Test Bank for Human Anatomy Physiology 8th Edition by Marieb

Chapter 8

Exam
Name___________________________________

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) In the classification of joints, which of the following is true? 1)
   A) Synarthrotic joints are slightly movable.
   B) All synovial joints are freely movable.
   C) In cartilaginous joints, a joint cavity is present.
   D) Immovable joints are called amphiarthroses.
   Answer: B
   Explanation: A) 
   B) 
   C) 
   D) 

2) Presence of a synovial cavity, articular cartilage, synovial membrane, and ligaments are characteristics of what type of joint?
   2)
   A) synchondrosis B) suture C) symphysis D) hinge joint
   Answer: D
   Explanation: A) 
   B) 
   C) 
   D) 

3) Which of the following statements best describes angular movements? 3)
   A) They allow movement in several planes.
   B) They change (increase or decrease) the angle between two bones.
   C) They allow movement only in one plane.
   D) They occur only between bones with flat articular processes.
   Answer: B
   Explanation: A) 
   B) 
   C) 
   D) 

4) Which of the following conditions is generally considered a noninflammatory type of arthritis? 4)
A) rheumatoid arthritis B) tendonitis
C) osteoarthritis D) bursitis
Answer: C
Explanation: A)
B)
C)
D)

5) What are menisci? 5)
A) tendon sheaths B) small sacs containing synovial fluid
C) semilunar cartilage pads D) cavities lined with cartilage
Answer: C
Explanation: A)
B)
C)
D)

6) What is moving a limb away from the median plane of the body along the frontal plane called? 6)
A) abduction B) inversion C) adduction D) dorsiflexion
Answer:
Explanation: A)
B)
C)
D)

7) On the basis of structural classification, which joint is fibrous connective tissue? 7)
A) pivot B) synchondrosis C) syndesmosis D) symphysis
Answer: C
Explanation: A)
B)
C)
D)

8) Fibrous joints are classified as ______. 8)
A) sutures, syndesmoses, and gomphoses B) symphysis, sacroiliac, and articular
C) pivot, hinge, and ball and socket D) hinge, saddle, and ellipsoidal
Answer:
Explanation: A)
B)
C)
D)

9) Which of the following statements defines synchondroses? 9)
A) amphiarthrotic joints designed for strength and flexibility
B) joints that permit angular movements  
C) interphalangeal joints  
D) cartilaginous joints where hyaline cartilage unites the ends of bones  
Answer: D  
Explanation: A)  
B)  
C)  
D)

10) Which of the following is a true statement regarding gliding movements?  
A) An example of a gliding movement is nodding one’s head.  
B) Gliding movements occur at the intercarpal and intertarsal joints.  
C) Gliding movements allow flexibility of the upper limbs.  
D) Gliding movements are multiaxial.  
Answer: B  
Explanation: A)  
B)  
C)  
D)

11) Connective tissue sacs lined with synovial membranes that act as cushions in places where friction develops are called _______.  
11) A) menisci B) ligaments C) bursae D) tendons  
Answer: C  
Explanation: A)  
B)  
C)  
D)

12) Multiaxial joints of the body include _______.  
12) A) the ankle and wrist B) the knee and elbow  
C) intercarpal and intertarsal joints D) the hip and shoulder  
Answer: D  
Explanation: A)  
B)  
C)  
D)

13) _______ are cartilaginous joints.  
13) A) Sutures B) Synchondroses C) Syndesmoses D) Gomphoses  
Answer: B  
Explanation: A)  
B)
14) Articular cartilage found at the ends of the long bones serves to ______.
A) form the synovial membrane
B) provide a smooth surface at the ends of synovial joints
C) attach tendons
D) produce red blood cells (hemopoiesis)
Answer: B
Explanation: A)

15) Which of the following is a correct statement about development of joints?
A) Joints develop independent of bone growth.
B) All fibrous joints are in the adult form by the time of birth.
C) By the end of the fourth week, fetal synovial joints resemble adult joints.
D) Joints develop in parallel with bones.
Answer: D
Explanation: A)

16) Which of the following is not a part of the synovial joint?
A) articular cartilage B) joint cavity
C) tendon sheath D) articular capsule
Answer: C
Explanation: A)

17) Which of the following is a true statement?
A) The anular ligament surrounds the head of the radius.
B) The rotator cuff is responsible for the flexible extensions at the elbow joint.
C) The greater tubercle of the humerus articulates at the coracoid process of the scapula.
D) The head of the humerus articulates with the acromion process.
Answer:
Explanation: A)
18) Synarthrotic joints _______. 18)  
A) permit essentially no movement  
B) have large joint cavities  
C) are cartilaginous joints  
D) are found at the junction of the epiphysis and diaphysis of growing bone  
Answer:  
Explanation: A)  
B)  
C)  
D)  
19) Pointing the toes is an example of _______. 19)  
A) pronation  
B) circumduction  
C) plantar flexion  
D) protraction  
Answer: C  
Explanation: A)  
B)  
C)  
D)  
20) A joint united by dense fibrocartilaginous tissue that usually permits a slight degree of movement is a _______.  
20)  
A) gomphosis  
B) syndesmosis  
C) symphysis  
D) suture  
Answer: C  
Explanation: A)  
B)  
C)  
D)  
21) Which ligament holds the radius to the ulna at the proximal end? 21)  
A) radial collateral  
B) ulnar collateral  
C) iliofemoral  
D) anular  
Answer: D  
Explanation: A)  
B)  
C)  
D)  
22) In symphysis joints the articular surfaces of the bones are covered with _______. 22)  
A) tendon sheaths  
B) hyaline cartilage  
C) synovial membranes  
D) fibrocartilage  
Answer: B  
Explanation: A)  
B)
23) Football players often sustain lateral blows to the extended knee. Which of the ligaments is (are) damaged as a result?
   23)  
   A) arcuate popliteal and the posterior cruciate  
   B) oblique popliteal and extracapsular ligament  
   C) suprapatellar  
   D) medial collateral, medial meniscus, and anterior cruciate  
   Answer: D  
   Explanation: A)  

24) Saddle joints have concave and convex surfaces. Name the two bones of the hand that articulate to form a saddle joint.
   24)  
   A) The trapezium of the ring finger and the capitate of the fourth finger.  
   B) The scaphoid of the middle finger and lunate of the index finger.  
   C) The trapezium of the carpal bone and the thumb’s metacarpal.  
   D) The scaphoid of the index finger and the triquetrum of the middle finger.  
   Answer: C  
   Explanation: A)  

25) Tendon sheaths _______. 25)  
   A) are lined with dense irregular connective tissue  
   B) form channels for tendons  
   C) act as friction-reducing structures  
   D) help anchor the tendon to the muscle  
   Answer: C  
   Explanation: A)  

26) An example of an interosseus fibrous joint is _______. 26)  
   A) the radius and ulna along its length  
   B) between the humerus and the glenoid cavity
C) the clavicle and the scapula at the distal ends
D) between the vertebrae
Answer:
Explanation: A)
B)
C)
D)
27) A fibrous joint that is a peg-in-socket is called a ______ joint. 27)
A) suture B) synchondrosis C) syndesmosis D) gomphosis
Answer: D
Explanation: A)
B)
C)
D)
28) The terms inversion and eversion pertain only to the ______. 28)
A) feet B) hands
C) arms D) hands and the feet
Answer:
Explanation: A)
B)
C)
D)
29) Synovial fluid is present in joint cavities of freely movable joints. Which of the following statements is true about this fluid?
29)
A) It contains hyaluronic acid. B) It contains enzymes only.
C) It contains hydrochloric acid. D) It contains lactic acid.
Answer:
Explanation: A)
B)
C)
D)
6
30) Which of the following is not a factor that contributes to keeping the articular surfaces of diarthroses in contact?
30)
A) arrangement and tension of the muscles
B) structure and shape of the articulating bone
C) number of bones in the joint
D) strength and tension of joint ligaments
31) The gliding motion of the wrist is accomplished because of the ______ joint. 31)
A) pivot B) condyloid C) hinge D) plane
Answer: D
Explanation: A)
B)
C)
D)

32) Compared to the shoulder, displacements of the hip joints are ______. 32)
A) common in all people who are overweight
B) common due to the weight bearing the hip endures
C) rare because the rotator cuff stabilizes the hip joint
D) rare because of the ligament reinforcement
Answer: D
Explanation: A)
B)
C)
D)

33) The hip joint is a good example of a(n) ______ synovial joint. 33)
A) nonaxial B) multiaxial C) biaxial D) uniaxial
Answer: B
Explanation: A)
B)
C)
D)

34) What can cause gouty arthritis? 34)
A) a bacterial infection in the bursae
B) excessive blood levels of uric acid deposited as crystals in the soft tissue joints
C) a disorder in the body’s immune system resulting in destruction of joints
D) a thickening of the synovial membrane and a decrease in fluid production
Answer: B
Explanation: A)
B)
C)
D)

35) Extracapsular ligaments stabilizing the knee include ______. 35)
A) the oblique popliteal crossing the knee anteriorly
B) cruciate ligaments, which help secure the articulating bones together
C) lateral and medial collateral ligaments preventing lateral or medial angular movements
D) the patellar ligament extending from femur to patella
Answer: C
Explanation: A)
B)
C)
D)
36) Movement allowed in a pivot joint is known as ______. 36)
A) extension B) flexion
C) biaxial movement D) uniaxial rotation
Answer: D
Explanation: A)
B)
C)
D)
37) Articulations permitting only slight degrees of movement are ______. 37)
A) synovial joints B) synarthroses C) amphiarthroses D) diarthroses
Answer: C
Explanation: A)
B)
C)
D)
38) The cruciate ligaments of the knee ______. 38)
A) are also called collateral ligaments
B) prevent hyperextension of the knee
C) assist in defining the range of motion of the leg
D) tend to run parallel to one another
Answer: B
Explanation: A)
B)
C)
D)
39) The ligaments that protect the alignment of the femoral and tibial condyles and limit the movement of the femur anteriorly and posteriorly are called _______. 39)
A) tibial collateral ligaments B) patellar ligaments
C) anterior ligaments D) cruciate ligaments
Answer: D
Explanation: A)
40) Bending your head back until it hurts is an example of _______. 40)
A) circumduction B) extension C) hyperextension D) flexion
Answer: C
Explanation: A)
B)
C)
D)
41) Which ligament of the knee initiates the knee-jerk reflex when tapped? 41)
A) the lateral patellar retinacula B) the patellar ligament
C) the medial patellar retinacula D) the extracapsular ligament
Answer: B
Explanation: A)
B)
C)
D)
9
SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

**Figure 8.2**
Using Figure 8.2, what type of axis does each joint have?
A. Nonaxial
B. Uniaxial
C. Biaxial
D. Multiaxial
42) Joint 3. 42)
Answer: B
Explanation:
43) Describe a typical synovial joint. 43)
Answer: The ends of each bone are covered with hyaline cartilage that is continuous with the synovial membrane enclosing the joint. Synovial fluid fills the space between the articular cartilage. Outside the synovial membrane there is a very tough, fibrous capsule that prevents the synovial membrane from bulging out as pressure is applied to the ends of the bones.
Explanation:
10
44) After reading a medical report, you learn that a 45-year-old female has the following
symptoms: inflammation of synovial membranes, accumulation of synovial fluid, pain and tenderness about the joints, pannus formation, and some immobility at certain joints. On the basis of these symptoms, what would the patient probably have?

44) Answer: Rheumatoid arthritis
Explanation:

45) Turning the foot medially at the ankle would be called ______. 45) Answer: inversion
Explanation:

46) The joint between the frontal and parietal bones is called a ______ joint. 46) Answer: suture
Explanation:

47) While the fingers can exhibit flexion and extension and other angular motions, the thumb has much greater freedom. Why?

47) Answer: The thumb possesses a saddle joint where each articular surface has both a concave and a convex surface.
Explanation:

48) Greg is somewhat of a “weekend athlete” who has overextended himself by pitching baseball for a local team during the week and playing golf on the weekends for several hours. He presented himself to the emergency room last week with severe shoulder pain (at the glenohumeral joint). The physician told him that the X ray was not conclusive, but he may have damage to his rotator cuff. What is the rotator cuff, and how might he have caused this damage? What remedies will the physician recommend?

48) Answer: Greg has either stretched or torn his rotator cuff. He will be told to rest for a few months, and if the pain does not subside, surgery will be necessary. The rotator cuff is made up of four tendons that belong to the subscapularis, supraspinatus, infraspinatus, and teres minor muscles and encircle the shoulder joint. They are vulnerable to damage when the arm is circumducted vigorously. Greg is obviously overdoing his activities by pitching four baseball games per week and playing golf on weekends.
49) Often people who exercise prudently seem to have fewer bouts with osteoarthritis. Will exercise prevent arthritis? If so, how?

Answer: Exercise does not prevent arthritis, but it strengthens muscles that in turn support and stabilize joints.

50) Using Figure 8.2, what type of axis does each joint have?
A. Nonaxial
B. Uniaxial
C. Biaxial
D. Multiaxial

Answer: C

51) Although uric acid is a normal waste product of nucleic acid metabolism, why are so many men suffering from a condition known as gouty arthritis? How does this product that should be eliminated in the urine cause so much pain when things go wrong?

Answer: Males have higher blood levels of uric acid than females. When blood levels of uric acid rise excessively, it is deposited as urate crystals in the soft tissues of joints. Sometimes gout sufferers have an excessive rate of uric acid production; or it is possible that some are unable to flush uric acid in the urine fast enough.

52) Why is muscle tone the most important stabilizing factor for most joints?

Answer: The shapes of the articular surfaces may hinder rather than help joint stability. Ligaments can stretch and reduce stability. Muscle tendons are kept taut at all times by the tone of their muscle.

53) Why are epiphyseal plates considered temporary joints?

Answer: Once long bone growth in length is complete, the cartilage of the epiphyseal plates ossifies to become a permanent synostosis.
Figure 8.1
*Using Figure 8.1, match the following:*
54) Synovial membrane. 54)  
Answer: E  
Explanation:
55) Using the functional classification, a freely movable joint would be called a _____ joint. 55)  
Answer: diarthrosis  
Explanation:
56) For each of the following movements, indicate the specific kind of joint involved (e.g., hinge, etc.) and the movement performed (e.g., extension, etc.).  
a. Bending the elbow: _____, ______.  
b. Turning head side to side: _____, ______.  
c. Lowering your arm to your side: _____, ______.  
d. Turning the sole of foot medially: _____, ______.  
56)  
Answer: a. hinge, flexion  
b. pivot, rotation  
c. ball and socket, adduction  
d. plane, inversion  
Explanation:

Figure 8.1
*Using Figure 8.1, match the following:*
57) Periosteum. 57)  
Answer:  
Explanation:

Figure 8.3
*Using Figure 8.3, identify each type of synovial joint by name.*
58) Joint 6. 58)  
Answer: condyloid joint  
Explanation:
59) Partial dislocation of a joint is called a ______. 59)  
Answer: subluxation  
Explanation:
60) Joint 3. 60)
Answer: hinge joint
Explanation:

16  
**Figure 8.1**

*Using Figure 8.1, match the following:*

61) Articular cartilage. 61)
Answer: C
Explanation:

62) A ______ is a fluid-filled sac a tendon slides over. 62)
Answer: bursa
Explanation:

17  
**Figure 8.3**

*Using Figure 8.3, identify each type of synovial joint by name.*

63) Joint 2. 63)
Answer: pivot joint
Explanation:

64) The hip joint, like the shoulder joint, is a ______ joint. 64)
Answer: ball-and-socket
Explanation:

18  
**Figure 8.3**

*Using Figure 8.3, identify each type of synovial joint by name.*

65) Joint 5. 65)
Answer: saddle joint
Explanation:

66) Moving your jaw forward, causing an underbite, is called ______. 66)
Answer: protraction
Explanation:

19  
**Figure 8.1**

*Using Figure 8.1, match the following:*

67) Fibrous capsule. 67)
Answer: D
Explanation:

20  
**Figure 8.2**

*Using Figure 8.2, what type of axis does each joint have?*

A. Nonaxial  
B. Uniaxial  
C. Biaxial  
D. Multiaxial
68) Joint 1. 68)
Answer: D
Explanation:
69) Joint 5. 69)
Answer: C
Explanation:
70) Joint 4. 70)
Answer:
Explanation:

71) Many inflammations of joint areas can be treated by injections of cortisone into the area. Why don’t we continually get injections rather than surgeries?
71)
Answer: A joint inflammation is always a symptom of an underlying problem such as cartilage or ligament damage, arthritis, etc. Continued injection might cause the patient to reinjure the area, or it might mask a more severe injury that may appear later.
Explanation:

**Figure 8.1**
*Using Figure 8.1, match the following:*
72) Joint (synovial) cavity. 72)
Answer: B
Explanation:

**Figure 8.3**
*Using Figure 8.3, identify each type of synovial joint by name.*
73) Joint 4. 73)
Answer: plane joint
Explanation:
74) The type of joint between the carpal and the first metacarpal is a ______ joint. 74)
Answer: saddle
Explanation:
75) Synovial joints have five major features. What are they? 75)
Answer: articular cartilage, a joint cavity, an articular capsule, synovial fluid, and reinforcing ligaments
Explanation:

**Figure 8.2**
Using Figure 8.2, what type of axis does each joint have?
A. Nonaxial
B. Uniaxial
C. Biaxial
D. Multiaxial

76) Joint 2. 76)
Answer: B
Explanation:

Figure 8.3
Using Figure 8.3, identify each type of synovial joint by name.

77) Joint 1. 77)
Answer: ball and socket
Explanation:

TRUE/FALSE. Write ‘T’ if the statement is true and ‘F’ if the statement is false.

78) The wrist joint can exhibit adduction and eversion movements. 78)
Answer: True False
Explanation:

79) Hinge joints permit movement in only two planes. 79)
Answer: True False
Explanation:

80) All joints permit some degree of movement, even if very slight. 80)
Answer: True False
Explanation:

81) Synovial fluid is a viscous material that is derived by filtration from blood. 81)
Answer: True False
Explanation:

82) A movement of the forearm in which the palm of the hand is turned from posterior to anterior is
supination.
82)
Answer: True False
Explanation:

83) A ball-and-socket joint is a multiaxial joint. 83)
Answer: True False
Explanation:

84) Movement at the hip joint does not have as wide a range of motion as at the shoulder joint. 84)
Answer: True False
Explanation:

85) The major role of ligaments at synovial joints is to help direct movement and
restrict undesirable movement.
85)
Answer: True False
Explanation:
86) A person who has been diagnosed with a sprained ankle has an injury to the ligaments that attach to that joint.
86)
Answer: True False
Explanation:
87) The structural classification of joints is based on the composition of the binding material and the presence or absence of a joint cavity.
87)
Answer: True False
Explanation:
88) The articular surfaces of synovial joints play a minimal role in joint stability.
88)
Answer: True False
Explanation:
89) Dislocations in the TMJ almost always dislocate posteriorly with the mandibular condyles ending up in the infratemporal fossa.
89)
Answer: True False
Explanation:
90) A person who has been diagnosed with rheumatoid arthritis would be suffering loss of the synovial fluids.
90)
Answer: True False
Explanation:
91) Synovial fluid contains phagocytic cells that protect the cavity from invasion by microbes or other debris.
91)
Answer: True False
Explanation:
92) The ligamentum teres represents a very important stabilizing ligament for the hip joint.
92)
Answer: True False
Explanation:
26
93) Flexion of the ankle so that the superior aspect of the foot approaches the shin is called dorsiflexion. 93)
Answer: True False
Explanation:
94) The gripping of the trochlea by the trochlear notch constitutes the “hinge” for the elbow joint. 94)
Answer: True False
Explanation:
95) The only movement allowed between the first two cervical vertebrae is flexion. 95)
Answer: True False
Explanation:
96) Symphyses are synarthrotic joints designed for strength with flexibility. 96)
Answer: True False
Explanation:
97) The amount of movement permitted by a particular joint is the basis for the functional classification of joints.
97)
Answer: True False
Explanation:
98) Bending of the tip of the finger exhibits flexion. 98)
Answer: True False
Explanation:
99) Cruciate ligaments are important ligaments that stabilize all ball-and-socket joints. 99)
Answer: True False
Explanation:

ESSAY. Write your answer in the space provided or on a separate sheet of paper.
100) Maggie is a 28-year-old Caucasian woman who has newly diagnosed rheumatoid arthritis. She complains of painful, stiff hands and feet, feeling tired all the time, and reports an intermittent low-grade fever. She asks the nurse if she is going to be “crippled.” How might the nurse explain the pathophysiology of rheumatoid arthritis?
Answer: Rheumatoid arthritis (RA) is a chronic, systemic, and inflammatory disorder. RA is an autoimmune disease in which the body’s immune system attacks its own tissue. RA begins with inflammation of the
synovial membrane of the affected joints. Fluid accumulates, causing joint swelling. The nurse should explain that RA is a chronic crippling disease with joint stiffening (ankylosis) resulting in restriction of joint movement and extreme pain.

101) Probenecid inhibits the active resorption of uric acid in the kidney, which leads to urinary excretion of uric acid. Explain why this drug would be useful in treating gout.
Answer: Uric acid, a normal waste product of nucleic acid metabolism, is ordinarily excreted in urine without any problem. However, when blood levels of uric acid rise excessively, it may be deposited as needle-shaped urate crystals in the soft tissue of joints. An inflammatory response follows, which leads to gout.

27

102) Mary has been suffering from a “bad knee” for several months. She is a tennis player who often slides in to attack a ball; she is an aerobic devotee and a jogger. She visited an orthopedic surgeon last week who told her that he would “like to have a look at her knee joint.” He also told her that her symptoms indicated damage to the meniscus, and it might have to be removed. What will the doctor do to see the joint, and if the meniscus is removed will Mary be able to play tennis again?
Answer: The doctor will perform arthroscopic surgery on Mary in order to view the interior of the joint. If she has severely damaged the meniscus, it can be removed with little impairment to the knee except some loss in stability.

103) A nurse is instructing the patient care assistants (PCAs) on transfer techniques. For patients requiring more assistance, the nurse tells the PCAs to reach through the patient’s axillae, and place their hands on the patient’s scapulae during the transfer. She tells them to avoid placing hands or pressure in the axillae area. Based on your knowledge of the shoulder joint, explain why this area should be avoided.
Answer: In the shoulder joint, stability has been sacrificed to provide the most freely moving joint of the body. The shoulder joint is a ball-and-socket joint. Shoulder dislocations are fairly common, therefore pressure in this area should be avoided.
104) Farhad begins typing his term paper on his new computer early one morning. After 8 hours of typing, he notices that his wrists are stiff and very sore. The next morning, Farhad begins to finish his paper, but soon finds his wrists hurt worse than last night. What is wrong? Answer: Farhad is suffering from tendonitis. If he continues to use the keyboard incorrectly, the tendonitis could develop into a very serious condition called carpal tunnel syndrome.

105) Akira, a 2.5-ranked tennis player (who thought he was a 4.5 player!), experienced severe pain in his elbow joint after playing for five straight hours, well beyond his limit. He told everyone it was due to a fall while diving to retrieve a difficult shot. What do you think? Answer: It was probably tennis elbow or inflammation of the bursa close to the olecranon process because he overextended his abilities.

28

Answer Key
Testname: C8
1) B
2) D
3) B
4) C
5) C
6) A
7) C
8) A
9) D
10) B
11) C
12) D
13) B
14) B
15) D
16) C
17) A
18) A
19) C
20) C
21) D
22) B
23) D
43) The ends of each bone are covered with hyaline cartilage that is continuous with the synovial membrane enclosing the joint. Synovial fluid fills the space between the articular cartilage. Outside the synovial membrane there is a very tough, fibrous capsule that prevents the synovial membrane from bulging out as pressure is applied to the ends of the bones.

44) Rheumatoid arthritis

45) inversion

46) suture

47) The thumb possesses a saddle joint where each articular surface has both a concave and a convex surface.

29

Answer Key

Testname: C8

48) Greg has either stretched or torn his rotator cuff. He will be told to rest for a few months, and if the pain does not subside, surgery will be necessary. The rotator cuff is made up of four tendons that belong to the subscapularis, supraspinatus, infraspinatus, and teres minor muscles and encircle the shoulder joint. They are vulnerable to damage when the arm is circumducted vigorously. Greg is obviously overdoing his activities by pitching four baseball games.
per week and playing golf on weekends.
49) Exercise does not prevent arthritis, but it strengthens muscles that in turn support and stabilize joints.
50) C
51) Males have higher blood levels of uric acid than females. When blood levels of uric acid rise excessively, it is deposited as urate crystals in the soft tissues of joints. Sometimes gout sufferers have an excessive rate of uric acid production; or it is possible that some are unable to flush uric acid in the urine fast enough.
52) The shapes of the articular surfaces may hinder rather than help joint stability. Ligaments can stretch and reduce stability. Muscle tendons are kept taut at all times by the tone of their muscle.
53) Once long bone growth in length is complete, the cartilage of the epiphyseal plates ossifies to become a permanent synostosis.
54) E
55) diarthrosis
56) a. hinge, flexion
   b. pivot, rotation
   c. ball and socket, adduction
   d. plane, inversion
57) A
58) condyloid joint
59) subluxation
60) hinge joint
61) C
62) bursa
63) pivot joint
64) ball-and-socket
65) saddle joint
66) protraction
67) D
68) D
69) C
70) A
71) A joint inflammation is always a symptom of an underlying problem such as cartilage or ligament damage, arthritis, etc. Continued injection might cause the patient to reinjure the area, or it might mask a more severe injury that may appear later.
72) B
73) plane joint
74) saddle
75) articular cartilage, a joint cavity, an articular capsule, synovial fluid, and reinforcing ligaments
76) B
77) ball and socket
78) FALSE
79) FALSE
80) FALSE
81) TRUE
82) TRUE
83) TRUE
84) TRUE
30
Answer Key
Testname: C8
85) TRUE
86) TRUE
87) TRUE
88) TRUE
89) FALSE
90) FALSE
91) TRUE
92) FALSE
93) TRUE
94) TRUE
95) FALSE
96) FALSE
97) TRUE
98) TRUE
99) FALSE
100) Rheumatoid arthritis (RA) is a chronic, systemic, and inflammatory disorder. RA is an autoimmune disease in which the body’s immune system attacks its own tissue. RA begins with inflammation of the synovial membrane of the affected joints. Fluid accumulates, causing joint swelling. The nurse should explain that RA is a chronic crippling disease with joint stiffening (ankylosis) resulting in restriction of joint movement and extreme pain.
101) Uric acid, a normal waste product of nucleic acid metabolism, is ordinarily excreted in urine without any problem. However, when blood levels of uric acid rise excessively, it may be deposited as needle-shaped urate crystals in the
soft tissue of joints. An inflammatory response follows, which leads to gout.

102) The doctor will perform arthroscopic surgery on Mary in order to view the interior of the joint. If she has severely damaged the meniscus, it can be removed with little impairment to the knee except some loss in stability.

103) In the shoulder joint, stability has been sacrificed to provide the most freely moving joint of the body. The shoulder joint is a ball-and-socket joint. Shoulder dislocations are fairly common, therefore pressure in this area should be avoided.

104) Farhad is suffering from tendonitis. If he continues to use the keyboard incorrectly, the tendonitis could develop into a very serious condition called carpal tunnel syndrome.

105) It was probably tennis elbow or inflammation of the bursa close to the olecranon process because he overextended his abilities.

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