

Study Guide C6 (0723)  
Integumentary System

- 1 What is the integument system? Common name?
- 2 What are the two layers of the integument? Average thickness? What is just below the integument? Name of this layer? What is the function of this layer? After this layer becomes “engorged” with fat, what is it called?
- 3 What is the name of the four cells in the epidermis? Location within epidermis? Function? Which cell type function signals the immune system? How?
- 4 As a histologist, how would you describe the epidermis?
- 5 What are the five stratum of the epidermis? Where are the four cell types located in the layers? How does the growth of the epidermis affect the keratinocytes? What is the role of diffusion? Explain
- 6 What is thick skin(s)? Location. Features. What layer is only found in thick skin?
- 7 How do basal keratinocytes protect themselves from UV damage? What is the mechanism? What cell produces the molecule that forms an “umbrella”? Name of molecule? What will stimulate more pigment formation? What is the difference between light skin and dark skin?
- 8 What type of cells are in the stratum basale? Which one of these cells make the keratinocytes? How long does it take to replace a lost keratinocyte (to replace your skin)? What is the name of the other cell in the stratum basale? Function?
- 9 What junction type is found in the thickest stratum of the skin? What important WBC is located in this layer?
- 10 Are the superficial cells of the epidermis alive? What is the function of this layer? What happens to this superficial layer? What is this process called? What do we call the tiny particles you see inside your house on a sunny day floating inside your home? If these particles mix with body oil and stay attached to the surface of the skin, what do we call these clumps?
- 11 What tissue type is the dermis? What type of fibers do you find in the dermis? Name of cell that makes these fibers? What other structures are found in the dermis? Why does a chronic alcoholic’s skin look like leather?
- 12 What are dermal papillae? Function? What surface structures result from dermal papillae? How do police use these structures? What structure is between these surface structures that are used for thermo regulation?
- 13 What is another term used to describe a sweat gland? What are the two different types of sweat glands? One gland produces sweat to help cool the body. What is the function of the other type of sweat gland? Location? When does it become active? Why?

- 14 There are three different mechanisms to release substances from secretory cells. Compare and contrast how merocrine, apocrine, and holocrine secretory cells release their secretory products. Give examples for each.
- 15 What is the difference in the depth of damage between first, second, and third degree burns?
- 16 What are the three forms of skin cancer? What form is most dangerous?