1. Each of the following is a function of the Integumentary system except one. Identify the exception.

Test: Integumentary

* 1. Protection of underlying tissues
  2. Excretion
  3. Maintenance of body temperature and hydration
  4. Synthesis of vitamin C
  5. Nutrition and storage of energy

1. Accessory structures of the skin include all of the following except…
   1. Hair follicles
   2. Sebaceous glands
   3. Sweat glands
   4. Epidermis
   5. Nails
2. The most abundant cells in the epidermis are…
   1. Adipocytes
   2. Keratinocytes
   3. Merkel Cells
   4. Melanocytes
   5. Red Blood Cells
3. The layer of the epidermis that contains cells undergoing continuous division is the…
   1. Stratum corneum
   2. Stratum lucidum
   3. Stratum granulosum
   4. Stratum spinosum
   5. Stratum basal
4. The epidermal strata found only in the palms and the soles of the feet.
   1. Stratum corneum
   2. Stratum lucidum
   3. Stratum granulosum
   4. Stratum spinosum
   5. Stratum basal
5. This strata is responsible for making a large amount of keratohyalin. It dehydrates and kills the epidermal cells.
   1. Stratum corneum
   2. Stratum lucidum
   3. Stratum granulosum
   4. Stratum spinosum
   5. Stratum basal
6. This strata is responsible for swelling when you have a blister…
   1. Stratum corneum
   2. Stratum lucidum
   3. Stratum granulosum
   4. Stratum spinosum
   5. Stratum basal
7. Someone who is albino lacks the ability to produce \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
   1. Melanin
   2. Melanocytes
   3. Keratin
   4. Keratinocytes
   5. Carotene

1. All of the following statements about melanin are true, except…
   1. Decreases in concentration within cells during exposure to the sun
   2. Usually a shade of brown or black
   3. Protects DNA similar to an umbrella
   4. Produced in melanocytes
   5. is more prevalent in certain parts of the body
2. When the skin is exposed to ultraviolet light…
   1. Can result in increased number of melanocytes forming in the skin
   2. Can result in decreased melanin production
   3. Can cause destruction of vitamin D
   4. Can result in damage of DNA
   5. Has no effect on the skin’s cells
3. The layer of the skin that has both blood vessels and nerves that are closest to the surface of the skin is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
   1. Papillary
   2. Reticular
   3. Epidermal
   4. Subcutaneous
   5. Hypodermal
4. This layer of the skin is elastic and resists stretching at the same time….
   1. Papillary
   2. Reticular
   3. Epidermal
   4. Subcutaneous
   5. Hypodermal
5. Why would a plastic surgeon want to make an incision with the cleavage lines?
   1. Where would be less damage to the epidermis
   2. There would be less damage to the hypodermis
   3. There would be less bleeding
   4. There would be less pain
   5. You would not cut the collagen and elastic fibers
6. Stretch marks are a sign…
   1. That the person has had plastic surgery
   2. There is no keratin in the underlying tissues
   3. The collagen fibers in the area have been broken due to expansion
   4. There has been a breakage of the elastic fibers in the skin due to expansion
   5. The skin has been torn from physical trauma.
7. Nerves of the skin are able to feel all of the following sensations, except…
   1. Pain
   2. Change in temperature
   3. Heat/Cold
   4. Moisture
   5. Pressure

1. All of the following are true about the hypodermis, except…
   1. Contains many blood vessels
   2. Contains the nerves for superficial structures
   3. Contains large amounts of adipose tissue
   4. Is divided into two sub-layers
   5. Contains nerves
2. Variations in hair color reflect differences in the pigments produced by…
   1. Keratinocytes
   2. Melanocytes
   3. Dermal papillae
   4. Elastic fibers
   5. Carotene cells
3. Glands that discharge an oily secretion are \_\_\_\_\_\_\_\_\_\_\_\_ glands.
   1. Sebaceous follicle
   2. Apocrine sweat
   3. Merocrine sweat
   4. Sebaceous
   5. Mammary
4. Most body odor is not a direct cause from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It is a secondary result of bacteria consuming body secretions produced from those glands.
   1. Sebaceous follicles
   2. Apocrine sweat glands
   3. Merocrine sweat glands
   4. Sebaceous glands
   5. Mammary glands
5. Merocrine sweat glands produce a liquid that is mostly water. The remaining 1% is made mostly of …
   1. PO4
   2. SuCl
   3. NaCu
   4. NaCl
   5. CH3
6. How does sweat help the body cool down?
   1. It traps heat against the body
   2. The water has a property that attracts cold air
   3. Evaporation steals heat from the surface of the skin
   4. The sweat produced is well below body temperature
   5. It does not help cool the body
7. Nails have the main function of…
   1. Giving humans a source of protein
   2. Protection of the ventral side of the hands and toes
   3. Protection of the dorsal side of the hands and toes
   4. Protection of all surfaces of the hands and toes
   5. Sending signals about the outside environment
8. Nail production happens at the nail…
   1. Bed
   2. Body
   3. Cuticle
   4. Hyponychium
   5. Root
9. The nail body covers the
   1. Bed
   2. Body
   3. Cuticle
   4. Hyponychium
   5. Root

Short Answer: Answer the questions below to the best of your ability. Your answers will be graded on accuracy and completion.

1. Depending on the severity of a burn, medical professionals will diagnose it. This means more severe burns will be marked as a higher “degree”.

The most severe type of burn would be a third degree burn. These burns are often found on patients have burned in a very severe fire. This type of burn will cause the patient to never be able to regrow skin in the area and they will also experience a lack of sensation from nerve damage for the rest of their life

Based on your knowledge of the skin, explain what must happen to the epidermis and the dermis for a burn to be classified as a third degree burn. Be sure to explain why both of the above symptoms are present. (10 points)

1. A person runs the mile during gym class. Explain all 4 types of exocrine glands that are producing fluids. Define their name and what type of fluid they are producing (8 points)
2. Label all 5 layers of the epidermis. (10 Points)

**Surface of the Skin**

