

***Anatomy & Physiology for Health Professions, 4e (Colbert)***  
**Chapter 1 Introduction to Anatomy and Physiology**

**1.1 Multiple-Choice Questions**

1) Gross anatomy is also known as \_\_\_\_\_.

- A) microscopic anatomy
- B) pathologic anatomy
- C) macroscopic anatomy
- D) diagnostic anatomy

Answer: C

2) An example of gross anatomy would be \_\_\_\_\_.

- A) viewing an x-ray
- B) using a microscope
- C) performing a complete cellular blood count
- D) determining the etiology of a disease

Answer: A

3) The study of physiology deals with \_\_\_\_\_.

- A) disease
- B) genetics
- C) structures
- D) functions

Answer: D

4) The potential outcome of a disease is the \_\_\_\_\_.

- A) etiology
- B) diagnosis
- C) prognosis
- D) treatment

Answer: C

5) The study of disease is known as \_\_\_\_\_.

- A) neurology
- B) pathophysiology
- C) microbiology
- D) cytology

Answer: B

6) The three basic parts of a medical term are \_\_\_\_\_.

- A) prefix, word root, suffix
- B) suffix, base, meaning
- C) prefix, stem, ending
- D) base, word root, stem

Answer: A

7) What system is known as the mathematical language of anatomy and physiology?

- A) Abbreviation system
- B) Metric system
- C) English system
- D) Customary system

Answer: B

8) Which of the following is not a vital sign?

- A) Heart rate
- B) Temperature
- C) Odor
- D) Respiratory rate

Answer: C

9) When the physician has documented several signs and symptoms, he or she will be able to make a(n) \_\_\_\_\_.

- A) prognosis
- B) etiology
- C) cytology
- D) diagnosis

Answer: D

10) The adjustments that maintain a stable environment within the body are known as \_\_\_\_\_.

- A) homeostasis
- B) metabolism
- C) syndrome
- D) pathology

Answer: A

11) The body uses feedback loops to maintain homeostasis. The response that opposes an action is known as a(n) \_\_\_\_\_.

- A) depressing feedback loop
- B) negative feedback loop
- C) positive feedback loop
- D) affirmative feedback loop

Answer: B

12) A positive feedback loop is necessary in which of the following situations?

- A) Blood pressure
- B) Coughing
- C) Bleeding
- D) Childbirth

Answer: D

13) Vital signs include all of the following except \_\_\_\_\_.

- A) coloring
- B) heart rate

- C) respirations
- D) temperature

Answer: A

14) RBC is the abbreviation for \_\_\_\_\_.

- A) really bad cut
- B) red and blue circulation
- C) red blood cells
- D) ruptured blood clot

Answer: C

15) The nurse found a preoperative patient out of bed, barefoot, and watching TV while eating breakfast. "We have to cancel your surgery, because you're not NPO," the nurse said. What did the patient do wrong?

- A) The patient ate food.
- B) The patient watched TV.
- C) The patient walked barefoot.
- D) The patient left the hospital bed.

Answer: A

16) A patient rang the call bell because he was in great pain. "I want my prn medication now," he said. Which medication timing is the nurse going to follow?

- A) Medications given in the morning
- B) Medications given at noontime
- C) Medications given in the evening
- D) Medications given when needed

Answer: D

17) A lab technician finishes a test. "The CBC results are in the computer," she tells her supervisor. What body fluid did the technician examine?

- A) Saliva
- B) Urine
- C) Blood
- D) Cerebrospinal fluid

Answer: C

18) All members of the Code Team have to take ACLS training annually. Which organs will they practice reviving?

- A) Eyes and ears
- B) Heart and lungs
- C) Nose and throat
- D) Stomach and colon

Answer: B

19) If a patient complains of SOB, which body system is having a problem?

- A) Urinary
- B) Neurological
- C) Reproductive
- D) Respiratory

Answer: D

20) The indicators that are essential for human life include all of the following except \_\_\_\_\_.

- A) coloring
- B) heart rate
- C) respirations
- D) temperature

Answer: A

21) Which is not a definition for *disease*?

- A) Not at ease
- B) A condition in which the body fails to function normally
- C) Anything that is a normal structure or function
- D) Anything that upsets normal structure or function

Answer: C

22) The term *tachycardia* means “\_\_\_\_\_.”

- A) fast heart rate
- B) slow heart rate
- C) rhythmic heart rate
- D) study of the heart rate

Answer: A

23) Which is not a symptom of metabolic syndrome?

- A) High triglycerides
- B) Low HDL level
- C) High blood pressure
- D) Vomiting and diarrhea

Answer: D

24) A sign that could be an indication of diabetes is breath that smells like \_\_\_\_\_.

- A) fruit-flavored chewing gum
- B) clay or starchy paste
- C) sweat
- D) maple

Answer: A

25) The prefix *hyper-* means “\_\_\_\_\_.”

- A) small
- B) above normal
- C) below normal
- D) within

Answer: B

26) The suffix *-oma* means “\_\_\_\_\_.”

- A) cutting into
- B) enlargement of
- C) surgically forming an opening
- D) tumor

Answer: D

27) The suffix *-algia* means “\_\_\_\_\_.”

- A) inflammation
- B) cell
- C) pertaining to
- D) pain

Answer: D

28) Most fevers are the body's way of \_\_\_\_\_.

- A) killing all pathogens
- B) breaking up the cells of pathogens
- C) making an inhospitable environment for pathogens to survive
- D) preventing pathogens from reproducing

Answer: C

29) Sweating at night may indicate \_\_\_\_\_.

- A) tuberculosis
- B) Hodgkin's disease
- C) riboflavin deficiency
- D) skin cancer

Answer: A

30) According to the rules of medical terminology, *hepatitis* is defined as “\_\_\_\_\_.”

- A) liver failure
- B) inflammation of the liver
- C) cirrhosis
- D) blood clotting

Answer: B

31) The abbreviation used for “twice a day” is \_\_\_\_\_.

- A) q.i.d.
- B) t.i.d.
- C) prn
- D) b.i.d.

Answer: D

32) Volumes expressed as ounces, pints, quarts, gallons, pecks, bushels, or cubic feet are examples of the \_\_\_\_\_.

- A) metric system
- B) English system
- C) scientific notation
- D) International System

Answer: B

33) A nurse found the vital sign he measured in millimeters of mercury to be highly elevated. What condition does his patient have?

- A) Hypertension
- B) Fever
- C) Hyperalgia
- D) Heart attack

Answer: A

34) A student concentrates on moving decimal points in the correct direction while completing her pharmacology homework. Which system of measurement is she using?

- A) English
- B) National
- C) British Imperial
- D) Metric

Answer: D

35) Normal adult cardiac output is 6,000 milliliters every 60 seconds. How is this amount of blood being measured?

- A) Volume in English units
- B) Volume in metric units
- C) Length in English units
- D) Length in metric units

Answer: B

36) "I always have to use a conversion table," a student complained. Which system of measurement is the student most likely using?

- A) English
- B) National
- C) American Imperial
- D) Metric

Answer: A

37) Which system would most likely be used to calculate the amount of medication to give by weight to a premature infant?

- A) English
- B) National
- C) American Imperial
- D) Metric

Answer: D

38) The coroner measures the size of the brain in a patient who died of Alzheimer's disease. Which unit dimension will she likely use to record the diameter?

- A) Milliliters
- B) Centimeters
- C) Kilograms
- D) Ounces

Answer: B

39) The diagnostic procedure begins by determining the patient's \_\_\_\_\_.

- A) prognosis
- B) syndrome
- C) chief complaint
- D) laboratory tests

Answer: C

40) \_\_\_\_\_ is the branch of medicine that studies the characteristics, causes, and effects of disease.

- A) Anatomy
- B) Physiology
- C) Pathology
- D) Pharmacy

Answer: C

41) The term *osteoma* can be defined as “\_\_\_\_\_.”

- A) cutting of the skin
- B) tumor of the bone
- C) tumor of the eye
- D) cutting into the eye

Answer: B

42) The normal heart rate for an adult is \_\_\_\_\_ beats per minute.

- A) 10–30
- B) 70–120
- C) 90–170
- D) 60–100

Answer: D

43) The \_\_\_\_\_ is the prediction of the outcome of a disease.

- A) prognosis
- B) diagnosis
- C) acute determination
- D) syndrome

Answer: A

44) A condition in which the body fails to function normally is \_\_\_\_\_.

- A) disease

- B) physiology
- C) nosocomial
- D) epidemiology

Answer: A

45) The cause of a disease is called its \_\_\_\_\_.

- A) prognosis
- B) pathology
- C) nosocomial
- D) etiology

Answer: D

46) A specific group of signs and symptoms that are related to a specific disease is known by which of the following names?

- A) Diagnosis
- B) Chief complaint
- C) Syndrome
- D) Relapse

Answer: C

47) A patient with Syndrome X can exhibit which of the following common conditions?

- A) High blood sugar levels, low blood pressure, high blood level of HDL
- B) High blood sugar levels, high blood pressure, high triglycerides
- C) Low blood sugar levels, low blood pressure, high triglycerides
- D) Low blood sugar levels, high blood pressure, low blood level of HDL

Answer: B

48) A patient who has metabolic syndrome is at an increased risk for all of the following except \_\_\_\_\_.

- A) diabetes
- B) heart attack
- C) Hodgkin's disease
- D) stroke

Answer: C

49) \_\_\_\_\_ is the physiological process that monitors and maintains a stable internal environment or equilibrium.

- A) Homeostasis
- B) Negative feedback loop
- C) Positive feedback loop
- D) Metabolism

Answer: A

50) \_\_\_\_\_ is a mechanism in the body that continually senses the internal and external environment and makes adjustments to maintain homeostasis.

- A) Homeostasis
- B) A negative feedback loop



- C) A positive feedback loop
- D) Metabolism

Answer: B

51) \_\_\_\_\_ is known as a "vicious cycle." In most cases, it is harmful if a vicious cycle cannot be broken. In some cases, however, it is necessary for a process to run to completion.

- A) Homeostasis
- B) Negative feedback
- C) Positive feedback
- D) Metabolism

Answer: C

52) Which of the following is an example of a sign?

- A) Temperature
- B) Nausea
- C) Pain
- D) Weakness

Answer: A

53) All of the following are symptoms except \_\_\_\_\_.

- A) pain
- B) respiratory rate
- C) dizziness
- D) itchiness

Answer: B

54) A condition in which the signs and symptoms develop gradually over time is called \_\_\_\_\_.

- A) chronic
- B) acute
- C) remission
- D) exacerbation

Answer: A

55) A measure of the number of deaths attributed to a specific disease over a period of time is \_\_\_\_\_.

- A) pandemic
- B) epidemic
- C) morbidity
- D) mortality

Answer: D

56) Simple compounds are built up and used to manufacture cellular materials in the process of \_\_\_\_\_.

- A) catabolism
- B) positive feedback
- C) anabolism

D) negative feedback

Answer: C

## 1.2 True/False Questions

1) In Greek, *anatomy* means “to cut apart.”

Answer: TRUE

2) Anatomy focuses on the function and vital processes of the human body.

Answer: FALSE

3) *Macro-* means “small.”

Answer: FALSE

4) A bacterial infection is the prognosis for a Staph infection.

Answer: FALSE

5) Negative feedback is bad for the body because it increases a change away from normal.

Answer: FALSE

6) Tachycardia is a slow heart rate.

Answer: FALSE

7) *Glyc/o-* is the combining form for sugar.

Answer: TRUE

8) *Leuk/o-* is the combining form for cell.

Answer: FALSE

9) *Hyp/o-* means “above normal.”

Answer: FALSE

10) An appendectomy is surgical removal of the appendix.

Answer: TRUE

11) STAT means “right away” or “immediately.”

Answer: TRUE

12) A microscope views small objects.

Answer: TRUE

13) Disease is a condition in which the body fails to function normally.

Answer: TRUE

14) Pain is the fifth vital sign.

Answer: TRUE

15) A disease that is endemic spreads worldwide.  
Answer: FALSE