

Directions: Unless otherwise noted, use well organized sentences and paragraphs to respond to the question or statement. A general response will receive a general grade of 70%; a well developed and correct response will receive 100% of the possible points. ***If your cell phone produces an audible tone during the exam, you will lose 10 pts off your final score.***

0. Differentiate between active and passive transport. What does facilitated transport mean—can it be active or passive? (10)

1. Differentiate between epithelial and connective tissue. Illustrate your answer with three types of each. (15)

2. Describe 5 functions of the integumentary system using 1-2 sentences for each. (10)

a.

b.

c.

d.

e.

3. Differentiate between the epidermis and dermis-- describe each. Describe key features of the layers of the epidermis from superficial to deep. (10.5)

4. Choose 3 changes in the skin that occur with aging and describe how they contribute to the “paper thin” skin typical of the elderly. (10)

5. In a flowchart manner, demonstrate using a cold stimulus how the skin is involved in temperature regulation and negative feedback. (10)

6. Demonstrate that bone is a dynamic, living, sensing tissue. This may be "attacked" by a variety of strategies. (15)

8. Fill in the table. No sentences allowed. (15, 1pt each space)

Joint type specific example functional classif action(s) if appropriate

Gomphosis

Hip

Junction b/ temporal
And parietal bone

Rotation only

Flex/extension only