1. Which of the following is a functional classification of joints and applies to joints that allow a wide range of motion?
   A) amphiarthrosis  
   B) diarthrosis  
   C) synarthrosis  
   D) fibrous  
   E) cartilaginous

2. Consider the anatomy of the pubic bones. They are joined by cartilage and allow limited movement. Their junction is classified as a(n):
   A) amphiarthrosis.  
   B) cartilaginous joint.  
   C) synarthrosis  
   D) A and B are correct.  
   E) A, B, and C are correct.

3. Which of the following is an example of a synarthrosis?
   A) a suture in the skull  
   B) the vertebral column  
   C) the atlanto-occipital joint  
   D) the knee  
   E) the elbow

4. The synovial membrane
   A) is the inner layer of the articular capsule.  
   B) consists of columnar epithelial cells.  
   C) makes mucous to lubricate the joints.  
   D) includes accumulations of dense connective tissue.  
   E) All of the above are correct.

5. Synovial fluid
   A) lubricates diarthrotic joints.  
   B) helps absorb mechanical shocks.  
   C) brings nutrients and O2 to cartilage in diarthroses.  
   D) removes wastes and CO2 from cartilages in diarthroses.  
   E) All of the above are correct.

6. Mensici
   A) are pads of hyaline cartilage.
B) help bones fit together more closely.
C) help decrease the stability of a joint.
D) block the flow of synovial fluid within a joint.
E) All of the above are correct.

7. Bursae
A) are fat-filled sacs.
B) are integral parts of the articular capsule.
C) are never observed between ligaments and bones.
D) help reduce friction between moving parts.
E) are associated with synarthroses.

8. Tendon sheaths
A) help reduce friction between moving parts.
B) are tube-like bursae.
C) are associated with the wrist, ankle, fingers and toes.
D) A and B are correct.
E) A, B and C are correct.

9. Each of the following is classified as an angular movement EXCEPT:
A) flexion
B) extension
C) hyperextension
D) rotation
E) circumduction

10. A person tilting her head back so that she can up at the stars ____ her head on her neck.
A) laterally flexes
B) extends
C) flexes
D) adducts
E) hyperextends

11. A man stands on his left foot. He holds his right thigh parallel to the ground with his right (lower) leg perpendicular to the ground. Which of the following is true?
A) His left knee is extended, but his right knee is flexed.
B) His left and right knees are flexed.
C) His left knee is extended, but his right knee is hyperextended.
D) His left and right knees are extended.
E) His left knee is flexed, but his right knee is extended.
12. An instructor tells students in a P.E. class to place their arms at their sides. Then she tells them to raise their arms away from their bodies until the arms are at shoulder level and their bodies form a letter T. During the last movement described the students ____ their arms.

A) adducted  
B) abducted  
C) circumducted  
D) rotated  
E) flexed  

13. When the elbow is flexed and the palm is turned superiorly so that it could hold a cup of soup, it is said to be

A) inverted.  
B) pronated.  
C) supinated  
D) opposed.  
E) depressed.  

14. Which of the following is true of vertebrocostal joints?

A) They are synovial joints.  
B) They occur between the costal heads and the facets of bodies of adjacent vertebrae.  
C) They occur between the costal tubercles and the facets of vertebral transverse processes.  
D) They are gliding joints.  
E) All of the above are correct.  

15. The radiocarpal joint

A) occurs between the distal end of the radius and the scaphoid, lunate, and triquetrum.  
B) is a hinge joint.  
C) is considered a synostosis by structure.  
D) is considered a fibrous joint by function.  
E) allows inversion and eversion.  

16. Which of the following is true of the elbow joint?

A) It is a pivot joint.  
B) It has no articular capsule.  
C) It consists of the radial, the humeral trochlea and the ulnar trochlear notch.  
D) It allows abduction and adduction.  
E) It is considered a synarthroses functionally.  

17. The hip joint

A) is a ball-and-socket (spheroidal), amphiarthrotic joint.
B) allows the same types of motion but not the same ranges of motion as the shoulder joint.
C) occurs between the head of the humerus and the acetabulum.
D) A and B are correct.
E) A, B and C are correct.

18. The knee joint
A) is the least complex joint in the body.
B) consists of a planar and two modified pivot joints.
C) is stabilized by the collateral and cruciate ligaments as well as the menisci.
D) allows pronation and supination.
E) includes the patella, but excludes the tibia and femur.

19. Which joint in the body is most likely to be injured?
A) knee
B) suture
C) hip
D) shoulder
E) elbow

20. Which of the following is an effect of aging on articulations?
A) decreased synovial fluid production
B) decreased flexibility of ligaments
C) increased length of ligaments
D) A and B are correct.
E) A, B and C are correct.

**Answer Key - Untitled Exam-1**

1. B
2. D
3. A
4. A
5. E
6. B
7. D
8. E
9. D
10. E
11. A
12. B
13. C
14. E
15. A
16. C
17. B
18. C
19. A
20. D