

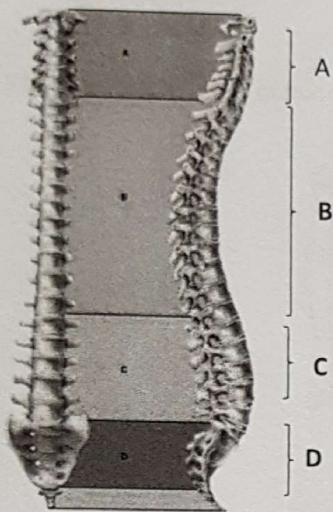
1. On the basis of structural classification, which is a fibrous joint?  
A) symphysis  
B) synchondrosis  
C) pivot  
D) syndesmosis
2. The gliding motion of the wrist uses \_\_\_\_\_ joints.  
A) hinge  
B) plane  
C) pivot  
D) condyloid
3. Paranasal sinuses are found in which of these facial bones?  
A) nasal conchae  
B) zygomatic bone  
C) maxillae  
D) vomer
4. In symphysis joints the articular surfaces of the bones are covered with \_\_\_\_\_.  
A) hyaline cartilage  
B) synovial membranes  
C) fibrocartilage  
D) tendon sheaths
5. What is moving a limb away from the midline of the body along the frontal plane called?  
A) abduction  
B) adduction  
C) flexion  
D) extension
6. Moving your jaw forward, causing an underbite, is called \_\_\_\_\_.  
A) protrusion  
B) pronation  
C) adduction  
D) retraction
7. The frontal bone connects to the maxillary bone via the  
A) maxillary process of the frontal bone  
B) frontal process of the frontal bone  
C) frontal process of the maxillary bone  
D) maxillary process of the maxillary bone
8. The prominent bulge just posterior and inferior to the external auditory meatus that anatomy students can feel on their own bodies is the:  
A) maxillary bone  
B) lacrimal bone  
C) occipital condyle  
D) mastoid process  
E) external occipital protuberance

9. If a person was suffering from bursitis, this condition would be designated as inflammation of a:
- A) sesamoid bone found at a joint
  - B) cavity within a long bone
  - C) small fluid-filled sac
  - D) none of the above
10. What can cause gouty arthritis?
- A) excessive blood levels of uric acid deposited as crystals in the soft tissue joints
  - B) a disorder in the body's immune system resulting in destruction of joints
  - C) a thickening of the synovial membrane and a decrease in fluid production
  - D) a bacterial infection in the bursae
11. Chewing your food involves (1) flexion, (2) extension, (3) hyperextension, (4) elevation, (5) depression.
- A) 1 and 2
  - B) 1 and 3
  - C) 4 and 5
  - D) 3 and 5
  - E) 1 and 4
12. A splinter penetrated into the skin of the sole of the foot, almost to the papillary region of the dermis. Which layer of the epidermis would be the final layer injured?
- A) granulosum
  - B) basale
  - C) lucidum
  - D) spinosum
  - E) corneum
13. A neurosurgeon orders a spinal tap for a patient. Into what body cavity will the needle be inserted?
- A) ventral
  - B) cranial
  - C) abdominopelvic
  - D) dorsal
  - E) thoracic
14. Which of the following cells and their functions are correctly matched?
- A) keratinocytes — provide sense of touch and pressure ✓
  - B) melanocytes — protects cells in the stratum corneum from damaging effects of sun's rays ✓
  - C) dendritic cells — activate the immune system
  - D) tactile cells — protection
15. Which of the following statements is TRUE?
- A) The greater trochanter is a bone marking on the humerus. ✗
  - B) The foot has two arches.
  - C) At the completion of pronation, the radius lies parallel to the ulna ✗
  - D) There are seven bones in the tarsus.

16. Despite its apparent durability, the dermis is subject to tearing. How might a person know that the dermis has been previously stretched and/or torn?
- A) There is an episode of acute pain due to the large number of tactile corpuscles.
  - B) The appearance of visible, silvery-white scars is an indication of stretching of the dermis.
  - C) The blood vessels in the dermis rupture and the blood passes through the tissue, causing permanent "black-and-blue marks."
  - D) The stretching causes the tension lines to disappear.
17. What are the most important factors influencing hair growth?
- A) sex and hormones
  - B) age and glandular products
  - C) the size and number of hair follicles
  - D) nutrition and hormones
18. A patient is brought into the emergency room suffering from a burn. The patient does not feel any pain at the burn site. With a gentle pull of a hair on the burn site, the examining physician can remove entire hair follicles from the patient's arm. The patient is suffering from what type of burn?
- A) third degree
  - B) second degree
  - C) first degree
  - D) localized
19. The composition of the secretions of the eccrine glands is \_\_\_\_\_.
- A) primarily uric acid
  - B) 99% water, sodium chloride, trace amounts of wastes, and vitamin C
  - C) fatty substances, proteins, antibodies, and trace amounts of minerals and vitamins
  - D) oily sebum
20. Which of the following would be a sign of a melanoma?
- A) uniform coloration
  - B) a size smaller than 6 mm
  - C) regular borders
  - D) asymmetry
21. Which layer of the epidermis will be supplied with the highest levels of oxygen from the blood?
- A) stratum corneum
  - B) stratum spinosum
  - C) stratum basale
  - D) stratum granulosum

Use the diagram below to answer the following two questions.

22. Pregnant women may experience an exaggerated lordosis, or swayback. Which curvature is affected during pregnancy?



- A)
- B)
- C)
- D)

23. Which of these curvatures on the spine are present at birth?

- A) A and C
- B) B and D
- C) A and D
- D) C and B

24. Which of the following structures is common only to the cervical, thoracic, or lumbar vertebrae?

- A) superior articulating surfaces
- B) pedicles
- C) transverse processes
- D) spinous processes
- E) All of the above are found on cervical, thoracic and lumbar vertebrae

25. A fracture in the shaft of a bone would be a break in the \_\_\_\_\_.

- A) epiphysis
- B) metaphysis
- C) diaphysis
- D) articular cartilage

35. Which of the following statements is TRUE?

- A) Both the tibia and fibula participate in the formation of the knee joint. ✗
- B) The palm of the hand is formed by the carpal bones. ✗
- C) The fracture type in which the bone ends penetrate the skin is a closed fracture. ✗
- D) A parasagittal plane is any cut dividing the body into anterior and posterior regions. ✗
- E) Formation of a bony callus in fracture repair is followed by bone remodeling.

36. Bones are constantly undergoing resorption (breaking bone down) for various reasons. Which of the following cells accomplishes this process?

- A) osteoclast
- B) osteocyte
- C) osteoblast
- D) stem cell

37. Wolff's law is concerned with \_\_\_\_\_.

- A) vertical growth of bones being dependent on age
- B) the thickness and shape of a bone being dependent on stresses placed upon it
- C) the function of bone being dependent on shape
- D) the diameter of the bone being dependent on the ratio of osteoblasts to osteoclasts

38. Cranial bones develop \_\_\_\_\_.

- A) from cartilage models
- B) within fibrous membranes B
- C) from a tendon
- D) within osseous membranes

39. Cartilage grows in two ways, appositional and interstitial. What is appositional growth?

- A) Growth at the epiphyseal plate
- B) The secretion of new matrix against the external face of existing cartilage C
- C) Along the edges only of existing osteons, making each osteon larger
- D) The lengthening of hyaline cartilage

40. At an archeological site you discover a bone that is cylindrical in shape, about one inch long and a quarter of an inch wide. Choose the correct classification.

- A) short
- B) irregular
- C) long C
- D) sesamoid

41. Which of the bones of the skull would you most associate with hearing and balance?

- A) The temporal bone
- B) The parietal bone
- C) The occipital bone
- D) The zygomatic bone

42. The sella turcica is part of the \_\_\_\_\_ bone and houses the \_\_\_\_\_ gland.

- A) sphenoid; thymus
- B) ethmoid; pituitary
- C) sphenoid; pituitary
- D) ethmoid; thymus

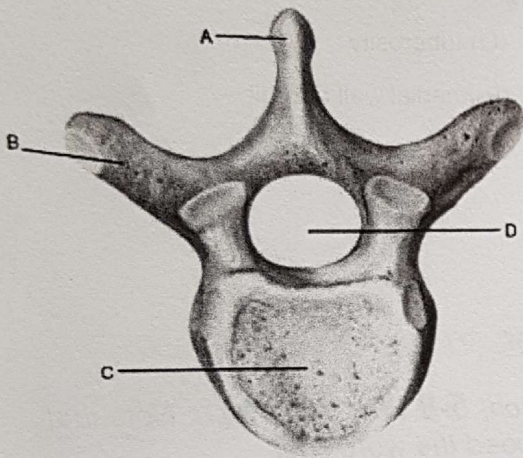
43. The axial skeleton includes \_\_\_\_\_.

- A) the skull, vertebral column, and pelvis
- B) arms, legs, hands, and feet
- C) the skull, vertebral column, and rib cage
- D) the skull, the scapula and the vertebral column

44. The suture that connects the two parietal bones together is the \_\_\_\_\_.

- A) coronal
- B) sagittal
- C) lambdoid
- D) squamous

45. To what region of the vertebral column does this vertebra belong?



- A) Sacral
- B) Cervical
- C) Thoracic
- D) Lumbar

**Answer the remaining questions on the exam itself**