

Anatomy Fall Semester Set 1: Organization and Tissues

- Which of the following describes anatomy?
 - using devices to investigate parameters such as heart rate and blood pressure
 - investigating human structure via dissections and other methods
 - studying the unusual manner in which an organism responds to painful stimuli
 - examining the physiology of life
- Physiology:
 - recognizes the unchanging (as opposed to the dynamic) nature of things.
 - investigates the body's structure.
 - is concerned with organisms and does not deal with different levels of organization such as cells and systems.
 - is the science that examines the function of living organisms and their parts.
- Metabolism* refers to:
 - the chemical basis of life.
 - the sum of all the physical and chemical reactions occurring in the body.
 - an organization of similar cells specialized to perform a certain function.
 - a subdivision of physiology.
- Homeostasis* can best be described as:
 - a constant state maintained by living and nonliving organisms.
 - a state of relative constancy.
 - adaptation to external environment.
 - changes in body temperature.
- The smallest living units of structure and function in the body are:
 - molecules.
 - cells.
 - organelles.
 - atoms.
- An organization of many similar cells that are specialized to perform a certain function is called a(n):
 - tissue.
 - organism.
 - system.
 - organ.
- The lungs are located in the:
 - thoracic cavity.
 - mediastinum.
 - abdominal cavity.
 - 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:
- thoracic and abdominopelvic cavities.
 - heart and lungs only.
 - digestive and reproductive organs.
 - brain and spinal cord.
25. The axial portion of the body consists of the:
- arms, neck, and legs.
 - neck, torso, and arms.
 - torso, arms, legs, and head.
 - head, neck, and torso.
26. A sagittal section divides the body into:
- upper and lower portions.
 - right and left portions.
 - front and back portions.
27. “Apple-shaped” or “pear-shaped” describe subtypes of what major body type?
- mesomorph
 - ectomorph
 - endomorph
 - polymorph
28. The most widespread and abundant tissue in the body is:
- epithelial.
 - connective.
 - muscle.
 - nervous.
29. A tissue is:
- a membrane that lines body cavities.
 - a group of similar cells that perform a common function.
 - a thin sheet of cells embedded in a matrix.
 - the most complex organizational unit of the body.
30. Keratinized stratified squamous epithelium is found in the:
- mouth.
 - esophagus.
 - epidermis.
 - vagina.
31. Glands that are not ducted, but release their products directly into tissue fluid and blood, are called:
- endocrine.
 - exocrine.
 - holocrine.
 - apocrine.

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

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40. Connective tissue membranes differ from cutaneous and serous membranes in that they:
- contain fewer layers of cells.
 - do not contain epithelial components.**
 - are not smooth and slick.
 - do not secrete fluids.
41. The most complex tissue in the body is:
- connective.
 - epithelial.
 - nervous.**
 - muscle.
42. Which of the following is not true of simple squamous epithelium?
- It is one layer thick.
 - It prevents the diffusion of material from one part of the body to another.**
 - It is composed of flat, scale-like cells.
 - All of the above are true of simple squamous epithelium.
43. Which of the following is not true of simple cuboidal epithelium?
- It is one layer thick.
 - It is composed of cuboidal-shaped cells.
 - It is found in ducts or tubules of the kidney.
 - 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?
- pseudostratified epithelium
 - simple columnar epithelium**
 - stratified cuboidal epithelium
 - simple cuboidal epithelium
45. Cilia are found on which types of cells lining the respiratory tract?
- pseudostratified epithelium**
 - simple columnar epithelium
 - stratified cuboidal epithelium
 - simple cuboidal epithelium
46. Glandular epithelium is usually composed of:
- stratified cuboidal epithelium.
 - stratified columnar epithelium.
 - pseudostratified columnar epithelium.
 - 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?
- apocrine
 - endocrine
 - merocrine**
 - 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:
- papillary muscles.
 - cuticle muscles.
 - medullary muscles.
 - arrector pili muscles.
57. The type of cancer associated with changes in a mole is:
- squamous cell carcinoma.
 - malignant melanoma.
 - basal cell carcinoma.
 - columnar cell carcinoma.
58. Prolonged exposure to the sun causes melanocytes to:
- increase in number.
 - rupture and release their contents.
 - increase melanin production.
 - decrease melanin production.
59. Growth of fingernails is due to the mitosis of the cells in the:
- stratum germinativum.
 - stratum granulosum.
 - stratum corneum.
 - stratum lucidum.
60. The type of gland associated with blackheads is:
- eccrine.
 - apocrine.
 - sebaceous.
 - ceruminous.
61. The hair follicle consists of:
- epidermal tissue.
 - dermal tissue.
 - hypodermal tissue.
 - fibrous connective tissue.
62. Sebum:
- lubricates hair and skin.
 - is produced by sweat glands.
 - consists of dead cells from hair follicles.
 - is responsible for body odor.
63. The type of gland that produces the waxy secretion in the external ear canal is:
- eccrine.
 - apocrine.
 - sebaceous.
 - 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%

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Semester Review Packet Fall 2010 Answer Section

MULTIPLE CHOICE

1. ANS: B
Topic: Anatomy and Physiology
Difficulty: memorization
Page: 5
2. ANS: D
Topic: Physiology
Difficulty: memorization
Page: 6
3. ANS: B
Topic: Characteristics of Life
Difficulty: application
Page: 7
4. ANS: B
Topic: Homeostasis
Difficulty: application
Page: 20
5. ANS: B
Topic: Levels of Organization
Difficulty: memorization
Page: 9
6. ANS: A
Topic: Tissue Level
Difficulty: memorization
Page: 9
7. ANS: A
Topic: Body Cavities
Difficulty: memorization
Page: 12 (Table 1-2)
8. ANS: C
Topic: Body Cavities
Difficulty: memorization
Page: 12 (Table 1-2)
9. ANS: D
Topic: Abdominal Regions
Difficulty: memorization
Page: 12
10. ANS: A
Topic: Abdominal Regions
Difficulty: memorization
Page: 13
11. ANS: A

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- Topic: Abdominal Regions
Difficulty: memorization
Page: 13
12. ANS: A
Topic: Body Planes and Sections
Difficulty: memorization
Page: 16
13. ANS: A
Topic: Abdominopelvic Quadrants
Difficulty: memorization
Page: 13
14. ANS: A
Topic: Body Cavities
Difficulty: memorization
Page: 11
15. ANS: C
Topic: Body Planes and Sections
Difficulty: memorization
Page: 16
16. ANS: C
Topic: Body Planes and Sections
Difficulty: memorization
Page: 16
17. ANS: C
Topic: Disease Terminology
Difficulty: memorization
Page: 27 (Box 1-4)
18. ANS: B
Topic: Cycle of Life: Life Span Considerations
Difficulty: memorization
Page: 26
19. ANS: D
Topic: Disease Terminology
Difficulty: memorization
Page: 27 (Box 1-4)
20. ANS: C
Topic: Support and Movement
Difficulty: memorization
Page: 10
21. ANS: A
Topic: Negative Feedback Control Systems
Difficulty: memorization
Page: 25
22. ANS: B
Topic: Positive Feedback Control Systems
Difficulty: memorization

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- Page: 25
23. ANS: A
Topic: Body Cavities
Difficulty: memorization
Page: 12
24. ANS: A
Topic: Body Cavities
Difficulty: memorization
Page: 11
25. ANS: D
Topic: Body Regions
Difficulty: memorization
Page: 12
26. ANS: B
Topic: Body Planes and Sections
Difficulty: memorization
Page: 16
27. ANS: C
Topic: Body Types and Diseases
Difficulty: memorization
Page: 18 & 19
28. ANS: B
Topic: Connective Tissue
Difficulty: memorization
Page: 132
29. ANS: B
Topic: Tissues
Difficulty: memorization
Page: 123
30. ANS: C
Topic: Classification Based on Layers of Cells
Difficulty: application
Page: 129 & 130 (Fig. 5-8)
31. ANS: A
Topic: Glandular Epithelium
Difficulty: memorization
Page: 131
32. ANS: B
Topic: Classification Based on Layers of Cells
Difficulty: application
Page: 129
33. ANS: B
Topic: Connective Tissue
Difficulty: memorization
Page: 134
34. ANS: B

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- Topic: Characteristics of Connective Tissue
Difficulty: memorization
Page: 132
35. ANS: A
Topic: Classification of Connective Tissue
Difficulty: application
Page: 135
36. ANS: D
Topic: Bone Tissue
Difficulty: memorization
Page: 140
37. ANS: B
Topic: Classification of Connective Tissue
Difficulty: memorization
Page: 134
38. ANS: C
Topic: Blood
Difficulty: memorization
Page: 143
39. ANS: B
Topic: Epithelial Membranes
Difficulty: memorization
Page: 147
40. ANS: B
Topic: Epithelial Membranes
Difficulty: synthesis
Page: 148
41. ANS: C
Topic: Principal Types of Tissue
Difficulty: memorization
Page: 124
42. ANS: B
Topic: Simple Epithelium
Difficulty: application
Page: 126
43. ANS: D
Topic: Simple Epithelium
Difficulty: application
Page: 128
44. ANS: B
Topic: Simple Epithelium
Difficulty: memorization
Page: 128
45. ANS: A
Topic: Simple Epithelium
Difficulty: memorization

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- Page: 129
46. ANS: D
Topic: Glandular Epithelium
Difficulty: memorization
Page: 131
47. ANS: C
Topic: Glandular Epithelium
Difficulty: memorization
Page: 131
48. ANS: B
Topic: Fibrous Connective Tissue
Difficulty: memorization
Page: 136
49. ANS: D
Topic: Cartilage
Difficulty: memorization
Page: 140
50. ANS: B
Topic: Serous Membranes
Difficulty: application
Page: 147
51. ANS: D
Topic: Functions of the Skin
Difficulty: memorization
Page: 170
52. ANS: C
Topic: Cell Layers
Difficulty: memorization
Page: 162
53. ANS: A
Topic: Cell Layers
Difficulty: memorization
Page: 163
54. ANS: D
Topic: Thin and Thick Skin
Difficulty: synthesis
Page: 160
55. ANS: C
Topic: Papillary Layer
Difficulty: memorization
Page: 166
56. ANS: D
Topic: Reticular Layer
Difficulty: memorization
Page: 166
57. ANS: B

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- Topic: Skin Cancer
Difficulty: application
Page: 164 (Box 6-4)
58. ANS: C
Topic: Skin Color
Difficulty: memorization
Page: 169
59. ANS: A
Topic: Nails
Difficulty: memorization
Page: 178
60. ANS: C
Topic: Sebaceous Glands
Difficulty: memorization
Page: 180
61. ANS: A
Topic: Hair
Difficulty: synthesis
Page: 176
62. ANS: A
Topic: Sebaceous Glands
Difficulty: synthesis
Page: 180
63. ANS: D
Topic: Ceruminous Glands
Difficulty: memorization
Page: 180
64. ANS: D
Topic: Surface Film
Difficulty: application
Page: 170 & 171
65. ANS: C
Topic: Heat Loss
Difficulty: memorization
Page: 172
66. ANS: D
Topic: Estimating Body Surface Area
Difficulty: synthesis
Page: 175 & 176
67. ANS: C
Topic: The Structure of the Skin
Difficulty: memorization
Page: 160 & 161
68. ANS: D
Topic: Structure of the Skin
Difficulty: memorization

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Page: 161

69. ANS: A

Topic: Epidermis

Difficulty: memorization

Page: 162

70. ANS: B

Topic: Epidermal Growth and Repair

Difficulty: memorization

Page: 164