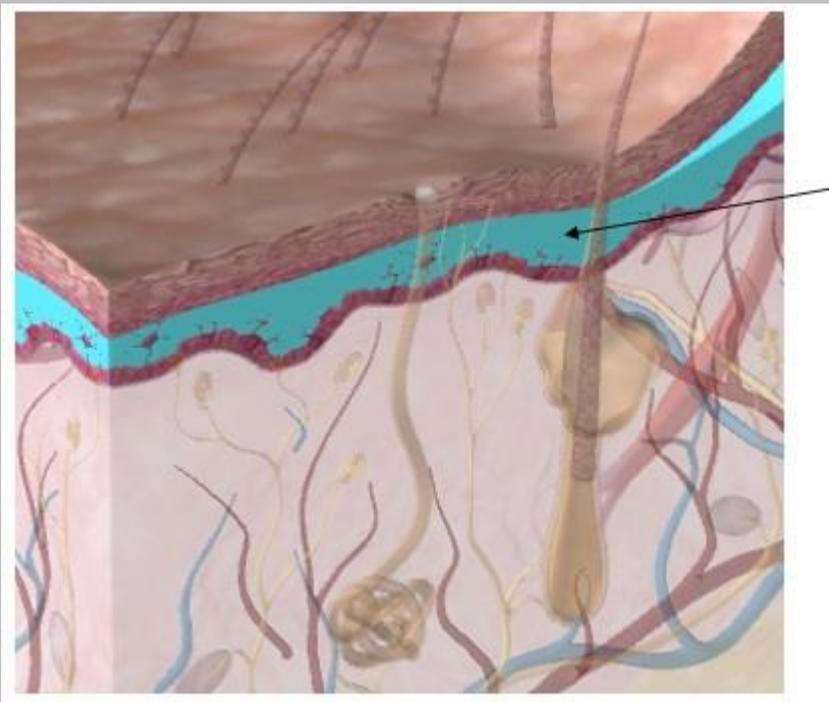


A&P 1 101 MODULE 7 EXAM 7 INTERGUMENTARY SYSTEM PORTAGE LEARNING 2022 UPDATE

Question 1
0 / 5 pts

Identify the region **and** the layer of skin that is highlighted in blue. (Also indicated by the arrow, below) *NOTE: To receive full credit you must label **two** regions.



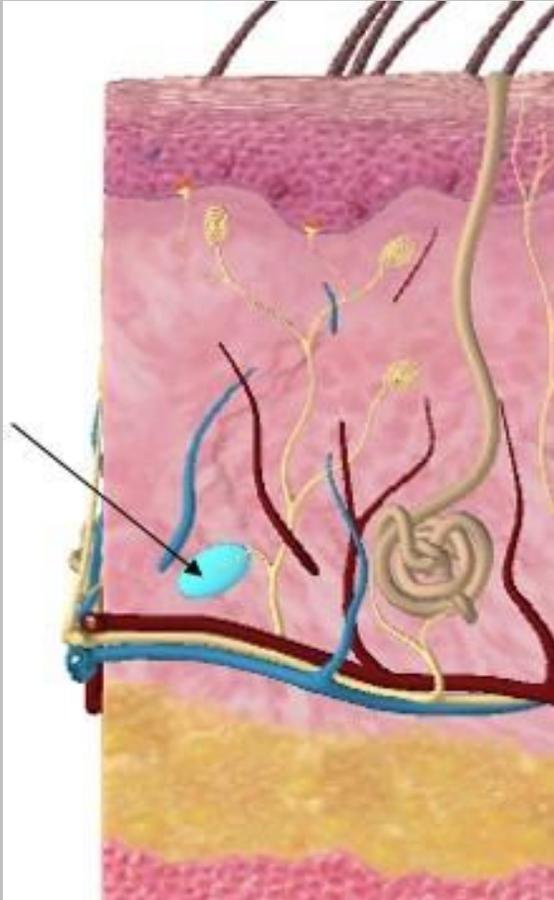
Your Answer:

papillary region of the dermis

Stratum spinosum; Epidermis
(Must have both for full credit)

Question 2
5 / 5 pts

- A- Identify the sensory cell receptor highlighted in blue, below, also indicated by the arrow.
- B- What sensory information is detected by this type of receptor?



Your Answer:

A - Pacinian Corpuscles is a mechanoreceptor that detects pressure applied to the skin. Pacinian Corpuscles detect vibration.

A) Pacinian corpuscle

B) Detects pressure (mechanoreceptor)

Question 3

3 / 3 pts

The layers of the epidermis, from superficial to deep are:

Correct!



Stratum corneum, stratum granulosum, stratum spinosum, stratum basale.



Stratum basale, stratum spinosum, stratum granulosum, stratum corneum



Stratum spinosum, stratum granulosum, stratum corneum, Stratum basale



Stratum corneum, stratum spinosum, stratum granulosum, stratum basale.

Question 4

4 / 4 pts

Endocrine glands secrete _____; Exocrine glands secrete _____.



A. for body-wide distribution, into an epithelial lining



B. into an epithelial lining, for body-wide distribution



C. through a duct, into the bloodstream



D. into the bloodstream, through a duct

Correct!



E. A&D



F. B&C

Question 5

3 / 3 pts

Which of the following is **true** regarding the epidermis:



It is highly vascular.



It is comprised of five distinct layers.

Correct!



The basement membrane contains its blood supply.



Epidermal ridges change throughout a person's lifetime.

Question 6

7.5 / 10 pts

Match the cell with its single best description, using each description only once.

Correct!

Keratinocytes

You Answered
Fibroblasts

Correct Answer
Produces collagen
Correct!
Melanocytes

Correct!
Langerhans cells

Other Incorrect Match Options:

- Detects light touch
- Detects pain

Question 7
3 / 3 pts

A person touches a hot cup of coffee. What type of sensory organ detects this information?

Your Answer:

Thermoreceptors

Thermoreceptor

Question 8
3 / 3 pts

Merkel cells are embedded in what layer of the skin?

Your Answer:

Epidermis

Epidermis

Question 9
4 / 4 pts

In your own words, how can the skin be used to determine if a person is dehydrated?

Your Answer:

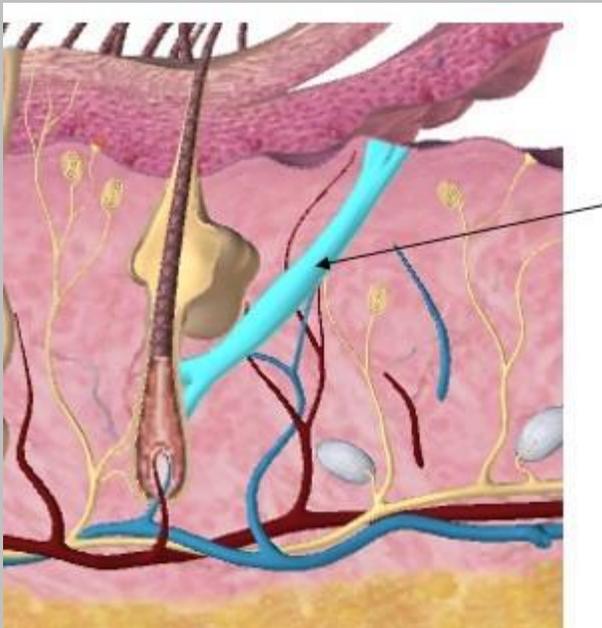
If you pinch the skin on the back of a person's hand, if it stays pinched instead of going back, it means this person is dehydrated.

A person who is dehydrated has decreased water content in the dermal layer of their skin. A person can be tested for dehydration by pinching the skin on the back of the hand. One indicator of dehydration is when the skin does not recoil back to its normal shape but instead stays "ridged".

Question 10

5 / 5 pts

What is the name and function of the structure below? (Highlighted in blue, also indicated by the arrow)



Your Answer:

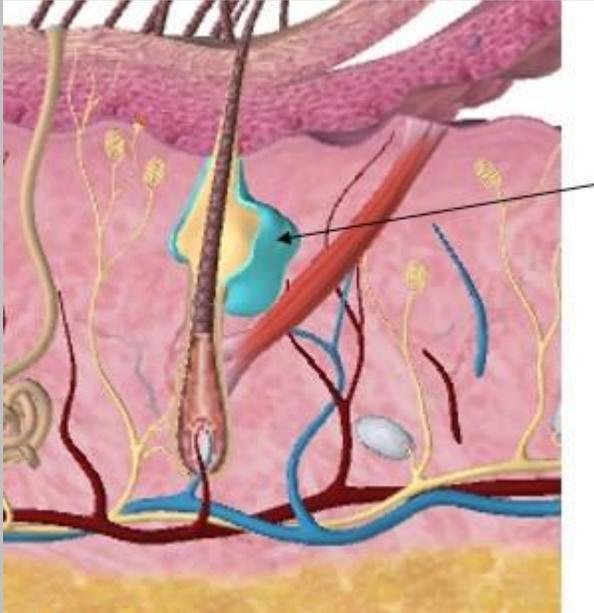
Arrector pili muscle. Its function is to contract when our body gets cold.

Arrector pili, a smooth muscle which connects to each hair follicle. It contracts when the body is cold or experiences emotional responses.

Question 11

5 / 5 pts

What is the name and function of the structure below? (Highlighted in blue, also indicated by the arrow)



Your Answer:

sebaceous gland. It secretes sebum that helps our skin and hair from drying

Sebaceous gland (oil gland) produces oil (sebum) to protect the skin and hair from drying.

Question 12

2 / 2 pts

All of the following are functions of skin except:



Absorb UV rays



Thermoregulation



Perspiration

Correct!



Produce vitamin K

Question 13

2 / 2 pts

The thickest region of the dermis is the:

Correct!



Reticular



Papillary



Basement membrane



Subcutaneous



None of the above are layers of the dermis

Question 14

2 / 2 pts

The hypodermis is comprised mainly of:

Correct!



Adipocytes



Reticular cells



Dermatomes



Sebaceous glands

Question 15

2 / 2 pts

What is a contusion?



A third degree burn



An infection in the epidermis

Correct!



Damage to a broken blood vessel



Subcutaneous injection

Question 16

2 / 2 pts

Information from a dermatome carries information from:



The brain



The spinal cord



A gland

Correct!



The skin

Question 17

10 / 10 pts

This injury, seen below, is best described as what degree of burn? Explain what layer/s of skin are damaged in this type of burn.



Your Answer:

Second degree burn. Epidermis and part of dermis is damaged.

**Second-degree burn, also called a partial thickness burn
The epidermis and dermis layers of the skin was damaged.
(Optional: The burned area burned becomes red and painful, forming blisters)**

Question 18

10 / 10 pts

Answer the following clinical case scenario:

Your patient was injured in a house fire. The skin sustained damage through the epidermis, dermis, hypodermis, and some muscle tissue.

- 1- What degree of burn best describes your patient's injury?
- 2- Would your patient experience pain in the injured area? Why or why not?

Your Answer:

fourth degree. Because nerve endings are damaged the patient may or may not feel pain.

-4th degree

-No, fourth-degree burns damage the epidermis, the dermis, the hypodermis, and underlying tissue such as muscle or bone. Because the nerve endings are destroyed there is no sensation in the affected burn area.

Question 19

2.5 / 2.5 pts

This part of a hair contains blood and nervous supply:



Keratin



Root



Shaft

Correct!



Bulb

Question 20

2.5 / 2.5 pts

Hair is made up of:



Living epidermal cells converted to keratin

Correct!



Dead epidermal cells converted to keratin



Living epidermal cells converted to collagen



Dead epidermal cells converted to collagen

Question 21

2.5 / 2.5 pts

Nails are hard, dead cells which have been converted to _____

Correct!



Keratin



Collagen



Calcium



Corneum

Question 22

2.5 / 2.5 pts

The nail _____ is the visible portion of the nail.



root

Correct!



body



matrix



phalanx

Question 23

2 / 2 pts

Why would a person receive a skin graft?

Your Answer:

because the skin is severely damaged or persons burn covers large area

(1) Skin grafting decreases recovery time and prevents infection

OR

(2) If skin has been damaged severely and/or covers a large surface area

Question 24

2 / 2 pts

What substance from the blood accumulates to form a clot?



White blood cells



Red blood cells

Correct!



Platelets



Macrophages

Question 25

2 / 2 pts

Mast cells secrete what chemical?



Collagen

Correct!



Histamine



Platelets



Heparin

Question 26

2 / 2 pts

Macrophages_____



secrete histamine.



remove fibroblasts.

Correct!



engulf bacteria.



replace old tissue matrix.

Question 27

2 / 2 pts

A scar_____.



is called clotting.



maintains full function of the original tissue.

Correct!



is an overgrowth of fibrous connective tissue.



supports the tissue matrix until the old cells are developed.