

BIO 217 HUMAN ANATOMY AND PHYSIOLOGY I
EXAM III

Multiple Choice (2 points each)

1. The bones of the skull are joined at joints called
 - a. Gomphoses
 - b. Sutures
 - c. Fissures
 - d. Symphyses

2. The hard palate in the roof of the mouth is composed of the
 - a. Palatine and ethmoid bones
 - b. Nasal conchae and vomer bones
 - c. Zygomatic and lacrimal bones
 - d. Maxilla and palatine bones
 - e. Vomer and ethmoid bones

3. Which of the following could increase the risk of developing osteoporosis?
 - a. Low dietary calcium intake
 - b. Excessive exercise
 - c. Ovariectomy (surgical removal of the ovary in a female)
 - d. All of the above

4. A cleft palate results from incomplete development of the
 - a. Palatine bone
 - b. Mandible
 - c. Vomer bone
 - d. Maxilla

5. All of the following are true of endochondral ossification except
 - a. Hyaline cartilage forms where future bones will be.
 - b. Endochondral bone growth occurs at the epiphyseal disks
 - c. Osteoblasts form bone by depositing calcium salts around them, eventually becoming osteocytes when the bony matrix completely surrounds them.
 - d. Most endochondral ossification occurs after birth.

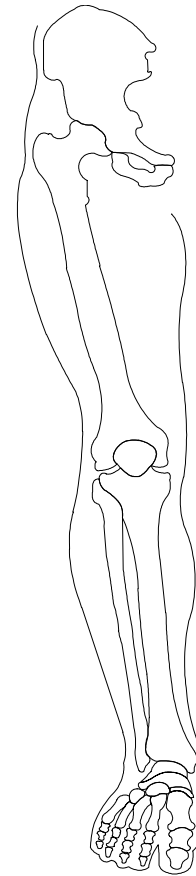
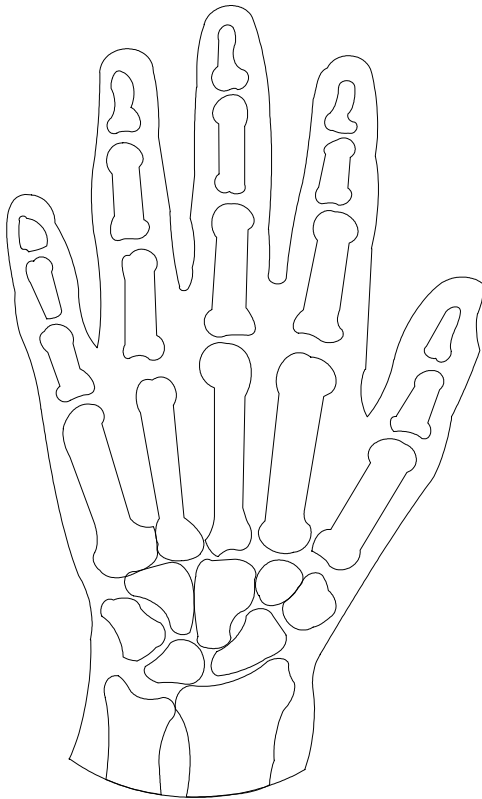
6. All of the following are considered facial bones except
 - a. Maxilla
 - b. Lacrimal
 - c. Vomer
 - d. Sphenoid

7. Dr. Crain has a 10-week old daughter (and, yes, she is the most beautiful baby that has ever been born). In her skull, there are not yet complete joints, as she has fibrous membranes connecting her cranial bones. What is the correct name for such a fibrous membrane?
- Foramen
 - Fissure
 - Fontanel
 - Fossa
 - Facet
8. Approximately how many pairs of ribs are there in a normal individual?
- 6
 - 9
 - 12
 - 15
9. The foramen magnum is located in which bone?
- Occipital
 - Coxal
 - Atlas
 - Frontal
 - Palatine
10. Which of the following is an example of a synchondrosis cartilaginous joint?
- The joint between the sternum and rib
 - The joint between two cranial bones
 - The joint between a tooth and the mandible
 - The joint between your humerus and ulna
11. Most of the joints in the body are considered
- Gomphoses
 - Cartilaginous
 - Fibrous
 - Synovial
12. Fluid filled sacs found between the skin and underlying bony prominences are called
- Ligaments
 - Menisci
 - Bursae
 - Articular cartilage
13. The radial collateral ligament is associated with the
- Hip joint
 - Shoulder joint
 - Knee joint
 - Elbow joint

14. The acetabulum and the glenoid cavity both serve in the articulation of a ball and socket joint. The acetabulum would be found in the _____ bone, whereas the glenoid cavity can be found in the _____ bone.
- Coxal; scapula
 - Humerus; scapula
 - Femur; coxal
 - Scapula, coxal
 - Coxal; humerus
15. Dr. Crain was born with 6 toes on his left foot (he had an extra little toe). This condition of being born with an extra digit is called polydactyly. How many phalanges would be present in a foot that had an extra little toe?
- 6
 - 12
 - 15
 - 17
16. Your cheek prominence is formed by what two bones?
- Frontal and lacrimal
 - Mandible and maxilla
 - Temporal and frontal
 - Temporal and zygomatic
17. The articulation of the ulna and humerus is considered what type of synovial joint?
- Ball and socket
 - Condyloid
 - Saddle
 - Hinge
18. Which of the following groups of bones contains the greatest number of individual bones?
- Cranial bones
 - Cervical vertebra
 - Thoracic vertebra
 - Ribs
 - Sacral vertebra
19. The red marrow in spongy bone serves what purpose?
- It is the site of blood cell formation
 - It is the site of osteoblast mitosis
 - It is the site of adipose storage
 - It is the site of oxygen storage in the body
20. The hole that a dentist would inject anesthetic to desensitize teeth in the jaw is called the
- Foramen ovale
 - Foramen magnum
 - Mental foramen
 - Mandibular foramen

21. One ligament that we did not study is the calcaneofibular ligament. Where do you suppose that the calcaneofibular ligament is located?
- a. In the shoulder
 - b. In the ankle
 - c. In the elbow
 - d. In the wrist.

22. . (7 points) Label the bones identified below.



A. _____

B. _____

C. _____

D. _____

E. _____

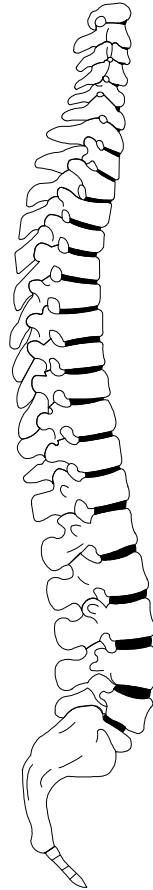
F. _____

G. _____

23. (5 points) Match the parts listed in column I with the bones listed in column II.

- | | |
|--------------------------|--------------------|
| Temporal process _____ | a. sternum |
| Lateral malleolus _____ | b. tibia |
| Medial malleolus _____ | c. maxilla |
| Xiphoid process _____ | d. scapula |
| Transverse process _____ | e. radius |
| Palatine process _____ | f. fibula |
| Acromion process _____ | g. zygomatic |
| trochlea _____ | h. humerus |
| styloid process _____ | i. lumbar vertebra |
| ischial spine _____ | j. coxal |

24. (5 points) On the following diagram, label cervical, lumbar, thoracic, sacral and coccygeal vertebrae.



Name _____

25. (7 points) On the following, label **femur, tibia, patella, bursae, articular cartilage, synovial fluid, and joint capsule.**

Name _____

Lab Practical Portion (*2 points each*). You have 1 minute per station. Please go in order. If you need extra time, there will be some at the end of class.

26. _____

27. _____

28. _____

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41. _____

42. _____