Anatomy: Integumentary System

1) List the components that make up the integumentary system.

Cutaneous membrane (skin), associated hairs, nails, and exocrine glands

2) 2 components of the cutaneous membrane:

Epidermis (epithelium), dermis (connective tissue)

3) Accessory Structures:

Hair, nails, exocrine glands

4) How is the subcutaneous layer/superficial fascia/hypodermis linked to the integument?

Separates integument from the deep fascia around other organs – connective interwoven with dermis

5) What are the 6 general functions of the skin and subcutaneous layer?

- Protection (underlying organs against shock, abrasion, chemical attack)
- Excretion (salts, water, organic waste)
- Maintenance (temperature – evaporation)
- Synthesis of vitamin D3 (converted to calcitriol(hormone) – normal calcium metabolism)
- Storage (nutrients – lipids)
- Detection (touch, pressure, pain, temperature stimuli – send to nervous system)

6) Why is the epidermis important (what does it provide)?

Protection – keep microorganisms out of body

7) What are keratinocytes?

Layers of epithelial cells

8)

9)
10) What are the two major components of the dermis? Briefly describe each.
   Superficial papillary layer (areolar tissue)
   - reticular layer (dense irregular connective tissue)

11) What is the subcutaneous layer and why is it important?
   Boundary between reticular layer and deep faciae
   - areolar and adipose tissue