

Anatomy Fall Semester Set 1: Organization and Tissues

1. Which of the following describes anatomy?
 - a. using devices to investigate parameters such as heart rate and blood pressure
 - b. investigating human structure via dissections and other methods
 - c. studying the unusual manner in which an organism responds to painful stimuli
 - d. examining the physiology of life
2. Physiology:
 - a. recognizes the unchanging (as opposed to the dynamic) nature of things.
 - b. investigates the body's structure.
 - c. is concerned with organisms and does not deal with different levels of organization such as cells and systems.
 - d. is the science that examines the function of living organisms and their parts.
3. *Metabolism* refers to:
 - a. the chemical basis of life.
 - b. the sum of all the physical and chemical reactions occurring in the body.
 - c. an organization of similar cells specialized to perform a certain function.
 - d. a subdivision of physiology.
4. *Homeostasis* can best be described as:
 - a. a constant state maintained by living and nonliving organisms.
 - b. a state of relative constancy.
 - c. adaptation to external environment.
 - d. changes in body temperature.
5. The smallest living units of structure and function in the body are:
 - a. molecules.
 - b. cells.
 - c. organelles.
 - d. atoms.
6. An organization of many similar cells that are specialized to perform a certain function is called a(n):
 - a. tissue.
 - b. organism.
 - c. system.
 - d. organ.
7. The lungs are located in the:
 - a. thoracic cavity.
 - b. mediastinum.
 - c. abdominal cavity.
 - d. cranial cavity.

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8. The mediastinum contains all the following except the:
 - a. trachea.
 - b. venae cavae.
 - c. right lung.
 - d. esophagus.
9. The number of abdominal regions is:
 - a. three.
 - b. five.
 - c. seven.
 - d. nine.
10. The abdominal region in which the urinary bladder is found is the:
 - a. hypogastric.
 - b. epigastric.
 - c. right lumbar.
 - d. left iliac.
11. The abdominal region in which the appendix is found is the:
 - a. hypogastric.
 - b. right iliac.
 - c. right lumbar.
 - d. right hypochondriac.
12. A plane through the body that would divide the body into right and left sides is called:
 - a. sagittal.
 - b. frontal.
 - c. coronal.
 - d. transverse.
13. The abdominal quadrants are located with what structure as their midpoint?
 - a. umbilicus
 - b. pubic bone
 - c. xiphoid process
 - d. iliac crest
14. Two major cavities of the human body are:
 - a. ventral/dorsal.
 - b. inferior/superior.
 - c. visceral/parietal.
 - d. axial/appendicular.
15. A plane through the body that would divide the body into anterior and posterior portions is:
 - a. sagittal.
 - b. median.
 - c. coronal.
 - d. transverse.

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16. The plane which divides the individual into upper and lower parts is the:
 - a. sagittal plane.
 - b. frontal plane.
 - c. transverse plane.
 - d. superficial plane.
17. *Pathogenesis* may be defined as:
 - a. a specific disease.
 - b. a group of diseases.
 - c. the course of disease development.
 - d. a subgroup of viruses.
18. The study of the aging process is:
 - a. neonatology.
 - b. gerontology.
 - c. dermatology.
 - d. podiatry.
19. *Epidemiology* is the study of the:
 - a. occurrence of diseases in human populations.
 - b. distribution of diseases in human populations.
 - c. transmission of diseases in human populations.
 - d. all of the above.
20. Blood production is a function of which system?
 - a. reproductive
 - b. respiratory
 - c. skeletal
 - d. lymphatic
21. Negative feedback control systems:
 - a. oppose a change.
 - b. accelerate a change.
 - c. have no effect on the deviation from set point.
22. Positive feedback control systems:
 - a. have no effect on the deviation from set point.
 - b. accelerate a change.
 - c. ignore a change.
23. The dorsal body cavity contains the:
 - a. brain and spinal cord.
 - b. heart and lungs.
 - c. reproductive organs.
 - d. digestive organs.

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24. The ventral body cavity contains the:
 - a. thoracic and abdominopelvic cavities.
 - b. heart and lungs only.
 - c. digestive and reproductive organs.
 - d. brain and spinal cord.
25. The axial portion of the body consists of the:
 - a. arms, neck, and legs.
 - b. neck, torso, and arms.
 - c. torso, arms, legs, and head.
 - d. head, neck, and torso.
26. A sagittal section divides the body into:
 - a. upper and lower portions.
 - b. right and left portions.
 - c. front and back portions.
27. “Apple-shaped” or “pear-shaped” describe subtypes of what major body type?
 - a. mesomorph
 - b. ectomorph
 - c. endomorph
 - d. polymorph
28. The most widespread and abundant tissue in the body is:
 - a. epithelial.
 - b. connective.
 - c. muscle.
 - d. nervous.
29. A tissue is:
 - a. a membrane that lines body cavities.
 - b. a group of similar cells that perform a common function.
 - c. a thin sheet of cells embedded in a matrix.
 - d. the most complex organizational unit of the body.
30. Keratinized stratified squamous epithelium is found in the:
 - a. mouth.
 - b. esophagus.
 - c. epidermis.
 - d. vagina.
31. Glands that are not ducted, but release their products directly into tissue fluid and blood, are called:
 - a. endocrine.
 - b. exocrine.
 - c. holocrine.
 - d. apocrine.

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32. Which of the following would be found as skin covering?
 - a. pseudostratified columnar epithelium
 - b. stratified squamous (keratinized) epithelium
 - c. pseudostratified squamous (keratinized) epithelium
 - d. stratified squamous nonkeratinized epithelium
33. Blood is an example of:
 - a. epithelial tissue.
 - b. connective tissue.
 - c. osseous tissue.
 - d. none of the above.
34. Collagenous fibers can be found extensively in:
 - a. epithelial tissue.
 - b. connective tissue.
 - c. muscle tissue.
 - d. nervous tissue.
35. The type of tissue referred to as *loose ordinary connective tissue* is:
 - a. areolar.
 - b. adipose.
 - c. reticular.
 - d. cartilage.
36. The basic organizational or structural unit of bone is called the:
 - a. canaliculi.
 - b. lamellae.
 - c. lacunae.
 - d. haversian system.
37. Cartilage is a form of:
 - a. epithelial tissue.
 - b. connective tissue.
 - c. muscle tissue.
 - d. osseous tissue.
38. The red marrow of bones is a form of:
 - a. skeletal muscle tissue.
 - b. cartilage tissue.
 - c. hematopoietic tissue.
 - d. smooth muscle tissue.
39. The peritoneum is an example of a:
 - a. cutaneous membrane.
 - b. serous membrane.
 - c. mucous membrane.
 - d. cuboidal membrane.

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40. Connective tissue membranes differ from cutaneous and serous membranes in that they:
 - a. contain fewer layers of cells.
 - b. do not contain epithelial components.
 - c. are not smooth and slick.
 - d. do not secrete fluids.
41. The most complex tissue in the body is:
 - a. connective.
 - b. epithelial.
 - c. nervous.
 - d. muscle.
42. Which of the following is not true of simple squamous epithelium?
 - a. It is one layer thick.
 - b. It prevents the diffusion of material from one part of the body to another.
 - c. It is composed of flat, scale-like cells.
 - d. All of the above are true of simple squamous epithelium.
43. Which of the following is not true of simple cuboidal epithelium?
 - a. It is one layer thick.
 - b. It is composed of cuboidal-shaped cells.
 - c. It is found in ducts or tubules of the kidney.
 - d. All of the above are true of simple cuboidal epithelium.
44. Microvilli are found on which types of cells in the lining of the intestine?
 - a. pseudostratified epithelium
 - b. simple columnar epithelium
 - c. stratified cuboidal epithelium
 - d. simple cuboidal epithelium
45. Cilia are found on which types of cells lining the respiratory tract?
 - a. pseudostratified epithelium
 - b. simple columnar epithelium
 - c. stratified cuboidal epithelium
 - d. simple cuboidal epithelium
46. Glandular epithelium is usually composed of:
 - a. stratified cuboidal epithelium.
 - b. stratified columnar epithelium.
 - c. pseudostratified columnar epithelium.
 - d. none of the above.
47. The functioning of which of the following glandular tissues does not injure the cell or cause a loss of cytoplasm?
 - a. apocrine
 - b. endocrine
 - c. merocrine
 - d. holocrine

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48. Areolar tissue usually contains which type of cell in the greatest number?
- macrophages
 - fibroblasts
 - mast cells
 - phagocytes
49. Cells found only in cartilage include:
- chondrocytes and fibroblasts.
 - chondrocytes and macrophages.
 - chondrocytes and mast cells.
 - only chondrocytes are found only in cartilage.
50. The serous membrane covering the stomach would be called the:
- visceral pleura.
 - visceral peritoneum.
 - parietal pleura.
 - parietal peritoneum.
51. Which of the following vitamins is/are absorbed through the skin?
- vitamin A
 - vitamin D
 - vitamin K
 - all of the above
52. The superficial outer layer of the epidermis is the:
- stratum basale.
 - stratum lucidum.
 - stratum corneum.
 - stratum granulosum.
 - stratum spinosum.
53. Of the five epidermal cell layers, the only one that can undergo mitosis is the:
- stratum basale.
 - stratum lucidum.
 - stratum corneum.
 - stratum granulosum.
 - stratum spinosum.
54. In what area of the body would you expect to find an especially thick stratum corneum?
- back of the hand
 - thigh
 - abdomen
 - sole of the foot
55. The papillary layer of the dermis:
- is responsible for cleavage or tension lines in the skin.
 - does not contain blood vessels.
 - is responsible for fingerprints.
 - contains large deposits of fat.

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56. Smooth muscles that produce goose pimples when they contract are the:
 - a. papillary muscles.
 - b. cuticle muscles.
 - c. medullary muscles.
 - d. arrector pili muscles.

57. The type of cancer associated with changes in a mole is:
 - a. squamous cell carcinoma.
 - b. malignant melanoma.
 - c. basal cell carcinoma.
 - d. columnar cell carcinoma.

58. Prolonged exposure to the sun causes melanocytes to:
 - a. increase in number.
 - b. rupture and release their contents.
 - c. increase melanin production.
 - d. decrease melanin production.

59. Growth of fingernails is due to the mitosis of the cells in the:
 - a. stratum germinativum.
 - b. stratum granulosum.
 - c. stratum corneum.
 - d. stratum lucidum.

60. The type of gland associated with blackheads is:
 - a. eccrine.
 - b. apocrine.
 - c. sebaceous.
 - d. ceruminous.

61. The hair follicle consists of:
 - a. epidermal tissue.
 - b. dermal tissue.
 - c. hypodermal tissue.
 - d. fibrous connective tissue.

62. Sebum:
 - a. lubricates hair and skin.
 - b. is produced by sweat glands.
 - c. consists of dead cells from hair follicles.
 - d. is responsible for body odor.

63. The type of gland that produces the waxy secretion in the external ear canal is:
 - a. eccrine.
 - b. apocrine.
 - c. sebaceous.
 - d. ceruminous.

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64. The surface film found on the skin has a variety of functions, including:
- lubrication.
 - buffering of caustic irritants.
 - antibacterial and antifungal activity.
 - all of the above.
65. The body compensates for the increase in the core body temperature due to exercise by:
- decreasing the blood flow to the skin.
 - increasing the blood flow to the core.
 - increasing the blood flow to the skin.
 - vasoconstriction of the blood vessels in the skin.
66. A major distinction between second- and third-degree burns is that:
- only third-degree burns involve injury to the deep epidermal layers.
 - only third-degree burns involve damage to hair follicles.
 - only third-degree burns involve damage to the sweat glands.
 - third-degree burns are characterized by insensitivity to pain immediately after injury.
67. In the skin, the dermis:
- and epidermis are both epithelial tissue.
 - and epidermis are both connective tissue.
 - is connective tissue and the epidermis is epithelial tissue.
 - is epithelial tissue and the epidermis is connective tissue.
68. The layer beneath the dermis is called the:
- hypodermis.
 - subcutaneous layer.
 - superficial fascia.
 - all of the above.
69. Which skin layer contains closely packed, clear cells that contain a gel-like substance called *eleidin*?
- stratum lucidum
 - stratum basale
 - stratum granulosum
 - stratum corneum
70. Normally, which percentage of the cells in the stratum basale enter mitosis each day?
- 20–25%
 - 10–12%
 - 18–20%
 - 35–40%