

B O D Y C A S T

Rounds Quiz Questions

1. Compartment syndrome is basically a vascular problem. List the signs and symptoms of compartment syndrome in sequence according to their value as indications of compartment syndrome. Answer includes six symptoms.

2. Periods of remission and exacerbation are typical of three orthopaedic condition. Name the three conditions.

3. Which of the following are metabolic disorders?

- A. Scurvy
- B. Osteoporosis
- C. Arthritis
- D. Gout

4. Shoulder pain referred from the neck is usually experienced:

- A. At the coracoacromial ligament
- B. At the subacromial bursa
- C. Above the coracoacromial ligament
- D. Over the upper border of the trapezius

5. Which of the following statements is/are true regarding the normal anatomy of the shoulder?

- i. The supraspinatus arises from the scapular spine
- ii. The coracoacromial ligament is situated above the shoulder joint
- iii. The sensory nerve supply to all the shoulder components is via the axillary and suprascapular nerves
- iv. The subacromial bursa communicates with the glenohumeral joint.

Answer is:

- A. 1, 2, 3 B. 1, 3 C. 2, 4 D. 1, 2, 3, 4

6. List possible disorders which may be confused with venous thrombosis on clinical grounds.

7. What is the last epiphysis to close in the body?

8. Improper cast length can result in:

- i. Unnecessary immobilization of joints
- ii. Ulceration at the edge of the cast
- iii. Fracture just above or below the cast
- iv. Poor positioning of the structures

- A. 1, 2, 3 B. 1, 3 C. 2, 4 D. 1, 2, 3, 4

9. Contraindications to the application of a cast include:

- i. Severe dermatitis
- ii. Circulatory problems due to arterial damage
- iii. Venous insufficiency
- iv. Nerve injury

- A. 1, 2, 3 B. 1, 3 C. 2, 4 D. 4 E. 1, 2, 3, 4

10. Most peripheral nerve injuries associated with fractures occur as a result of fracture manipulation.

- A. True B. False

11. Os trigonum of the calcaneus often is mistaken for fracture.

- A. True B. False

12. With reference to x-ray films in suspected fracture, which of the following statements is/are true?

- i. Most areas require four views for definitive interpretation
- ii. A film of the opposite, uninjured extremity can aid diagnosis
- iii. Stress views should always be taken
- iv. The distal and proximal joints should be included whenever long-bone fracture is suspected.

- A. 1, 2, 3 B. 1, 3 C. 2, 4 D. 4 E. 1, 2, 3, 4

13. Pain from compartment syndrome is probably due to:

- A. Pressure on nerves
- B. Muscle ischemia
- C. Deep tendon involvement
- D. Internal haemorrhage

14. The most likely treatment for advanced compartment syndrome with high tissue pressure is:

- A. Ice and elevation
- B. Surgical fasciotomy
- C. Fluid aspiration
- D. Extremity immobilization

15. Reliable signs and symptoms of increased compartment pressure are pain, muscle weakness, hypesthesia and:

- A. Prolonged capillary refill
- B. Coolness of skin
- C. Tenseness of compartment on palpation
- D. Pallor

16. Gamekeeper's Thumb

- A. Is an injury to the ulnar collateral ligament of the metacarpophalangeal joint of the thumb.
- B. Causes difficulty in pinching and grasping objects
- C. Always involves an avulsion fracture
- D. Must be treated by surgical intervention

17. The most common risk factor for pulmonary embolism is:

- A. Superficial phlebitis
- B. Venous stasis
- C. Hypercoagulability
- D. Vascular wall damage

18. The Pisiform is the only carpal bone to have a tendon insertion.

- A. True B. False

19. Severe pressure sores associated with complete quadriplegia are most commonly found over the:

- A. Heel
B. Foot
C. Sacrum
D. Scapula
E. Trochanter

20. Rupture of the Achilles tendon occurs most commonly at the Muscutotendinous junction.

- A. True B. False

21. The two movements unique to the forearm are:

22. Complete the following by naming the functional position of the part name:

- A. Wrist
B. Fingers
C. Arm

23. The most vital function of the hand is the ability to:

24. A common cause of maceration is:

- A. Poor nutrition
B. Moisture
C. Changing dressings too frequently
D. Incorrect positioning of the patient

25. The most common site of compression of the tibial nerve is:

- A. The popliteal fossa
B. The soleus muscle
C. The tarsal tunnel
D. The plantar muscle
E. The gastrocnemius muscle

26. Compression of the common peroneal nerve may produce all but which one of the following abnormalities?

- A. Impaired dorsiflexion of the foot
B. Impaired eversion of the foot
C. Slapping gait
D. Wasting of the muscle of the anterolateral compartment of the leg
E. Weakness of the posterior tibial muscle

27. Contributing factors to the development of diabetic foot disease include:

- A. Decreased pain sensation
B. Decreased proprioceptive sensation
C. Motor deficits
D. Vascular disease

28. Wrist drop occurs with which one of the following entrapment syndromes?

- A. Carpal tunnel
B. Pronator
C. Cubital tunnel
D. Guyon's canal
E. Posterior interosseous nerve

29. Foot drop is caused by which one of the following entrapment syndromes?

- A. Femoral nerve
B. Meralgia parasthetica
C. Common peroneal nerve
D. Tarsal tunnel
E. Obturator nerve

30. Which of the following is usually a late sign of diabetic neuropathy?

- A. Decreased pain sensation
B. Decreased temperature sensation
C. Decreased touch sensation
D. Decreased proprioception
E. Decreased deep tendon reflexes

31. In a minimally displaced fracture of the proximal humerus with impacted fragments, the major treatment is:

- A. Immobilization in hanging arm cast
B. Immobilization in an elevated cast
C. Immobilization with a sling and swathe
D. Early exercise
E. Surgery

32. Tinel's sign and Phalen's test are useful in diagnosing:

- A. Subluxation in cervical spine
B. "Pseudothrombophlebitis" syndrome
C. Rupture of synovial cyst
D. Tendon rupture
E. Carpal tunnel syndrome

33. The leading cause of non-fatal injuries in Canada is:

- A. Bicycle crashes
B. Firearms
C. Water activities
D. Falls
E. Poisons

34. Erosions, sclerosis and ankylosis involving which of the following sites are the hallmark of ankylosing spondylitis?

- A. Sacroiliac joint
B. Atlantoaxial joint
C. Distal phalanges
D. Femoral head-neck junction
E. Acromioclavicular joint

35. Which is the joint most commonly injured in aerobic exercises?

- A. The ankle
B. The knee
C. The hip
D. The shoulder
E. The elbow

36. One problem a patient may experience wearing a fracture brace for the knee is knee oedema.

- A. True B. False

37. The area of the hip where transient osteoporosis is most prominent is:

- A. The femoral neck
B. The femoral head
C. The greater trochanter
D. The intertrochanteric region
D the acetabulum

38. The critical determinants of pressure ulcers are:

- A. Pressure
- B. Shearing
- C. Level of pain
- D. Mental status

39. Risk factors for elder abuse include:

- A. History of alcohol abuse
- B. Caregiver facing recent life stress
- C. Caregiver overwhelmed by daily care of elderly
- D. Family history of violent behaviour

40. Adults who care for elderly relatives tend to report all but which one of the following:

- A. Increased self esteem
- B. Depression
- C. Back pain
- D. Perception of improved health in themselves
- E. Increased functional somatic complaints

41. The most definitive finding in thoracic spine fracture is:

- A. Misalignment of vertebrae
- B. Increased distance between pedicles
- C. A fracture line through the vertebral body
- D. Decreased vertebral height
- E. The appearance of bifid rib

42. When reassuring an injured patient, an orthopaedic technologist should NOT do which of the following?

- A. Touch the patient gently
- B. Ask the patient about his/her medical problems
- C. Explain the treatment being given
- D. Explain potential complications of the patient's injury

43. A cast is usually wedged to do which of the following:

- A. Relieve swelling
- B. Properly align a fractured bone
- C. Reduce skin irritation
- D. Permit suture removal

44. Which of the following muscles and its tendons are not part of the rotator cuff?

- A. Deltoid
- B. Supraspinatus
- C. Infraspinatus
- D. Subscapularis
- E. Teres minor

45. Ambulatory stability is usually enhanced by: (more than one answer)

- A. Increasing the base of support
- B. Lowering the centre of gravity of the patient-ambulation aid combination
- C. Using hyperlordosis of the trunk
- D. Increasing the pace of ambulation

46. Advantages of multi-legged over single-legged canes include which of the following? (more than one answer)

- A. They stand alone
- B. They may provide more stability than single-legged canes
- C. They are less expensive
- D. They are superior in assisting patients up stairs.

47. Radiographic findings in osteoarthritis include:

- A. Widening of the joint space
- B. Formation of osteophytes
- C. Osteopenia in the subchondral areas of the joint
- D. Tophaceous deposits around the joint

48. Which of the following is not characteristic of joint aspirate fluid in septic arthritis?

- A. High turbidity
- B. Low viscosity
- C. Elevated glucose level
- D. Elevated white cell count

49. The most likely cause of a ruptured biceps tendon is:

- A. Advanced impingement syndrome
- B. Acute trauma
- C. Infection
- D. Intrinsic tendon weakness
- E. Compression from adjacent osteophytes

50. Which of the following injuries causes a Mallet finger deformity?

- A. Flexor tendon avulsion
- B. Extensor tendon rupture (DIP)
- C. Volar plate rupture
- D. Collateral ligament rupture
- E. Central slip disruption

51. Evaluation of finger injuries should always include which of the following?

- A. Neurovascular assessment
- B. Range of motion examination
- C. Stress testing of the affected joint
- D. Assessment of rotational and angular deformity
- E. All of the above

52. Following an injury, a Boutonniere deformity may not be present but can develop several days or weeks later.

- A. True
- B. False

53. With reference to question three, the delay in the Boutonniere deformity develops as the lateral band drift progressively volarward.

- A. True
- B. False

54. Dupuytren's contracture occurs most often in the ring and small fingers.

- A. True
- B. False

55. The occupational risk factor most commonly associated with ulnar tunnel syndrome is:

- A. Repetition
- B. Excessive force
- C. Mechanical stress
- D. Abnormal posturing
- E. Vibration

56. Which of the following commonly coexists with ulnar tunnel syndrome?

- A. De Quervains tenosynovitis
- B. Carpal tunnel syndrome
- C. Osteoarthritis of the digits
- D. Dupuytren contracture
- E. Reflex sympathetic dystrophy

57. Which of the following joints are least commonly involved in rheumatoid arthritis?

- A. Metacarpophalangeal joints
- B. Distal interphalangeal joints
- C. Proximal interphalangeal joints
- D. Wrists interphalangeal joints
- E. Metatarsophalangeal joints

58. Behaviours that may indicate alcoholism include all of the following except:

- A. Increased consumption of coffee or other caffeinated beverages
- B. Increased absenteeism and decreased productivity at work
- C. Loss of interest in social activities that do not involve alcohol
- D. Anxiety, depression and insomnia
- E. Increased interpersonal difficulties with spouse and children

59. Which of the following activities is/are most likely to result in ulnar tunnel syndrome?

- A. Use of the heel of the hand for pounding
- B. Pressure placed over the base of the hypothenar area by a tool
- C. Repetitive flexion of the wrist against resistance
- D. Frequent squeezing activities of the hand

60. The major effect of compartment syndrome is necrosis of the muscle caused by inadequate capillary flow.

- A. True
- B. False

61. Physical examination of the cavus foot often reveals:

- A. Clawing of the toes
- B. A high longitudinal arch
- C. Decreased motion in the subtalar joint
- D. A tight band-like plantar aponeurosis
- E. All of the above

62. A soft longitudinal arch support may be used in the treatment of:

- A. Tarsal tunnel syndrome
- B. Plantar fasciitis
- C. Abductor hallucis muscle pain
- D. Atrophy of the fat pad beneath the heel

63. The most common complication of MCP dislocation is joint stiffness.

- A. True
- B. False

64. Which of the following tests is the "gold standard" for evaluation of deep vein thrombosis?

- A. Duplex ultrasonography
- B. Impedance plethysmography
- C. Venography
- D. Ventilation - perfusion scanning

65. Anserine bursitis causes pain at which one of the following sites?

- A. Lateral elbow
- B. Medial knee
- C. Anterior shoulder
- D. Lateral hip
- E. Posterior superior iliac spine

66. Which of the following characterize osteoarthritis on radiographs?

(More than one answer)

- A. Loss of joint space
- B. Periarticular soft tissue
- C. Subchondral cyst formation
- D. Sclerosis of subchondral bone

67. Which of the following clinical signs are consistent with osteoarthritis? (More than one answer)

- A. Joint enlargement
- B. Crepitus
- C. Synovial thickening
- D. Periarticular erythema

68. Osteoarthritis is a degenerative disease of the cartilage of joints.

- A. True
- B. False

69. The most common cause of non-healing diabetic foot wounds is:

- A. Large-vessel occlusive disease
- B. Neuropathy
- C. Infection
- D. Microvascular disease

70. Arthritis of the cervical spine might result in spinal cord injury from:

- A. Anterior C1-C2 subluxation
- B. Osteophytes growing into the spinal cord
- C. Pathologic fracture of an ankylosed osteoporotic spine
- D. All of these

71. The primary goal of joint replacement surgery is:

- A. Relief of pain
- B. Improvement in range of motion
- C. Improvement in appearance
- D. Alteration of arthritic process

72. Which of the following is/are associated with increased risk of infection of a prosthetic joint?

- A. Infected area distal to the joint being replaced
- B. Steroid use
- C. Rheumatoid arthritis
- D. All of these

73. A potential complication of traction to the arm is ischemic muscle atrophy.

- A. True
- B. False

74. When traction is discontinued, the arm is gradually lowered.

- A. True
- B. False

75. In traction managed by a Boehler-Braun frame, countertraction is provided by elevating the foot of the bed.

- A. True
- B. False

76. In balanced suspension and Boehler-Braun frame, elevation of the head of the bed of more than 35° is avoided.

- A. True B. False

77. Bryant's traction - the only sign of vascular insufficiency is pulselessness.

- A. True B. False

78. The blood supply to the wrist derives from branches of the:

- A. Radial artery
B. Ulnar artery
C. Interosseous artery
D. All of the above

79. Wilhelm Conrad Rontgen, a professor of physics at the University of Wurzburg, Germany, discovered x-rays in what year?

- A. 1888
B. 1903
C. 1895
D. 1900

80. The major tissue systems involved in Marfans syndrome is/are:

- A. Cardiovascular
B. Ocular
C. Skeletal
D. All of the above

81. Myoplasty is the surgical repair of:

- A. Ligament
B. Tendon
C. Muscle
D. Nerve

82. Tinel's sign and Phalen's test are useful in diagnosing:

- A. Subluxation in cervical spine
B. Pseudo-thrombophlebitis syndrome
C. Rupture of synovial cyst
D. Tendon rupture
E. Carpal tunnel syndrome

83. The "lunate bone" (semilunar) is the most frequently dislocated of all carpal bones.

- A. True B. False

84. Patients with Raynaud's phenomenon should avoid all but which one of the following?

- A. Antihistamines
B. Smoking
C. Decongestants
D. Exposure to cold
E. Caffeine

85. Metatarsus adductus is a common paediatric foot deformity characterized by which one of the following?

- A. A lateral deformity of the sole
B. An incidence of approximately two cases in 10,000 live births
C. A medial deformity of the heel
D. A foot that cannot easily be dorsiflexed
E. Treatment consisting of stretching exercises in mild cases

86. Which of the following conditions is/are associated with foot deformities?

- A. Cerebral palsy
B. Spinal cord tumour
C. Wegener's granuloma
D. Spina bifida

87. The term "club foot" (talipes equinovarus) is characterized by the inability to dorsiflex.

- A. True B. False

88. Tears of the rotator cuff or avulsion fractures of the greater tuberosity are injuries associated with anterior dislocations.

- A. True B. False

89. Extension of the fingers and thumb is produced by the combined action of the extrinsic and intrinsic muscles.

- A. True B. False

90. Which one of the following is the immediate fuel source for the body during exercise?

- A. Fat
B. Protein
C. Sucrose
D. Glycogen

91. The most common expression of elder abuse is:

- A. Financial exploitation
B. Abandonment
C. Passive neglect
D. Verbal and emotional abuse
E. Physical abuse

92. Synostosis of the radius and ulna may be congenital or occur after trauma.

- A. True B. False

93. The ulnar artery originates from the brachial artery.

- A. True B. False

94. In traction managed by a Boehler-Braun frame, countertraction is provided by elevating the foot of the bed.

- A. True B. False

95. Which one of the following muscles is implicated in the condition known as tennis elbow?

- A. Flexor carpi ulnaris
B. Flexor carpi radialis
C. Extensor carpi radialis brevis
D. Extensor pollicis longus
E. Extensor pollicis brevis

96. Typical features of aseptic meningitis include fever and/or headache.

- A. True B. False

97. A splint does not reduce a fracture; it is intended to maintain reduction.

- A. True B. False

98. A patient may be at risk for radial nerve compression palsy through improper adjustment and use of crutches.

- A. True B. False

98. Skeletal traction may be released for adjustment.

- A. True B. False

- 100. If five pounds of weight are added to a double-pulley system, how much traction pull in pounds is there?**
- 101. Which of the following diagnostic procedures is/are most useful in evaluating patellofemoral pain syndrome?**
- A. Radiographic examination, including the skyline view
 - B. Computed tomographic scanning
 - C. Magnetic resonance imaging
 - D. Physical examination
- 102. Which of the following is/are considered a source of pain in patellofemoral syndrome?**
- A. Subchondral bone of the patella
 - B. Peripatellar soft tissue
 - C. Stress fracture of the patella
 - D. Neuroma formation in the retropatellar area
- 103. Which of the following is not a synonym for patellofemoral pain syndrome?**
- A. Retropatellar pain syndrome
 - B. Patellofemoral arthralgia
 - C. Extensor mechanism disorder
 - D. Chondromalacia patellae
 - E. Patellofemoral dysfunction
- 104. According to some recent researchers, which one of the following is the origin of most cases of back pain?**
- A. Hip joint
 - B. Ligamentous tissue in the back
 - C. Muscles
 - D. Sciatic nerve
 - E. Facet joint
- 105. Which of the following is responsible for the largest proportion of falls in the elderly?**
- A. Environmental factors
 - B. Postural changes
 - C. Dizziness
 - D. Gait problems
 - E. Impaired vision
- 106. The more proximal the fracture line in scaphoid injuries, the greater likelihood of developing avascular necrosis.**
- A. True
 - B. False
- 107. Distal radial shaft fractures are commonly associated with distal radioulnar dislocations.**
- A. True
 - B. False
- 108. Displaced malleolar fractures are always accompanied by a ligamentous injury.**
- A. True
 - B. False
- 109. Fractures of the pelvis rarely involve a urinary tract injury.**
- A. True
 - B. False
- 110. Cuboid chip or compression fractures are frequently associated with tarsometatarsal dislocations.**
- A. True
 - B. False
- 111. All type II olecranon fractures have either a rupture of the triceps aponeurosis or the periosteum.**
- A. True
 - B. False
- 112. In all radial head or neck fractures, closely examine the capitellum for any evidence of fracture.**
- A. True
 - B. False
- 113. In children, isolated fractures of the radius should be treated conservatively. Galeazzi fracture-dislocations should be manipulated and placed in an above elbow plaster cast in supination.**
- A. True
 - B. False
- 114. Which of the following conditions must be considered in the differential diagnosis of scapholunate dissociation?**
- A. Aseptic necrosis of the lunate
 - B. Carpal fracture (especially fractures of the scaphoid or lunate)
 - C. De Quervians tenosynovitis
 - D. Carpal tunnel syndrome
- 115. A Plafond fracture involves the buttress portion of the malleolus.**
- A. True
 - B. False
- 116. A Rolando fracture is at the base of the first metacarpal.**
- A. True
 - B. False
- 117. Thickening of the plantar nerve just beyond the metatarsal head in the web spaces is referred to as Morton's neuroma.**
- A. True
 - B. False
- 118. The space between the hamate and pisiform bones for the ulnar nerve is called:**
- A. Thenar space
 - B. Landsmeer ligament canal
 - C. Guyon canal
 - D. Snuffbox
- 119. The excision of the femoral head and neck for a fractured introchanteric hip joint is called a Girdlestone resection.**
- A. True
 - B. False
- 120. Schamberg's purpura is a morbid complication of trauma.**
- A. True
 - B. False
- 121. Name the syndrome that primarily affects the elderly with a history of dementia causing disruptive and unusual behaviour in late afternoon and early evening hours.**
- A. Munchhausen syndrome
 - B. Sundown syndrome
 - C. Aphasia syndrome
- 122. What is a Pilon fracture?**
- A. Fracture of the distal fibula
 - B. A radiating fracture of the skull
 - C. Distal metaphysis fracture of the tibia extending into the ankle joint
 - D. An intracapsular fracture of the neck of the femur
- 123. Wrisberg's ligament is the band that passes posterior to the posterior cruciate ligament.**
- A. True
 - B. False

124. What test is performed to assist in the diagnosis of an achilles tendon injury?

- A. McMurray
- B. Tinels
- C. Thompson
- D. Stenger

125. Which of the following syndromes causes vague medial elbow pain, paraesthesia and numbness in the little finger, weakness in the intrinsic hand muscle and a positive elbow flexion test?

- A. Carpal tunnel syndrome
- B. Posterior interosseous syndrome
- C. Pronator interosseous syndrome
- D. Cubital tunnel syndrome
- E. Radial tunnel syndrome

126. Diminished sensation in the thumb, index and middle fingers and thenar atrophy suggest which one of the following syndromes?

- A. Ulnar tunnel syndrome
- B. Cubital tunnel syndrome
- C. Carpal tunnel syndrome
- D. Radial tunnel syndrome
- E. Posterior interosseous syndrome

127. Decreased sensation of the little finger and ulnar aspect of the ring finger and intrinsic muscle weakness may be caused by which of the following conditions? (More than one answer)

- A. Cubital tunnel syndrome
- B. Thoracic outlet syndrome
- C. Degenerative cervical disc disease
- D. Ulnar tunnel syndrome

128. The Guyon tunnel is clinically significant because it contains the ulnar nerve and artery and is a site for compression injuries.

- A. True
- B. False

129. Which one of the following apophyseal injuries is not correctly matched with its bony insertion site?

- A. Sever's disease: fifth metatarsal
- B. Osgood-Schlatter disease: tibial tuberosity
- C. Sindig-Larson-Johanson disease: inferior pole of the patella
- D. Medial epicondylitis: humeral medial epicondyle

130. Which of the following should be considered in the differential diagnosis of an adolescent with anterior knee pain? (More than one answer)

- A. Osgood-Schlatter syndrome
- B. Bursitis
- C. Sever's disease
- D. Osseous malignancy

131. The name of the first cervical vertebra is the Atlas.

- A. True
- B. False

132. A plafond fracture usually results from an axial compression or torsional load that creates a spiral fracture in the tibia.

- A. True
- B. False

133. This congenital anomaly involves a hypoplasia of the distal ulna and ulnar aspect of the distal radius. Infection or trauma sometimes produces a similar deformity. Name the deformity.

- A. Madelung's deformity
- B. Gunstock deformity
- C. Erlenmeyer flask deformity
- D. Boutonniere deformity

134. The term genu valgum indicates which of the following conditions?

- A. Hyperextension of the knees
- B. Bow legs
- C. Knock knees
- D. Clubfoot deformity

135. The term indicating formation of new bone is:

- A. Necrotic bone
- B. Sequestrum
- C. Osteogenesis imperfecta
- D. Involucrum

136. Which of the following terms indicates a defect in the pedicles of the fifth lumbar vertebra?

- A. Spina bifida manifesta
- B. Spondylolisthesis
- C. Vertebral epiphysitis
- D. Klippel-Feil syndrome

137. Contracture of which of the following muscles causes torticollis?

- A. Pectoratis
- B. Platysma
- C. Sternocleidomastoid
- D. Trapezius

138. The Dennis Browne splint is used in the treatment of:

- A. Clubfeet
- B. Torticollis
- C. Sprengel's deformity
- D. Brachial palsy

139. Which nerve innervates the quadriceps muscle which extends the knee?

- A. Femoral
- B. Sciatic
- C. Deep peroneal
- D. Superior gluteal
- E. Posterior tibial

140. Complications of supracondylar elbow fractures in children include cubitus varus/valgus and stiffness. Which of the following is not related to these?

- A. Epiphyseal plate disturbance
- B. Malunion
- C. Injury to the radial nerve
- D. Duration of immobilization

141. Which of the following arteries would most likely be injured in a supracondylar fracture of the elbow?

- A. Brachial
- B. Radial
- C. Axillary
- D. Subscapular

142. Osteoblasts are responsible for bone:

- A. Growth
- B. Formation
- C. Nutrition
- D. Destruction

143. Why should the lateral skin traction tape, applied to a patient being placed in a Thomas splint for treatment of a fractured femur, be placed more posteriorly than the medial one?

- A. To correct external rotation of the limb
- B. It will give more traction in that position
- C. There will be less skin irritation
- D. The groin ring pressure will be lessened

144. An osteotomy is a controlled fracture.

- A. True
- B. False

145. In an arthrodesis, the articular cartilages are removed.

- A. True
- B. False

146. Paresthesia is a general term referring to:

- A. Decreased sensitivity
- B. Absence of sensitivity
- C. Increased sensitivity
- D. Presence of a variety of sensations

147. An additional check of vascular status is the blanching test.

- A. True
- B. False

148. An amputee has a contracture of the knee above the stump.

They can? / cannot? use a prosthesis.

149. Sequestra are pieces of bone.

- A. True
- B. False

150. Possible complications of osteomyelitis include:

- A. Pathological fracture
- B. Contracture deformities
- C. Antibiotic toxicity
- D. Septic shock
- E. All of the above.

151. An operative procedure for recurrent dislocation of the shoulder is called:

- A. Potts procedure
- B. Lisfranc procedure
- C. Putti-Platt procedure
- D. Doyles procedure

152. The splint that holds the arm in abduction at about shoulder level with the forearm midway in flexion, generally with an axillary strut for support is called a/an:

- A. Sugar tong splint
- B. Airplane splint
- C. Dynamic splint
- D. Anderson splint

153. Electromyography (EMG) can differentiate which of the following clinical conditions?

- A. When a specific suspected neurogenic lesion is present
- B. When no neurogenic lesion is present
- C. When a neurogenic condition other than the one suspected is present
- D. All of the above

154. Patients with calcaneal fractures should also be examined for:

- A. Decubitus ulcers
- B. Heel spurs
- C. Compression fracture of the spine
- D. Obesity
- E. Paget's disease

155. The skeleton of the adult hand consists of how many bones?

- A. Seven
- B. 12
- C. 19
- D. 26

156. Following a healed Colles fracture, a patient loses the ability to extend the terminal joint of the thumb. This is due to:

- A. Delayed union of the fracture
- B. Rupture of the extensor pollicis longus tendon
- C. Median nerve palsy
- D. Kienbock's disease

157. Common causes of peroneal neuropathy include:

- A. Hyperthyroidism
- B. Diabetes mellitus
- C. Hip arthroplasty
- D. Leprosy
- E. All of the above

158. Which of the following radiographic signs is most characteristic of chronic gout?

- A. Osteoporosis
- B. Pathologic fractures
- C. Joint space destruction
- D. Tophaceous deposits
- E. Intra-articular calcification

159. Name the disorder for repeated fabrication of clinically convincing simulations of disease for the purpose of gaining medical attention.

- A. Charcot-Marie-Tooth syndrome
- B. Marfan's syndrome
- C. Munchausen syndrome
- D. Milkman's syndrome

160. A primary consideration of a compound wound with a relatively small open wound area is:

- A. Odour
- B. Gas gangrene
- C. Cosmesis
- D. Peroneal nerve

161. A Girdlestone Resection is:

- A. Surgical decompression for relief of pressure
- B. Surgical transection of fascia for compartment syndrome
- C. Surgical excision of the femoral head and neck
- D. Surgical removal of a portion of the capsule of a joint

162. Name the disease for epiphyseal aseptic necrosis of the tibial tubercle (apophysitis tibialis adolescentium).

- A. Marie Strumpell disease
- B. Osgood-Schlatter disease
- C. Blount's disease
- D. Legg-Calve-Perthes disease

163. In traction managed by Boehler-Braun frame used for fractures of the tibia, counter traction is provided by elevating the foot of the bed.

- A. True
- B. False

164. Dunlop's traction may be used to reduce transcondylar or supracondylar fractures of the humerus.

- A. True
- B. False

165. Name the test that is utilized to test the continuity of the gastrocnemius and the soleus muscle when suspecting an Achilles tendon rupture.

- A. Sail sign test
- B. Thompson
- C. Hill-Sachs
- D. McMurray
- E. None of the above

166. A trapeze is used for any traction set-up.

- A. True
- B. False

167. A fracture dislocation of the cervical spine at levels C2, C3 and through the pedicles of C2 is called:

- A. Le Fort fracture
- B. Chance fracture
- C. Bending fracture
- D. Hangman's fracture
- E. Skillern's fracture

168. A subtrochanteric fracture is?

- A. A femoral fracture between greater and lesser trochanter
- B. A fracture of the proximal femur, at or below level of lesser trochanter

169. Which is the most frequently dislocated carpal bone?

170. The location of pain from the peritendonitis know as "squeaker's wrist" is similar to that of which one of the following?

- A. De Quervain's tenosynovitis
- B. Acute calcific tendonitis
- C. Triangular fibrocartilage rupture
- D. Extensor carpi ulnaris subluxation
- E. Flexor digiti minimi rupture

171. What other injury should be suspected in an elderly patient who has fallen and presents with knee pain?

172. What are the major complications directly related to pelvic fractures? (May have more than one answer)

- A. Hemorrhage
- B. Hip dislocation
- C. Urologic injury
- D. Muscle atrophy

173. Pott's disease is:

- A. Enlargement of the spleen
- B. Tuberculosis of the spine
- C. Porotic bone in the talus
- D. Milkmaid's elbow

174. The "March Fractures" occurs as a stress fracture without major trauma after prolonged and unaccustomed walking or running.

- A. True
- B. False

175. Subluxation is partial displacement or dislocation of a joint.

- A. True
- B. False

176. Transcercal fracture is a:

- A. Fracture of the os calcis
- B. Fracture of C-7 involving pedicle
- C. Fracture of the clavicle
- D. Fracture anywhere along neck of femur

177. Compression of the brachial plexus and the subclavian artery by attached muscles in the region of the first rib and clavicle is referred to as:

- A. Usher's syndrome
- B. Thoracic outlet syndrome
- C. Weber's sign
- D. Raynaud's phenomenon

178. A subtrochanteric fracture is:

- A. A femoral fracture between the greater and lesser trochanter
- B. A fracture of the proximal femur, at or below level of the lesser trochanter

179. According to the Ottawa ankle rules, in which of these situations is/are radiograph series required?

- A. Age over 55
- B. Diffuse, non-localized pain in the ankle area
- C. Tenderness at the posterior edge of either malleolus
- D. Inability to bear weight (four steps)

180. Which of the following stress fractures is most likely to become displaced?

- A. Fracture of the metatarsal
- B. Fracture of the sacrum
- C. Fracture of the fibula
- D. Fracture of the tarsal navicular
- E. Fracture of the femoral neck

181. Patients with which one of the following conditions are more likely to benefit from orthotic devices?

- A. History of stress fracture
- B. Excessive pronation of foot
- C. Extreme height
- D. Hyperflexible ankles
- E. Obesity

182. Common presenting symptoms of Sever's disease include which of the following? (May have more than one answer)

- A. Heel pain precipitated by weight-bearing exercise
- B. Improvement of pain with rest
- C. History of trauma to the heel
- D. Pain presenting on awakening in the morning

183. What type of joint is the metatarsophalangeal joint?

- A. Pivot
- B. Ball and socket
- C. Condylloid
- D. Hinge

184. Heterotopic bone formation is development of normal tissue in an abnormal location.

- A. True
- B. False

185. Osteochondrosis of the second metatarsal head is referred to as:

- A. March fracture
- B. Keinbocks disease
- C. Frieberg's infraction
- D. Tillaux lesion

186. An isolated fracture of the lateral portion of the distal tibia physis in the 12-14 years of age group is called: (may have more than one answer)

- A. Jones fracture
- B. Salter-Harris type III fracture
- C. Plafond fracture
- D. Potts fracture
- E. Tillaux fracture

187. Possible disorders which may be confused with venous thrombosis on clinical grounds are: (may have more than one answer)

- A. Cellulitis
- B. Post-phlebitic syndrome
- C. Rupture Baker's cyst
- D. Lymphedema
- E. Calf muscle haematoma
- F. All of the above

188. Patients who enroll in predeposit autologous blood donation programs substantially reduce their risk of acquiring:

- A. Acquired immunodeficiency syndrome (AIDS)
- B. Hepatitis B
- C. Hepatitis A
- D. Non-A, non-B hepatitis
- E. Bacterial infection

189. Which of the following microorganisms is most commonly involved in a case of infectious olecranon bursitis?

- A. Streptococcus
- B. Staphylococcus aureus
- C. Haemophilus influenzae
- D. Candida species
- E. Propionibacterium acnes

190. Patients with fractures of the lower extremities are most susceptible to _____, because they are relatively inactive.

- A. Fat embolism
- B. Tetanus
- C. Pulmonary embolism
- D. Gas gangrene

191. In what year did Dr. C. Henry Kempe write about the battered child syndrome?

- A. 1946
- B. 1875
- C. 1961
- D. 1964
- E. 1970

192. Following a closed reduction for displaced fractures of the distal one-third radius and ulna in a child/youth, a long arm hanging cast was applied. In accordance with Dr. Mercer Rang, where should the loop be placed in the cast on the forearm portion?

- A. Distal
- B. Proximal

193. As the fascia is pulled away from the bone, the body reacts by filling in the space with new bone. Patients with plantar fasciitis may have the "classic heel spur". The heel spur is a secondary x-ray finding and is not the problem, but a result of the problem.

- A. True
- B. False

194. Adhesive capsulitis is commonly referred to as "frozen shoulder".

- A. True
- B. False

195. Which traumatic event can initiate a compartment syndrome?

- A. Crush injury
- B. Snake bite
- C. Supracondylar humeral fracture
- D. Midshaft spiral tibial fracture

196. Horner's syndrome indicates a lesion of what nerves?

- A. C2-3 roots
- B. Upper trunk
- C. C6-7 roots
- D. Lower roots
- E. C8 to T1 roots

197. Traumatic tibial tubercle apophysitis is clinically referred to as:

- A. Jumpers knee
- B. Osgood-Schlatter disease
- C. Bipartite patella
- D. Sarmiento discrepancy

198. Which nerve is most commonly injured as a result of an anterior dislocation of the shoulder?

- A. Median
- B. Radial
- C. Axillary
- D. Ulnar
- E. Musculocutaneous

199. Disruption of the plantar aponeurosis may lead to:

- A. Cock up deformity of the first metatarsophalangeal joint
- B. Painful sesamoiditis at the first metatarsophalangeal joint
- C. Plantar flexion of the first metatarsal
- D. Painful callus beneath the second metatarsal head

200. Side arm traction is the application of lateral-longitudinal traction to the humerus.

- A. True B. False

201. Which of the following tendons, when ruptured, may cause a flatfoot deformity?

- A. Achilles
B. Anterior tibial
C. Posterior tibial
D. Peroneus longus
E. Flexor hallucis longus

202. Dislocations involving the scaphoid or lunate include which one of the following positive clinical findings?

- A. History of forceful flexion of the wrists
B. Point tenderness at the ulnar side of the wrist
C. Nerve impingement in the tunnel of Guyon
D. A widening of the space between the scaphoid and lunate on radiograph
E. A marked loss of wrist extension

203. The odontoid, process of the axis (second vertebra) provides a pivot for the atlas when the head is turned from side to side.

- A. True B. False

204. The thumb metacarpal articulates with the trapezium, forming the unique basilar joint.

- A. True B. False

205. Culture and sensitivity studies are done to determine:

- A. The dose of antibiotic required for treatment
B. The presence and type of microorganisms and antibiotic most appropriate for treatment
C. Allergies to specific antibiotic
D. Quantity of sediment in the blood

206. Surgical removal of a portion or all of the synovial membrane of a joint is called:

- A. Osteotomy
B. Arthrotomy
C. Synovectomy
D. Capsulotomy

207. Continuous passive motion (CPM) machines may be used to increase range of motion and prevent muscle atrophy. Question: It may be used to decrease risk of venous thrombosis?

- A. True B. False

208. The bringing of the hand into a palm-up position with the elbow flexed at a 90 degree angle, brought about by the motion of the radius around the ulna is called pronation.

- A. True B. False

209. Which of the following describes Sterner's lesion of the thumb?

- A. Partial rupture of the radial collateral ligament, with good prognosis for healing
B. Stenosing tenosynovitis of the adductor aponeurosis
C. Avulsion fracture at the insertion of the extensor pollicis longus
D. Entrapment of the ruptured ulnar collateral ligament outside the adductor aponeurosis
E. Complete rupture of the radial collateral ligament, with need for surgical repair

210. A 10-year-old boy, while playing basketball, lands on his toes and falls, forcing the foot into inversion. Which one of the following conditions *best explains* the subsequent symptoms of pain, tenderness and mild bruising at the base of the fifth metatarsal?

- A. Displaced os peroneum
B. Jones fracture
C. Tuberosity avulsion fracture
D. Iselin's disease
E. Stress fracture of the metatarsal

211. Which one of the following is the most common local problem causing secondary adhesive capsulitis?

- A. Subdeltoid bursitis
B. Tendinitis of the rotator cuff
C. Bicipital tendonitis
D. Subcromial bursitis
E. Acromioclavicular joint dislocation

212. Which of the following is/are predisposing factors associated with secondary adhesive capsulitis?

- A. Avascular necrosis
B. Trauma
C. Diabetes
D. Osteoarthritis

213. The initial evaluation of a patient with an inflamed joint who is thought to be experiencing a first episode of gout should include which of the following?

- A. Aspiration of synovial fluid from the affected joint
B. Radiology
C. Complete blood cell count
D. Determination of serum uric acid level

214. The active anterior drawer test (90 degree quadriceps active test) is used to assess the integrity of the:

- A. Anterior cruciate ligament
B. Posterior cruciate ligament
C. Posteromedial capsular structures
D. Posterolateral capsular structures
E. Anterolateral capsular structures

215. Reactive arthritis (Reiter's syndrome) usually involves which one of the following areas of the body?

- A. Wrists
B. Fingers
C. Back
D. Elbow and shoulders
E. Lower extremities

216. Which of the following statements about anterior subluxation of the shoulder is incorrect?

- A. The 'dead arm' syndrome may accompany the subluxation
B. It mostly occurs in older patients
C. It may develop from over-use microtrauma and rotator cuff weakness
D. It may be associated with numbness
E. It occurs with the arm in abduction and external rotation

217. Which of the following statements about posterior shoulder dislocation is/are correct?

- A. Posterior dislocation occurs as frequently as anterior dislocation
- B. The diagnosis may be missed on standard radiographic views
- C. The axillary view is the best radiographic view for identifying a posterior dislocation
- D. Posterior instability is more common in athletes who have subluxation as a result of repetitive microtrauma and posterior rotator cuff weakness

218. Which one of the following is the most common presentation for a soft tissue sarcoma?

- A. Isolated painful muscle
- B. Pathologic fracture from a metastatic lesion in the bone
- C. Tissue necrosis with associated infection
- D. A symptomatic lesion
- E. Poorly defined swelling in a limb

219. Paraesthesia in the plantar surface of the foot indicates compression of which nerve?

220. Impedance plethysmography (IPG) is a non-invasive test for detection of deep vein thrombosis.

- A. True
- B. False

221. The ossification and vascularization of the tarsal navicular is often referred to as:

- A. Sever's disease
- B. Streeter dysplasia
- C. Bohler fracture
- D. Kohler's disease
- E. Morton syndrome

222. Overweight male adolescents who present with anterior hip pain during a period of rapid growth should be suspected of having which one of the following conditions?

- A. Tendonitis
- B. Sports hernia
- C. Slipped Capital Epiphysis
- D. Muscles or tendon tear
- E. Acetabular labral tear

223. An oblique fracture of the distal one-third of the humerus with potential radial nerve palsy after closed reduction in children is referred to as a:

- A. Holstein-Lewis fracture
- B. Child abuse fracture
- C. Piedmont fracture
- D. Kocher fracture

224. Diffuse heel pain with a burning sensation radiating to the calf or the toes is most consistent with which one of the following diagnoses?

- A. Plantar fascial rupture
- B. Plantar fasciitis
- C. Sever's disease
- D. Calcaneal stress fracture
- E. Tarsal tunnel syndrome

225. Painful anterior knee syndrome is most often due to which one of the following?

- A. Meniscus tear
- B. Degenerative joint disease
- C. Collateral ligament strain
- D. Anterior cruciate ligament tear
- E. Malalignment of the patellofemoral joint

226. A nontraumatic dislocation of the first cervical vertebra (atlas) is called:

- A. Desault dislocation
- B. Luxatio erecta dislocation
- C. Unilateral facet subluxation
- D. Bell-Dally dislocation
- E. Spondylolisthesis

227. In the aging process, cartilage continues to grow, lengthening your nose and ears.

- A. True
- B. False

228. Which one of the following joints is the most commonly affected by osteochondritis dissecans?

- A. Talar dome
- B. Femoral condyles
- C. Tibial plateau
- D. Capitellum of the humerus
- E. Distal humerus at the elbow

229. Disruption of circulation to the bowel following application of a body cast is known as: (more than one answer)

- A. Arteriovenous fistula
- B. Cast syndrome
- C. Mendal-Bekhterev reflex
- D. Pseudo-Babinski sign
- E. Superior mesenteric artery syndrome

230. Children with Down's syndrome are at greatest risk of developing which one of the following malignancies?

- A. Non-Hodgkins lymphoma
- B. Hodgkin's disease
- C. Neuroblastoma
- D. Ependymoma
- E. Myeloid leukemia

231. A history of a childhood limp that is worse in the morning suggests which one of the following conditions?

- A. Slipped capital femoral epiphysis
- B. A tumour
- C. Infectious arthritis
- D. Legg-Calvé-Perthes disease
- E. Rheumatoid arthritis

232. Compression of the sciatic nerve by which one of the following muscles can cause buttock and leg pain similar to radicular pain caused by lumbar nerve root impingement?

- A. Quadriceps group
- B. Piriformis
- C. Hamstring group
- D. Iliopsoas

233. Age-related changes that may increase the risk of falls in an elderly patient include which of the following?

- A. Decreased vibration sense
- B. Increased body sway
- C. Decreased visual acuity
- D. Cerumen accumulation
- E. All of the above

234. Which of the following are/is considered positive Waddell signs in patients with acute low back pain?

- A. Sensory loss over the entire foot
- B. Pain with pelvic rotation
- C. Specific anatomic tenderness over the spine
- D. Stoic reaction to pain

235. Which of the following is the most important laboratory test in the evaluation of a patient with suspected giant cell arthritis?

- A. Alkaline phosphatase level
- B. Temporal artery biopsy
- C. Aminotransferase levels
- D. Complete blood count
- E. Erythrocyte sedimentation rate

236. In the elbow, the ulnar nerve is most likely to be compressed as it passes through which one of the following structures?

- A. Cuboid tunnel
- B. Distal portion of the triceps muscle
- C. Two heads of the pronator teres
- D. Arcade of Frohse
- E. Lateral epicondyle of the elbow

237. Hydrarthrosis describes accumulation of fluid within a joint cavity.

- A. True
- B. False

238. An inherited characteristic resulting in an individual having extra fingers and toes is called:

- A. Achondroplasia
- B. Ostalgia
- C. Polydactyly
- D. Gomphosis
- E. Acromegaly

239. Which of the following joints is most commonly dislocated?

- A. Elbow
- B. Finger
- C. Shoulder
- D. Toe
- E. Hip

240. The articulation between the carpal and metacarpal of the thumb is a saddle joint.

- A. True
- B. False

241. Which of the following is/are signs/symptoms of ulnar nerve entrapment at the elbow?

- A. Hand fatigue
- B. Parasthesia along the thumb, index and long fingers
- C. A positive Tinel's sign over the medial epicondyle
- D. Hyperthenar atrophy

242. Patients in skin traction are susceptible to skin breakdown.

- A. True
- B. False

243. The presence of which of the following factors represents a contraindication to the donation of autologous blood?

- A. Unstable angina
- B. History of hepatitis A
- C. Weight less than 100 lbs.
- D. Age of greater than 65 years
- E. Age of greater than 80 years

244. The resultant line of pull of the traction force is along the axis of the bone.

- A. True
- B. False

245. Which of the following patient parameters is most directly associated with wear rates of total hip replacement?

- A. Sex
- B. Age
- C. Height
- D. Weight
- E. Activity

246. A complication of proximal varus osteotomy of the femur is?

- A. Low back pain
- B. A persistent limp
- C. Decreased motion
- D. Contralateral hip arthritis
- E. Lengthening of the operated extremity

247. Which of the following conditions is commonly confused with fibromyalgia?

- A. Somatoform disorder
- B. Rheumatoid arthritis
- C. Depression
- D. Myofascial pain syndrome

248. Which one of the following is the most likely cause of plantar fasciitis?

- A. Repetitive microtears that overcome the body's ability to repair itself
- B. Congenital weakness in the plantar fascia
- C. Inflammation associated with chronic pounding injury
- D. Acute tears of the fascia at the calcaneal insertion

249. Bone mineral density indicates the relative concentration of non-organic material in the living bone tissue and reflects the amount of force needed to fracture a bone.

- A. True
- B. False

250. A grade III ankle sprain is characterized by which one of the following?

- A. Complete ligament disruption
- B. Ligament disruption with associated avulsion fracture
- C. No ligament disruption
- D. Gross but incomplete ligament disruption
- E. Microtearing of ligament fibres without ankle instability

251. Which one of the following may improve the symptoms of plantar fasciitis in up to 80 per cent of patients?

- A. Changing shoes
- B. Night splints
- C. Arch strapping
- D. Orthotics

252. Which one of these ligaments is most easily damaged in an inversion ankle sprain?

- A. Tibiocalcaneal
- B. Sustentaculum tali
- C. Posterior talofibular
- D. Anterior talofibular
- E. Posterior tibiotalar

253. Osteochondritis dissecans is the most common cause of which one of the following conditions in adolescents?

- A. Inability to participate in sports
- B. Premature osteoarthritis
- C. Knee pain
- D. Formation of a loose body
- E. Locking of the knees

254. A patient has sharp, shooting, burning pain located in the lower back and radiating to the lower leg. The pain decreases with standing but increases with bending or sitting. The physical examination reveals weakness and asymmetric reflexes. The straight leg raise test is positive. Which one of the following would be the most likely diagnosis?

- A. Spondylolisthesis
- B. Acute disc herniation
- C. Back sprain
- D. Ankylosing spondylitis
- E. Spinal stenosis

255. For flatfoot, medialward curving of the achilles tendon as viewed from behind is referred to as:

- A. Babinski reflex
- B. Chaddock sign
- C. Helbing sign
- D. Homans sign
- E. Thomas sign

256. Which of the following has been shown to retard bone resorption and reduce or halt postmenopausal bone loss in women?

- A. 5,000 IU vitamin D daily
- B. Human growth hormone
- C. Calcitonin
- D. Estrogen replacement
- E. Daily dietary intake of 400 mg of calcium

257. Which of the following factors is most clearly associated with failure to return to work after total hip replacement?

- A. Female sex
- B. Male sex
- C. Age less than 60 years
- D. Bilateral hip replacements
- E. Prolonged preoperative sick leave

258. Patients who enroll in predeposit autologous blood donation programs substantially reduce their risk of acquiring:

- A. Acquired immunodeficiency syndrome (AIDS)
- B. Non-A, non-B hepatitis
- C. Hepatitis B
- D. Hepatitis A
- E. Bacterial infection

259. Which one of the following radiographic findings is more common in patients with rheumatoid arthritis than in patients with osteoarthritis?

- A. Osteophytes
- B. Subchondral cysts
- C. Decreased bone density
- D. Asymmetric distribution
- E. Nonuniform joint space loss

260. Which of the following is/are considered characteristic radiographic findings of primary osteoarthritis?

- A. Osteophyte formation
- B. Subchondral sclerosis
- C. Erosions
- D. Symmetric joint cartilage loss

261. Which of the following is recommended for the treatment of subungual hematoma with a distal comminuted fracture on (hand) x-ray?

- A. Closed reduction and casting
- B. Evacuation of the hematoma and observation
- C. Open reduction and casting
- D. Evacuation of the hematoma and splinting for two to three weeks

262. Which one of the following organisms is most commonly implicated in acute hematogenous osteomyelitis?

- A. Serratia marcescens
- B. Pseudomonas aeruginosa
- C. Escherichia coli
- D. Staphylococcus epidermidis
- E. Staphylococcus aureus

263. Which of the following is/are cardinal signs of subacute and chronic osteomyelitis?

- A. Impaired range of motion
- B. Deformity
- C. Chronic edema
- D. Draining sinus tracts

264. The anconeus is a small muscle on the ulnar side of the elbow.

- A. True
- B. False

265. The elbow is most stable:

- A. In pronation
- B. In supination
- C. Flexed
- D. Extension
- E. At 90 degrees

266. The structure responsible for maintaining the arch of the foot is?

- A. Metatarsals
- B. Intermediate and lateral cuneiform bones
- C. Plantar fascia
- D. Medial cuneiform bone
- E. Transverse arch

267. The most important ligaments for pelvic stability are:

- A. Anterior sacroiliac
- B. Posterior sacroiliac
- C. Symphyseal
- D. Sacrotuberous
- E. Sacrospinous

268. In adolescent idiopathic scoliosis, which of the following is/are the main determinants of curve progression?

- A. Short stature
- B. Gender
- C. Future growth potential
- D. Short stature

269. Which one of the following statements about total contact casting in the treatment of Charcot foot is correct?

- A. A total contact cast (TCC) is heavily padded and designed to minimize pressure on the lower extremity and foot
- B. The first TCC should be left on the foot for a minimum of three to four weeks
- C. The risk of developing a contralateral Charcot process is as high in patients with a TCC as it is in patients who are not treated with a TCC
- D. Surveillance radiographs should be obtained one week after the TCC is applied
- E. A properly applied TCC will evenly distribute forces across the plantar surface of the foot

270. A proximal tibia metaphyseal fracture that develops valgus deformity is known as a Cozen's fracture.

- A. True
- B. False

271. The metaphyseal region of which one of the following is the least common site for osteosarcoma?

- A. Proximal tibia
- B. Proximal humerus
- C. Greater trochanter
- D. Distal femur

272. Which of the following findings is/are most consistent with a diagnosis of osteoarthritis? (More than one answer)

- A. Radiographic evidence of increased subchondral bone density
- B. Morning joint stiffness resolving within 30 minutes or occurring with mild to moderate activity
- C. Joint pain at night
- D. A predominance of mononuclear cells in joint aspirate

273. Muscle strength in older adults declines by which one of the following percentages every decade after the age of 70?

- A. 5%
- B. 10%
- C. 15%
- D. 20%
- E. 30%

274. Patients with osteosarcoma are usually 10 to 20 years of age and present with which one of the following?

- A. Weight loss
- B. A limp
- C. Dull aching pain of several months' duration
- D. Painless mass
- E. Shortness of breath from metastases

275. Osteoporosis differs from osteomalacia in the following way: There are gross changes in the epiphyses in osteomalacia.

- A. True
- B. False

276. In smooth muscle cells, the protein desmin is present.

- A. True
- B. False

277. Which of the following radiographic features is most consistent with osteoarthritis of the knee?

- A. Marginal erosions
- B. Juxta-articular osteopenia
- C. Loss of articular cartilage with narrowing of the radiologic joint space
- D. Osteonecrosis (avascular necrosis) of the medial femoral condyle
- E. Syndesmophyte formation

278. Perineural fibrosis as a result of repetitious compression of the ulnar nerve of the thumb is known as:

- A. Gamekeepers thumb
- B. Hypoplastic thumb
- C. Trigger thumb
- D. Bowlers thumb

279. Which of the following is least likely to cause avascular necrosis?

- A. Sickle cell disease
- B. Septic arthritis
- C. Steroid use
- D. Constrictive dressings
- E. Post-traumatic fracture

280. All of the following have been associated with posterior shoulder dislocation EXCEPT:

- A. Ethanol
- B. Electricity
- C. Exercise
- D. Epilepsy
- E. Encephalitis

281. Complaints of severe bilateral buttock cramps and thigh fatigue during exercise and a recent onset of impotence in a 50-plus year old male, the likely diagnosis is:

- A. Lumbosacral disc problem
- B. Multiple sclerosis
- C. Leriche syndrome
- D. Metastatic carcinoma of the spine

282. Which of the following is not a sign or symptom of carpal tunnel syndrome?

- A. Loss of sensation to the proximal palm
- B. Positive Phalen test
- C. Positive Tinel sign
- D. Pain involving the thumb, index, long, and part of the ring digits
- E. Delayed transit time on nerve conduction study

283. Which of the following agents commonly cause allergic contact dermatitis?

- A. Nickel
- B. Latex
- C. Solvents and lubricating oils
- D. Members of the Rhus genus (e.g., poison oak, poison ivy)

284. A rongeur is what type of medical instrument?

- A. Pin/wire cutter
- B. Retractor
- C. Bone nibbler (a sharp biting instrument)
- D. Orthopaedic chisel

285. Which of the following is the most serious complication of a displaced supracondylar fracture of the humerus?

- A. Failure to heal
- B. Significantly limited range of elbow motion
- C. Healing in a non-anatomical position
- D. Compartment syndrome of the forearm
- E. Injury to the median nerve

286. A child presents with bilateral shin pain. Which of the following suggests that this is not growing pain?

- A. Pain awakens the child at night
- B. Pain is poorly localized
- C. No fever or rash
- D. Pain abates with reassurance and massage
- E. Child may limp in the morning from stiffness

287. X-rays reveal a Colles fracture in a 16-year-old who fell on her outstretched right hand while skating. The proper reduction technique for this wrist fracture is which of the following?

- A. Slight extension, full pronation, and full ulnar deviation
- B. Slight flexion, full supination, and full ulnar deviation
- C. Slight extension, full supination, and full ulnar deviation
- D. Slight flexion, full pronation, and full ulnar deviation
- E. Slight extension, full pronation, and full radial deviation

288. A hockey player severely fractures his ankle while playing in a game and subsequently requires ORIF treatment. Indications for ORIF treatment of an ankle fracture include all of the following except:

- A. A fracture dislocation
- B. Unstable talar tilt
- C. Unable to maintain a closed reduction
- D. Trimalleolar fracture
- E. Undisplaced fracture with Grade II ATFL tear

289. Which one of the following clinical features is most clearly associated with lateral epicondylitis?

- A. Pain on wrist flexion;
- B. Pain on pronation;
- C. Diffuse soft tissue swelling;
- D. Weakened hand grip

290. Osteopetrosis is a defect in osteoclast function leading to decreased bone resorption and net bone overgrowth.

True or False

291. The spinal cord ends at which vertebra?

- A. L2
- B. T11
- C. L1
- D. S1

292. Which of the following statements are correct for rheumatoid arthritis:

- A. Is more common in males;
- B. May be complicated by septic arthritis;
- C. Most commonly affects the distal interphalangeal joints;
- D. Is associated with destruction of cartilage;
- E. Patients may demonstrate the presence of ANAs

293. Based on its origins in classical language, 'placebo' means:

- A. I shall be pleasing;
- B. My lazy little friend;
- C. As powerful as ginkgo biloba.

294. In biceps rupture: as the function of the biceps remains intact during rupture, no treatment is required.

True or False

295. In the prone position, excess internal rotation of the hip is:

- A. Femoral retroversion.
- B. Tibial torsion.
- C. Femoral ante version.

296. Clubfoot is a deformity in which category?

- A. Forefoot adduction.
- B. Forefoot neutral to abduction.

297. The resultant line of pull of the traction force is along the axis of the bone.

True or False

298. A true clubfoot is a flexible deformity that can be manipulated to full correction.

True or False

299. The Achilles reflex is associated with which nerve root?

- A. L3
- B. L4
- C. L5
- D. S1
- E. Upper motor nerve

300. Which of the following conditions is/are associated with vitamin B12 deficiency? (More than one answer).

- A. Paresthesias and peripheral neuropathy
- B. Microcytic anemia
- C. Irritability
- D. Memory impairment

301. The distal phalanx of the middle finger is flexed by:

- A. Dorsal interosseous.
- B. Lumbrical.
- C. Flexor digitorum profundus.
- D. Flexor digitorum superficialis.
- E. Palmar interosseous.

302. A patient whose toes hit the floor first followed by a hard slap of the heel Has an injury to the:

- A. Femoral nerve.
- B. Obturator nerve.
- C. Tibial nerve.
- D. Common peroneal nerve.
- E. None of the above.

303. An opening through a bone, which usually serves as a passageway for blood vessels, nerves or ligaments is called:

- A. Foramen.
- B. Fossa.
- C. Sinus.
- D. Process.
- E. Fovea.

304. A fall on the elbow fractures the medial epicondyle and damages important adjacent structures. Among the deficits listed below, select the one most likely to be encountered in this patient:

- A. Inability to flex wrist.
- B. Inability to extend wrist
- C. Inability to oppose the thumb.
- D. Inability to grasp a piece of paper tightly between the extended second and third finger.
- E. Inability to abduct wrist.

305. All are true statements regarding scoliosis EXCEPT:

- A. Congenital scoliosis is usually idiopathic.
- B. Scoliosis is more likely to manifest itself in adolescence than early childhood.
- C. Scoliosis is a word of Greek derivation meaning 'curvature'. D. Scoliosis may be asymptomatic and diagnosed incidentally on x-ray examination.
- E. Most scoliosis is caused by a hemi-vertebra.

306. Which carpal bone articulates with the radius?

- A. Trapezoid.
- B. Scaphoid.
- C. Hamate.
- D. Capitate.
- E. Trapezium.