

Exam

Name \_\_\_\_\_

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) \_\_\_\_\_ is considered the oldest medical science. 1) \_\_\_\_\_  
A) Physiology  
B) Biology  
C) Cytology  
D) Embryology  
E) Anatomy
- 2) Anatomy is to \_\_\_\_\_ as physiology is to \_\_\_\_\_. 2) \_\_\_\_\_  
A) structure; form  
B) structure; function  
C) growth; form  
D) function; form  
E) form; structure
- 3) The analysis of the internal structure of individual cells is called 3) \_\_\_\_\_  
A) histology.  
B) embryology.  
C) anatomy.  
D) physiology.  
E) cytology.
- 4) The study of the general form and superficial markings of an organism is called \_\_\_\_\_ anatomy. 4) \_\_\_\_\_  
A) systemic            B) regional            C) surface            D) gross            E) surgical
- 5) The study of the superficial and internal features in a specific area of the body is called \_\_\_\_\_ 5) \_\_\_\_\_  
anatomy.  
A) regional  
B) radiographic  
C) surface  
D) surgical  
E) pathological
- 6) Anatomical features that change during illness are studied in \_\_\_\_\_ anatomy. 6) \_\_\_\_\_  
A) surface  
B) microscopic  
C) regional  
D) pathological  
E) gross
- 7) The study of the liver is to gross anatomy as the study of the liver cell is to 7) \_\_\_\_\_  
A) physiology.  
B) systemic anatomy.  
C) cytology.  
D) regional anatomy.  
E) radiographic anatomy.

- 8) The study of the first two months of development is termed \_\_\_\_\_  
A) embryology.  
B) organology.  
C) pathology.  
D) cytology.  
E) histology.
- 9) The study of the function of specific organ systems is called \_\_\_\_\_  
A) systemic physiology.  
B) cell physiology.  
C) histology.  
D) organ physiology.  
E) pathological physiology.
- 10) Cardiovascular physiology is an example of \_\_\_\_\_  
A) pathological physiology.  
B) histophysiology.  
C) physiological chemistry.  
D) organ physiology.  
E) systemic physiology.
- 11) Organ physiology is to \_\_\_\_\_ as gross anatomy is to \_\_\_\_\_.  
A) balance; equilibrium  
B) imbalance; microscopic anatomy  
C) macroscopic anatomy; unbalance  
D) cell physiology; microscopic anatomy  
E) equilibrium; macroscopic anatomy
- 12) Which of the following is arranged in correct order from the most COMPLEX to the SIMPLEST?  
A) cellular, tissue, molecular, system, organ, organism  
B) organism, system, organ, tissue, cellular, molecular  
C) organ, organism, molecular, cellular, tissue, system  
D) molecular, cellular, tissue, organ, system, organism  
E) tissue, cellular, molecular, organ, system, organism
- 13) Which organ system provides support, protection of soft tissue, mineral storage, and blood formation?  
A) muscular  
B) endocrine  
C) nervous  
D) skeletal  
E) integumentary
- 14) The kidneys and ureters are organs of the \_\_\_\_\_ system.  
A) urinary  
B) endocrine  
C) lymphoid  
D) digestive  
E) respiratory

- 15) The pituitary gland and thyroid gland are organs of the \_\_\_\_\_ system. 15) \_\_\_\_\_  
A) cardiovascular  
B) lymphoid  
C) endocrine  
D) digestive  
E) respiratory
- 16) Which organ system removes carbon dioxide from the bloodstream? 16) \_\_\_\_\_  
A) cardiovascular  
B) endocrine  
C) respiratory  
D) digestive  
E) lymphoid
- 17) Lungs are to the respiratory system as the liver is to the \_\_\_\_\_ system. 17) \_\_\_\_\_  
A) urinary  
B) digestive  
C) cardiovascular  
D) lymphoid  
E) both B and D
- 18) Skin, hair, and nails are associated with the \_\_\_\_\_ system. 18) \_\_\_\_\_  
A) skeletal  
B) integumentary  
C) muscular  
D) endocrine  
E) both A and B
- 19) Which organ system transports nutrients, metabolic wastes, gases, and defense cells? 19) \_\_\_\_\_  
A) muscular  
B) respiratory  
C) cardiovascular  
D) urinary  
E) digestive
- 20) Which organ system includes the spleen and the tonsils? 20) \_\_\_\_\_  
A) endocrine  
B) cardiovascular  
C) lymphoid  
D) nervous  
E) digestive
- 21) Which of the following organs is located between the peritoneum and the body wall? 21) \_\_\_\_\_  
A) kidney  
B) stomach  
C) urinary bladder  
D) spleen  
E) large intestine

- 22) A chemical imbalance in the blood can cause the heart to stop pumping blood, which in turn will cause other tissues and organs to cease functioning. This observation supports the view that 22) \_\_\_\_\_
- A) chemical molecules make up cells.
  - B) congenital defects can be life-threatening.
  - C) all levels of organization within an organism are interdependent.
  - D) all organisms are composed of cells.
  - E) blood has magical properties.
- 23) The maintenance of a constant internal environment in an organism is termed 23) \_\_\_\_\_
- A) effector control.
  - B) integration.
  - C) positive feedback.
  - D) negative feedback.
  - E) homeostasis.
- 24) The central principle of physiology is 24) \_\_\_\_\_
- A) homeostasis.
  - B) stimulation.
  - C) temperature regulation.
  - D) reflexes.
  - E) nutrition.
- 25) When body temperature rises, a center in the brain initiates physiological changes to decrease the body temperature. This is an example of 25) \_\_\_\_\_
- A) negative feedback.
  - B) fever.
  - C) diagnostic regulation.
  - D) positive feedback.
  - E) nonhomeostatic regulation.
- 26) In general, the nervous system does each of the following, except 26) \_\_\_\_\_
- A) helps to maintain homeostasis.
  - B) responds rapidly to change.
  - C) directs very specific responses.
  - D) directs long-term responses to change.
  - E) both B and D
- 27) Which one of the following is not a characteristic of the endocrine system? 27) \_\_\_\_\_
- A) produces a more rapid response than the nervous system
  - B) produces effects that last for days or longer
  - C) produces an effect that involves several organs or tissues at the same time
  - D) important homeostatic system
  - E) releases chemical messengers called hormones
- 28) A cell or organ that responds to commands of the control center in negative feedback is termed a(n) 28) \_\_\_\_\_
- A) receptor.
  - B) stimulus.
  - C) effector.
  - D) thermoregulator.
  - E) hypothalamus.

- 29) This type of feedback exaggerates the effects of variations from normal. 29) \_\_\_\_\_  
 A) positive  
 B) depressing  
 C) negative  
 D) neutral  
 E) all of the above
- 30) The integrating center for the negative feedback loop that regulates body temperature is the 30) \_\_\_\_\_  
 A) positive feedback center.  
 B) hypothalamus.  
 C) thermostat.  
 D) skin.  
 E) temperature sensor.
- 31) If a response decreases a disturbance, the system is classified as a \_\_\_\_\_ feedback system. 31) \_\_\_\_\_  
 A) neutral                      B) deficit                      C) positive                      D) negative                      E) polarized
- 32) If a response increases a disturbance, the system is classified as a \_\_\_\_\_ feedback system. 32) \_\_\_\_\_  
 A) polarized                      B) deficit                      C) positive                      D) negative                      E) neutral
- 33) An example of a receptor in a negative feedback loop controlling body temperature would be 33) \_\_\_\_\_  
 A) effectors that cause blood vessels to dilate.  
 B) sweat glands that increase secretion.  
 C) sweat glands that act like effectors.  
 D) temperature sensors on the skin that detect a stimulus.  
 E) regulatory centers that send commands to an effector.
- 34) A person facing forward with hands at the sides and palms facing forward is in the 34) \_\_\_\_\_  
 A) anatomical position.  
 B) sagittal position.  
 C) prone position.  
 D) supine position.  
 E) frontal position.
- 35) An anatomical term that means the same as *ventral*: 35) \_\_\_\_\_  
 A) inferior  
 B) anterior  
 C) superior  
 D) posterior  
 E) abdominal
- 36) The heart is \_\_\_\_\_ to the lungs. 36) \_\_\_\_\_  
 A) lateral                      B) medial                      C) proximal                      D) distal                      E) posterior
- 37) The wrist is \_\_\_\_\_ to the elbow. 37) \_\_\_\_\_  
 A) lateral                      B) horizontal                      C) distal                      D) medial                      E) proximal
- 38) The chin is \_\_\_\_\_ to the nose. 38) \_\_\_\_\_  
 A) superior                      B) anterior                      C) posterior                      D) inferior                      E) medial

- 39) Which of the following regions corresponds to the buttocks? 39) \_\_\_\_\_  
 A) cephalic      B) pelvic      C) thoracic      D) lumbar      E) gluteal
- 40) Which of the following terms refers to the foot? 40) \_\_\_\_\_  
 A) cervical  
 B) antebrachial  
 C) brachial  
 D) pedal  
 E) femoral
- 41) Which plane divides the body into right and left parts? 41) \_\_\_\_\_  
 A) proximal  
 B) transverse  
 C) frontal  
 D) sagittal  
 E) orthogonal
- 42) The quadrants of the abdominopelvic region include all of the following except 42) \_\_\_\_\_  
 A) left upper quadrant (LUQ).  
 B) left lower quadrant (LLQ).  
 C) pelvic quadrant.  
 D) right upper quadrant (RUQ).  
 E) right lower quadrant (RLQ).
- 43) Which of the following is not considered an abdominopelvic region? 43) \_\_\_\_\_  
 A) upper  
 B) right hypochondriac  
 C) left lumbar  
 D) left hypochondriac  
 E) right inguinal region
- 44) The urinary bladder is found in the \_\_\_\_\_ quadrant and the \_\_\_\_\_ quadrant. 44) \_\_\_\_\_  
 A) left upper; left lower  
 B) right upper; right lower  
 C) right upper; right lower  
 D) left upper; right upper  
 E) right lower; left lower
- 45) The liver is primarily located in the \_\_\_\_\_ quadrant. 45) \_\_\_\_\_  
 A) hepatic  
 B) left upper  
 C) right lower  
 D) left lower  
 E) right upper
- 46) While standing erect, the direction of caudal is 46) \_\_\_\_\_  
 A) upward.  
 B) medially.  
 C) laterally.  
 D) downward.  
 E) none of these.

- 47) A person is lying on the bed gazing at the ceiling. She is in the \_\_\_\_\_ position. 47) \_\_\_\_\_  
A) anatomical  
B) supine  
C) prone  
D) caudal  
E) dorsal
- 48) Terms of anatomical direction are used to describe 48) \_\_\_\_\_  
A) the nervous system.  
B) one body part in relation to another.  
C) surgical procedures.  
D) a supine position.  
E) living matter.
- 49) While standing in the anatomical position, 49) \_\_\_\_\_  
A) back refers to dorsal.  
B) front refers to ventral.  
C) front refers to anterior.  
D) back refers to posterior.  
E) all of the above
- 50) The muscle known as the diaphragm separates the \_\_\_\_\_ from the \_\_\_\_\_. 50) \_\_\_\_\_  
A) pleural cavity; mediastinum  
B) thoracic cavity; abdominopelvic cavity  
C) pericardial sac; pericardial cavity  
D) abdominal cavity; pelvic cavity  
E) pericardial cavity; pleural cavity
- 51) The thoracic cavity contains the 51) \_\_\_\_\_  
A) pelvic cavity.  
B) pericardial cavity.  
C) coelom.  
D) pleural cavities.  
E) both B and D
- 52) The serous membrane covering the stomach and most of the intestines is called the 52) \_\_\_\_\_  
A) mediastinum.  
B) abdomen.  
C) pericardium.  
D) peritoneum.  
E) pleura.
- 53) The two major divisions of the ventral body cavity are the 53) \_\_\_\_\_  
A) pelvic and thoracic.  
B) thoracic and abdominopelvic.  
C) cranial and sacral.  
D) lateral and medial.  
E) dorsal and ventral.

- 54) The right pleural cavity contains the \_\_\_\_\_  
 A) both lungs.  
 B) trachea.  
 C) heart.  
 D) right lung.  
 E) left lung.
- 55) Which of the following organs is not contained within the abdominal cavity? \_\_\_\_\_  
 A) small intestine  
 B) pancreas  
 C) ovary  
 D) spleen  
 E) stomach
- 56) The mediastinum \_\_\_\_\_  
 A) contains the pleural cavities.  
 B) separates the pleural cavities.  
 C) contains the pericardial cavity.  
 D) both A and C  
 E) both B and C
- 57) Identify a structure located within the mediastinum. \_\_\_\_\_  
 A) pericardial sac  
 B) small intestine  
 C) stomach  
 D) lung  
 E) spleen
- 58) Visceral pericardium is located \_\_\_\_\_  
 A) lining the pericardial cavity.  
 B) on the heart itself.  
 C) lining the peritoneal cavity.  
 D) on the lung itself.  
 E) lining the pleural cavity.
- 59) A midsagittal section would pass through the \_\_\_\_\_  
 A) kidney.            B) leg.            C) heart.            D) spleen.            E) lung.
- 60) Identify the correctly spelled term describing the organ that separates the ventral body cavity into superior and inferior cavities. \_\_\_\_\_  
 A) mediastinum  
 B) diaphram  
 C) mediastienum  
 D) diaphragm  
 E) diafragm

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

- 61) The branch of biological science that studies the external and internal structure of the body and the physical relationship among body parts is called \_\_\_\_\_ 61) \_\_\_\_\_



- 62) Anatomy uses a special language, called \_\_\_\_\_, that involves the use of word roots, prefixes, suffixes, and combining forms to construct terms related to the body in health and disease. 62) \_\_\_\_\_
- 63) The \_\_\_\_\_ serves as a worldwide official standard of anatomical vocabulary. 63) \_\_\_\_\_
- 64) The branch of biological science that deals with the study of how living organisms perform their vital functions is called \_\_\_\_\_. 64) \_\_\_\_\_
- 65) \_\_\_\_\_ studies the changes in form that occur between conception and physical maturity. 65) \_\_\_\_\_
- 66) The tendency for physiological systems to stabilize internal conditions is called \_\_\_\_\_. 66) \_\_\_\_\_
- 67) \_\_\_\_\_ regulation results from the activities of the nervous or endocrine system. 67) \_\_\_\_\_
- 68) When homeostatic mechanisms fail, an individual will experience the symptoms of \_\_\_\_\_. 68) \_\_\_\_\_
- 69) Homeostatic regulation usually involves a(n) \_\_\_\_\_ that detects a particular stimulus, and a(n) \_\_\_\_\_ that responds to the stimulus by communicating with a(n) \_\_\_\_\_ whose activity has an effect on the same stimulus. 69) \_\_\_\_\_
- 70) \_\_\_\_\_ regulation occurs when the activities of organs are regulated locally. 70) \_\_\_\_\_
- 71) A person lying face down is in the \_\_\_\_\_ position. 71) \_\_\_\_\_
- 72) A cut parallel to the midsagittal plane would produce a(n) \_\_\_\_\_ section. 72) \_\_\_\_\_
- 73) The common term for the buccal region is the \_\_\_\_\_. 73) \_\_\_\_\_
- 74) The common term for the carpal region is the \_\_\_\_\_. 74) \_\_\_\_\_
- 75) The common name for the patella is the \_\_\_\_\_. 75) \_\_\_\_\_
- 76) The common name for the pollex is the \_\_\_\_\_. 76) \_\_\_\_\_

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

- 77) What is homeostatic regulation, and what is its physiological importance?

78) During exercise, blood flow to skeletal muscles increases. The initial response that increases blood flow is automatic and independent of the nervous and endocrine systems. Which type of homeostatic regulation is this? Why?

79) Name the two upper abdominal quadrants and list the organs that lie in each.

80) Name the organs found in the thoracic cavity.

## Answer Key

Testname: UNTITLED1

- 1) E
- 2) B
- 3) E
- 4) C
- 5) A
- 6) D
- 7) C
- 8) A
- 9) A
- 10) E
- 11) D
- 12) B
- 13) D
- 14) A
- 15) C
- 16) C
- 17) B
- 18) B
- 19) C
- 20) C
- 21) A
- 22) C
- 23) E
- 24) A
- 25) A
- 26) D
- 27) A
- 28) C
- 29) A
- 30) B
- 31) D
- 32) C
- 33) D
- 34) A
- 35) B
- 36) B
- 37) C
- 38) D
- 39) E
- 40) D
- 41) D
- 42) C
- 43) A
- 44) E
- 45) E
- 46) D
- 47) B
- 48) B
- 49) E
- 50) B

## Answer Key

Testname: UNTITLED1

- 51) E
- 52) D
- 53) B
- 54) D
- 55) C
- 56) E
- 57) A
- 58) B
- 59) C
- 60) D
- 61) anatomy
- 62) medical terminology
- 63) *Terminologia Anatomica*
- 64) physiology
- 65) Developmental anatomy
- 66) homeostasis
- 67) Extrinsic
- 68) disease
- 69) receptor; integrating center; effector
- 70) Intrinsic
- 71) prone
- 72) parasagittal
- 73) cheek
- 74) wrist
- 75) kneecap
- 76) thumb
- 77) Homeostatic regulation refers to adjustments in physiological systems that are responsible for the preservation of a constant internal environment. This provides a favorable environment for the body's cells.
- 78) The initial increase in blood flow to active muscles is an example of autoregulation. For example, when oxygen levels decline in a tissue, the cells release chemicals that dilate local blood vessels. This dilation increases the rate of blood flow and provides more oxygen to the region even before responses from the nervous or endocrine system take place. Autoregulation does not require the nervous or endocrine system.
- 79) right upper quadrant (RUQ): right lobe of liver, gallbladder, right kidney, portions of stomach, large and small intestines; left upper quadrant (LUQ): left lobe of liver, stomach, pancreas, left kidney, spleen, portions of large intestine
- 80) lungs, heart, trachea, esophagus, thymus, major blood vessels connected to the heart