Integumentary System

1. Which of the following is NOT part of the integumentary system?
   a. Stratum corneum
   b. Superficial fascia
   c. Reticular dermis
   d. Hair
   e. Sebaceous glands

2. In response to an increase in body temperature, the diameter of blood vessels in the dermis will:
   a. Increase
   b. Decrease

3. Which of the following is a function of the integumentary system?
   I. Production of Vitamin D
   II. Protection from physical injury
   III. Protection from dehydration
   IV. Sensation of temperature
   a. I, II, III, and IV
   b. I, II, and III
   c. I, III, and IV
   d. II, III, and IV
   e. II and III

4. The majority of the dermis is composed of:
   a. Stratified squamous epithelium
   b. Areolar tissue
   c. Adipose tissue
   d. Reticular tissue
   e. Dense irregular connective tissue

5. Most epidermal cells are:
   a. Melanocytes
   b. Epidermal dendritic cells
   c. Keratinocytes
   d. Squamocytes
   e. Erythrocytes

6. Which of the following cells produce the most pigment molecules?
   a. Epidermal dendritic cells
   b. Melanocytes
   c. Keratinocytes
   d. Pigmentoblasts
   e. Stratified cuboidal epithelial cells
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7. A lack of functioning melanocytes would cause the likelihood of skin cancer to:
   a. Increase
   b. Decrease

8. Which of the following cells present pathogen fragments to white blood cells?
   a. Epidermal dendritic cells
   b. Keratinocytes
   c. Melanocytes
   d. Erythroblasts
   e. Neutrophils

9. Which of the following proteins is found in the skin?
   I. Melanin
   II. Keratin
   III. Collagen
   a. I, II, and III
   b. II and III
   c. I and III
   d. I and II
   e. II only

10. An increase in blood flow to the skin will cause the amount of heat leaving the body to:
    a. Increase
    b. Decrease

11. The upper layer of the dermis is the __________ and is made primarily of __________.
    a. Epidermis; stratified squamous keratinized epithelium
    b. Reticular dermis; areolar connective tissue
    c. Papillary dermis; areolar connective tissue
    d. Reticular dermis; dense irregular connective tissue

12. As you go from the stratum spinosum to the stratum corneum, the amount of keratin per cell will:
    a. Increase
    b. Decrease
    c. Stay the same

13. $O_2$ use by cells in the stratum basale is _______ $O_2$ use by cells in the stratum corneum.
    a. Typically greater than
    b. Never greater than
    c. Always less than
    d. Always the same as

14. The stratum corneum:
    a. Is the layer of the epidermis that contains the youngest cells
    b. Provides no protection from mechanical abrasion
    c. Is the thinnest cell layer in thin skin
    d. Can be considered an example of epithelial connective tissue
    e. None of the above
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15. The elderly are more likely to become sunburned because...
   a. They have decreased Vitamin D production
   b. They have a decrease rate of hemoglobin synthesis
   c. They have a decreased number of active epidermal dendritic cells in the dermis
   d. They have decreased melanocyte activity
   e. They have increased amount of keratin in the stratum basale

16. If Tom’s production/ingestion of vitamin D decrease, his ability to absorb calcium in his intestine will:
   a. Increase
   b. Decrease

17. An increase in blood flow to the skin would cause body temperature to:
   a. Increase
   b. Decrease

18. Which of the following is NOT a function of subcutaneous tissue?
   a. Energy creation
   b. Thermal insulation
   c. Shock absorption
   d. Both A and B
   e. Both B and C

19. The majority of the appendages of the skin are located within the
   a. Epidermis
   b. Dermis
   c. Hyperdermis
   d. Superficial fascia
   e. Subcutaneous layer

20. Victims of 3rd degree burns are at severe risk for dehydration and infection.
   a. True
   b. False
21. Which of the above structures/areas is not composed of either epithelial or connective tissue? \( \text{A} \)

22. Which of the above labeled structures/areas contains the most collagen? \( \text{D} \)

23. Which of the above structures/areas responds to cold temperature and to being frightened? \( \text{A} \)

24. Which of the above structures/areas is not part of skin? \( \text{B} \)

25. Label the sebaceous gland in the above pic with the letter \( \text{F} \).