

Brightman
BSC 1085
EXAM 2



P 1-8

NAME:

Anatomy and Physiology
EXAM 2

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PART 1 : MULTIPLE CHOICE - SELECT THE BEST ANSWER FOR EACH QUESTION! 2 PTS EACH.

1. Which of these is NOT a location for hyaline cartilage?
 - a. nose
 - b. articular cartilage
 - c. larynx
 - d. intervertebral discs
 - e. trachea

2. Which of these statements is false about cartilage?
 - a. the cells are located in spaces called lacunae
 - b. fibrocartilage contains collagen fibers
 - c. it is surrounded by a perichondrium membrane
 - d. elastic cartilage is found in your ears
 - e. it contains concentric rings called lamallae

3. Which of these bones would NOT contain a diaphysis?
 - a. phalange
 - b. tarsal
 - c. ulna
 - d. femur
 - e. humerus

4. Bone cells that maintain bone tissue are called.....
 - a. osteoblasts
 - b. osteoclasts
 - c. osteocytes
 - d. osteogenitic
 - e. none of the above

5. Lacunae of compact bone are directly connected to each other by hair-like structures called____
 - a. central (Haversian) canal
 - b. periosteum vessels
 - c. canaliculi
 - d. Volkmans canals
 - e. lamallae

6. Which of these bones would be formed from endochondral ossification?
 - a. temporal bone
 - b. ribs
 - c. sternum
 - d. axis
 - e. frontal bone

7. The region of an adult long bone that would be responsible for energy storage is
 - a. epiphyseal line
 - b. episeal plate
 - c. medullary cavity
 - d. articular cartilage
 - e. periosteum

8. Which of these is found only in spongy bone?
 - a. mesenchyme
 - b. osteoblasts
 - c. osteoprogenitor
 - d. secondary ossification center
 - e. trabeculae

9. Appositional growth of bone is the
 - a. thickening of the diaphysis
 - b. lengthening of the diaphysis
 - c. lengthening of short bone shafts
 - d. thickening of the epiphyseal line
 - e. formation of the epiphyseal plate

10. The majority of bone matrix is composed of _____
 - a. osteocytes
 - b. mineral salts
 - c. water
 - d. protein
 - e. collagen fibers

11. The bone that contains the zygomatic process is the _____
 - a. sphenoid
 - b. ethmoid
 - c. temporal
 - d. zygomatic
 - e. parietal

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12. Which of these bones is not a facial bone?
 - a. ethmoid
 - b. maxillae
 - c. nasal
 - d. mandible
 - e. lacrimal bones

13. The bone marking/structure called the coronoid process is located on the _____
 - a. mandible
 - b. occipital
 - c. clavicle
 - d. temporal
 - e. scapula

14. Which of these bone markings/structures is located on the occipital bone?
 - a. coronoid process
 - b. condylar process
 - c. crista galli
 - d. infraorbital foramen
 - e. foramen magnum

15. Lumbar vertebrae are characterized by
 - a. long spinous process
 - b. transverse foramen
 - c. large body
 - d. fusion of intervertebral processes
 - e. articulations for ribs

16. The bone marking/structure called the olecranon fossa belongs to which bone?
 - a. sphenoid
 - b. scapula
 - c. radius
 - d. humerus
 - e. ulna

17. The humerus and radius articulate at what bone marking/structure?
 - a. acromion process
 - b. radial tuberosity
 - c. capitulum
 - d. greater tubercle
 - e. styloid process

- 18. Which of these joint is monoaxial?
 - a. ball and socket
 - b. symphysis
 - c. condyloid
 - d. synchondroses
 - e. hinge

- 19. Condyloid joints can't do which of these movements?
 - a. circumduction
 - b. flexion
 - c. extension
 - d. rotation
 - e. abbduction

- 20. When cellular ATP runs out the NEXT method to make ATP is _____
 - a. aerobic metabolism
 - b. anaerobic metabolism
 - c. creatine phosphate
 - d. oxidative phosphorlation
 - e. lactic acid formation

- 21. "Recruitment" involves _____
 - a. increasing the frequency of stimulation
 - b. increasing optimum overlap of muscle fibers
 - c. increasing asynchronous stimulation
 - d. increasing the number of motor units used
 - e. none of the above

- 22. Which of these structures is NOT within a muscle fiber?
 - a. troponin
 - b. perimysium
 - c. T-tubule
 - d. myofibril
 - e. myofilament

- 23. Which of these bone marking/structure is not associated with the hip bones?
 - a. obturator foramen
 - b. lesser tubercle
 - c. ishium tuberosity
 - d. pubis symphysis
 - e. acetabulum

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24. Which of these bone markings is located on the fibula?
- a. medial malleolus
 - b. tibia tuberosity
 - c. lateral tuberosity
 - d. linea aspera
 - e. lateral malleolus
25. The bone that makes up the "socket" of the arm is the
- a. talus
 - b. glenoid cavity
 - c. sciatic notch
 - d. trochlear notch
 - e. acetabulum
26. The fibrous layer and the _____ are the two layers of the articular capsule.
- a. synovial membrane
 - b. articular membrane
 - c. joint cavity
 - d. synovial cavity
 - e. articular cartilage
27. Which of these joints would not contain a joint cavity?
- a. hinge
 - b. pivotal
 - c. gliding/planar
 - d. gomphosis
 - e. ball and socket
28. The joint that is represented by the epiphyseal plate would be a _____
- a. synostosis
 - b. symphysis
 - c. gliding
 - d. suture
 - e. synchondroses
29. In a muscle contraction the thin ____ molecules slide past the thick ____ molecules.
- a. troponin; tropomyosin
 - b. actin; myosin
 - c. tropomyosin; troponin
 - d. myosin; actin
 - e. none of the above

30. Which of these statement is FALSE about muscles?
- muscles can not elongate themselves
 - muscles are stimulated by AchE
 - muscles are used in thermogenesis = heat production
 - muscles shorten when they contact
 - muscles are used to regulate organ volume
31. On a myogram the time from stimuli to beginning of contraction (steps 1-9) is called the _____.
- refractory period
 - latent period
 - contraction period
 - recovery period
 - relaxation peroid
32. Which of these the binding site of calcium during contraction.
- actin
 - tropomyosin
 - myosin
 - t-tubule
 - tropoan
33. Another name for a muscle that is a prime mover is _____
- syngamist
 - antagonists
 - fixators
 - secondary movers
 - agonist
34. The term "rectus" refers to the _____
- shape
 - size
 - number of origins
 - location
 - direction of muscle fibers
35. The biceps femoris is named due to the _____
- number of locations in the body
 - number of origins in the body
 - number of insertions in the body
 - number of joints they cross over in the body
 - the action it performs

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PART 2. MATCHING SELECT THE BEST ANSWER FOR EACH NUMBER 2 PTS EA

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|---------------------|--|
| 51. compact | 1. synovial; circumduction |
| 52. hypertrophy | 2. toes pointed down |
| 53. dorsiflexion | 3. toes pointed up |
| 54. calcitonin | 4. synovial; tarsals |
| 55. PTH | 5. synovial; rotation |
| 56. patella | 6. example = epiphyseal line |
| 57. plantar flexion | 7. cartilage cells swell up |
| 58. synostosis | 8. example of a sesamoid bone |
| 59. pivotal | 9. location diaphysis of a long bone |
| 60. gliding/planar | 10. hormone causes calcium into the bones |
| | 11. hormone causes calcium to leave the bone |

PART 3. DISCUSSION QUESTION 10 PTS

Compare the 3 types of muscle tissue.

<u>SKELETAL</u>	<u>CARDIAC</u>	<u>SMOOTH</u>
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location =

appearance =

control =

nuclei =

speed of contraction =