

STUDENT NAME: .....

STUDENT NUMBER: .....

# University of Ottawa

## ANP 1106C

### Midterm #1

Date: February 5, 2015  
Time: 11:30 h  
Duration: 1 hr 20 min

Instructor:  
Dr. J. Carnegie

#### INSTRUCTIONS:

1. 44 multiple choice questions (1 mark/1 correct answer per question) plus 16 marks worth of written work = 60 marks in total.
2. Please answer the multiple choice questions using the computer sheet and all remaining questions right on the exam pages themselves.
3. Please put your name and student number at the top of this page, on the top of pages 7 and 9 and on the computer sheet. Please hand in pages 7-10 and the computer sheet when you have finished. You may keep pages 1-6 of the exam to check your answers for the MCQs.
4. Make sure this exam is complete. This exam contains **10** pages. The excuse of missing a page will not be accepted after the examination.

1. A fibrous joint that is a peg-in-socket is called a ..... joint.
  - A. syndesmosis
  - B. suture
  - C. synchondrosis
  - D. gomphosis
  
2. A joint united by dense fibrocartilaginous tissue that usually permits a slight degree of movement is a \_\_\_\_\_.
  - A. suture
  - B. syndesmosis
  - C. symphysis
  - D. gomphosis
  
3. Saddle joints have concave and convex surfaces. Name the two bones of the hand that articulate to form a saddle joint.
  - A. The scaphoid of the index finger and the triquetrum of the middle finger.
  - B. The trapezium of the ring finger and the capitate of the fourth finger.
  - C. The scaphoid of the middle finger and the lunate of the index finger.
  - D. The trapezium of the carpal bone and the thumb's metacarpal.
  
4. The plane that runs at right angles to the sagittal plane, dividing the body into anterior and posterior regions is a:
  - A. midsagittal plane
  - B. transverse plane
  - C. frontal plane
  - D. parasagittal plane
  
5. What structure separates the abdominopelvic and thoracic cavities?
  - A. The pericardial cavity
  - B. The diaphragm
  - C. The mediastinum
  - D. There is no separation between these cavities
  
6. Which of the following statements is/are TRUE?
  - A. The colour of skin is due primarily to a pigment named keratin.
  - B. The outermost layers of epidermis are composed of dead cells.
  - C. Both the epidermis and the dermis contain blood vessels (are vascularized tissues).
  - D. Hairs are noncellular structures composed entirely of nonliving substances secreted by follicle cells.
  - E. B) and D)
  
7. Which structure is NOT associated with a hair?
  - A. shaft
  - B. cortex
  - C. eponychium
  - D. matrix
  - E. cuticle
  
8. In thick skin, the order of the cells of the epidermis, from DEEP to SUPERFICIAL, are:
  - A. stratum corneum, stratum lucidum, stratum spinosum, stratum granulosum, stratum basale
  - B. stratum corneum, stratum spinosum, stratum lucidum, stratum granulosum, stratum basale
  - C. stratum basale, stratum spinosum, stratum granulosum, stratum lucidum, stratum corneum
  - D. stratum granulosum, stratum basale, stratum lucidum, stratum spinosum, stratum corneum
  - E. stratum basale, stratum corneum, stratum spinosum, stratum lucidum, stratum granulosum
  
9. In addition to protection (physical and chemical barrier), the skin serves other functions. Which of the following is another vital function of the skin?
  - A. It is involved in the conversion of cholesterol to vitamin D.
  - B. It aids in the transport of materials throughout the body.
  - C. The cells of the epidermis store glucose as glycogen for energy.
  - D. It absorbs vitamin C so that the skin will not be subject to diseases.

10. Which of the following statements is/are TRUE regarding the DERMIS?
- A. It is vascularized
  - B. It is made mostly of squamous epithelial tissue
  - C. It is composed mostly of areolar connective tissue
  - D. Both A) and B) are correct =
  - E. Both A) and C) are correct
11. Which of the following statements is TRUE?
- A. Regardless of race, all human beings have about the same number of melanocytes.
  - B. The epidermis composes the thickest portion of the skin.
  - C. Melanocytes are found in the deepest layer of the dermis.
  - D. When a patient is said to have "third degree burns", this indicates that the patient has burns that cover approximately one-third of the body.
12. Which muscles attached to the hair follicles cause "goose bumps"?
- A. arrector integument
  - B. arrector pili
  - C. levator folliculi
  - D. arrector folliculi
13. Within the dermis, lines that indicate areas of separation between bundles of collagen fibers and that are important to surgeons when making a cut through the body wall are called:
- A. striae
  - B. cleavage or tension lines
  - C. dermal ridges
  - D. flexure lines
  - E. dermal papillae
14. Which of the following statements is TRUE?
- A. Osteoblasts deposit bone while osteocytes resorb bone.
  - B. Perichondrium covers the surface of long bones.
  - C. Blood vessels are found in bone but not in cartilage. —
  - D. Bones that do not fit into any category are classified as miscellaneous bones.
  - E. The hallux is an irregular bone.
15. Which of the following is NOT a carpal bone?
- A. capitate
  - B. triquetral
  - C. lunate
  - D. pisiform
  - E. talus
16. In the human skull, which of the following bones is unpaired?
- A. Nasal
  - B. Parietal
  - C. Maxilla
  - D. Ethmoid x
  - E. Temporal
17. The superior nasal concha is part of which bone?
- A. nasal
  - B. ethmoid
  - C. vomer
  - D. sphenoid
  - E. maxilla
18. Which of the following bones is NOT weight-bearing?
- A. talus
  - B. femur
  - C. fibula
  - D. tibia

19. Your anatomy instructor asks you to locate the lateral malleolus. What bone will you pick up?
- A. calcaneous
  - B. ulna
  - C. fibula
  - D. tibia
  - E. radius
20. The hard palate is composed of contributions from the ..... & ..... bones?
- A. ethmoid, palatine
  - B. maxillary, sphenoid
  - C. ethmoid, sphenoid
  - D. palatine, maxillary
  - E. sphenoid, palatine
21. You have a cervical vertebra in your hand. What feature is present that is NOT present on the other vertebrae?
- A. transverse foramina
  - B. facets
  - C. body
  - D. spinous process
  - E. pedicles
22. The parietal bone is an example of a ..... bone.
- A. long
  - B. short
  - C. flat
  - D. irregular
  - E. sesamoid
23. In the epiphyseal plate, cartilage grows:
- A. from the diaphysis to the epiphysis
  - B. from the epiphysis to the diaphysis
  - C. from the edges inward
  - D. in a circular fashion
24. The suture that connects the parietal bone with the frontal bone is the ..... suture.
- A. sagittal
  - B. coronal
  - C. squamous
  - D. lambdoid
25. The structure that separates the condylar and coronoid processes of the mandible is the:
- A. mandibular ramus
  - B. mandibular angle
  - C. styloid process
  - D. mandibular notch
  - E. mandibular canal
26. Which of the following statements is/are TRUE?
- A. Ribs numbered 11 and 12 are true ribs because they have no anterior attachments.
  - B. The most common site of fracture in the humerus is the anatomical neck.
  - C. In anatomical position, the lateral forearm bone is the ulna.
  - D. Each vertebral disc possesses a nucleus pulposus and an annulus fibrosus.
  - E. C) and D)
27. 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

28. The meatus can best be described as a:

- A. large bony prominence
- B. a tubelike opening or channel
- C. a shallow groove
- D. a raised, rough area

29. The greater trochanter is a bony landmark of the:

- A. femur
- B. tibia
- C. pubis
- D. ramus
- E. ulna

30. Which of the following statements is FALSE?

- A. The true name for cheekbones is zygomatic bones.
- B. There are seven cervical, twelve thoracic and five lumbar vertebrae.
- C. Costal cartilages join the ribs to the sternum.
- D. In anatomical position, the lateral bone is the ulna.
- E. The vertebral column is held in place primarily by the anterior and posterior longitudinal ligaments.

31. Locking of the ..... process prevents hyperextension of the elbow.

- A. olecranon
- B. glenoid
- C. coronoid
- D. styloid
- E. deltoid

32. Endosteum is in all of these places EXCEPT:

- A. around the exterior of the femur
- B. on the trabeculae of spongy bone
- C. lining the central canal of an osteon
- D. often directly touching the bone marrow

33. Each of the following bones contributes to the formation of the orbit EXCEPT the:

- A. lacrimal bone
- B. nasal bone
- C. frontal bone
- D. sphenoid bone
- E. palatine bone

34. The clavicle articulates with the scapula at the:

- A. acromion process
- B. coracoid process
- C. glenoid tuberosity
- D. scapular spine
- E. subscapular fossa

35. Which of the following phrases best describes the function of the vertebral curves?

- A. to provide resilience and flexibility
- B. to accommodate muscle attachment
- C. to improve cervical center of gravity
- D. to accommodate the weight of the pelvic girdle

36. In the epiphyseal plate, cartilage grows \_\_\_\_\_.

- A. by pulling the diaphysis toward the epiphysis
- B. by pushing the epiphysis away from the diaphysis
- C. from the edges inward
- D. in a circular fashion

37. Which of the following glands or organs produces hormones that tend to *increase* blood calcium levels?
- A. pineal
  - B. thyroid
  - C. parathyroid
  - D. spleen
38. The small spaces in bone tissue that are holes in which osteocytes live are called:
- A. lacunae
  - B. Volkmann's canals
  - C. Haversian canals
  - D. trabeculae
  - E. sinuses
39. Hallux is another name for the:
- A. thumb
  - B. 3rd cervical vertebra
  - C. terminal portion of the sternum
  - D. big toe
  - E. horseshoe-shaped bone found just under the chin
40. The paired L-shaped bones that contribute to the hard palate are the ..... bones.
- A. ethmoid
  - B. sphenoid
  - C. palatine
  - D. buccal
  - E. parietal
41. The ethmoid bone is composed of all of the following EXCEPT the:
- A. superior nasal concha
  - B. crista galli
  - C. cribriform plate
  - D. inferior nasal concha
42. The term eversion is applied only to movement of the:
- A. knee
  - B. vertebral column
  - C. wrist
  - D. elbow
  - E. ankle
43. All of the following influence joint stability EXCEPT:
- A. shape of articulating surfaces
  - B. bone density
  - C. muscle tone
  - D. degree of ligament stretch
44. Pulling the tongue back into the mouth after sticking it out is called:
- A. rotation
  - B. inversion
  - C. supination
  - D. retraction
  - E. protraction