Anatomy & Physiology (Answer Key)

INTEGUMENTARY SYSTEM

1. Subcutaneous or Superficial Fascia or Hypodermis

2. Epidermis

3. Epithelial

4. Sweat acting with bacteria on skin causes odor.

5. Arrector pilorum muscles contract pulling the hairs into a vertical position. This muscle contraction has made the skin around the hair shaft raise a little, and we see goose bumps.

6. Sebaceous glands

7. Too much sebum accumulates in the sebaceous glands. When air reaches this fatty accumulation, oxidation takes place and the fatty substance turns black.

8. Stratum corneum

9. Keratin

10. Sensory receptors. Hair follicles.

11. You ask these and other questions to try to determine what the patient's skin has been exposed to over a period of time.

12. Drugs are often the cause of skin eruptions.

13. Seafoods . Nuts. Berries.

14. You are correct if you listed any two of the following: Exact description of eruption when it began. Description of the first lesion. Details of the development/extension of the skin lesion. Information about the skin problem if it has happened before.

15. You are correct if you listed any two of the following: Skin diseases. Allergies. Diabetes.

Hypertension. Bleeding disorders. Anemia. Nervous disturbances. Muscular disturbances. Intellectual disturbances. Emotional disturbances.

16.The wood's lamp

17.Tinea versicolor

18.Wood's lamp /UV

19. Hyperpigmentation

20. Hypopigmentation

MUSCULAR SYSTEM

(muscle) fatigue	1.	Occurs when muscles can no longer perform the required level of activity
atrophy	2.	Condition when a skeletal muscle is not regularly stimulated by a motor neuron or exercised causing the muscle to lose tone and mass
rigor mortis	3.	The physical state when a death occurs and all the skeletal muscles run out of ATP and the body becomes 'stiff as a board'
platysma	4.	This muscle covers the anterior surface of the neck, extending from the base of the neck to the periosteum of the mandible and the fascia at the corner of the mouth
flexors	5.	At joints that permit flexion and extension, what are muscles whose lines of action cross the anterior side of the joint?
hernia	6.	Develops when a visceral organ or part of an organ protrudes abnormally through an opening in a surrounding muscular wall or partition
tetanus	7.	Disease caused by Clostridium Tetani bacterial infection resulting in sustained, powerful contraction of skeletal muscles throughout the body
epimysium	8.	Dense layer of collagen fibers that surround the entire muscle
sarcomeres	9.	The smallest functional unit of the muscle fiber
twitch	10.	A single stimulus-contraction-relaxation sequence in a muscle fiber

Enumeration:

MUSCULAR SYSTEM

#1. – #6. Give the 6 major functions of the skeletal muscle:

1. Produce skeletal movement

2. Maintain posture and body position
3. Support soft tissue
4. Guard body entrances and exits
5. Maintain body temperature
6. Store nutrients

#7 - #8. Give the 2 types of skeletal muscle fibers:

7. Fast (white)
8. Slow (red)

#9 - #11. Give the 3 types of muscle tissue:

9. Skeletal
10. Cardiac
11. Smooth

#12 - #15. Muscle fibers in a skeletal muscle form bundles called fascicles. What are the 4 types of skeletal muscles based on fascicle organization?

12. Parallel muscles
13. Convergent muscles
14. Pennate muscles
15. Circular/sphincter muscles

#16. - #18. What are the 3 hamstring muscles?

16. Biceps femoris
17. Semimebranosus
18. Semitendinosus

#19. - #20. What are the 2 types of muscle contraction based on tension production pattern?

19. Isotonic
20. Isometric

SKELETAL SYSTEM:

#21. - #22. What are the 2 types of bones found in the skull?

21. Face/facial
22. Cranium/cranial

#23 - #25. What are the 3 parts of the vertebral column?

23. Cervical spine, Lumbar spine and Thoracic spine
24. Sacrum
25. Coccyx

#26 - #30. Give the 5 primary functions of the skeletal system:

26. Support
27. Storage of minerals and lipids
28. Blood cell production
29. Protection
30. Leverage

MATCH COLUMN A TO COLUMN B: Read the question in Column A. On the blank, write the letter of the matching answer from Column B.
SKELETAL SYSTEM

		COLUMN A	COLUMN B
K	1.	Divides the nasal cavity between the left and right halves	A. calcaneus
H	2.	A condition caused by anterior exaggeration of lumbar curvature resulting in abnormal protrusion of both the abdomen and buttocks. This 'swayback' may occur during pregnancy, abdominal obesity or weakness in the muscles of the abdominal wall.	B. clavicle
B	3.	S shaped bones that originate at the superior, lateral border of the manubrium of the sternum	C. diaphysis
F	4.	Extends from the scapula to the elbow	D. hairline fracture
N	5.	Group of bones that form the ankle	E. heel
A or E	6.	Largest tarsal bone	F. humerous
D or M	7.	Type of fracture that typically develops due to repeated shock or impact	G. kyphosis
L	8.	Bones consisting of an open network of struts and plates that resemble latticework	H. lordosis
I	9.	Membrane with a fibrous outer layer and cellular inner layer that wraps the superficial layer of compact bones (except within joint cavities)	I. perosteum
C	10.	Shaft of a long bone	J. scoliosis
			K. septum
			L. spongy/cancellous/trabecular bone
			M. stress fracture
			N. tarsal bones

SKELETAL SYSTEM

80	1. How many bones of the head and trunk make up the axial skeleton?
eyes/eyeballs/eye sockets	2. The orbital complex groups 7 bones forming recesses called orbits. What do the orbits contain?
sinusitis	3. Sinus inflammation and congestion
ribs/costae	4. Long curved flattened bones that originate on or between the thoracic cavity
carpal	5. The group of bones that form the wrist
Fibula (Pelvis is accepted)	6. When someone has a hip fracture, which bone is fractured?
bone graft	7. A surgical procedure that transplants bone tissue to repair and rebuild diseased or damaged bone
osteolysis	8. The erosion process that dissolves bone matrix caused by enzymes secreted by osteoclasts
orthopedics	9. Branch of medicine dealing with the correction of deformities of bones or muscles
joint	10. Physical connection of 2 bones