

**DO NOT MARK OR WRITE ON THIS QUIZ !!**

There are 25 questions, each worth 3 points and a short essay worth 25 points.

**DO YOUR OWN WORK !! Use Your Time Wisely**

1. The Integumentary System is divided into how many layers?  
a) 2                              b) 3                              c) 4                              d) 6
2. What are the two major groups of **membranes** covering the human body?  
a) Epithelial & Mucus      b) Cutaneous & Mucus      c) Epithelial & Connective Tissue      d) None of these
3. Which internal membrane provides protection for your joints?  
a) Serous                      b) Synovial                      c) Cutaneous                      d) Mucus
4. These membranes line internal cavities exposed to air & excrete a gooey substance.  
a) Serous                      b) Synovial                      c) Cutaneous                      d) Mucus
5. The Integumentary System protects the human body from ...  
a) Friction                      b) Hot & Cold Temperature                      c) Bacteria                      d) All of These
6. Which stratum of the epidermis is full of keratin, cornified to prevent water loss?  
a) Basale                      b) Granulosum                      c) Corneum                      d) None of These
7. Which body system extends into the dermis to provide information to your brain?  
a) Cardiovascular      b) Immune                      c) Integumentary      d) Nervous
8. Subcutaneous tissue includes adipose tissue or fat. It is also known as the ...  
a) Dermis                      b) Papillary Layer                      c) Hypodermis                      d) Reticular Layer
9. The dermis is divided into two layers. Which of these is the thickest?  
a) Papillary                      b) Reticular                      c) Basale                      d) Hypodermis
10. Which stratum of the epidermis is responsible for new cell production?  
a) Corneum                      b) Basale                      c) Granulosum                      d) Spinosum

11. Which stratum of the epidermis receives the most nutrients from the dermal blood vessels?  
a) Corneum                      b) Basale                      c) Granulosum                      d) Spinosum
12. What happens to epithelial cells as they migrate to the surface layer of your skin?  
a) Death                      b) Cornification                      c) Stratification                      d) Both (a) & (b)
13. Keratinocytes are full of these fibrous macromolecules to make them tough/strong.  
a) Proteins                      b) Phospholipids                      c) DNA                      d) Nucleic Acids
14. Meissner's Corpuscles are located in the dermal papillae and are responsible for sensing ...  
a) Pain                      b) Pressure                      d) Bacteria                      d) Temperature
15. Melanin, a pigment colored yellow to brown to black, is produced in these spider-like cells.  
a) Adipose                      b) Hemoglobin                      c) Melanocytes                      d) Melanoblasts
16. The dermis is divided into two layers. Which of these is closest to the hypodermis?  
a) Subcutaneous                      b) Epidermis                      c) Papillary                      d) Reticular
17. Genetically determined patterns found on hands & feet are formed by arrangement of ...  
a) Papillae                      b) Basale Cells                      c) Melanocytes                      d) Carotene
18. Most skin structures and appendages are found in this layer.  
a) Epidermis                      b) Hypodermis                      c) Reticular                      d) Papillary
19. Most cells in the epidermis are dead, flat, full of protein fibers and located in this stratum.  
a) Corneum                      b) Lucidum                      c) Granulosum                      d) Spinosum
20. Pressure receptors, located deep in the dermis, are called ...  
a) Pressure Papili                      b) Pacinian Corpuscles                      c) Arrector pili                      d) Meissner's pili
21. Which of these pigments is also responsible for carrying oxygen in your blood?  
a) Hemoglobin                      b) Carotene                      c) Melonin                      d) Red dye #4



Matching - Choose the best descriptor from Column B to match the question in Column A.

<u>Column A</u>	<u>Column B</u>
11. Melanoma	A. Sebaceous gland infection
12. Boils	B. <i>Streptococcus pyogenes</i>
13. Eczema	C. Too much sun
14. Erysipelas	D. Environmental stresses
15. Acne	E. <i>Staphylococcus aureus</i>

<u>Column A</u>	<u>Column B</u>
16. 2 <sup>nd</sup> Degree Burn	A. Follicle infection
17. 3 <sup>rd</sup> Degree Burn	B. Epidermis/Dermis interface
18. Furuncle	C. Epidermis only
19. Dermal Pappillae	D. Beyond Epidermis and dermis
20. 1 <sup>st</sup> Degree Burn	E. Dermis only

<u>Column A</u>	<u>Column B</u>
21. Stratum Germinativum	A. Epidermis
22. Stratum corneum	B. Dermis
23. Sweat gland	
24. Papillae	
25. Stratum Granulosum	
26. Melanocytes	A. Sweat glands
27. Keratinized cells	B. Epidermal leakage
28. Sensible perspiration	C. Thick soles
29. Insensible perspiration	D. Pigmented protection
30. Stratum lucidum	E. Waxy protection

31. Medulla	A. "Goose bumps"
32. Vellus hair	B. Hair shaft
33. Cuticle of hair	C. "Baby hair"
34. Sebaceous gland	D. Hair root
35. Erector pili	

36. Basal Cell	A. Metastasizes
37. Melanoma	B. T2 Diabetes
38. Bed Sores	C. Sebaceous Oil
39. Acne	D. Slow Growing
40. Psoriasis	E. Stage 4- Gangrene
41. 1 Degree Burns	AB. Vitamin E

42. Keloid	A. Bacteria
43. Baldness	B. Stress
44. Eczema	C. Black/Yellow
45. Acne	D. Blisters
46. 2 Degree Burns	E. Testosterone
47. 3 Degree Burns	AB. Scar Tissue

48. DMSO	A. Staphylococcus
49. Erysipelas	B. Streptococcus
50. Squamous Cell	C. Skin Absorption
51. Furuncles	D. UV Damage

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True/False Questions. Note: **A = True, B = False**

- 52. Insensible perspiration comes out of sweat glands.
- 53. Arrector pili muscles are associated with each sweat gland.
- 54. Joe just burned himself on a hot pot. A blister forms and the burn is painful. Joe's burn would best be described as a second degree burn.
- 55. A fingernail is actually a modification of the skin.
- 56. The skin is not able to receive stimuli because the cells of the epidermis are not living cells and because there are no sensory receptors the skin.
- 57. Destruction of the matrix of the hair bulb would result in its inability to produce oil.
- 58. The protein found in large amounts in the outermost layer of the epidermal cells is lignin.

**Part 2 - Problems**

**Name** \_\_\_\_\_

**Period** \_\_\_\_\_

Section 2. Problem and Graph

1. Listed below is modified from Lab 6: Sweat Gland Density. Your tasks are:

- A. Calculate the mean density for the surface areas listed. Write your answers in the space provided.
- B. Graph the mean data vs body surface on the bar graph provided.
- C. Write your conclusions based on your graph and analysis.

Table 1. Raw Data

<b>Lab 6    Sweat Gland Data -    Densities    (#/cm<sup>2</sup>)</b>				
Initials	Surface			
	Palm	Upper leg	Upper arm	Arm pit
WW	165.0	47.3	49.4	192.0
XY	213.0	35.0	44.0	273.5
ZZ	<u>198.0</u>	<u>33.0</u>	<u>63.0</u>	<u>382.0</u>
Sum				
A)Mean				

B) Bar Graph

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Mr. Holder  
ARC  
C) Conclusions:

Integumentary System – Unit 5  
TEST 1.0

December 3, 2015

**Integumentary System Review Sheet**

1. The two primary pigments contained in the epidermis are
2. Arrector pili muscles are associated with each sweat gland
3. Acne is a disorder associated with:
4. The dermis: Is avascular, Lacks sensory nerves, Has melanocytes, Is vascular
5. Where is the hypodermis located
6. What is the ascending order of the epidermal layers?
7. Select the most correct statement concerning skin cancer.
  - A. Most tumors that arise on the skin are malignant.
  - B. Squamous cell carcinomas arise from the stratum corneum
  - C. Basal cell carcinomas are the least common but most malignant.
  - D. Most moles will eventually become malignant.
  - E. Melanomas are rare but must be removed quickly.
8. What is the protein found in the epidermis that waterproofs and toughens skin?
9. The most abundant cells of the epidermis
10. Must be activated in the skin in order to enhance calcium metabolism:
  - A. Keratinocytes
  - B. Vitamin D
  - C. Keratin
  - D. Spike in body temp.

**Matching**

- |                                 |                                 |
|---------------------------------|---------------------------------|
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| 14. Erysipelas                  | D. Environmental stresses       |
| 15. Acne                        | E. <i>Staphylococcus aureus</i> |
| <hr/>                           |                                 |
| 16. 2 <sup>nd</sup> Degree Burn | A. Follicle infection           |
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| 18. Furuncle                    | C. Epidermis only               |
| 19. Dermal Pappillae            | D. Beyond Epidermis and dermis  |
| 20. 1 <sup>st</sup> Degree Burn | E. Dermis only                  |
| <hr/>                           |                                 |
| 21. Stratum Germinativum        | A. Dermis                       |
| 22. Stratum corneum             | B. Epidermis                    |
| 23. Sweat gland                 |                                 |
| 24. Papillae                    |                                 |
| 25. Stratum Granulosum          |                                 |
| <hr/>                           |                                 |
| 26. Melanocytes                 | A. Sweat glands                 |
| 27. Keratinized cells           | B. Epidermal leakage            |
| 28. Sensible perspiration       | C. Thick soles                  |
| 29. Insensible perspiration     | D. Pigmented protection         |
| 30. Stratum lucidum             | E. Waxy protection              |
| <hr/>                           |                                 |
| 31. Medulla                     | A. Goose bumps                  |



Mr. Holder  
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Integumentary System – Unit 5  
TEST 1.0

December 3, 2015

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|---------------------|----------------|
| 32. Vellus hair     | B. Hair shaft  |
| 33. Cuticle of hair | C. ABaby hair@ |
| 34. Sebaceous gland | D. Hair root   |
| 35. Erector pili    |                |
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