1. Which of the following is not associated with synarthrodial joints?
   A. typically weak
   B. fibrous
   C. immovable
   D. sutures of the skull

2. Which of the following is an example of a uniaxial joint?
   A. hip
   B. carpals
   C. elbow
   D. base of thumb

3. Which of the following is associated with triaxial joints?
   A. ball and socket
   B. 3 axes
   C. hip
   D. all of the choices are associated with triaxial joints

4. Which of the following terms does not fit with the others?
   A. carpals
   B. short bones
   C. gliding movements
   D. uniaxial

5. The knee is an example of which type joint?
   A. fibrous
   B. synarthroses
   C. synovial
   D. amphiarthroses

6. A triaxial joint allows which of the following movements?
   A. flexion and extension
   B. abduction and adduction
   C. rotation and circumduction
   D. all of the choices are movements allowed by a triaxial joint

7. Hinge joints have how many axes?
   A. none
   B. 1
   C. 2
   D. 3
8. Which of the following are functions of articular cartilage?
A. minimize friction and wear at a joint
B. protect against joint dislocation
C. both minimizing friction and wear at a joint and protecting against joint dislocation
D. neither minimizing friction and wear at a joint nor protecting against joint dislocation

9. Which of the following are examples of articular fibrocartilage?
A. the intervertebral discs
B. the menisci of the knee
C. both the intervertebral discs and the menisci of the knee
D. none of the choices are examples of articular fibrocartilage.

10. Which of the following characterizes the "close-packed position" at a joint?
A. joint stability is minimum
B. muscular tension is maximum
C. when both joint stability is minimum and muscular tension is maximum
D. neither joint stability is minimum nor muscular tension is maximum

11. Which of the following is/are true regarding amphiarthrodial joints?
A. Hyaline cartilage holds the bones together.
B. They are slightly moveable.
C. both that they are slightly moveable and that Hyaline cartilage holds the bones together
D. they are neither slightly moveable nor does the Hyaline cartilage hold the bones together

12. Which of the following refers to the stretching of muscles, tendons, and ligaments by a force other than tension in the antagonist muscles?
A. active stretching
B. passive stretching
C. ballistic stretching
D. none of the choices are correct

13. Which type of flexibility accompanies the ROM achieved by actively contracting the antagonist muscle?
A. static flexibility
B. dynamic flexibility
C. passive stretching
D. none of the choices are correct
14. Which of the following does not affect the range of motion at a joint?
A. the degree of tonus of surrounding muscles and ligaments
B. the shape of the articular surfaces
C. the exercise habits of the individual
D. the number of proprioceptors present at the joint

15. Which of the following heightens the risk of injury?
A. low flexibility
B. high flexibility
C. both low and high flexibility
D. none of the choices heighten the risk of injury.

16. Where are Golgi tendon organs located?
A. in tendons
B. in the junctions between muscles and their tendons
C. interspersed throughout the fibers of muscles
D. in both tendons and in the junctions between muscles and their tendons.
E. all of the above

17. The stretch reflex, or myotatic reflex, is provoked by activation of which of the following in a stretched muscle?
A. muscle spindles
B. Golgi tendon organs
C. both muscle spindles and Golgi tendon organs
D. neither muscle spindles nor Golgi tendon organs

18. The technique of muscle stretching known as proprioceptive neuromuscular facilitation (PNF) is based on responses elicited from which of the following?
A. Golgi tendon organs
B. muscle spindles
C. both muscle spindles and Golgi tendon organs
D. neither muscle spindles nor Golgi tendon organs

19. Proprioceptive neuromuscular facilitation is an example of what type of stretching?
A. active stretching
B. passive stretching
C. ballistic stretching
D. none of the choices is correct.

20. Which of the following joint injuries is accompanied by inflammation?
A. sprains
B. dislocations
C. bursitis
D. all of the choices are accompanied by inflammation.
21. Which of the following are characteristics of diarthrodial joints?
A. Articulating bone surfaces are covered with articular cartilage.
B. An articular capsule surrounds the joint.
C. They are lubricated by synovial fluid.
D. Both the articulating bone surfaces are covered with articular cartilage and an articular capsule surrounds the joint.
E. all of the choices are true

22. Which of the following is/are characteristic(s) of bursae?
A. They are associated with synovial joints.
B. They separate tendons from bones to reduce friction.
C. They separate skin from bones to reduce friction.
D. both A and B
E. all of the above

23. Which of the following is true regarding bursitis?
A. overuse injury
B. frictional irritation in one or more bursae
C. inflammation
D. it is both an overuse injury and frictional irritation in one or more bursae.
E. all of the choices are correct

24. Which of the following contain synovial fluid?
A. bursae
B. tendon sheaths
C. articular cartilage
D. both bursae and tendon sheaths
E. all of the choices contain synovial fluid.

25. Which connective tissue attaches muscle to bone?
A. ligaments
B. tendons
C. both ligaments and tendons
D. none of the choices attaches muscle to bone

26. What characteristics do tendons and ligaments share with muscles?
A. extensibility
B. elasticity
C. contractility
D. both extensibility and elasticity
E. all of the choices are characteristics that tendons and ligaments share with muscles
27. Which statement(s) is/are true?
A. Exercise can increase the size and strength of tendons.
B. Exercise can increase the size and strength of ligaments.
C. Exercise can increase the strength of tendon junction with a bone.
D. Exercise can increase the size and strength of both tendons and ligaments.
E. All of the choices are true.

28. The “ability of a joint to resist abnormal displacement” defines what?
A. joint stability
B. joint flexibility
C. loose-packed position
D. none of the choices are correct.

29. Joint stability is affected by which of the following?
A. shape of the articulating bones
B. arrangement and size of ligaments
C. area of contact between the bones
D. all of the choices are correct

30. Which of the following statements is/are true?
A. The hip is more stable than the shoulder.
B. The shoulder has more range of motion than the hip.
C. The hip is more stable than the shoulder and the shoulder has more range of motion than the hip.
D. none of the statements is correct.

31. What is the result when a ligament is stretched beyond its elastic limit?
A. A sprain occurs.
B. Joint stability may be temporarily compromised.
C. Joint stability may be permanently compromised.
D. A sprain occurs and joint stability may be temporarily compromised.
E. all of the choices are possible results when a ligament is stretched beyond its elastic limit.

32. Which statement(s) is/are true?
A. When muscles are fatigued, ligaments are at a greater risk of injury.
B. When ligaments are fatigued, muscles are at a greater risk of injury.
C. both of the statements are true
D. neither of the statements is true

33. A goniometer is used to directly measure what?
A. muscle flexibility
B. joint range of motion
C. both muscle flexibility and joint range of motion
D. none of the choices are correct
34. Range of motion at a joint is influenced by which of the following?
   A. shape of the articulating surfaces
   B. relative laxity and extensibility of the muscles crossing the joint
   C. fluid content of the cartilage within the joint
   D. both the shape of the articulating surfaces and the relative laxity and extensibility of the muscles crossing the joint
   E. all of the choices influence range of motion at a joint.

35. The term “hypermobile” is used to describe what?
   A. a joint with an unusually large range of motion
   B. a joint with an unusually small range of motion
   C. a gymnast
   D. a sprinter

36. Golgi tendon organs respond in which of the following ways?
   A. inhibit tension in the activated muscle
   B. initiate tension in the antagonist muscle
   C. both statements are correct
   D. none of the choices are correct

37. Which of the following activates the muscle spindles?
   A. knee-jerk test
   B. ballistic stretching
   C. both the knee-jerk test and ballistic stretching
   D. none of the choices are true

38. Which type of stretching demonstrates greater range of motion?
   A. active stretching
   B. passive stretching
   C. active and passive stretching are equal
   D. need more information