ossicles are composed of the _____.
 - A. eustachian tube and cochlea.
 - B. malleus, stapes, and incus.
 - C. cochlea and vestibule.
 - D. pinna, tympanic membrane, and malleus.
5. The inner ear may also be called the _____.
 - A. tympanic membrane.
 - B. pinna.
 - C. auricle.
 - D. labyrinth.
6. One purpose of fluid in the inner ear is to _____.
 - A. Produce cerumen.
 - B. Maintain balance.
 - C. Trap invading microbes.
 - D. Gather sounds.

Matching – Match definition with the correct term

- | | |
|---|-------------------|
| 7. Part of the eye that changes shape, regulating the amount of light that enters | A. aqueous humor |
| 8. Area in which the cones are located | B. iris |
| 9. Maintains shape of the eyeball | C. refraction |
| 10. The middle layer of the eyeball, consisting of three parts | D. myopia |
| 11. Bending rays of light | E. sclera |
| 12. Clouding of the lens | F. macula lutea |
| 13. Colored portion of the eye | G. cataract |
| 14. Nearsightedness | H. pupil |
| 15. Maintains pressure in the eye | I. uvea |
| 16. Part that may be called the “white of the eye” | J. vitreous humor |

Defining Terms – Choose the word that correctly defines the term

17. The nurse uses an (A. oral/B. aural) thermometer to check the temperature in the ear.
18. Mrs. Kosmacek complained of (A. tinnitus/B. tendonitis), or ringing in the ears.
19. Mr. Sotolongo could not (A. here/B. hear) the telephone ring.
20. The (A. malleus/B. malleolus) is a small bone in the ear.

Completion – Use “opt/o” to create the correct term

21. _____ is a condition in which the patient has a drooping or sagging eyelid.
- A. palpebralostris
 - B. blepharoptosis
 - C. presbyoptosis
 - D. optometrist

22. The _____ is a healthcare professional who fills prescriptions for eyeglasses and contact lenses.

- A. optometrist
- B. ophthalmologist
- C. optician
- D. optotritian

23. The process of visually examining the eye is _____.

- A. ophthalmoscopy
- B. optometry
- C. optelescropy
- D. ophthalmetrics

24. The _____ is a healthcare professional who specializes in the study, diagnosis, and medical and surgical treatment of eye disorders.

- A. ophthalmologist
- B. optician
- C. optometrist
- D. optotritian

25. An _____ is a healthcare professional who specializes in the testing of visual function, diagnosis, and nonsurgical treatment of eye.

- A. optician
- B. internist
- C. periodontist
- D. optometrist

This is the End of this exam. Move on to the next lesson. You will need a NEW answer sheet for your next exam.

Chapter 11

Digestive System

Objectives

- Name and locate the major organs of the digestive system
- Name and locate the liver, gallbladder, biliary ducts, and pancreas
- Describe the peritoneum
- Pronounce, spell, and define, and write the medical terms related to the digestive system
- Describe common diseases related to the digestive system
- Listen, read, and study so you can speak and write effectively

Major Organs of the Digestive System

Review section 11.1 in your textbook for a list and diagram (Figure 11-1) of the major organs of the digestive system

Oral Cavity

The mouth is also known as the **oral cavity**

Pharynx, Esophagus, and Stomach

The **pharynx** is the throat

The **esophagus** is a tube that carries food to the stomach

The **stomach** is a J-shaped organ that stretches to accommodate food before it moves on to the small intestine

Small Intestine

Review section 11.4 in your textbook for a list of the sections of the small intestine and a diagram (Figure 11-2)

The main function of the small intestine is to absorb nutrients from digested food and pass them into the bloodstream

Large Intestine

Review section 11.5 in your textbook for a list of the sections of the large intestine and a diagram (Figure 11-3)

A main function of the large intestine is removal of solid waste from the body

Liver, Gallbladder, Biliary Ducts, and Pancreas

The **biliary tract** includes the liver, the gallbladder, and the biliary ducts.

The **liver** produces bile and aids in the elimination of toxic substances from the body.

The **biliary ducts** transport secretions from the liver and gall bladder to the duodenum

Bile from the liver is stored in the **gallbladder**.

The **pancreas** secretes enzymes that help with digestion and the hormones **insulin** and **glucagon**, which work together to regulate sugar in the body.

Peritoneum

A two-layered membrane that lines the abdominal cavity

Pathology

Cholecystolithiasis or Cholelithiasis is a condition where stones develop in the gallbladder. It's commonly called gallstones.

A **hernia** is a protrusion or displacement of an organ through a structure that normally holds it in place.

Crohn's Disease is an inflammatory bowel disease that causes obstruction of intestinal contents.

Ulcers occur when the mucous membrane of the digestive tract wears away, creating an open sore

In your textbook, make sure you review the sections on New Roots, Prefixes, and Suffixes, and follow the directions for Learning The Terms.

Also, pay attention to the pictures, graphics, and X-Rays throughout the chapter. They are there to help you understand the terms and how they apply to specific body parts

Remember to do some of the questions in the Review Exercises. They will help prepare you for the exam.

Exam 11

Multiple Choice – Select the best answer

1. The function of the small intestine is to _____
 - A. absorb nutrients.
 - B. break down food for digestion.
 - C. store wastes.
 - D. break down fats.
2. The appendix _____
 - A. breaks down fats.
 - B. is part of the biliary tract.
 - C. has no known function.
 - D. absorbs nutrients.
3. The patient who is having an emesis _____
 - A. has gallstones.
 - B. has difficulty swallowing.
 - C. is having diarrhea.
 - D. is vomiting.
4. Crohn's disease is _____
 - A. caused by calculi in the common duct.
 - B. loss of appetite due to a medical condition.
 - C. an inflammatory bowel disease.
 - D. related to disruption of insulin balance.
5. The medical term for "stones," such as gallstones, is _____
 - A. enzymes
 - B. calculi
 - C. livor
 - D. pellets

True/False – Answer each question true (T) or false (F)

6. The liver is essential to life.

True (T) or False (F)

7. The appendix is a nonessential organ.

True (T) or False (F)

8. Anorexia nervosa is usually caused by underlying medical problems.

True (T) or False (F)

9. The gallbladder secretes insulin and glucagon.

True (T) or False (F)

10. The purpose of bile is to break down fats.

True (T) or False (F)

11. Colic causes severe abdominal pain, with origins in the colon.

True (T) or False (F)

12. The structures in the mouth are not part of the digestive system.

True (T) or False (F)

Matching – Match the definition with the correct term

13. Inflamed gums

A. dyspepsia

14. Stones in the gallbladder

B. glossitis

15. Inflammation of the tongue

C. hernia

16. Difficulty swallowing

D. cholecystolithiasis

17. Indigestion

E. hematemesis

18. Protrusion of an organ through a structure that normally holds it in place

F. gingivitis

19. Feeling of discomfort or uneasiness

G. malaise

20. Vomiting blood

H. dysphagia

Continued on the next page

Defining Terms – Choose the word that correctly defines the term

21. The (A. ilium/B. ileum) is part of the small intestine.
22. The patient has (A. dysphagia /B dysphasia.), or difficulty swallowing.
23. The (A. peritoneum /B. perineum) is a membrane lining the abdominopelvic cavity.
24. The (A. pallet/B. palate) is the roof of the mouth.
25. The patient was diagnosed with gastroesophageal (A. reflex/B. reflux) disease.

This is the End of this exam. Move on to the next lesson. You will need a NEW answer sheet for your next exam.

Chapter 12

Cardiovascular System

Objectives

- Name and locate the major organs of the cardiovascular system
- Name, locate, and describe the structures of the heart and associated blood vessels
- Describe the function of the heart and blood vessels
- Name the blood vessels
- Pronounce, spell, define, and write the medical terms related to the cardiovascular system
- Describe common diseases related to the cardiovascular system
- Listen, read, and study so you can speak and write effectively

Major Organs of the Cardiovascular System

Review section 12.1 in your textbook for a list and diagram (Figure 12-1) of the major organs of the cardiovascular system

Structures of the Heart

Review section 12.2 in your textbook for a list and diagram (Figure 12-2) of the heart

The heart has **four chambers**

The upper chambers are called **atria**; the lower chambers are called **ventricles**

A wall called the **septum** divides the heart into right and left sides

Four **valves** regulate the flow of blood through the heart

The heart has three walls: **epicardium (outer wall)**; **myocardium (middle wall)**; **endocardium (inner wall)**

Pericardium is the sac that surrounds the heart

How the Heart Beats

Review section 12.3 in your textbook for an explanation of how the heart beats and a diagram (Figure 12-7) that traces the process

Blood Pressure and Pulse

Blood pressure is the pressure blood creates on an artery wall as it flows through it

High blood pressure is called **hypertension**; **hypotension** is low blood pressure

A **sphygmomanometer** measures blood pressure

Blood Vessels and Circulation

Review section 12.5 in your textbook for an explanation of how blood vessels function in circulation. Figure 12-11 outlines the circulatory system.

Pathology

An **aneurysm** is an abnormal bulge in the wall of an artery

Coronary artery disease is characterized by complete or partial blockage of the coronary arteries

Lack of blood to the brain results in a **cerebrovascular Accident (Stroke)**.

Cardiac arrest occur when the heart suddenly stops pumping blood

Death of the heart muscle is called a **Myocardial Infarction (Heart Attack)**; it usually occurs when one or more of the coronaries arteries are blocked

Varicose Veins are dilated, twisted veins caused damaged valves; they are usually found in the lower legs

In your textbook, make sure you review the sections on New Roots, Prefixes, and Suffixes, and follow the directions for Learning The Terms.

Also, pay attention to the pictures, graphics, and X-Rays throughout the chapter. They are there to help you understand the terms and how they apply to specific body parts

Remember to do some of the questions in the Review Exercises. They will help prepare you for the exam.

Exam 12

Multiple Choice – Select the best answer

1. The upper chambers of the heart are _____
 - A. septums.
 - B. atria.
 - C. ventricles.
 - D. chordae tendineae.
2. The blood vessels that carry freshly oxygenated blood throughout the system to nourish body parts are the _____
 - A. arteries.
 - B. arterioles.
 - C. venules.
 - D. veins.
3. The large blood vessels that carry deoxygenated blood directly into the heart are the _____
 - A. venules.
 - B. capillaries.
 - C. arteries.
 - D. venae cavae.
4. A blood clot or foreign particle that travels through the blood vessels and may become fatal is a/an _____
 - A. phlebitis.
 - B. stenosis.
 - C. embolus.
 - D. thrombus.
5. A common cause of coronary artery disease is _____
 - A. stroke.
 - B. arrhythmia.
 - C. thrombophlebitis.
 - D. atherosclerosis.

Continued on the next page

True/False – Answer each question true (T) or false (F)

6. Every cell in the human body needs to be fed oxygen and nutrients.

True (T) or False (F)

7. The heart has four walls.

True (T) or False (F)

8. The myocardium is composed of muscle that contracts the ventricles, pumping the blood out of the heart.

True (T) or False (F)

9. The heart is surrounded by a sac called the pericardium.

True (T) or False (F)

10. Electrical impulses from the brain stimulate each heartbeat.

True (T) or False (F)

11. A myocardial infarction causes tissue death within the heart.

True (T) or False (F)

12. Arteriosclerosis is hardening of the arteries and loss of vessel elasticity.

True (T) or False (F)

Defining Terms – Choose the word that correctly defines the term

13. (A. Arteriosclerosis/B. Atherosclerosis) is narrowing of the artery walls because of fat deposits.

14. The (A. veins/B. arteries) carry deoxygenated blood back to the heart.

15. An (A. arrhythmia/B. erythema) is an abnormal heart rhythm.

16. Mrs. Li complained of (A. palpitations/B. palpations) in her chest.

17. (A. Angina pectoris/B. anjyna pecktores) is pain over the chest area.

18. Varicose veins are caused by damaged (A. volvez/B. valves).

19. (A. Tackycardea/B. Tachycardia) is a rapid heartbeat.

20. (A. Bradycardia/B. Braydekhardea) is a slow heartbeat.

**This is the End of this exam. Move on to the next lesson. You will need a
NEW answer sheet for your next exam.**

Chapter 13

Blood

Objectives

- Name and describe the components of blood.
- Pronounce, spell, define, and write the medical terms related to the blood.
- Describe common disease of the blood.
- Listen, read, and study so you can speak and write effectively.

Major Components of Blood

Review section 13.1 in your textbook for a list and diagram (Figure 13-1) of the major components of blood

Blood Composition

Blood is composed of formed elements and liquid called plasma

Formed elements include **erythrocytes (transport oxygen and carbon dioxide)**, **leukocytes (fight infection)**, and **thrombocytes or platelets (blood clotting)**

Plasma, the liquid part of blood, transports a variety of substances (solids and liquids) throughout the body; plasma without the clotting elements is called **serum**

Blood Types

The four blood types are A, B, AB, and O.

An **antigen** is a substance that stimulates the body's immune response to produce antibodies

There are several blood antigens, but the most important is the **Rh antigen**.

Pathology

Anemia is the result of not enough red blood cells and hemoglobin in the blood

Hemophilia, a genetic condition where there is a lack of clotting factor, often results in spontaneous or traumatic bleeding into the body

A type of bone marrow cancer is known as **leukemia**

Multiple myeloma is a malignant tumor of the bone marrow

In your textbook, make sure you review the sections on New Roots, Prefixes, and Suffixes, and follow the directions for Learning The Terms.

Also, pay attention to the pictures, graphics, and X-Rays throughout the chapter. They are there to help you understand the terms and how they apply to specific body parts

Remember to do some of the questions in the Review Exercises. They will help prepare you for the exam.

Exam 13

Multiple Choice – Select the best answer

1. The component(s) of the blood whose primary purpose is to fight infection is/are _____
 - A. leukocytes
 - B. thrombocytes
 - C. plasma
 - D. erythrocytes
2. The part of the blood that causes clotting when an injury occurs is the _____
 - A. eosinophils
 - B. leukocytes
 - C. basophils
 - D. thrombocytes
3. Substances in the blood that stimulate the immune system to resist infection are _____
 - A. basophils
 - B. antibodies
 - C. Rh factors
 - D. antigens
4. Inadequate hemoglobin results in a condition in which the patient becomes tired and pale, called _____
 - A. hemophilia
 - B. multiple myeloma
 - C. leukemia
 - D. anemia
5. The blood cells that transport oxygen and carbon dioxide are _____
 - A. leukocytes
 - B. eosinophils
 - C. erythrocytes
 - D. granulocytes

Continued on the next page

True/False – Answer each question true (T) or false (F)

6. The liquid portion of blood is called hemoglobin.

True (T) or False (F)

7. Whole blood is about 45% solid and 55% liquid.

True (T) or False (F)

8. Hemoglobin is a protein.

True (T) or False (F)

9. Serum contains valuable clotting elements.

True (T) or False (F)

10. Hemoglobin has the ability to bind with oxygen (O₂) and carbon dioxide (CO₂).

True (T) or False (F)

11. The antigen-antibody reaction causes clumping of red blood cells and can be fatal.

True (T) or False (F)

12. Anemia results from excessive water in the body tissues.

True (T) or False (F)

13. O positive blood contains types A, B, and O antigens.

True (T) or False (F)

14. Hemolysis is the production of new blood cells.

True (T) or False (F)

15. Rh factor is an antigen.

True (T) or False (F)

Continued on the next page

Completion – Choose the correct answer

16. _____ is a genetic condition characterized by a lack of clotting factors.
- A. Hemophilia
 - B. Leukemia
 - C. Osteogenic sarcoma
 - D. Anemia
17. _____ is a type of bone marrow cancer that results in a malignant increase in the number of white blood cells.
- A. Blastoma
 - B. Melanoma
 - C. Anemia
 - D. Leukemia
18. _____ is a malignant neoplasm of the bone marrow that results in bone destruction, as the tumor replaces bone.
- A. Hemoglobin
 - B. Antibody
 - C. Malignant melanoma
 - D. Thrombocyte
19. _____ are substances that stimulate the body's immune response to produce antibodies.
- A. Erythrocytes
 - B. Antigens
 - C. Rh factors
 - D. Leukocytes

Continued on the next page

Matching – Match the definition with the correct term

- | | |
|---|-----------------|
| 20. Excessively pigmented red blood cells | A. thrombosis |
| 21. Produced by bone marrow | B. hematology |
| 22. Redness of the skin | C. myelogenous |
| 23. Study of blood and blood disorders | D. erythremia |
| 24. Abnormal increase in red blood cells | E. hyperchromic |
| 25. Blood clots | F. erythema |

This is the End of this exam. Move on to the next lesson. You will need a NEW answer sheet for your next exam.

Chapter 14

Lymphatic and Immune Systems

Objectives

- **Locate and describe the organs of the lymphatic system**
- **Define terms relating to the immune system**
- **Pronounce, spell, define, and write the medical terms related to the lymphatic and immune systems**
- **Describe common diseases of the lymphatic and immune systems**
- **Listen, read, and study so you can speak and write effectively**

Major Organs of the Lymphatic System

Review section 14.1 in your textbook for a list and diagram (Figure 14-1) of the major organs of the lymphatic system

Lymphatic System

Lymph is the fluid that travels through the lymphatic system

The primary function of the lymphatic system is the draining of excess fluids away from body tissues and delivering them to the bloodstream.

Lymphatic vessels are **capillaries, vessels, and ducts**

Lymph is cleaned by lymph nodes before it drains into the bloodstream

Lymph nodes act like filtration devices

Immune System

The **immune system** protects the body from disease.

It includes the lymphoid organs, lymphocytes, and antibodies.

Pathology

Human immunodeficiency virus (HIV) causes the body to lose its ability to fight infections

HIV eventually leads to **acquired immune deficiency syndrome (AIDS)**, which is characterized by a weakened and incapacitated immune system

Hypersensitivity/Allergic Reactions occur when the body is exposed to a substance that causes a harmful immune response

Lymphomas are tumors found in lymphoid tissue

In your textbook, make sure you review the sections on New Roots, Prefixes, and Suffixes, and follow the directions for Learning The Terms.

Also, pay attention to the pictures, graphics, and X-Rays throughout the chapter. They are there to help you understand the terms and how they apply to specific body parts

Remember to do some of the questions in the Review Exercises. They will help prepare you for the exam.

Exam 14

Multiple Choice – Select the best answer

1. The lymphatic system does all of the following *except* _____
 - A. drain excess fluid from tissues.
 - B. provide oxygen.
 - C. transport nutrients.
 - D. fight infection.

2. All of the following are part of the lymphatic system *except* _____
 - A. thyroid gland.
 - B. spleen.
 - C. thymus gland.
 - D. tonsils.

3. Phagocytes _____
 - A. cause blood to clot.
 - B. prevent allergic reactions.
 - C. stimulate antibodies.
 - D. eliminate bacteria.

4. The tonsils _____
 - A. act as filters.
 - B. produce lymph.
 - C. have no known purpose.
 - D. produce leukocytes.

5. The most severe allergic reaction is _____
 - A. asthma.
 - B. hay fever.
 - C. anaphylactic shock.
 - D. urticaria.

True/False – Answer each question true (T) or false (F)

6. The lymph nodes act as filtration devices.

True (T) or False (F)

7. T-cells produce antibodies.

True (T) or False (F)

8. B-cells kill virus and cancer-infected cells.

True (T) or False (F)

9. The spleen is essential to life.

True (T) or False (F)

10. HIV disease weakens the immune system.

True (T) or False (F)

11. Lymphatic capillaries are present in body tissues.

True (T) or False (F)

12. Non-Hodgkin's lymphoma is not malignant.

True (T) or False (F)

Matching – Match the definition with the correct term

- | | |
|---|---------------------|
| 13. Pharyngeal tonsils | A. immunodeficiency |
| 14. Enlargement of the spleen | B. lymphadenopathy |
| 15. Study of the immune system | C. adenoids |
| 16. Lymphatic capillaries, lymphatic vessels, and lymphatic ducts | D. splenorrhaphy |
| 17. Inadequate immune response | E. immunology |
| 18. Stimulates antibody production | F. splenomegaly |
| 19. Disease of the lymph nodes | G. vascular system |
| 20. Suturing of the spleen | H. antibodies |

Completion – Choose the correct answer

21. HIV disease progresses gradually to (A. lymphoma/B. AIDS), a serious condition in which the immune system is destroyed.
22. The human body has (A. three/B. one) set(s) of tonsils.
23. Lymph nodes are located in (A. sets/B. clusters) in various parts of the body.
24. The thymus gland is located in the chest, near the (A. lungs/B. heart).
25. Only (A. two/B. three) types of lymphocytes can stimulate immune response.

This is the End of this exam. Move on to the next lesson. You will need a NEW answer sheet for your next exam.

Chapter 15

Respiratory System

Objectives

- **Locate and describe the organs of the respiratory system**
- **Describe the functions of the respiratory structures**
- **Pronounce, spell, define, and write the medical terms related to the respiratory system**
- **Describe common diseases of the respiratory system**
- **Listen, read, and study so you can speak and write effectively**

Major Organs of the Respiratory System

Review section 15.1 in your textbook for a list and diagram (Figure 15-1) of the major organs of the respiratory system

Upper Respiratory Tract (URT)

Review section 15.2 in your textbook for a list and diagram (Figure 15-2) of the structures of the upper respiratory tract

Air enters the body through the **nasal cavity**

The **pharynx** is another name for the throat

The voice box is also known as the **larynx**

Lower Respiratory Tract

Review section 15.3 in your textbook for a list and diagram (Figure 15-3) of the structures of the lower respiratory tract

The **lower respiratory tract** includes the **lower trachea, bronchi, and bronchioles.**

Lungs and Alveoli

Review Figure 15-4 for a list and diagram of the lungs and alveoli

Paranasal Sinuses

Hollow spaces in the skull bones that are lined with mucous membranes; they moisten and warm air as it is breathed in

Pleural and Mediastinal Cavities

The **pleural cavity** surrounds the lungs; the **mediastinal cavity** lies between the lungs

Pathology

Asthma is a bronchospasm that leads to airway obstruction

Cancer of the lungs that originates in the bronchus or bronchioles is called **bronchogenic carcinoma**

Chronic obstructive pulmonary disease results in blocked air flow to the lungs and body tissues

Overexpansion (dilation) of the alveoli, which traps air inside of them, is known as **emphysema**

Pneumonia (Pneumonitis) is inflammation and infection of the lung

In your textbook, make sure you review the sections on New Roots, Prefixes, and Suffixes, and follow the directions for Learning The Terms.

Also, pay attention to the pictures, graphics, and X-Rays throughout the chapter. They are there to help you understand the terms and how they apply to specific body parts

Remember to do some of the questions in the Review Exercises. They will help prepare you for the exam.

Exam 15

Multiple Choice – Select the best answer

1. The muscular flap that prevents food from entering the airway is the _____
 - A. pharynx.
 - B. larynx.
 - C. cilia.
 - D. epiglottis.
2. The vocal cords are _____
 - A. cartilage.
 - B. mucous membranes.
 - C. muscles.
 - D. soft tissues.
3. The long, hollow tube known as the windpipe is the _____
 - A. trachea.
 - B. esophagus.
 - C. bronchus.
 - D. bronchiole.
4. Air exchange into the capillaries takes place in the _____
 - A. bronchioles
 - B. alveoli.
 - C. lobes.
 - D. Bronchi.
5. A bronchospasm is a serious condition that may cause _____
 - A. COPD.
 - B. asthma.
 - C. airway obstruction.
 - D. pneumonia.
6. Incomplete inflation of the (collapsed) lung is _____
 - A. atelectasis.
 - B. bronchiectasis.
 - C. bradypnea.
 - D. dysphonia.

True/False – Answer each question true (T) or false (F)

7. The primary gases taken in and given off during respiration are oxygen and carbon monoxide.

True (T) or False (F)

8. The Adam's apple is a large, bony shield.

True (T) or False (F)

9. The cilia inside the nose act as filters.

True (T) or False (F)

10. The medical term for the throat is "pharynx."

True (T) or False (F)

11. The six paranasal sinuses are the frontal, ethmoid, pharyngoid, sphenoid, olfactory, and maxillary sinuses.

True (T) or False (F)

12. The sinuses have no effect on the voice.

True (T) or False (F)

Matching – Match the definition with the correct term

13. Lack of, no, not

A. –thorax

14. Scanty, few

B. –ptysis

15. Imperfect

C. –scope

16. Chest

D. oligo-

17. Instrument for examination

E. –spasm

18. Sudden, involuntary contraction

F. a-

19. Straight

G. ortho-

20. Spitting

H. atel/o-

**This is the End of this exam. Move on to the next lesson. You will need a
NEW answer sheet for your next exam.**

Chapter 16

The Urinary System

Objectives

- **Locate the organs of the urinary system**
- **Describe the structure and functions of the kidney, ureters, bladder, and urethra**
- **Describe how the kidneys produce urine**
- **Pronounce, spell, define, and write the medical terms related to the urinary system**
- **Describe common diseases of the urinary system**
- **Listen, read, and study so you can speak and write effectively**

Major Organs of the Urinary System

Review section 16.1 in your textbook for a list and diagram (Figure 16-1) of the major organs of the urinary system

Structure and Function of the Urinary System

Kidneys filter the blood to remove waste products

Ureters carry urine from the kidneys to the **bladder**, where it is stored until it is emptied into the **urethra**, which carries urine out of the body

Urine Production in the Kidney

For a complete explanation of how the kidneys produce urine, review section 16.3 in the textbook. Pay special attention to Figure 16-2 to get a better understanding of the process.

Pathology

Renal failure is loss of kidney function it can come on suddenly or develop gradually

Involuntary outflow of urine is called **urinary incontinence**.

Urinary retention is the inability of the bladder to empty completely during urination

In your textbook, make sure you review the sections on New Roots, Prefixes, and Suffixes, and follow the directions for Learning The Terms.

Also, pay attention to the pictures, graphics, and X-Rays throughout the chapter. They are there to help you understand the terms and how they apply to specific body parts

Remember to do some of the questions in the Review Exercises. They will help prepare you for the exam.

Exam 16

Multiple Choice – Select the best answer

1. Urine is produced by filtering blood through the _____
 - A. nephrons.
 - B. vesicals.
 - C. bladder.
 - D. meatus.
2. A diagnostic test that involves visually examining the bladder is a _____
 - A. urogram.
 - B. urinalysis.
 - C. lithotomy.
 - D. cystoscopy.
3. Painful urination is _____
 - A. anuria.
 - B. dysuria.
 - C. hematuria.
 - D. nocturia.
4. A patient with anuria excretes less than _____
 - A. 1500 ml urine each day.
 - B. 1200 ml urine each day.
 - C. 500 ml urine each day.
 - D. 100 ml urine each day.
5. A patient with oliguria excretes _____
 - A. 100-400 ml urine each day.
 - B. 500-800 ml urine each day.
 - C. 800-1200 ml urine each day.
 - D. 1200-1500 ml urine each day.
6. A waste product that is excreted in the urine, which is elevated in kidney disease, is _____
 - A. creatine.
 - B. uremia.
 - C. creatinine.
 - D. azotemia.

7. Accumulation of urine in the renal pelvis due to narrowing of the ureter is

- A. pyelonephritis.
- B. hydronephrosis.
- C. nephrolithiasis.
- D. glomerulonephritis.

True/False – Answer each question true (T) or false (F)

8. All the blood goes through the kidneys.

True (T) or False (F)

9. A person with renal hypoplasia has malformed kidneys.

True (T) or False (F)

10. A patient with polyuria excretes large quantities of urine.

True (T) or False (F)

11. A stylette is a flexible tube inserted into the bladder to drain urine.

True (T) or False (F)

12. A patient with anuresis wets the bed at night.

True (T) or False (F)

13. In a patient with incontinence, the bladder empties involuntarily.

True (T) or False (F)

14. A patient with retention is unable to empty the bladder completely during urination.

True (T) or False (F)

15. A patient with nephrolithiasis has an inflammation on the inside of the kidney.

True (T) or False (F)

Continued on the next page

Matching – Match the definition with the correct term

- | | |
|---|------------------|
| 16. Mechanical replacement of kidney function | A. urinalysis |
| 17. Laboratory analysis of urine | B. pyuria |
| 18. Blood in the urine | C. renal calculi |
| 19. Record of the urinary tract | D. dialysis |
| 20. Kidney stones | E. oliguria |
| 21. Pus in the urine | F. urogram |
| 22. Decreased urination | G. hematuria |

Defining Terms – Choose the word that correctly defines the term

23. Urine leaves the bladder by way of the (A. ureter/B. urethra).
24. Mrs. Lopez, a dialysis patient, has an elevated (A. creatinine /B. creatine) level.
25. Jason Omerto was burned with hot water; he has multiple, small (A. vesicles /B. vesicals) on his arms.

This is the End of this exam. Move on to the next lesson. You will need a NEW answer sheet for your next exam.

Chapter 17

The Male Reproductive System

Objectives

- **Locate the organs of the male reproductive system**
- **Describe the structure and function of the male reproductive system**
- **Pronounce, spell, define, and write the medical terms related to the male reproductive system**
- **Describe common diseases of the male reproductive system**
- **Listen, read, and study so you can speak and write effectively**

Major Organs of the Male Reproductive System

Review section 17.1 in your textbook for a list and diagram (Figure 17-1, A and B) of the major organs of the male reproductive system

Structure and Function of the Male Reproductive System

The testes are also known as the **testicles**; they are located in an external skin sac called the **scrotum**; sperm is produced in the testes; the hormone called **testosterone** is also produced in the testes

Semen is a fluid produced by the male reproductive organs

Epididymis, Vas Deferens, Seminal Vesicle, and Ejaculatory Duct

Review Section 17.2 for the function of these structures. Trace the entire reproductive tract on Figure 17-1

Accessory Organs

Review Section 17.2 for the names and functions of these organs. The accessory organs can also be seen in Figure 17-1

The **scrotum** and the **penis** are the external genitalia

Pathology

Benign Prostatic Hypertrophy (BPH) is non-cancerous enlargement of the prostate gland

A malignant tumor of the prostate is called **carcinoma** of the prostate

Phimosis is tightened foreskin that is difficult to pull back

Any number of **sexually transmitted diseases (STDs)** can also adversely affect the male reproductive system

Malignant tumors of the testicles is called **testicular cancer**

In your textbook, make sure you review the sections on New Roots, Prefixes, and Suffixes, and follow the directions for Learning The Terms.

Also, pay attention to the pictures, graphics, and X-Rays throughout the chapter. They are there to help you understand the terms and how they apply to specific body parts

Remember to do some of the questions in the Review Exercises. They will help prepare you for the exam.

Exam 17

Multiple Choice – Select the best answer

1. The purpose of the male reproductive system includes all of the following *except* _____
 - A. produce testosterone.
 - B. eliminate urine from the body.
 - C. manufacture sperm that carries the genetic code.
 - D. deliver sperm and semen.
2. Sperm is produced in the _____
 - A. prostate gland.
 - B. vas deferens.
 - C. epididymis.
 - D. testes.
3. Accumulation of fluid around the testicles is _____
 - A. hydrocele.
 - B. hematocele.
 - C. varicocele.
 - D. spermatocele.
4. Tightened foreskin that cannot be pulled back is _____
 - A. hypospadias.
 - B. phimosis.
 - C. orchitis.
 - D. balanorrhea.
5. Accessory organs of male reproductive system include all of the following *except* _____
 - A. prostate gland.
 - B. Cowper's gland.
 - C. urethra.
 - D. seminal vesicles.

Continued on the next page

6. The tip of the penis is covered with a loose skin called the _____
- A. prepuce.
 - B. meatus.
 - C. glans penis.
 - D. epididymis.

True/False – Answer each question true (T) or false (F)

7. Acquired immune deficiency syndrome is an STD.
- True (T) or False (F)
8. Benign prostatic hyperplasia (BPH) commonly occurs in men 20 to 50 years of age.
- True (T) or False (F)
9. Transurethral resection is the treatment for an enlarged prostate (BPH).
- True (T) or False (F)
10. When using medical terminology, -in changes to -im before word elements starting with “p.”
- True (T) or False (F)
11. Prostatitis is an inflammation of the testicle.
- True (T) or False (F)
12. A patient with oligospermia is unable to produce sperm.
- True (T) or False (F)
13. Testicular cancer commonly occurs in men over age 50.
- True (T) or False (F)

Continued on the next page

Completion – Choose the correct answer

- | | | |
|---------------------------|------------------------|--------------------------|
| A. Circumcision | D. testosterone | G. gynecomastia |
| B. Spermatogenesis | E. impotence | H. cryptorchidism |
| C. Spermaticidal | F. vasectomy | |

14. _____ products are used to destroy sperm as a form of birth control.
15. Excision of the vas deferens, or _____, is commonly done as a means of birth control.
16. The patient is being treated for _____, which is the inability to achieve or maintain an erection.
17. _____ is commonly done on male infants, to remove the foreskin.
18. The child was born with _____, or undescended testicles.
19. The primary male hormone produced by the reproductive system is _____.
20. _____ is the production of sperm.
21. Mr. Castleberry has _____, an abnormal enlargement of the male breast.

Defining Terms – Select the word that correctly defines the term.

22. Mr. Sedala is scheduled for (A. prostate/B. prostrate) surgery in the morning.
23. Dr. Lank would like us to schedule Mr. Tilander for consultation and possible surgery to correct prostatic (A. hypoplasia/B. hyperplasia)
24. The seminal (A. vesicles /B. vesicals) are accessory reproductive organs.
25. The (A. glands/B. glans) penis contains the opening for urination and ejaculation.

This is the End of this exam. Move on to the next lesson. You will need a NEW answer sheet for your next exam.

Chapter 18

Female Reproductive System

Objectives

- **Locate the organs of the female reproductive system**
- **Describe the structures and functions of the female reproductive system**
- **Pronounce, spell, define, and write the medical terms related to the female reproductive system**
- **Describe common diseases of the female reproductive system**
- **Listen, read, and study so you can speak and write effectively**

Major Organs of the Female Reproductive System

Review section 18.1 in your textbook for a list and diagram (Figure 18-1) of the major organs of the female reproductive system

Structure and Function of the Female Reproductive System

Ovaries are almond-shaped glands that produce a variety of hormones and produce eggs or **ova**

The **fallopian tubes** link the ovaries to the uterus; **fertilization**, the union of ovum and sperm, happens in the fallopian tubes

The **uterus** is a muscular, thick-walled organ that houses and protects the developing fetus during pregnancy

The **vagina**, also called the birth canal, is a muscular tube that leads from the cervix to the body's exterior; it accepts the male penis during intercourse

External Genitalia

Review Section 18.2 for the names and functions of these structures. The female external genitalia can also be seen in Figure 18-3

Breasts

Review Section 18.2 for the names and functions of the structures of the breast. Figure 18-4 shows two different views of the breast.

Pathology

Breast cancer is a malignant tumor of the breast

Endometrial tissue found outside of the uterus is a condition known as **endometriosis**

Uterine cancer is a malignant tumor of the endometrium (inner lining of the uterus)

Protrusion or displacement of the uterus through the vaginal canal is called **uterine prolapse**.

Sexually transmitted diseases are any diseases that are transmitted through sexually activity.

In your textbook, make sure you review the sections on New Roots, Prefixes, and Suffixes, and follow the directions for Learning The Terms.

Also, pay attention to the pictures, graphics, and X-Rays throughout the chapter. They are there to help you understand the terms and how they apply to specific body parts

Remember to do some of the questions in the Review Exercises. They will help prepare you for the exam.

Exam 18

Multiple Choice – Select the best answer

1. Estrogen is the hormone that is responsible for all of the following *except* _____
 - A. thickening of the uterine lining.
 - B. stimulating growth of uterine blood vessels.
 - C. stimulating development of breasts.
 - D. stimulating development of pubic hair.
2. Fertilization of the egg takes place in the _____
 - A. cervix.
 - B. uterus.
 - C. fimbriae.
 - D. fallopian tube.
3. A developing baby is called a/an _____
 - A. fetus.
 - B. infant.
 - C. ovum.
 - D. fundus.
4. The uterine lining that is sloughed off during menstruation is the _____
 - A. perimetrium.
 - B. endometrium.
 - C. retrometrium.
 - D. myometrium.
5. The dark area on the external nipple is the _____
 - A. lactiferous sinus.
 - B. duct.
 - C. areola.
 - D. lobe.
6. All of the following are part of the external genitalia *except* _____
 - A. vagina.
 - B. clitoris.
 - C. labia.
 - D. Bartolin's glands.

True/False – Answer each question true (T) or false (F)

7. The ovaries are held in place by tendons.

True (T) or False (F)

8. The ovaries of a newborn female contain a lifetime supply of immature eggs.

True (T) or False (F)

9. Menopause occurs between the ages of 40 and 55 in most women.

True (T) or False (F)

10. The fimbriae are the structures that hold the uterine tubes, ovaries, and uterus in place.

True (T) or False (F)

11. Menstruation stops when the patient has a tubal ligation.

True (T) or False (F)

12. Chlamydia is an STD.

True (T) or False (F)

13. STDs are often asymptomatic.

True (T) or False (F)

14. An episiotomy involves suturing the vagina and peritoneum.

True (T) or False (F)

Continued on the next page

Matching – Match the definition with the correct term

- | | |
|--|-----------------|
| 15. Excessive menstrual bleeding | A. dysmenorrhea |
| 16. Pertaining to the perineum | B. peritoneal |
| 17. Pertaining to the peritoneum | C. metrorrhagia |
| 18. Absence of menstruation | D. peroneal |
| 19. Outermost wall of the uterus | E. menorrhea |
| 20. Irregular uterine bleeding | F. perimetrium |
| 21. Beginning of the regular menstrual cycle | G. perineal |
| 22. Painful menstruation | H. menarche |
| 23. Pertaining to the fibula, on the outer side of the leg | I. amenorrhea |
| 24. Connective tissue located beside the uterus | J. menorrhagia |
| 25. Normal menstruation | K. parametrium |

This is the End of this exam. Move on to the next lesson. You will need a NEW answer sheet for your next exam.

Chapter 19

Endocrine System

Objectives

- Define “endocrine glands” and “hormones”
- Name the endocrine glands and their hormones
- Understand the function of these hormones in the body
- Pronounce, spell, define, and write the medical terms related to the endocrine system
- Describe common diseases related to the endocrine system
- Listen, read, and study so you can speak and write effectively

Glands of the Endocrine System

Review section 19.1 in your textbook for a list and diagram (Figure 19-1) of the major components of the endocrine system

Peripheral Endocrine Glands

The **thyroid gland (Figure 19-2)** secretes a variety of hormones that regulate the body’s metabolism

Calcium and phosphorus levels are regulated in the body by secretions from the **parathyroid**

The **adrenal glands**, which are found on top of the kidneys, secrete a variety of hormones that regulate the immune system, sodium and potassium in the body, and male and female sexual characteristics

Melatonin, which is secreted by the **pineal gland**, regulates sleep and waking patterns; it may also affect moods

Secretions from the **pancreas** help break down foods and regulate the amount of sugar in the blood

Central Endocrine Glands

The **pituitary gland** secretes hormones that stimulate other glands to secrete their hormones

Neurohormones are produced by the **hypothalamus**, which also works with the pituitary gland

Abbreviations of Major Hormones

Review the list in Table 19-1 on page 414 of the textbook

Pathology

Hypersecretion – excess secretion from a gland

Hyposecretion – inadequate secretion from a gland

The body is unable to use sugar for energy when someone is suffering from

Diabetes Mellitus

Graves disease occurs when antibodies attack the thyroid gland, causing an increase in the secretion of the thyroid hormone

In your textbook, make sure you review the sections on New Roots, Prefixes, and Suffixes, and follow the directions for Learning The Terms.

Also, pay attention to the pictures, graphics, and X-Rays throughout the chapter. They are there to help you understand the terms and how they apply to specific body parts

Remember to do some of the questions in the Review Exercises. They will help prepare you for the exam.

Exam 19

Multiple Choice – Select the best answer

1. Hormones _____
 - A. are the master control for all body functions.
 - B. produce neurons.
 - C. are chemical messengers.
 - D. are generated in the brain.

2. Homeostasis is _____
 - A. the ability of the body to normalize itself.
 - B. a chemical messenger.
 - C. the trigger to hormone production.
 - D. caused by an autoimmune.

3. The peripheral endocrine glands are the _____
 - A. parathyroid, pituitary, and pancreas.
 - B. thyroid, pituitary, hypothalamus, and parathyroid.
 - C. thyroid, adrenals, parathyroids, pancreas, and pineal.
 - D. thyroid, pituitary, pineal, hypothalamus, and parathyroid.

4. The central endocrine glands are the _____
 - A. thyroid, pituitary, pineal, and parathyroid.
 - B. pituitary and hypothalamus.
 - C. pancreas and hypothalamus.
 - D. parathyroid, pituitary, and pancreas.

5. The energy used by the cells to perform normal body functions is the _____
 - A. immune regulator.
 - B. energy control.
 - C. infundibulum appraisal.
 - D. metabolic rate.

6. The adrenal cortex secretes _____
 - A. aldosterone, potassium, estrogen, and sodium.
 - B. cortisol, androgen, aldosterone, and androgens.
 - C. cortisol, testosterone, iodine, and potassium.
 - D. calcium, phosphorous, potassium, and sodium.

7. Estrogen and androgens are _____

- A. part of the “fight or flight” response.
- B. immune modulators.
- C. necessary for sodium regulation.
- D. sex hormones.

Matching – Match the definition with the correct term

- | | |
|--|--|
| 8. Regulates sodium and potassium levels | A. PTH |
| 9. Sex hormones; maintain secondary gender-related characteristics | B. cortisol |
| 10. Stimulates growth in all body cells | C. TSH |
| 11. “Flight or fight” hormones | D. MSH |
| 12. Stimulates uterine contractions during labor | E. aldosterone |
| 13. Regulates metabolic rate | F. ADH |
| 14. Prevents excessive loss of water | G. somatropic (growth) hormone |
| 15. Helps regulate calcium and phosphorus levels | H. iodine |
| 16. Stimulates the adrenal cortex | I. gonadotropic hormones |
| 17. Regulates immune system; assists with carbohydrate, fat, and protein use | J. prolactin |
| 18. Stimulates the skin to produce melanocytes | K. estrogens and androgens |
| 19. Stimulate the ovaries and testicles | L. ACTH |
| 20. Stimulates the thyroid gland | M. T ₃ and T ₄ |
| 21. Necessary for T ₃ and T ₄ production | N. oxytocin |
| 22. Stimulates breast development | O. adrenaline (epinephrine) and noradrenaline (norepinephrine) |

True/False – Answer each question true (T) or false (F)

23. The adrenal medulla produces antidiuretic hormone.

True (T) or False (F)

24. The pancreas produces hormones and provides some digestive functions.

True (T) or False (F)

25. Three gonadotropic hormones are follicle-stimulating hormone, luteinizing hormone in the female, and interstitial cell-stimulating hormone in the male.

True (T) or False (F)

26. The posterior pituitary is an extension of the adrenal cortex.

True (T) or False (F)

27. The adrenal cortex and adrenal medulla have the same function.

True (T) or False (F)

28. The hypothalamus releases hormones that regulate the secretions of the pituitary gland.

True (T) or False (F)

29. A goiter will develop if there is insufficient iodine in the diet.

True (T) or False (F)

30. Melatonin affects pigmentation of the skin.

True (T) or False (F)

31. Diabetes is a disease in which the body is unable to use sugar to produce energy.

True (T) or False (F)

32. When the body does not have enough glucose, it will break down carbohydrates for fuel.

True (T) or False (F)

33. Excess insulin in the blood cause many diabetic complications such as blindness, heart attacks, and gangrene of the lower extremities.

True (T) or False (F)

34. Type 2 diabetes is caused by an abrupt end to insulin production.

True (T) or False (F)

35. Genetic factors and obesity affect the development of type 2 diabetes.

True (T) or False (F)

Congratulations!

**You have completed the all the exams
Please send in your answer sheets**



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