Choose the best response for the following multiple choice questions (1.5 points each).

51) Isolated bones developing in tendons in response to stress are
   a. sutures  b. wormian bones  c. fontanels  d. sesamoid bones

52) A sinus is defined as a
   a. sharp, slender process  b. large, rounded process
   c. cavity or hollow space in a bone  d. rounded opening through a bone

53) Which ocular muscle moves the eye inferior and lateral?
   a. superior rectus  b. inferior rectus  c. superior oblique  d. inferior oblique

54) The adductor muscle group is located on the aspect of the thigh.
   a. lateral  b. medial  c. anterior  d. posterior

55) The hamstrings include all the following muscles EXCEPT
   a. semimembranosus  b. semitendinosus  c. biceps femoris  d. rectus femoris

56) Intercarpal and intertarsal joints are synovial joints of the type.
   a. hinge  b. pivot  c. saddle  d. gliding

57) A syndesmosis is a joint that is
   a. held together by elastic tissue  b. permits great movement
   c. located between the tibia and fibula  d. located between the humerus and radius

58) Motion that increases the joint angle in an anterior-posterior plane?
   a. abduction  b. extension  c. eversion  d. flexion

59) All of the following movements can be performed at the wrist joint except
   a. flexion and extension of the hand  b. circumduction of the hand
   c. rotation of the hand  d. abduction and adduction of the hand

60) An immovable joint found only between the skull bones is called a
   a. suture  b. condyle  c. crest  d. synovial joint

61) Which of the following muscles extends, adducts, and rotates the humerus medially at the shoulder?
   a. pectoralis major  b. deltoid  c. latissimus dorsi  d. biceps brachii

62) Which of the following is NOT a diagnostic feature of the os coxa?
   a. anterior superior iliac spine  b. acetabulum
   c. medial malleolus  d. ischial tuberosity

63) Which of the following bones is INCORRECTLY paired with its diagnostic feature?
   a. os coxae/greater sciatic notch  b. scapula/spine
   c. humerus/detoid tuberosity  d. femur/symphysis pubis

64) The largest bone of the foot which forms your heel is the
a. calcaneus   b. talus   c. lunate   d. trapezoid

65) How many metacarpals are present on your middle finger?
   a. 0   b. 2   c. 1   d. 3

66) The most inferior part of the sternum is the
   a. body   b. xiphoid process   c. manubrium   d. ramus

67) Transverse foramina are only found in
   a. the sacrum   b. cervical vertebrae   c. lumbar vertebrae   d. thoracic vertebrae

68) Which of the following muscles abducts and rotates the thigh medially at the hip joint.
   a. iliopsoas   b. sartorius   c. gluteus maximus   d. gluteus medius

69) A muscle that originates on bones but insert in the skin is
   a. rectus abdominis   b. temporalis   c. zygomaticus   d. tibialis anterior

70) The sternocleidomastoid receives its name because of its
   a. shape   b. attachment   c. size   d. function

71) The three auditory ossicles are located in the __________ portion of the temporal bone.
   a. mastoid   b. tympanic   c. squamous   d. petrous

72) Which suture extends from the anterior to the posterior fontanel?
   a. lambdoidal   b. coronal   c. squamosal   d. midsagittal

73) The end of a long bone is properly called the
   a. epiphysis   b. periosteum   c. diaphysis   d. compact bone

74) The ______ of the ethmoid bone has numerous perforations for the passage of olfactory nerves from
the nasal cavity to the brain.   a. sella turcica   b. cribriform plate   c. crista galli   d. concha

75) When looking into the nasal cavity the bone you CAN'T see is the
   a. inferior nasal conchae   b. ethmoid   c. vomer   d. lacrimal

76) Articular fovae for ribs are only found on
   a. the sacrum   b. cervical vertebrae   c. lumbar vertebrae   d. thoracic vertebrae

77) The distal row of carpal bones include each of the following EXCEPT?
   a. pisiform   b. hamate   c. capitate   d. trapezium

78) The olecranon process is found on which bone?
   a. temporal   b. humerus   c. ulna   d. radius

79) The head of the humerus fits into the __________ of the scapula.
   a. glenoid cavity   b. acetabulum   c. medial malleolus   d. ischial tuberosity

80) The articulation of the trapezium with the first metacarpal bone is an example of a
   a. hinge joint   b. pivot joint   c. saddle joint   d. gliding joint

81) The fibers of __________ muscle are elongated, multinucleated, and have distinct striations.
   a. smooth   b. cardiac   c. rough   d. skeletal

82) Groups of muscle fibers are bound together by ______________ into bundles known as fasciculi.
   a. fascia   b. endomysium   c.
83) Which of the following muscles is used during kicking or extension of the knee?  
a. semitendinosus muscle  
b. tensor fasciae latae  
c. quadriceps femoris muscle  
d. gastrocnemius muscle

84) Which muscle of facial expression protrudes the lower lip?  
a. orbicularis oris  
b. mentalis  
c. platysma  
d. buccinator

85) In an adult bone, the epiphyseal line is  
a. where the epiphyseal artery enters the epiphysis  
b. the line where the epiphysis joins the articular cartilage  
c. the remnant of a closed epiphyseal plate  
d. the remnant of the secondary ossification center

86) A condyle is a bone marking that is  
a. sharp, slender, pointed projection  
b. a long narrow ridge of bone  
c. a large opening through a bone  
d. participating in a joint

87) The type of cartilage that forms the costal cartilages is  
a. hyaline cartilage  
b. elastic cartilage  
c. fibrocartilage  
d. calcified cartilage

88) The foramen magnum is located in the ____________ bone.  
a. sphenoid  
b. occipital  
c. temporal  
d. frontal

89) Which muscle keeps food from accumulating between your cheek and teeth?  
a. lateral pterygoid  
b. orbicularis oris  
c. masseter  
d. buccinator

90) The tendocalcaneus (Achilles tendon) serves both the gastrocnemius and the  
a. sartorius  
b. tibialis anterior  
c. peroneus longus  
d. soleus

91) A muscle that inverts the foot (inversion) is the  
a. gastrocnemius  
b. peroneus longus  
c. tibialis anterior  
d. soleus

92) The deep sockets in the mandible and maxilla for the roots of the teeth are ______.  
a. alveoli  
b. foramen  
c. meatus  
d. condyle

93) Of all of the processes of the temporal bone, the one that projects inferiorly and is almost needle-shaped is the_________________.  
a. mastoid process  
b. styloid process  
c. petrous process  
d. zygomatic process

94) Which of the following bones DOES NOT articulate with the ethmoid?  
a. frontal  
b. lacrimal  
c. vomer  
d. inferior nasal conchae

95) The mandibular fossa is located in which bone?  
a. zygomatic  
b. temporal  
c. maxilla  
d. mandible

96) The fleshy, thickened portion of a muscle between the tendons is called the  
a. origin  
b. belly  
c. insertion  
d. aponeuroses

97) The suture that exists between the two maxillary bones where they articulate to form the hard palate is a  
a. synchondrosis  
b. serrat  
c. synostosis  
d. plane

98) The lambdoidal suture is an example of a  
a. fibrous joint  
b. synovial joint  
c. cartilaginous joint  
d. none of the above
99) The type of cartilage in the symphysis pubis and intervertebral discs is
a. hyaline cartilage  b. elastic cartilage  c. fibrocartilage  d. calcified cartilage

100) Which of the following is an example of a hinge joint in the axial skeleton?
a. ulna/humerus  b. radius/ulna  c. temporal/mandible  d. axis/atlas

Fill-in the blanks (please write legibly) (1 point each).
1) The more stationary attachment of a muscle is known as the ________________.
2) Flexion of the foot at the ankle so that the superior aspect of the foot approaches the shin is called
______________________________.
3) The ____________________ muscle of mastication protracts the mandible.
4) The head of the femur fits into the ____________________ of the ox coxa.
5) A __________________ is a type of cartilaginous joint found between a diaphysis and an epiphysis at
the epiphyseal plate.
6) ____________________ is one muscle that is synergistic to the diaphragm during inspiration.
7) The main muscles in the pelvic diaphragm are the ___________________ and ____________________.
8) The ____________________ muscles extend the lower back.
9) The ____________________ is the lateral of the two bones in the antebrachium.
10) The synovial fluid of a synovial joint is secreted into the joint capsule by a thin__________________.

True/false - circle the appropriate response (1 point each).
1) Synovial fluid is found only within synovial joints.  T  F
2) When you contract your left sternocleidomastoid muscle your head turns to the right.  T  F
3) The average adult has 209 bones.  T  F
4) The articular surface of the ischium articulates with the sacrum.  T  F
5) Each pes (ankle, foot, and toes) includes 26 bones.  T  F
6) The os coxae is formed by the fusion of three separate bones.  T  F
7) The frontal, sphenoid, ethmoid, and occipital are the only unpaired bones of the skull.  T  F
8) Adduction is the movement of a body part away from the main axis of the body.  T  F
9) The orbit is formed only by facial bones.  T  F
10) The hyoid bone is a component of the axial skeleton.  T  F

Definitions (1 point each).
Aponeuroses
Gomphoses
Pivot Joint
Floating ribs
Hemopoiesis