1. When taking an x-ray of the hand, the bone structures should include the following (choose one answer):
   a. Only the carpal bones
   b. Only the distal tuft, middle phalanx and proximal phalanx
   c. From the distal tufts to the distal radius
   d. Metacarpals to the distal radius

2. The lateral x-ray study of the hand should have the fingers:
   a. Close together (adducted) with the thumb pointing up or away (abducted) from the cassette
   b. Flexed
   c. Splayed in extension position and parallel to the cassette
   d. Extended

3. What is it called with a volar fracture fragment along the ulnar aspect of the base of the first proximal interphalangeal joint?
   a. Colle’s fracture
   b. Gamekeeper’s or Skier’s thumb
   c. Keinbock’s
   d. Barton’s fracture

4. Patient exhibits a fracture at the distal tuft of the 2nd finger. What is the possible complication?
   a. Infection
   b. Non-union
   c. Osteonecrosis
   d. Gout

5. When taking an x-ray of the forearm, the x-ray should include what bony structures? (pick one answer)
   a. Midportion of the ulna and radius only
   b. Elbow joint to the midportion of the ulna and radius
   c. Wrist joint, ulna, radius and elbow joint
   d. Wrist joint to the midportion of the ulnar and radius

6. The doctor is taking a PA x-ray of the wrist. How should the patient’s wrist be positioned to keep the wrist in neutral position?
   a. Fingers splayed
   b. Fingers adducted
   c. Fingers extended
   d. Loose fist with fingers flexed

7. You are suspecting a scaphoid fracture. What special projection could be performed to optimally evaluate the scaphoid?
   a. PA view of the wrist
   b. PA 15 degree cephalad tube tilt with ulnar deviation of the wrist
   c. AP view of the wrist
   d. Lateral view of the wrist
8. What is the measurement for normal joint spacing of the intercarpal joints on the AP radiograph of the wrist?
   a. 1.0 mm
   b. 3.0 cm
   c. 2.0 cm
   d. 2.0 mm

9. A linear radiolucency traverses the scaphoid. What is the most common location for this fracture and what are the possible complications?
   a. Distal body of the scaphoid; no complications
   b. Waist of the scaphoid; non-union and/or osteonecrosis of distal pole
   c. Proximal pole of the scaphoid; non-union and/or osteonecrosis of distal pole
   d. Tuberosity of the scaphoid; non-union

10. Dorsal triquetral fracture can only be seen on which x-ray projection?
    a. Lateral x-ray of the wrist
    b. Oblique x-ray of the wrist
    c. PA x-ray of the wrist
    d. PA x-ray with ulnar deviation of the wrist

11. Which carpal bone is the most common to fracture?
    a. Scaphoid
    b. Lunate
    c. Triquetrum
    d. Hamate

12. The x-ray demonstrate buckling along the posterior and lateral aspect of the metadiaphysis of the distal radius in an 8 year-old boy. What is the likely diagnosis?
    a. Greenstick fracture
    b. Torus fracture
    c. Colle’s fracture
    d. Insufficiency fracture

13. The radiocapitellar line on the AP and lateral projection of the elbow should intersect which bony structures?
    a. Midportion of the radial head to the superior 1/3 of the capitellum
    b. Midportion of the radial head to the trochlea
    c. Midportion of the radial head to midportion of the capitellum
    d. None of these options are correct

14. When positioning the patient for an AP elbow projection, the patient’s hand should be in which position?
    a. Pronated
    b. Supinated
    c. Lateral position with the thumb abducted
    d. None of the above
15. When positioning the patient for a medial oblique elbow projection, the patient’s hand should be in which position?
   a. Supinated
   b. Lateral position with the thumb abducted
   c. Medial position with the thumb abducted
   d. Pronated

16. Posterior fat pad sign on a lateral projection of the elbow indicates or is suspicious for what pathology?
   a. Fracture
   b. Normal finding
   c. Dislocation
   d. None of the above

17. What is the most common elbow fracture in children?
   a. Medical epicondyle fracture
   b. Supracondylar fracture
   c. Olecranon process fracture
   d. Radial head fracture

18. What is the most common elbow fracture in adults?
   a. Olecranon process fracture
   b. Medical epicondyle fracture
   c. Supracondylar fracture
   d. Radial head fracture

19. What is the preferred advanced imaging for osteochondritis dessicans of the capitellum to determine size, location and stability?
   a. Bone Scan
   b. CT
   c. X-Ray
   d. MRI

20. When is osteochondritis dessicans unstable?
   a. Fluid surrounding a fragment and disrupted articular cartilage
   b. Intact articular cartilage and bone marrow edema
   c. Joint space narrowing, subchondral cyst formation and bone marrow edema
   d. Can never be unstable

21. The x-ray studies of the shoulder indicate anteromedial displacement of the proximal humerus with osseous flattening along the posterolateral aspect of the humeral head. What is the diagnosis?
   a. Posterior dislocation with trough sign
   b. Intrathoracic dislocation with Hill Sach deformity
   c. None of these answers are correct
   d. Anterior shoulder dislocation with Hill Sach deformity

22. What is the normal value for coracoclavicular distance on the AP view?
   a. Greater than 11-13 cm
   b. Greater than 1-3 mm
   c. Less than 11-13 mm
   d. Less than 1-3 cm
23. What is the Grade of Acromioclavicular Separation found on the AP x-ray study: Widening of the acromioclavicular joint with normal coracoclavicular distance.
   a. Grade II  
   b. Grade IV  
   c. Grade I  
   d. Grade III  

24. Which one is a possible complication following clavicle fracture?
   a. Carpal tunnel syndrome
   b. Ulnar nerve entrapment
   c. Thoracic outlet syndrome
   d. Parsonage Turner syndrome

25. AP view of the shoulder demonstrates widening of the acromioclavicular joint of 7.0 mm (normal = less than 5 mm) with indistinct or blurred margins of the distal clavicle. What is your differential diagnosis?
   a. AC separation/strain
   b. Post traumatic osteolysis of the clavicle, infection, hyperparathyroidism or tumor
   c. Congenital anomaly
   d. Normal