

Orthopaedic Surgery MCQs



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MCQs

- 1) **Origin of bone is from:**
 - a. Ectoderm.
 - b. Mesoderm.
 - c. Endoderm.
 - d. All of the above.
- 2) **Acute osteomyelitis is commonly caused by:**
 - a. Staph aureus.
 - b. S. pyogenes.
 - c. H. influenzae.
 - d. Salmonella.
- 3) **Acute osteomyelitis usually begins at:**
 - a. Epiphysis.
 - b. Metaphysis.
 - c. Diaphysis.
 - d. Any of the above.
- 4) **What is not True of acute pyogenic osteomyelitis:**
 - a. Trauma is a predisposing factor.
 - b. Common infecting agent is Staph. Aureus.
 - c. Infection is usually blood borne.
 - d. All are true.
- 5) **What is not True of Brodie's abscess:**
 - a. A form of chronic osteomyelitis.
 - b. Intermittent pain and swelling.
 - c. Common to diaphysis.
 - d. Excision is very often required.
- 6) **Tuberculosis of the spine most likely originates from:**
 - a. Intervertebral disk.
 - b. Cancellous vertebral body.
 - c. Ligamentous structures.
 - d. Paravertebral soft tissue.
- 7) **In Pott's spine, the disease starts in the:**
 - a. Intervertebral disk.
 - b. Anterior vertebral margin.
 - c. Posterior vertebral margin.
 - d. Paravertebral soft tissue.
- 8) **Melon seed bodies in joint fluid are characteristic of:**
 - a. Rheumatoid arthritis.
 - b. Tuberculous arthritis.
 - c. Septic arthritis.
 - d. None of the above.
- 9) **The earliest sign of TB hip in X-ray is:**
 - a. Narrow joint space.
 - b. Irregular moth eaten femoral head.
 - c. Periarticular osteoporosis.
 - d. Dislocation.
- 10) **Healing of tuberculous arthritis can lead to:**
 - a. Calcification.
 - b. Fibrous ankylosis.
 - c. Bony ankylosis.
 - d. None of the above.
- 11) **Osteoid osteoma originates from:**
 - a. Periosteum.
 - b. Cortex.
 - c. Medullary cavity.
 - d. All of the above.

12) Sun ray appearance of osteosarcoma is because of:

- a. Periosteal reaction.
- b. Osteonecrosis.
- c. Calcification along vessels.
- d. None of the above.

13) Bone metastasis in male commonly arises from cancer of:

- a. Lung.
- b. Prostate.
- c. Kidney.
- d. Thyroid.

14) Osteoblastic bone secondaries commonly arise from cancer of:

- a. Breast.
- b. Lung.
- c. Prostate.
- d. Adrenal.

15) Bone metastasis can be best evaluated by:

- a. X-ray.
- b. ^{99m}Tc bone scan.
- c. ¹¹¹Indium scan.
- d. Calcium-alkaline phosphatase elevation.

16) The synonym for Paget's disease is:

- a. Osteitis fibrosa.
- b. Osteitis proliferans.
- c. Osteitis deformans.
- d. None of the above.

17) Multiple myeloma tumor cells resemble:

- a. Granulocytes.
- b. Plasma cells.
- c. Lymphocytes.
- d. Chondrocytes.

18) An adamantinoma historically contains:

- a. Squamous cell rests.
- b. Palisading cells.
- c. Cells resembling basilar cells.
- d. All of the above.

19) Osteomalacia predominantly affects the:

- a. Spine.
- b. Pelvis.
- c. Skull bones.
- d. Metatarsals.

20) The enzyme found in osteoclasts but not in osteoblasts is:

- a. Alkaline phosphatase.
- b. Acid phosphatase.
- c. Elastase.
- d. Cytochrome oxidase.

21) A Gigli saw is:

- a. An electrically driven circular bone saw.
- b. A pneumatically driven bone saw.
- c. A short straight bone saw.
- d. A long twisted wire bone saw.

22) Osteoclasts can be used to:

- a. Correct deformity of the tibia due to rickets.
- b. Curette an osteoclastoma.
- c. Correct deformity.
- d. Correct a ricketery rosary.

23) In Dupuytren's contracture which one of the following statements is incorrect:

- a. It is a contracture of the flexor tendons to the ring and little fingers.
- b. It is a contracture of the palmar fascia.
- c. It may occur in the plantar fascia.
- d. There is an association with cirrhosis of the liver.

- 24) **In an adult patient with a fracture of the shaft of the femur:**
- No blood can be lost without obvious swelling.
 - No blood can be lost without obvious bruising.
 - Two liters of blood can be lost without obvious swelling or bruising.
 - There is no possibility of death from hemorrhagic shock.
- 25) **A greenstick fracture:**
- Occurs chiefly in the elderly.
 - Does not occur in children.
 - Is a spiral fracture- of tubular bone.
 - Is a fracture where part of the cortex is intact and part is crumpled or cracked.
- 26) **Spiral fracture is due to:**
- Blunt trauma.
 - Axial compression.
 - Twist.
 - Direct impact.
- 27) **The single most important factor in fracture healing is:**
- Correct bone alignment.
 - Accurate reduction.
 - Immobilization.
 - Organization of clot.
- 28) **Immobilization is not required in fracture involving:**
- Scapula.
 - Wings of ilium.
 - Rib.
 - Proximal humerus in elderly.
 - All of the above.

- 29) **Internal reduction is considered in presence of:**
- Reduction impossible to the achieved or maintained.
 - Healing is expected to be delayed.
 - Pathological fracture.
 - All of the above.
- 30) **Which one of these statements is True in diagnosis of congenital hip dislocation in the first few days of life:**
- It is impossible to diagnose it.
 - The sign of telescoping is the best way of diagnosing it.
 - It is possible to diagnose it by the Van Rosen/Barlow Test.
 - The Trendelenberg test is the most useful.
- 31) **Trendelenburg's sign is used in the diagnosis of:**
- Varicose veins.
 - Congenital dislocation of the hip.
 - Carcinoma of the stomach.
 - Pulmonary embolism.
- 32) **If an unstable hip is detected at birth the management policy is:**
- Do nothing and re-examine every six months as only a minority of hips develop into a persistent dislocation.
 - Use a splint to keep the hip joint in 45° flexion and adduction.
 - Use a splint to keep the hip joint in 90° flexion and abduction.
 - Advise operative stabilization.
- 33) **The essential examination of the hip in order to clinch the diagnosis of chronic slipped femoral epiphysis is:**
- Measuring for shortening of the leg.
 - Palpation of the femoral head.
 - A-P plain x-ray view of the hip.
 - Lateral x-ray view of the hip.

- 34) **Shenton's line is a sign applicable to:**
- The detection of shortening of the leg on physical examination.
 - A radiological feature of the pelvis applied to the diagnosis of congenital dislocation of the hip.
 - A radiological feature of the lungs applied to the diagnosis of pulmonary vein thrombosis.
 - A physical sign applied to the diagnosis of adrenal deficiency.
- 35) **Perthes' disease is common to age group of:**
- 1-5.
 - 6-10.
 - 11-15.
 - 16-20.
- 36) **The average duration of Perthes' disease is:**
- 1-2 years.
 - 3- 4 years.
 - 1 month - 6 months.
 - 6 months - 1 year.
- 37) **In Perthes' disease the hip movements restricted are:**
- Abduction and external rotation.
 - Abduction and internal rotation.
 - Adduction and external rotation.
 - All of the above.
- 38) **The sequestrum in X-ray appears:**
- Dense.
 - Light.
 - Isodense as surrounding bone.
 - Any of the above.

- 39) **The term delayed union is employed when the fracture fails to unite within:**
- 1.5 times the normal union time.
 - Twice the normal union time.
 - 2.5 times the normal union time.
 - None of the above.
- 40) **First bone to ossify in foetal life is:**
- Femur.
 - Tibia.
 - Clavicle.
 - Sternum.
- 41) **What is True of clavicle fracture:**
- Non-union is rare.
 - Malunion is of no functional significance.
 - Reduction even if achieved is difficult to maintain.
 - All are true.
- 42) **The joint most likely to have recurrent dislocation is:**
- Ankle.
 - Knee.
 - Shoulder.
 - Patella.
- 43) **Anterior dislocation of shoulder may be complicated by:**
- Brachial plexus injury.
 - Tear of rotator cuff.
 - Fracture head of humerus.
 - All of the above.
- 44) **What is not True about fracture surgical neck of humerus:**
- Occurs due to fall on outstretched hand.
 - Common to children.
 - Osteoporosis is an important risk factor.
 - Non-union is uncommon.

- 45) **Radial nerve palsy may occur in fr of humerus involving:**
- Surgical neck.
 - Shaft.
 - Lower end.
 - At all of the above locations.
- 46) **The most common form of supracondylar fracture humerus in children is of which type:**
- Flexion.
 - Extension.
 - Combination of A & B
 - None of the above.
- 47) **Myositis ossificans commonly occurs around:**
- Shoulder.
 - Elbow.
 - Wrist.
 - Knee.
- 48) **Volkman's ischemia commonly occurs following:**
- Fracture shaft humerus.
 - Supracondylar fracture.
 - Colles' fracture.
 - Monteggia fracture.
- 49) **The single dependable sign of early Volkmann's contracture is:**
- Cyanosis of fingers.
 - Obliteration of radial pulse.
 - Paralysis of flexor muscles of forearm.
 - Pallor of fingers.
 - Pain.
- 50) **Cubitus valgus of elbow commonly follows fracture of:**
- Lateral condyle.
 - Medial condyle.
 - Capitalum.
 - Lower third of humerus.

- 51) **Fracture involving which part of humerus can cause delayed ulnar palsy:**
- Shaft.
 - Surgical neck.
 - Medial epicondyle.
 - Lateral epicondyle.
- 52) **The deformity of wrist in Colles' fracture is:**
- Madelung's deformity.
 - Dinner fork deformity.
 - Buttonaire deformity.
 - None of the above.
- 53) **Colles' fracture can be complicated by late rupture of:**
- Extensor pollicis longus.
 - Abductor pollicis longus.
 - Adductor pollicis longus.
 - Flexor pollicis longus.
- 54) **What is True of Sudeck's atrophy of hand:**
- Hand is painful and swollen.
 - Osteoporosis of carpals and metacarpals.
 - There is increased blood flow to para-articular areas.
 - Cervical sympathectomy may be of help.
 - All are true.
- 55) **The carpal bone most commonly fractured is:**
- Triquetrum.
 - Hamate.
 - Capitate.
 - Scaphoid.
- 56) **Which nerve is compressed in carpal tunnel syndrome:**
- Ulnar.
 - Median.
 - Radial.
 - All of the above.

57) The most common injury following pelvic fracture is of:

- a. Bladder.
- b. Urethra.
- c. Rectum.
- d. Vagina.

58) Limb shortening with adduction and internal rotation occurs in which type of hip dislocation:

- a. Anterior.
- b. Posterior.
- c. Central.
- d. All of the above.

59) Nelaton's line joins anterior superior iliac spine to:

- a. Xiphisternum.
- b. Pubic tubercle.
- c. Ischial tuberosity.
- d. Ischial spine.

60) Bryant's triangle helps to assess:

- a. Fracture neck of femur.
- b. Iliac crest displacement.
- c. Trochanteric displacement.
- d. None of the above.

61) Normal neck-shaft angle of femur is:

- a. 90°.
- b. 120°.
- c. 150°.
- d. 170°.

62) Fracture femoral neck can be diagnosed from:

- a. Limb shortening.
- b. External rotation.
- c. Abduction.
- d. A + B.

63) Which of the following is not True of intertrochanteric fracture of femur:

- a. Limb shortening.
- b. Malunion.
- c. Avascular necrosis of femoral head.
- d. Internal fixation is preferred.

64) Most common complication of fracture shaft femur is:

- a. Malunion.
- b. Nonunion.
- c. Knee stiffness.
- d. Fat embolism.

65) Spontaneous bleeding into joints in haemophilia occurs when factor VI level is less than:

- a. 50%.
- b. 25%.
- c. 10%.
- d. 5%.

66) Recurrence of Baker's cyst should make the surgeon suspect:

- a. Neoplastic change.
- b. Undiagnosed pathology within knee.
- c. Incomplete removal of the cyst.
- d. The communication to the joint is persisting.

67) Flexion of distal interphalangeal joint with fixing the proximal interphalangeal joint (PIP) tests:

- a. Flexor digitorum profundus.
- b. Flexor digitorum superficialis.
- c. Palmaris longus.
- d. All of the above.

68) **Stenosing tenovaginitis commonly affects:**

- a. Abductor pollicis.
- b. Flexor pollicis longus.
- c. Opponens pollicis.
- d. All of the above.

69) **A sequestrum is**

- a. a piece of soft dead tissue
- b. a piece of dead skin
- c. a dead tooth
- d. a piece of dead bone
- e. a retained swab

70) **Union of a simple uncomplicated transverse fracture of the tibia in an adult normally takes**

- a. 6 weeks
- b. 8 weeks
- c. 12 weeks
- d. 18 weeks
- e. 26 weeks

71) **Fractures which do not impact include**

- a. fracture of tile vault of the skull
- b. a compression fracture
- c. a simple fracture
- d. a transverse fracture of the patella
- e. fracture of the neck of the femur

72) **Colles' fracture is**

- a. a fracture of the clavicle
- b. a fracture about the ankle joint
- c. common in elderly women
- d. a fracture of the head of the radius
- e. fracture of the scaphoid

73) **Bennett's fracture is**

- a. reversed Colles' fracture
- b. fracture of the scaphoid bone in the wrist
- c. fracture of the radial styloid (chauffeur's fracture)
- d. fracture dislocation of the first metacarpal
- e. cause of mallet finger

74) **Supracondylar fracture of the humerus in a child**

- a. is due to a fall on the point of the elbow
- b. is usually compound
- c. requires admission of the patient after reduction
- d. requires immediate open reduction
- e. is a fracture dislocation

75) **A fracture of the midshaft of the clavicle is best treated by**

- a. clavicle rings
- b. a figure-of-eight bandage
- c. open reduction and plating
- d. an intramedullary nail
- e. a broad arm sling and analgesics

76) **A Pott's fracture is a type of fracture of the**

- a. wrist
- b. ankle
- c. spine
- d. foot
- e. skull

77) **Treatment of a severe comminuted fracture of the patella includes**

- a. physiotherapy alone
- b. insertion of a figure-of-eight tension band
- c. patellectomy
- d. inserting screws or wire
- e. skin traction

- 78) **Malunion of a fracture is**
a. a fracture which unites in a position of deformity
b. delayed union of a fracture
c. non-union of a fracture
d. followed by pseudoarthrosis
e. due to tuberculosis
- 79) **Volkman's contracture**
a. affects the palmar fascia
b. develops at the ankle in a case of chronic venous ulcer
c. follows ischemia of the forearm muscles
d. is due to excessive scarring of the skin of the axilla following a burn
e. follows ulnar nerve palsy
- 80) **A Brodie's abscess is**
a. a subperiosteal abscess due to infection of the mastoid air cells
b. a type of breast abscess
c. a chronic abscess of the bone
d. an abscess arising in the inguinal lymph nodes
e. an abscess forming in an infected varicose vein
- 81) **The initial abnormality in primary osteoarthritis is**
a. in the synovial membrane
b. sclerosis of cartilage
c. fibrillation of cartilage
d. an osteophyte
e. a pannus
- 82) **The initial abnormality in rheumatoid arthritis is**
a. fibrillation of cartilage
b. sclerosis of cartilage
c. in the synovial membrane
d. in the capsule
e. proliferation of bone

- 83) **Pott's paraplegia is due to**
a. hematomyelia following trauma
b. damage to the cord by a piece of bone when vertebrae collapse in tuberculosis of the spine
c. tuberculous pus and angulation in tuberculosis of the spine
d. damage to the corda equina after a fall
e. fracture dislocation of cervical vertebrae
- 84) **Still's disease is**
a. spastic diplegia
b. rheumatoid arthritis in childhood
c. rheumatoid arthritis in the elderly
d. post-traumatic bone formation in the lateral ligament of the knee
e. synonymous with Reiter's disease
- 85) **A benign tumor forming osteoid is**
a. a synovioma
b. a chondroma
c. an osteoma
d. a fibroma
e. an adenoma
- 86) **Ewing's tumor affecting the humerus**
a. is a metastasis from carcinoma of the thyroid
b. should be treated by immediate amputation
c. looks like a cut onion on x-ray
d. has a soap-bubble appearance on x-ray
e. displays sun-ray spicules on x-ray
- 87) **Barlow's sign is related to the diagnosis of**
a. talipes equinus varus
b. congenital dislocation of the hip
c. ulnar nerve palsy
d. genu varum
e. fractured neck of femur

88) The reported incidence of unstable hips per 1000 at birth is as much as

- a. 0.5
- b. 2-5
- c. 8-20
- d. 25-30
- e. 35-40

89) The word talipes refers to

- a. long feet with spidery toes
- b. knock knee
- c. flat feet
- d. hammer toes
- e. club feet

90) Bone dysplasia is due strictly to

- a. faulty nutrition
- b. osteomyelitis
- c. parathyroid tumor
- d. trauma
- e. faulty development

91) Idiopathic scoliosis is a

- a. lateral curvature of the spine
- b. rotation of the spine
- c. lateral curvature with rotation of the spine
- d. flexion deformity of the spine
- e. congenital disease with hemivertebrae

92) A Milwaukee brace can be used in

- a. sacro-iliac strain
- b. derangement of the teeth
- c. a patient with an above knee amputation
- d. scoliosis
- e. fractured clavicle

93) Legg-Calve-Perthe's disease is

- a. osteochondritis of the spine
- b. tuberculosis of the hip joint
- c. slipped proximal femoral epiphysis
- d. osteochondritis of the proximal femoral epiphysis
- e. osteomalacia

94) The name associated with joint neuropathy is that of

- a. Cushing
- b. Osier
- c. Moon
- d. Charcot
- e. Addison

95) Adrenocorticosteroids administered in excess cause

- a. osteoporosis
- b. osteosclerosis
- c. osteochondritis
- d. endochondral ossification
- e. osteosarcoma

96) 'Tennis elbow' is the term used for

- a. olecranon bursitis
- b. 'non-articular rheumatism' of the extensor muscles of forearm attached to lateral epicondyle of the humerus
- c. myositis ossificans of the supinator muscle
- d. a fractured head of radius
- e. ulnar nerve neuritis

97) An adventitious bursa is

- a. an anatomical bursa overlying any joint
- b. a type of degeneration of adventitia of popliteal artery
- c. an acquired bursa generated from connective tissue
- d. a pseudocyst in the lesser sac (omental bursa)
- e. an infected knee

- 98) **A trigger finger is**
- an inflamed index finger
 - an atrophic index finger in a median nerve palsy
 - due to stenosing tenovaginitis affecting one of the flexor tendons in the palm
 - an essential feature of the carpal tunnel syndrome
 - a component of syndactyly
- 99) **A Baker's cyst is**
- an implantation dermoid cyst occurring in the palms of those who work in a bakery
 - a synovial cyst of the wrists of those who knead bread
 - a prepatellar bursa
 - a synovial cyst of the ankle
 - a synovial cyst of the popliteal fossa
- 100) **Immobilization of fractures of long bones should include**
- Fractured bone only
 - Joint involved in the fracture
 - Proximal joint
 - Both proximal and distal joints
 - Distal joint
- 101) **Non-union is common in fractures of the following bones except the:**
- Carpal scaphoid
 - Neck of the femur
 - Lower third of the tibia
 - Talus
 - Tuberosity of the fifth metatarsal
- 102) **The signs of fractured shaft of a bone do not include:**
- Swelling
 - Deformity
 - Loss of all movements in the limb
 - Acute localized bone tenderness
 - Abnormal mobility in the line of the bone

- 103) **In the following types of fractures of long bones, crepitus can be elicited only in:**
- Fissures
 - Subperiosteal cracks
 - Greenstick fractures
 - Spiral and oblique fractures
 - Impacted fractures
- 104) **The most severe growth disturbance results from which of the following types of epiphyseal injuries:**
- Separation of the epiphysis at the metaphyseal side of the epiphyseal plate
 - Separation of the epiphysis with a triangular fragment of the metaphysis
 - Intra-articular fracture involving the articular cartilage epiphysis and epiphyseal plate
 - Intra-articular fracture extending from the joint surface through the epiphysis and epiphyseal plate to the metaphysis
 - Crushing injuries compressing the epiphyseal plate without displacement
- 105) **Local complications of closed fractures do not include:**
- Malunion
 - Non-union
 - Infection
 - Sudek's atrophy
 - Joint stiffness
- 106) **Non-union in closed fractures may due to any of the following except:**
- Inadequate immobilization
 - Interposition of soft parts
 - Impaired blood supply
 - Inspection of the fragments
 - Wide separation of the fragments

- 107) **Causes of gangrene after fracture in a limb do not include:**
- Direct crushing of the tissues
 - Injury to the main vessels
 - Tight plasters
 - Septic infection
 - Clostridial infection
- 108) **The correct ttt of traumatic myositis ossificans is by:**
- Prolonged immobilization
 - Active exercises
 - Passive stretching and massage
 - Both A and B
 - Both B and C
- 109) **Concerning fracture of the shaft of the clavicle, it is untrue that it:**
- Is usually due to direct trauma
 - Commonly involves the middle third
 - Is often associated with overriding of fragments
 - Causes dropping and deformity of shoulder
 - Is usually treated by figure-of-eight bandage
- 110) **A child with midclavicular fracture and overriding of the fragments is best treated by:**
- Supine bed rest with interscapular sandbag support
 - Open reduction and internal fixation
 - Figure-of-eight bandage
 - Closed reduction and plaster fixation
 - Manipulative reduction and abduction splint
- 111) **In shoulder dislocations, the humeral head usually dislocates primarily in which of the following directions:**
- Inferiorly
 - Superiorly
 - Anteriorly
 - Posteriorly
 - Laterally

- 112) **The incorrect statement about anterior dislocation of the shoulder joint is that:**
- shoulder loses its rounded contour & becomes flattened
 - The elbow is abducted from the side
 - All movements of the shoulder are limited and painful
 - The anterior and posterior folds of the axilla are elevated
 - The hand cannot be placed on the opposite shoulder (Duga's test)
- 113) **Recent dislocations of shoulder joint are best treated by:**
- Hippocrates' method of closed reduction
 - Kocher's manipulation
 - Modified Milch's manoeuvre
 - Open reduction
 - Putti-platt's operation
- 114) **Recurrent shoulder joint dislocation is best treated by:**
- Physiotherapy
 - Nicola's operation
 - Bankart's operation
 - Putti-Platt's operation
 - Arthrodesis of the joint
- 115) **Fractures of the shaft of the humerus are best treated by:**
- Closed reduction and shoulder spica
 - Continuous skeletal traction
 - Open reduction and internal fixation
 - Hanging plaster cast
 - Coaptation plaster splint with a Velpeau dressing

- 116) The most vulnerable structure in supracondylar fracture of the humerus is the:
- Median cubital vein
 - Brachial artery
 - Median nerve
 - Ulnar nerve
 - Radial nerve
- 117) Posterior dislocation of elbow joint is characterized by the following except:
- Gross swelling of the elbow region
 - Loss of all movements at the elbow joint
 - Shortening of the upper arm
 - Absence of crepitus
 - Loss of the normal relationship of the olecranon with the two epicondyles
- 118) In fracture of the olecranon process of the ulna, the following statements are true except that it:
- Is usually due to a fall on the elbow
 - Can be felt as a gap between the olecranon and the shaft
 - Is rarely associated with hemarthrosis
 - May be complicated by anterior dislocation of the elbow joint
 - Always requires surgical treatment
- 119) Concerning extension Monteggia's fracture-dislocation, it is untrue that it:
- Consists of fracture of the upper third of the ulna and anterior dislocation of the radial head
 - Is usually due to a severe blow on the back of the forearm
 - Can be treated by manipulative reduction in children
 - Always requires surgical treatment in adults
 - Is rarely associated with complications

- 120) An elderly ♀ sustained Colles' fracture which was properly treated. However, she developed severe pain & stiffness of the wrist with coldness and cyanosis of the hand. X-ray examination revealed diffuse decalcification of the bones. She proved to be suffering from:
- Causalgia
 - Tuberculous arthritis of wrist joint
 - Traumatic tenosynovitis
 - Sudek's atrophy
 - Osteoarthritis of wrist joint
- 121) Following a stumble on stairs, a 70-year-old ♂ felt severe pain in the hip and could not stand up. O/E, there was shortening of the limb, external rotation deformity and tender thickening of the greater trochanter. X-ray examination revealed:
- Intracapsular fracture of the neck of the femur
 - Peritrochanteric fracture of the femur
 - Dislocation of hip
 - Fracture of acetabulum
 - Fracture of greater trochanter
- 122) Tears of the meniscus of the knee result from which of the following strain:
- Hyperextension
 - Abduction
 - Adduction
 - Rotation
 - Combined flexion and rotation

123) In a football game, an athlete felt severe pain in his Rt knee while turning to the left side with the joint flexed and taking the body weight. Soon after, the joint became swollen and painful but recovery followed rest for 3 weeks. Thereafter, the patient suffered from recurrent locking with pain and a feeling of "giving way" in the joint. The most probable diagnosis is:

- a. Solitary loose body
- b. Fracture of the tibial spine
- c. Rupture of the medial ligament
- d. Rupture of the medial semillunar cartilage
- e. Fracture of the patella

124) A lateral blow at the level of the knee joint may cause:

- a. Rupture of anterior cruciate ligament
- b. Rupture of medial collateral ligament
- c. Avulsion of medial meniscus
- d. Bumper fracture of tibia
- e. All of the above

125) A march fracture most frequently results from:

- a. Direct trauma
- b. Jumping from a height
- c. Muscle fatigue from prolonged walking
- d. Use of high-healed shoes
- e. Osteoporosis

126) Intestinal absorption of calcium is dependent upon:

- a. Vitamin D
- b. Parathoraone
- c. Calcitonin
- d. All of the above
- e. None of the above

127) An irregular epiphyseal line with calcifying periosteal haematc found on X-ray examination is indicative of:

- a. Infantile rickets
- b. Scurvy
- c. Hemophilia
- d. Hypoparathyroidism
- e. Hypervitaminosis A

128) Osteoporosis is a deficiency in:

- a. Calcium metabolism
- b. Calcium deposition
- c. Protein supporting tissue
- d. All of the above
- e. None of the above

129) Which of the following statements is untrue concerning the enzyme alkaline phosphatase:

- a. Has a normal serum concentration of 3-13 KA units
- b. Is present in high concentrations in liver cells
- c. Is excreted in the bile
- d. Is elevated in the serum of patients with healing fractures
- e. Is ↑ in the serum of patients with rickets and osteomalacia

130) Localized bone sclerosis may be due to:

- a. Syphilis
- b. Sclerosing osteoperiostitis
- c. Osteoarthritis
- d. Bone tumors
- e. All of the above

131) Enlarged tender epiphyses with bowing of long bones and X-ray evidence of delayed carpal ossification suggest the diagnosis of:

- a. Scurvy
- b. Infantile rickets
- c. Syphilitis epiphysitis
- d. Osteogenesis imperfecta
- e. Achondroplasia

132) Osteomalacia may be due to the following factors except:

- a. Starvation
- b. Repeated pregnancies
- c. Idiopathic steatorrhea
- d. Increased renal excretion of calcium and phosphorus
- e. Prolonged recumbency

133) Achondroplasia is characterized by the following features except:

- a. Short extremities
- b. Normal trunk length
- c. Normal intelligence
- d. Enlarged head
- e. Normal ossification of cartilage

134) Osteogenesis imperfecta is characterized by the following features except:

- a. Blue sclerae
- b. Brittle shell-like bones
- c. Multiple fractures
- d. Osteoporosis
- e. Familial tendency

135) Concerning Ollier's disease, which of the following statements is incorrect:

- a. There is a strong hereditary predisposition
- b. Multiple enchondromata occur in small long bones of hands and feet
- c. The affected bones are stunted
- d. Deformities may arise from unequal affection of metaphyses
- e. Chondrosarcoma may develop in one of the enchondromata

136) The following statements about diaphyseal aclasis are true except that it:

- a. Is a common hereditary condition
- b. Never affects membrane bones
- c. Is characterized by multiple exostoses
- d. May be associated with dwarfism
- e. Spares the metaphyses of long bones

137) Concerning Osgood-Schlatter's disease, the following statements are true except that it:

- a. Is an avascular necrosis of the epiphysis of the tibia tubercle
- b. Usually occurs between ages of 10 and 16 years
- c. Is due to traction of the patellar tendon on the tibial tubercle
- d. Is associated with no radiological signs
- e. Causes pain and swelling over the tubercle

138) Generalized osteitis fibrosa cystica is characterized by the following features except:

- a. Deficiency of parathormone
- b. Diffuse decalcification and softening of bones
- c. Cysts containing brownish fluid
- d. Multiple giant-cell tumors
- e. Urinary symptoms due to renal calculi

- 139) The following statements about Paget's disease of bones are true except that it:
- Affects elderly subjects, particularly males
 - Is a generalized bone dystrophy of obscure etiology
 - Causes deformities in the skull, spine, pelvis and lower limbs
 - Produces no pressure symptoms
 - Is often associated with cardiovascular complications
- 140) Which of the following statements is untrue in Paget's disease:
- The bones are greatly thickened and very vascular
 - Cranial nerve palsies may occur
 - Spontaneous fractures are rare
 - X-ray examination of the skull is diagnostic
 - Osteogenic sarcoma occurs in over 5% of cases
- 141) Which statement is untrue in renal rickets:
- Results from renal insufficiency in infancy
 - Is due to deficient phosphorus, excretion
 - Manifests itself by marked dwarfism
 - Causes no deformities in the limbs
 - Ends fatally from uraemia at puberty
- 142) A 7-year-old child presented with intermittent limp and pain in the right hip and knee. On examination, flexion and extension movements were free and there was no tenderness and no muscle wasting. X-ray examination confirmed the diagnosis of:
- Early tuberculous arthritis of the hip joint
 - Traumatic arthritis
 - Perthes' disease
 - Slipped upper femoral epiphysis
 - Coxa vara

- 143) A 9-year-old boy presented with limping and pain in the right knee two days after a fall in the street. On examination he looked ill and in severe pain with high fever and swelling of the knee region extending to the thigh which was warm and very tender. The most probable diagnosis is:
- Traumatic synovitis
 - Hemarthrosis
 - Acute osteomyelitis of the femur
 - Septic arthritis of knee
 - Bone sarcoma
- 144) Solitary bone cyst is characterized by the following features except that it:
- Occurs most often in children and adolescents
 - Usually arises in the diaphysis of a long bone
 - Often remains symptomless until complicated by pathological fracture
 - Appears as clear ovoid expanding cavity in the X-ray
 - May be associated with new-bone formation
- 145) The most common tumor of the small bones of the hands and feet is:
- Enchondroma
 - Osteochondroma
 - Osteoclastoma
 - Cancellous osteoma
 - Bone sarcoma
- 146) Which of the following is most common in the small bones of the hands and feet:
- Osteochondroma
 - Enchondroma
 - Osteoid osteoma
 - Osteochondritis juvenilis
 - Tuberculous osteitis

147) Concerning osteoclastoma, the following statements are correct except that it:

- a. Usually occurs between the ages of 15 and 40 years
- b. Always arises in metaphyseal region of cartilaginous bones
- c. Consists of large giant cells in a very vascular stroma of spindle cells
- d. Presents as a painless globular swelling with well-defined edge
- e. Produces diagnostic radiological signs

148) The radiological signs of osteoclastoma include the following except:

- a. Abrupt expansion of the bone
- b. Characteristic soap-bubble appearance
- c. Presence of an operculum obliterating the medullary cavity
- d. Absence of any new-bone formation
- e. Presence of areas of bone destruction

149) The treatment of osteoclastoma includes the following measures except:

- a. Curettage of tumor tissue & packing cavity with bone chips
- b. Excision with safety margin of bone
- c. Amputation
- d. Radiotherapy
- e. Chemotherapy

150) The following statements about multiple myeloma are true except that it::

- a. Is a primary malignant tumor of bone marrow
- b. Occurs between the ages of 40 and 60 years
- c. Usually presents with bone pain especially in the back
- d. Is rarely associated with fever and anemia
- e. May cause paraplegia with girdle pains

151) The following statements about bone sarcoma are true except that it:

- a. Arises from osteoblasts of the periosteum or bone cortex
- b. Forms a fusiform mass ensheathing the bone
- c. Often invades the epiphyseal cartilage and neighbouring joint
- d. Produces characteristic new bone formation in the X-ray
- e. Disseminates rapidly by the blood stream

152) Which one of the following statements is untrue concerning chondro-sarcoma:

- a. Occurs most often between the ages 20 and 60 yrs
- b. Is always a primary malignant tumor of bone
- c. Most commonly affects scapula, pelvis, ribs & sternum
- d. Causes bone expansion and destruction with irregular opacities in the X-ray
- e. Is radioresistant

153) Ewing's sarcoma is characterized by the following except that it:

- a. Is a common tumor of children
- b. Always arises in the metaphysis of a long bone
- c. Presents as a fusiform swelling with inflammatory changes in the overlying soft tissues
- d. May be associated with leucocytosis
- e. Produces characteristic radiological signs

154) The most important DD of Ewing's tumor is:

- a. Chondrosarcoma
- b. Osteogenic sarcoma
- c. Acute osteomyelitis
- d. Malignant metastasis
- e. Reticulum cell sarcoma

155) The most common osteolytic metastases in bones are derived from the:

- a. Lung
- b. Breast
- c. Stomach
- d. Kidney
- e. Prostate

156) The most pain-sensitive structure in a joint is the:

- a. Bone end
- b. Articular cartilage
- c. Joint capsule
- d. Synovial membrane
- e. Skin and subcutaneous tissues

157) Osteomalacia is characterized by the following features except:

- a. Deficient protein metabolism
- b. Demineralization of the bones
- c. Slow epiphyseal closure
- d. Skeletal deformities
- e. X-ray Looser 's zones

158) The following statements about solitary bone cyst are true except that it:

- a. Occurs most often in children and adolescents
- b. Is commonest in the humerus , femur and tibia
- c. Arises in the diaphysis of the bone
- d. Assumes an avoid shape and may cause bone expansion
- e. May remain unnoticed until complicated by pathological fracture

159) The differential diagnosis of osteoid osteoma includes all the following except:

- a. Brodies' abscess
- b. Ossifying fibroma
- c. Ewing's tumor
- d. Metastatic thyroid nodule
- e. Bone sarcoma

160) Ivory osteomata occur most often in the:

- a. Skull
- b. Spine
- c. Humerus
- d. Femur
- e. Tibia

161) Sensory end organs are absent from the:

- a. Muscle
- b. Periostium
- c. Synovial membrane
- d. Articular cartilage
- e. Joint capsule

162) The viscosity of synovial fluid is mainly due to:

- a. Chondroitin sulphate
- b. Hyaluronidase
- c. Albumin and laucin
- d. Alpha and beta globulins
- e. Beta lipoproteins

163) Septic arthritis of infancy usually affects which of the following joints:

- a. Shoulder
- b. Elbow
- c. Wrist
- d. Hip
- e. Knee

164) The treatment of acute septic synovitis includes the following except:

- a. Massive antibiotics
- b. Splintage in the position of function
- c. Aspiration and antibiotic injection
- d. Arthrotony and drainage
- e. Excision and Winnett Orr-treatment

165) Rheumatoid arthritis primarily involves the:

- a. Articular cartilage
- b. Subchondral bone
- c. Synovial membrane
- d. Capsule
- e. Ligaments

166) Complications of rheumatoid arthritis in the hands include:

- a. Tenosynovitis
- b. Rupture of extensor tendons
- c. Carpal tunnel syndrome
- d. Ulnar deviation at the metacarpophalangeal joints
- e. Bony ankylosis of affected joints

167) A 20-year-old male presented because of increasing pain in his left lower thigh. Examination revealed tender fusiform thickening of the lower end of the femur with a small effusion into the knee joint. The overlying skin was warm and the seat of dilated veins but movements of the knee were free and painless. X-ray examination revealed:

- a. Acute osteomyelitis of the lower end of the femur
- b. Brodie's abscess
- c. Bone sarcoma
- d. Parosteal fibrosarcoma
- e. Ewing's tumor

168) Bloody or coffee-ground fluid obtained by aspiration of the knee joint is suggestive of:

- a. Septic arthritis
- b. Hemophilic joint
- c. Synovial chondromatosis
- d. Pigmented villonodular synovitis
- e. Charcot's joint

169) Correct statements regarding the carpal tunnel syndrome include the following except that it:

- a. Is always due to compression of the median nerve in the carpal tunnel
- b. May follow a wrist fracture
- c. May occur in patients with rheumatoid arthritis
- d. Frequently first appears during pregnancy
- e. Is often associated with vascular disorders

170) A 60-year-old male with 3 months history of severe back-ache anemia and loss of weight, developed severe girdle pains with weakness of the lower limbs. Examination revealed low grade fever with marked tenderness over the spine, ribs, sternum, skull and pelvic bones. X-ray examination of the skeleton revealed multiple punched out defects without any new bone formation. The most probable diagnosis is:

- a. Bone metastases from an occult primary
- b. Multiple myeloma
- c. Osteitis fibrosa cystica
- d. Hand Schuller-Christian's disease
- e. Paget's disease

171) 12-year-old boy developed bilateral painless effusion of both knees together with blurring of vision and impairment of hearing. He should be suspected to be suffering¹ from:

- a. Traumatic synovitis.
- b. Tuberculous arthritis.
- c. Inherited syphilis.
- d. Rheumatic arthritis.
- e. Rheumatoid arthritis.

172) A 40-year-old male presented with a grossly swollen painless left knee. Examination revealed a flail joint with irregularly thickened bone ends, palpably swollen synovial membrane and marked grating and creaking on passive movement of the joint. The first diagnostic step is:

- a. Examination of the nervous system.
- b. Serological tests.
- c. X-ray examination of the joint.
- d. Examination of aspirated synovial fluid.
- e. Arthroscopy and synovial biopsy.

173) A 9-year-old boy developed an intermittent limp which soon became constant and associated with pain in the Rt hip & knee. Examination revealed a flexion deformity of the Rt hip with limitation of flexion and extension movements, wasting of the thigh muscles and upward tilting of the pelvis. The most probable diagnosis is :

- a. Congenital dislocation of the hip.
- b. Legg-Perthes' disease.
- c. Septic arthritis of infancy.
- d. Tuberculous arthritis.
- e. Slipped upper femoral epiphysis.

174) The X-ray findings in tuberculosis of the hip include the following except :

- a. Diffuse decalcification of the bones.
- b. Blurring of the joint outline.
- c. Diminution of the joint space.
- d. Wandering acetabulum.
- e. Downward tilting of the pelvis.

175) In children, the treatment of tuberculosis of the hip includes the following except :

- a. Tuberculostatic drugs.
- b. Weight traction to correct deformity.
- c. Fixation of the joint in the position of function.
- d. Aspiration of cold abscess.
- e. Extra-articular arthrodesis.

176) In Sprengel's shoulder, the following statements are correct except that :

- a. There is congenital elevation & maldevelopment of scapula.
- b. An ugly prominence in the neck is produced by the superior angle.
- c. A band of fibrocartilage or bone anchors the medial border of the scapula to the spine.
- d. There is no limitation of shoulder movements.
- e. No ttt is required apart from excision of the supermedial angle of scapula to improve the appearance.

177) The following statements about cubitus valgus deformity are correct except that :

- a. It may be due to malunited supracondylar fr of the humerus or non united fr of the lateral condyle
- b. The deformity is most obvious when elbow is fully flexed
- c. It predisposes to delayed ulnar neuritis
- d. Treatment of supracondylar osteotomy is necessary only when the deformity is severe

178) A 25 years old male complained of limitation of wrist movements, especially dorsiflexion, and weakness of the hand, especially the grip. Examination revealed radial deviation of the hand with abnormal prominence of the ulna. He gave a history of a fall on the outstretched hand in children.

The correct diagnosis is :

- a. Rheumatoid arthritis of the wrist joint.
- b. Non-united fracture of the scaphoid.
- c. Malunited Colles' fracture.
- d. Madelung's deformity.
- e. Persistent dislocation of the lunate.

179) The most characteristic feature of Volkmann's contracture is :

- a. Wasting of the forearm.
- b. Flexion deformity of the wrist.
- c. Extension of the metacarpophalangeal joints with flexion of the interphalangeal joints.
- d. Volkmann's phenomenon.
- e. Weakness of the hand and fingers.

180) The following statements about Dupuytren's contracture are true except that :

- a. It is due to contraction of the palmar fascia which starts as an indurated nodule on the ulnar border of the hand.
- b. The ring and little fingers are severely affected.
- c. The deformity consists of flexion of the metacarpophalangeal and proximal interphalangeal joints with extension of the terminal joint.
- d. The skin overlying the indurated fascia is often puckered and immobile.
- e. The joint capsules and flexor tendons are not affected.

181) The most effective ttt of severe Dupuytren's contracture is:

- a. Repeated stretching and night splintage.
- b. Local injections of fibrinolysin or hydrocortisone.
- c. X-ray therapy.
- d. Subcutaneous fasciotomy.
- e. Radical excision of the palmar fascia.

182) The most diagnostic sign of congenital hip dysplasia in the newly borne is :

- a. Widening of the perineum.
- b. Asymmetry of the buttocks.
- c. Ortolani's sign.
- d. Limitation of hip abduction with hip and knees flexed to 90°.
- e. Apparent shortening of the thigh with the hips and knees flexed to 90°.

183) The earliest radiological sign in congenital hip dislocation in infants is :

- a. The small shallow acetabulum.
- b. The hypoplastic femoral head.
- c. The shortened anteverted femoral neck.
- d. Distortion of Shenton's line.
- e. Displacement of the femoral head from the acetabulum.

184) In congenital dislocation of the hip (CDH), the pathological changes include the following except :

- a. Small shallow acetabulum.
- b. Snail flattened femoral head lying outside the acetabulum.
- c. Elongated femoral neck.
- d. Thickened adherent joint capsule with an hour-glass constriction.
- e. Shortened hamstrings and adductors.

185) **Trenderburg' s sign can be elicited in all of the following except :**

- a. Congenital dislocation of the hip.
- b. Infantile paralysis of the gluteal muscles.
- c. Coxa vara.
- d. Tuberculous arthritis of the hip joint.
- e. Non-united fracture of the femoral neck.

186) **A 10-year-old male with neglected congenital dislocation of the hip presented because of increasing pain in the back with limping and fatigue. The appropriate management should be :**

- a. Analgesics and anti-inflammatory drugs.
- b. Raising the heel of the right shoe.
- c. Open reduction with deepening the acetabulum by a shelf procedure.
- d. Colonna's arthroplasty.
- e. Lorenz's bifurcation osteotomy.

187) **The clinical features of coxa vara include the following except :**

- a. Shortening, adduction and eversion of the limb.
- b. Raising of the greater trochanter above Nelaton's line.
- c. Limitation of all movements of the hip.
- d. Positive Trendelenburg's sign.
- e. Limping and difficulty in kneeling, riding and separating the legs.

188) **Treatment of genu valgum includes the following except:**

- a. Physiotherapy.
- b. Wedged shoes.
- c. Night splints.
- d. Osteoclasia of the tibia.
- e. McEwen's osteotomy of the femur.

189) **A 4-year-old rachitic child developed severe genu varum. The best line of treatment is by :**

- a. Antirachitic treatment.
- b. Repeated moulding.
- c. Corrective splints.
- d. Osteoclasia of the tibia.
- e. Tibial osteotomy.

190) **A 13-year-old boy presented for consultation because his knees tend to knock together and he tends to fall during running. Examination revealed separation of the medial malleoli by 3 inches when standing with the knees in contact with each other and the feet directed forwards. The correct diagnosis is :**

- a. Coxa vara.
- b. Genu valgum.
- c. Genu varum.
- d. Talipes calcaneovalgus.
- e. Bilateral flat foot.

191) **The most common congenital deformity of the hindfoot is talipes :**

- a. Calcaneus.
- b. Equinus.
- c. Eguinovarus.
- d. Varus.
- e. Valgus.

192) **Paralytic talipes is differentiated from, congenital talipes by the following features except that :**

- a. The deformity appears later after birth.
- b. The limb is atrophied, cyanosed and cold.
- c. The muscles are wasted and flabby.
- d. Usually both sides are affected.
- e. The deformity can be corrected easily by manipulation.

- 193) **An 8-year-old child with neglected congenital equinovarus is best treated by :**
- Repeated manipulation under anaesthesia.
 - Denis-Browne splint.
 - Plantar fasciotomy and elongation of the tendo Achilles.
 - Wedge tarsectomy.
 - Dunn's triple arthrodesis.
- 194) **The commonest form of acquired talipes is the :**
- Paralytic.
 - Spastic.
 - Traumatic.
 - Cicatricial.
 - Compensatory.
- 195) **The best treatment for pes cavus causing severe local pressure on the metatarsal-heads is by :**
- Toe exercises.
 - Electric stimulation of the intrinsic muscles.
 - Steindler's operation.
 - Lambrinudi's operation.
 - Dunn's triple arthrodesis.
- 196) **The commonest variety of flat foot is the :**
- Congenital.
 - Spasmodic.
 - Paralytic.
 - Statis.
 - Traumatic.

- 197) **A 25-year-old male suffered from painful swelling of the feet and ankles over the last 6 weeks. On examination, the arches were preserved but the skin was congested and localized tenderness could be elicited over the navicular bone and the spring, deltoid and plantar ligaments. The correct diagnosis is :**
- Sprain of the ankle joint.
 - Plantar fasciitis.
 - Incipient flat foot.
 - Spasmodic flat foot.
 - Talonavicular arthritis.
- 198) **An adolescent male complained of severe pain in the foot and leg after prolonged standing. Examination revealed that the foot is flat and fixed in extreme eversion by spastic contraction of the peroneal muscles and long extensors of the toes. The most likely diagnosis is :**
- Incipient flat foot.
 - Spasmodic flat foot.
 - Tuberculosis of the ankle joint.
 - Sprain of the ankle.
 - Retrocalcaneal bursitis.
- 199) **Which of the following is associated with neurofibromatosis ?**
- Talipes equinovarus.
 - Metatarsus varus.
 - Pseudarthrosis of the tibia.
 - Genu recurvatum.
 - Congenital hip dysplasia.

200) Regarding hallux valgus, the following statements are true except that it:

- a. Consists of outward deviation of the great toe at the metatarso-phalangeal joint.
- b. Is usually due to badly fitting shoes.
- c. Is not progressive.
- d. Causes hammer-toe deformity in the other toes.
- e. Predisposes to several painful complications.

201) The causes of hammer-toe include the following except:

- a. Overcrowding of the toes by ill-fitting shoes.
- b. Hallux valgus.
- c. Pes cavus.
- d. Talipes equinus.
- e. Rupture of the extensor expansion.

202) The following statements about provisional amputation for infective gangrene are true except that it:

- a. May be urgently needed to control infection and toxemia.
- b. Should be made through the healthy limb above the infected area.
- c. Should be done as low as possible to allow reamputation at the optimum level.
- d. Should provide free drainage.
- e. May be carried out by the guillotine or flap method without closure.

203) The ideal amputation should fulfill the following requirements except that it should:

- a. Be as long as possible.
- b. Have a smoothly rounded cone-shaped end.
- c. Not include muscle over the bone end.
- d. Have a linear freely movable scar not exposed to pressure.
- e. Be painless with a freely movable joint above and a smooth bone end elbow.

204) Syme's amputation is better than a below-knee amputation except that it:

- a. Is less "catastrophic" to the patient.
- b. Allows the patient to walk around in his room without prosthesis.
- c. Maintains the pleasure of "earth feeding".
- d. Requires a cheap stump boot.
- e. Is not attended with serious complications.

205) Reimplantation of a traumatically amputated limb requires all of the following except:

- a. Limb preservation.
- b. Shortening of bone.
- c. Immediate arterial and venous repair.
- d. Routine angiograms.
- e. Delayed repair of nerves.

True & False

1. A fracture is said to be

- a. closed if an overlying skin laceration has been sutured
- b. simple when there is a single fracture line
- c. comminuted if there has been associated damage to adjacent nerves or vessels
- d. a fatigue fracture if it occurs through a diseased bone
- e. pathological if it occurs through a bony metastasis

2. In a healing fracture

- a. the hematoma is initially invaded by osteoblasts
- b. the tissue formed by the invading osteoblasts is termed osteoid
- c. osteoid tissue is formed in an acid pH
- d. calcium salts are laid down in the osteoid tissue
- e. the final stage of repair is the remodeling of the callus

3. Non-union is often seen in

- a. fractures of the fourth metatarsal
- b. fractures of the neck of the femur
- c. fractures of the condyle of the mandible
- d. Colles' fractures
- e. scaphoid fractures

4. Dislocation of the sternoclavicular joint

- a. is usually caused by a fall on the outstretched hand
- b. displaces the clavicle upwards and medially
- c. is usually treated by internal fixation
- d. very rarely causes any compression of the trachea or vessels in the neck
- e. is usually accompanied by fracture of the first rib

5. Fractures of the clavicle

- a. Are usually of the greenstick variety in children under the age
- b. are usually the result of direct violence
- c. are frequently associated with injury to the subclavian vessels
- d. can be recognized by the abnormal elevation of the fragment
- e. are usually treated by internal fixation

6. Fractures of the neck of the scapula

- a. are often due to a fall on the outstretched hand
- b. are frequently associated with chest wall injury
- c. are often associated with dislocation of the acromioclavicular
- d. can usually be managed without surgical intervention
- e. are often associated with fracture of the coracoid process

7. Recurrent dislocation of the shoulder

- a. is usually in the posterior position
- b. is usually in young adults
- c. is more common after associated damage to the glenoid labrum
- d. usually requires surgical repair
- e. is surgically managed by tightening the soft tissues over the inferior aspect of the joint

8. In fractures of the surgical neck of the humerus the

- a. lesion is usually due to indirect violence
- b. fracture line usually passes between the greater and lesser tuberosities
- c. fragments are usually impacted
- d. proximal fragment is usually internally rotated
- e. distal fragment is usually adducted

9. In a fracture of the distal 1/3 of the shaft of the humerus

- a. the distal fragment is usually posteriorly angulated by the action of biceps
- b. the radial nerve is frequently damaged
- c. delayed radial nerve palsy is usually due to edema
- d. late onset of radial nerve palsy is usually due to the involvement of the nerve with callus
- e. ulnar nerve palsy is usually of late onset

10. A supracondylar fracture of the humerus

- a. is a fracture commonly seen in young adults
- b. is particularly subject to the complication of ischemic muscle contracture
- c. is held in the position of reduction by the tendon of brachioradialis
- d. when properly reduced has the index finger pointing approximately to the tip of shoulder of the same side
- e. is commonly accompanied by ulnar nerve palsy

11. Fractures of the head of the radius

- a. do not occur in isolation
- b. are usually associated with dislocation of the radius
- c. may be associated with dislocation of the elbow joint
- d. may require surgical excision of the head
- e. are usually accompanied by damage to the median nerve

12. In a Monteggia fracture dislocation

- a. the dislocation of the distal radio-ulnar joint brings the ulnar styloid process anterior to the capitulum
- b. the radial fracture is usually at the junction of the middle and distal thirds
- c. internal fixation is usually required in the adult
- d. the causative injury is often a blow on the extensor surface of the forearm with the elbow flexed
- e. the commonest neurological injury is to the posterior branch of the radial nerve

13. In a Colles' fracture the distal radial fragment

- a. is dorsally angulated on the proximal radius
- b. is usually torn from the intra-articular triangular disc
- c. is deviated to the ulnar side
- d. is usually impacted
- e. commonly damages the median nerve

14. Fractures of the radial styloid

- a. extend into the wrist joint
- b. typically have an anterior dislocation of the bony fragment
- c. are commonly associated with fractures of the triquetral bone
- d. are commonly associated with fractures of scaphoid
- e. are commonly associated with dislocation of the wrist joint

15. A transverse fracture of the scaphoid is

- a. the commonest carpal injury
- b. prone to infection
- c. usually seen in young men
- d. prone to avascular necrosis
- e. usually seen on an early scaphoid radiograph

16. In pelvic fractures

- a. avulsion injuries are usually treated by early mobilization
- b. undisplaced lesions of the ischial or pubic rami are usually treated by early mobilization
- c. extraperitoneal urinary extravasation may be due to damage either to the membranous urethra or to the base of the bladder
- d. extraperitoneal urinary extravasation may be due to damage of the base of the bladder
- e. which are unstable, one half of the pelvis is displaced proximally by the flank muscles
- f. Reduction may need 40 to 50 lb (18 to 23 kg) of traction

17. Intracapsular fractures of the upper end of the femur are usually

- a. after major trauma in the young
- b. accompanied by shortening of the leg
- c. accompanied by external rotation of the leg
- d. accompanied by adduction of the leg
- e. treated by internal fixation

18. Extracapsular fractures of the upper end of the femur are

- a. usually subtrochanteric in position
- b. usually subject to avascular necrosis of the head of the femur
- c. usually accompanied by internal rotation of the leg
- d. usually treated by internal fixation
- e. rarely comminuted

19. In fractures of the mid-shaft of the femur the

- a. proximal fragment is usually flexed
- b. proximal fragments is usually abducted
- c. distal fragment is usually adducted
- d. common femoral vessels are usually damaged
- e. femoral nerve is often damaged

20. In fractures of the patella

- a. comminution is usual when the fracture has been caused by indirect violence
- b. a transverse fracture without displacement is usually treated by a plaster cylinder with no direct surgical intervention
- c. aspiration of the Knee joint should be avoided
- d. a comminuted fracture is best treated by patella excision and replacement by a prosthesis
- e. weight bearing should be avoided for the first week

21. In fractures of the middle third of the tibia and fibula

- a. delayed union is common
- b. indirect violence usually results in a spiral or oblique fracture line
- c. shortening and anterior angulation of the tibia are common
- d. comminuted fractures are usually treated by early plating of the tibia
- e. the tibial nerve is frequently damaged

22. In injuries of the ankle joint

- a. eversion injuries are the most commonly encountered
- b. inversion injuries are usually accompanied by a tear of the deltoid ligament
- c. there is frequently associated posterior tibial nerve damage
- d. the posterior tibial artery is frequently damaged
- e. the joint is rendered unstable by rupture of the inferior tibiofibular ligament

23. In rheumatoid arthritis the

- a. principal lesion is an area of fibrinoid necrosis surrounded by fibroblasts
- b. synovial membrane characteristically undergoes marked hypertrophy
- c. fibrosis in the joint capsule and ligaments produces the main deforming forces in the early stages of the disease
- d. permanent deformity in the late stage of the disease is usually due to bone ankylosis
- e. radiological signs occur at a late stage in the disease

24. Rheumatoid arthritis

- a. is characteristically symmetrical in its involvement of the more proximal joints
- b. has an equivalent disease in childhood which is also associated with pericarditis
- c. carries a worse prognosis if serological tests (such as the Rose-Waaler and Latex tests) are positive
- d. is characterized by the pes anserinus deformity
- e. is characterized by increased activity within an inflamed joint

25. In rheumatoid arthritis

- a. ♀ are affected 7 times more commonly than ♂
- b. the onset of the disease is usually in the fourth decade
- c. the disease is rapidly progressive in 25 per cent of patients
- d. approximately 50 % of patients have a remission in the 1st yr
- e. the symptoms are least apparent in the morning

26. Rheumatoid arthritis often has an associated

- a. Sacroileitis
- b. Photosensitivity
- c. anicteric hepatitis
- d. conjunctivitis
- e. Heberden's nodes

27. Acute osteomyelitis in childhood

- a. is usually the result of compound bony injuries
- b. is characterized by a constant bone pain
- c. characteristically produces necrosis of the periosteum overlying the infected bone
- d. is not usually demonstrable radiologically for the first 2 weeks of the disease
- e. may be demonstrated by scintigraphy within 2 to 3 days of onset

28. In tuberculosis of the bone

- a. the local reaction is characterized by extensive new bone formation
- b. metaphysis of long bones is the commonest site of involvement
- c. the infection is usually secondary to a primary focus elsewhere in the body
- d. extension of the bone abscess into a joint is common
- e. the presentation is typically severe pain over the end of a long bone

29. In osteoarthritis of the hip joint

- a. the articular cartilage undergoes initial hypertrophy and then becomes hardened and eburnated
- b. the joint capsule becomes stretched and lax
- c. the leg is usually adducted and externally rotated when the patient lies supine
- d. a femoral osteotomy usually helps halt the progress of the disease process
- e. associated changes in the ankle joint are rare

30. Osteoarthritis

- a. is the commonest arthropathy
- b. is characterized by marginal osteophyte formation
- c. commonly presents with back pain
- d. symptoms are least apparent in the morning
- e. commonly produces swelling of the distal interphalangeal joints

31. In Paget's disease of the bone

- a. the serum alkaline phosphatase is considerably raised
- b. spiral fractures of the femur are common
- c. deafness is a characteristic of later stages of the disease
- d. the fibula is typically affected
- e. osteogenic sarcoma develops twice as commonly as in unaffected people

32. Dyschondroplasia is characterized by

- a. a large skull with a short base and a snub nose
- b. short stubby fingers (the trident hand)
- c. being inherited as a Mendelian dominant
- d. multiple endochondromas of the fingers and toes
- e. congenital dislocation of the hip

33. Diaphysial aclasis is characterized by

- a. a defect in cartilaginous ossification
- b. multiple fractures and subsequent deformity
- c. blue sclera
- d. being familial in origin
- e. an increased incidence of sarcomatous bone disease

34. Dupuytren's contracture of the palm

- a. is transmitted as a Mendelian dominant
- b. is predominantly seen in men
- c. has an association with glomerulonephritis
- d. which is long-standing, is often associated with 2ry fibrosis of the interphalangeal joints
- e. extends proximally along the lateral aspect of the hand

35. In a case of congenital dislocation of the hip

- a. the defect cannot be detected until the third week of life
- b. there is a defect of the posterior rim of the acetabulum
- c. on bilateral hip abduction with the knees flexed there is often limited abduction on the diseased side
- d. reduction is sometimes hindered by a tight gluteus minimus muscle
- e. splinting of the limbs following reduction should be maintained until the femoral epiphysis returns to its normal density on radiographic examination

36. Slipped femoral epiphyses

- a. occur between the ages of 5 and 10 years
- b. typically are seen in overweight children
- c. are bilateral in 20 per cent of patients
- d. are displaced downwards and posteriorly in relation to the neck of the femur
- e. are usually associated with dislocation of the femoral head

37. Injury to the medial meniscus of the knee joint is

- a. often associated with a tear of the quadriceps femoris
- b. less common than that of the lateral meniscus
- c. often present in cases of locking of the knee
- d. characterized by a positive draw sign
- e. commonly associated with local tenderness

38. Hallux valgus is commonly associated with

- a. a raised medial longitudinal arch
- b. clawing of toes
- c. a perforating ulcer beneath the head of the first metatarsal
- d. reduction of vibration sensation over the tip of the great toe
- e. a dry vasodilated foot

39. Idiopathic scoliosis

- a. is the most common type of scoliosis
- b. usually appears between the ages of 10 and 12 years
- c. is more common in boys
- d. is sometimes familial
- e. is usually painless

40. In benign tumors of cartilage

- a. chondromata and osteochondromata occur equally in the two sexes
- b. malignant changes occur in 10 % of cases of multiple osteochondromata
- c. chondromata usually occur in epiphyses of long bones
- d. osteochondromata usually occur in the epiphyses of long bones
- e. chondromata frequently present with pathological fracture

41. Chordomata

- a. of the base of the skull (sphenoid-occipital) develop in the remnants of Rathke's pouch
- b. of the sacrococcygeal region develop in the remnants of the neural canal
- c. are characterized radiologically by central rarefaction of the bone and cortical thinning and expansion
- d. are commoner in females than in males
- e. usually present soon after puberty

42. An osteoid osteoma

- a. usually presents in the adult
- b. is most frequently seen in the bones of the upper limb
- c. commonly presents with local pain
- d. demonstrates a small circular band of bony sclerosis surrounding a translucent area on radiographs
- e. is a blood-filled cavity lined with a soft membrane

43. Chondrosarcomata

- a. which develop in the metaphysis are usually less well differentiated than those occurring around the epiphysis
- b. quite commonly invade the neighbouring blood vessels
- c. commonly metastasize to lymph nodes
- d. characteristically present as a pathological fracture
- e. are the commonest malignant tumor of bone

44. Examples of traction injuries include

- a. fracture of the medial tibial tubercle
- b. fracture of the medial epicondyle of the humerus
- c. fracture of the medial malleolus of the tibia
- d. mallet finger
- e. stellate fracture of the patella

45. In the stages of healing of a fracture of tubular bone, according to the haematoma theory

- a. the hematoma is invaded by granulation tissue
- b. acanthosis occurs
- c. macrophages remove the hematoma
- d. the repair includes the formation of fibrocartilaginous tissue
- e. callus is distributed throughout the area occupied by the fracture hematoma

46. In the stages of healing of a fracture of tubular bone, according to the periosteal (proliferative) theory

- a. osteogenic cells are stimulated to proliferate within hours of the fracture occurring
- b. callus collars are formed around each fragment
- c. the callus collars grow toward each other
- d. squamous metaplasia occurs
- e. osteogenic cells become osteoblasts

47. Fracture callus characteristically

- a. exhibits bony trabeculae cemented to the shaft
- b. exhibits an outer layer of chondrocytes
- c. includes a V-shaped cartilaginous formation
- d. is cemented to the original cortex
- e. becomes Haversian bone

48. A compound fracture

- a. is present if a laceration of mucous membrane connects with the fracture hematoma
- b. inevitably is present if a laceration of the skin overlies a spiral fracture of the humerus
- c. can be present if skin death from ischemia overlies a fractured tibia
- d. is not a cause of septicemia
- e. if compound from without carries a poorer prognosis than a compound fracture from within

49. Fracture lines can be described as being

- a. Comminuted
- b. Butterfly
- c. Spiral
- d. Compression
- e. Twisted

50. The name given to the displacement in a fracture of a long bone include

- a. Angulation
- b. Shift
- c. Twist
- d. Distraction
- e. Subluxation

51. At the stage of clinical union of a fracture of tubular bone

- a. the bone bridging the fracture has normal radiological appearance
- b. unprotected stress can lead to re-fracture
- c. local palpation produces little or no tenderness
- d. consolidation has occurred
- e. the swelling at the fracture site has disappeared

52. Practical schemes for management of fractures include

- a. treating the patient specifically according to the radiographic appearance
- b. reduction by gravity
- c. clinical manipulation
- d. open operation
- e. the use of external fixators

53. The causes of non-union of a fracture include

- a. very slight bending movements during healing phase
- b. infection of the fracture hematoma
- c. anoxia
- d. uremia
- e. Paget's disease (osteitis deformans)

54. As an alternative to plaster of Paris a tubular bone fracture can be stabilized by

- a. external skeletal fixators
- b. compression plating
- c. osteoclasis
- d. skin traction
- e. intra-medullary nailing

55. Operative stabilization of a tubular bone fracture is of value for

- a. replacing small fragments adjacent to joints
- b. fractures of the patella
- c. patients with a head injury
- d. repair of a main artery to a limb
- e. those occurring in infants

56. Characteristic features of acute compartment syndrome in the lower leg include

- a. gross swelling
- b. normal pulses
- c. normal sensation distally
- d. acute pain on employing the stretch test
- e. venous occlusion

57. Early complications of lower limb fractures include

- a. Blisters
- b. gas gangrene
- c. fat embolism
- d. osteoarthritis
- e. Friedrich's ataxia

58. Recognized late complications of fractures include

- a. Dupuytren's contracture
- b. hypertrophic non-union
- c. Sudeck's atrophy
- d. myositis ossificans
- e. osteitis fibrosa cystica

59. Fractures occurring in children differ from those in adults in the following respects: In children

- a. the fractures unite more slowly
- b. malunion can be partly corrected by growth
- c. joint stiffness is common after immobilization
- d. immobilization by splinting is the method of choice in ttt
- e. involvement of the epiphyseal plate is uncommon as the plate is stronger than the bone

60. Recognized features of fractures involving the growth plate and epiphysis in children include

- a. greenstick fractures
- b. end-on crushes
- c. intra-articular fractures
- d. butterfly fractures
- e. a fracture line that runs through part of the growth plate lying between calcified and uncalcified cartilage

61. With injury and fracture of articular cartilage

- a. true healing does not occur
- b. the defect is filled with fibrocartilage
- c. muscle wasting surrounding the joint is unusual
- d. locking can occur
- e. blood within the joint will not clot

62. With a midshaft fracture of the clavicle

- a. the coraco-acromial ligament is ruptured
- b. significant displacement of the bone ends is common
- c. the fracture should be reduced
- d. malunion is uncommon
- e. non-union is possible

63. If a patient presents with an acromioclavicular dislocation

- a. the coraco-clavicular ligament has also ruptured
- b. the clavicle is held in place by the clavipectoral fascia
- c. reduction is best maintained by a temporary screw through the clavicle to engage in the coracoid process
- d. it is acceptable merely to rest the arm in a sling and to mobilize the shoulder when the pain has settled
- e. the late sequel of osteoarthritis can be treated by excision of the outer end of the clavicle

64. With fractures of the proximal humerus

- a. injury is through the anatomical neck characteristically following a fall on the outstretched hand
- b. fracture of the surgical neck is common in the elderly
- c. fracture of the anatomical neck may be combined with anterior dislocation of the shoulder
- d. fracture of surgical neck is treated by excision of the head of the humerus and replacement by a prosthesis
- e. fracture of the anatomical neck with dislocation of the shoulder is best treated by rest in a sling with active mobilization once pain has subsided

65. Complications of fracture of proximal humerus include

- a. paralysis of the deltoid muscle
- b. numbness of skin over a small area of the deltoid
- c. avascular necrosis of the head of the humerus
- d. non-union
- e. tardy ulnar palsy

66. In fracture of the shaft of the humerus

- a. a butterfly fragment may be present
- b. the fracture should be reduced under an anesthetic
- c. the arm should be held by plaster abducted to 60° on a traction frame secured to the body
- d. radial palsy is a complication
- e. pseudarthrosis is common

67. Regarding fracture of medial epicondyle of the humerus

- a. it is an avulsion injury
- b. the fragment of bone may be rotated
- c. the fragment of bone fortunately does not enter the elbow joint
- d. a rotated fragment requires operative re-attachment to the epicondyle
- e. active and passive movements of the elbow joint should begin as soon as possible

68. In posterior dislocation of the hip

- a. the leg is flexed
- b. the leg is abducted
- c. the leg is externally rotated
- d. reduction is usually easy
- e. 50 % of dislocations are followed by avascular necrosis of the femoral head if there is delay in reduction

69. The immediate management of condylar fractures of the femur includes

- a. Kuntscher nailing
- b. Arthrodesis
- c. skeletal traction
- d. a plaster of Paris cylinder
- e. a Milwaukee brace

70. In dislocation of the patella

- a. the patella dislocates to the medial side of the knee
- b. the knee becomes locked
- c. the condition is predisposed to by an unusually high lateral femoral condyle
- d. the condition is liable to recur spontaneously
- e. patellectomy is the most suitable treatment

71. Features recognized to be associated with the diagnosis of ruptured anterior cruciate ligament include

- a. minor swelling
- b. little pain
- c. hemarthrosis
- d. dislocation of the patella
- e. excessive posterior glide

72. Features in the knee recognized to be consistent with a torn medial meniscus include

- a. Swelling
- b. excessive forward glide
- c. locking
- d. McMurray's sign
- e. giving way

73. In fractures involving the ankle joint

- a. the stability of the tibio-fibular mortice determines the outcome
- b. if the mortice is disrupted it must be reconstructed
- c. in a third-degree external rotation injury the talus is free to slide beneath, and possibly fracture, the posterior margin of the tibia
- d. in an inversion (adduction) injury the media malleolus may be sheared from the tibia
- e. diastasis of the inferior tibiofibular joint is caused by a vertical compression injury

74. Transmetatarsal dislocation is

- a. associated with a march fracture of the metatarsals
- b. synonymous with Lisfranc's dislocation
- c. associated with ischaemia of the toes
- d. part of neuropathic arthropathy
- e. treated by open reduction

75. The position of ease which joints take up in acute suppurative arthritis includes, the

- a. shoulder – abducted
- b. elbow - extended and supinated
- c. hip - flexed, abducted and internally rotated
- d. knee – straight
- e. ankle – dorsiflexed

76. The most suitable positions for ankylosis of a joint include

- a. elbow if unilateral - 90° of extension semi-pronated
- b. wrist - slightly dorsiflexed
- c. hip - 60° of flexion to allow sitting in a chair
- d. knee - 30° of flexion to allow sitting in a chair
- e. ankle - at a right angle

77. Paget's disease of bone

- a. can affect any bone in the body
- b. appears primarily as an osteosclerosis
- c. causes deafness
- d. produces bone that is stronger than normal bone
- e. affects cancellous and cortical bone

78. Osteomalacia

- a. is rickets in the adult skeleton
- b. is due to deficient absorption of vitamin A
- c. is associated with blind loop syndrome
- d. is consistent with a raised serum alkaline phosphatase
- e. can be brought about by renal tubular acidosis

79. The clinical features that are associated with osteoarthritis of the hip include

- a. pain on walking but not at night
- b. muscle spasm
- c. the joint held in the position of ease which is functionally useless
- d. apparent shortening
- e. telescopic movement

80. Characteristic radiological appearances of OA include

- a. widening of the joint space
- b. new bone formation
- c. subchondral sclerosis
- d. subluxation
- e. Codman's triangle

81. Pathological changes in Rheumatoid arthritis of the knee include

- a. synovial infiltration with plasma cells
- b. effusion
- c. synovial pannus
- d. destruction of the cruciate ligaments
- e. osteosclerosis

82. Characteristic features of rheumatoid arthritis include

- a. appearance in childhood
- b. affects men more than women
- c. mild fever
- d. persistently unremitting pain and stiffness
- e. muscle wasting

83. Surgery in relation to the pathology of osteoarthritis include

- a. osteotomy
- b. arthrodesis
- c. synovectomy
- d. replacement arthroplasty
- e. sympathectomy

84. Operations favored for RhA include

- a. osteotomy
- b. replacement arthroplasty
- c. synovectomy
- d. neuroectomy
- e. excision arthroplasty

85. Ankylosing spondylitis

- a. affects the small distal joints in the extremities first
- b. is more common in women than in men
- c. is associated with pulmonary fibrosis
- d. characteristically displays tissue antigen hla-b27
- e. is associated with aortic valve disease

86. A positive Trendelenberg sign

- a. is present when the pelvis rises on the unsupported side on walking
- b. occurs with paralysis of hip adductors
- c. occurs with coax vara
- d. on both sides can make the gait appear normal
- e. on one side causes a lurching gait downwards towards the unsupported side

87. Club foot is

- a. known as talipes
- b. congenital
- c. most commonly of the equino-valgus variety
- d. a consequence of placenta praevia
- e. characteristically associated with breech presentation

88. Recognized features of club foot include

- a. erosion of the os clacis
- b. adduction of the bones of the forefoot
- c. a small os calcis
- d. abnormal histology of the calf muscles
- e. scleroderma

89. In a neonate with club foot

- a. the foot can be dorsiflexed until the dorsum touches the chin
- b. arthrogryphosis can be present
- c. x-ray is necessary for diagnosis
- d. the mother can be taught manipulation therapy if the deformity is slight
- e. a Denis Browne splint can be used

90. Congenital torticollis

- a. is a true congenital abnormality
- b. involves infarcted muscles
- c. exhibits a swelling called a potato tumor
- d. causes facial asymmetry
- e. is treated by division of the accessory nerve

91. The types of scoliosis include the

- a. Congenital
- b. Paralytic
- c. Postural
- d. Pulmonary
- e. gastro-esophageal

92. Recognized current procedures in the management of scoliosis include

- a. repeated comparable AP x-rays of the spine
- b. the use of the Milwaukee brace
- c. the use of plaster casts
- d. insertion of rods and hooks
- e. insertion of Rush nails

93. There is a recognized association between

- a. rickets and knock knee
- b. Blount's disease and bow leg
- c. in-toeing and knock knee
- d. slipped femora] epiphysis and bow leg
- e. osteochondritis and knock knee

94. Factors predisposing to slipped femoral epiphysis include

- a. high normal loads
- b. rickets
- c. 'hypogonadal' children
- d. an epiphyseal plate not disposed at right angles to the line of action of the resultant force applied to it
- e. previous poliomyelitis

95. Features associated with chronic slipped epiphysis include

- a. knock knee
- b. pain in the knee
- c. in-toeing
- d. apparent shortening
- e. isolated limitation of external rotation and abduction

96. The management of acute slipped epiphysis in a young adult includes

- a. Denis Browne splints
- b. a Milwaukee brace
- c. osteoclasis
- d. internal fixation with three threaded pins
- e. diet

97. The management of Perthe's disease includes

- a. no treatment
- b. broomstick plasters
- c. compression nail plating
- d. femoral osteotomy
- e. innominate osteotomy

98. Traction injuries of the epiphyses include

- a. Sever's disease
- b. Osgood Schlatter's disease
- c. Kienbock's disease
- d. Scheuermann's disease
- e. Freiberg's disease

99. Tennis elbow is

- a. also known as medial epicondylitis
- b. characteristically associated with tenderness of the attachment of the extensor muscles of the forearm
- c. associated with the presence of bone chips
- d. treated by rest
- e. associated with olecranon bursitis

100. Supraspinatus tendonitis is associated with

- a. rotator cuff injuries
- b. tendon calcification
- c. painful arc syndrome
- d. frozen shoulder
- e. Pancoast syndrome

101. There is a recognized association between carpal tunnel syndrome and

- a. Dupuytren's contracture
- b. RhA
- c. pregnancy
- d. compound palmar ganglion
- e. Sudeck's atrophy

102. The commonest general cause of bone fragility:

- a. Senile osteoporosis.
- b. Osteogenesis imperfecta.
- c. Hyperparathyroidism.
- d. Rickets or osteomalacia.
- e. Multiple myelomatosis.

103. The commonest local cause of pathological fracture of bones is:

- a. Congenital bone cyst.
- b. Chronic osteomyelitis.
- c. Pressure atrophy by aortic aneurysm.
- d. Acute osteomyelitis.
- e. Osteogenic osteosarcoma.

104. All benign tumors are liable to pathological fractures except:

- a. Cancellous osteoma.
- b. Enchondroma.
- c. Ecchondroma.
- d. Ivory osteoma.
- e. Osteoclastoma.

105. All primary and secondary bone tumors are liable to pathological fracture except:

- a. Osteogenic osteosarcoma.
- b. Ewing sarcoma.
- c. Multiple myelomatosis.
- d. Secondaries from carcinoma of the prostate.
- e. Secondaries from carcinoma of the breast.

106. Spiral fractures are common on top of:

- a. Direct trauma.
- b. Indirect trauma, usually with rotation.
- c. Direct severe trauma.
- d. Electro-convulsive therapy.
- e. March fracture.

107. The most pathognomic sign of fracture is:

- a. Tenderness at fracture site.
- b. Swelling at the fracture site.
- c. Deformity at the fracture site.
- d. Crepitus except if the fracture is impacted.
- e. Shortening of the affected bone.

108. Displacement of a fracture:

- a. Relation of the proximal fragment to the distal one.
- b. Relation of the distal fragment to the proximal one.
- c. It is done mainly by the surrounding muscles.
- d. It is very valuable to be known before reduction.
- e. It may anterior or posterior or medio-lateral or rotational displacement.

109. Distraction displacement is very common in:

- a. Fissure fracture of the green -stick type.
- b. Transverse fracture of tibia.
- c. Stellate shape fracture of the patella.
- d. Avulsion fracture of the tibial tuberosity.
- e. Fracture with bone loss (bullet injury).

110. The most important step in 1st aid measure of fracture is:

- a. Control of hemorrhage.
- b. Anti-gas gangrene and anti-tetanic serum.
- c. Antibiotics.
- d. Immobilization of the part affected.
- e. Relief of pain.

111. Indications of open reduction and internal fixation:

- a. Failure of closed reduction.
- b. Complicated fracture.
- c. Unstable fracture.
- d. Comminuted fracture.
- e. Intra-articular fracture.
- f. Multiple bone fractures.

112. Common complications of plastering of fractures are:

- a. Ischemia of the limb distal to the plaster.
- b. Venous congestion and venous thrombosis.
- c. Delayed or malunion of fracture.
- d. Allergic dermatitis.
- e. Orthostatic oedema of the limb:
- f. Peripheral neuritis.

113. Skeletal traction and fixation is commonly used in:

- a. Fracture radius and or fracture ulna.
- b. Fracture of the patella.
- c. Fracture of the tibia or fibula.
- d. Fracture of the shaft of the femur.
- e. Fracture of the clavicle.

114. Intero-external fixation is indicated in:

- a. Simple transverse fracture.
- b. Spiral or oblique fracture of the femur.
- c. Infected fractures.
- d. Fractures complicated by vascular injury.
- e. Intra-articular fracture.

115. Pre-operative measures for ttt of compound fr are:

- a. Cover open fracture by sterile dressings.
- b. Broad-spectrum antibiotics.
- c. Sedation of the patient by morphia.
- d. Blood transfusion or intra-venous fluids.
- e. Anti-tetanic globulins.
- f. Urgent x-ray.

116. Important operative measures in treating compound fractures are all followings except:

- a. Division of the deep fascia.
- b. Excision of dead tissues and removal of foreign bodies.
- c. Ligation, suturing or grafting of damaged vessels.
- d. Immediate repair of damaged nerve or tendon.
- e. Intero-external fixation of compound fracture.

117. Internal fixation is only indicated in management of compound fracture if:

- a. Presence of marked skin loss.
- b. Presence of marked muscle laceration.
- c. Presence of nerve injury.
- d. Presence of vascular arterial injury.
- e. Presence of tendon injuries.

118. The commonest general complication of fracture is:

- a. Neurogenic shock.
- b. Pulmonary embolism.
- c. D.V.T.
- d. Paralytic ileus.
- e. Septic shock.
- f. Acute renal failure on top of crush syndrome.

119. All are causes of delayed union of fractures:

- a. Improper immobilization.
- b. Infection of bone haematoma.
- c. Anaemia.
- d. Interposition by soft tissues.
- e. Excessive traction of bone fragments.
- f. Poor blood supply of the fracture site.

120. Viscera liable to be injured by fracture lower ribs of the left side are:

- a. Stomach.
- b. Spleen.
- c. Sigmoid colon.
- d. Left kidney.
- e. Lung and left pleura.

121. Sprain of a joint:

- a. Over stretch or partial rupture of a ligament.
- b. Usually follows indirect trauma.
- c. Characterized by swelling, local tenderness of the joint affected.
- d. Marked haemarthrosis of the joint affected is present.
- e. It is treated by crepe bandage and analgesics.

122. Traumatic synovitis is characterized by all except:

- a. Increase amount of synovial fluid inside joint.
- b. It is caused by trauma. Sprains. Or torn cartilage.
- c. No spasm of the muscles surrounding the joint:
- d. U/S is very diagnostic.
- e. Marked limitation of joint movement is characteristic.

123. The followings are all lines of treatment of traumatic synovitis except:

- a. immobilization and firm bandage.
- b. aseptic aspiration of the fluid if excessive in amount.
- c. arthroscopy with removal of loose bodies or torn cartilage.
- d. arthrotomy with evacuation of the synovial fluid.
- e. arthroscopic repair of the injured ligaments.

124. Haemarthrosis:

- a. Bleeding inside the injured joint.
- b. Caused by severe trauma or twist of the joint.
- c. Immediate swelling of the joint affected after trauma.
- d. No limitation of movements of the joint affected.
- e. NMR is very diagnostic.

125. The commonest cause of haemarthrosis is:

- a. Severe trauma or twist of a joint.
- b. Intra-articular fracture.
- c. Hemophilia.
- d. Purpura.
- e. Bullet or stab injuries of joints.

126. The commonest site of fracture clavicle caused by indirect trauma in form of fall on outstretched hand is:

- a. Junction of the medial third with lateral two thirds.
- b. Junction of the lateral third with medial two thirds.
- c. Middle of the clavicle.
- d. Anywhere.
- e. None of the above.

127. Internal fixation of fracture clavicle is achieved by:

- a. Intramedullary nail.
- b. Kirschner wire.
- c. Bone graft.
- d. Screws.
- e. Plate and screws.

128. Ladder step deformity characteristic of fracture clavicle is:

- a. Medial fragment is displaced downward below lateral fragment.
- b. Lateral fragment is displaced forward while medial is displaced backward.
- c. Dislocation of sternoclavicular joint gives ladder step deformity.
- d. Dislocation of acromio-clavicular joint.
- e. Lateral fragment is displaced downward and forward by weight of the upper limb while medial fragment is displaced upward and backward by spasm of the sternomastoid muscle.

129. Visceral complications complicating fracture medial third of the clavicle are:

- a. Rupture of the liver.
- b. Tracheal injury.
- c. Pleural injury in form of haemothorax and pneumothorax.
- d. Oesophageal injury with mediastinitis.
- e. Lung laceration.

130. Level (II) fracture shaft of humerus is characterized by the following deformity:

- a. Proximal fragment is abducted by the deltoid.
- b. Distal fragment is adducted by teres major and pectoralis major.
- c. Proximal fragment is adducted by teres major and pectoralis major.
- d. Distal fragment is abducted by deltoid muscle.
- e. It is almost impacted fracture.

131. Nervous complication of levels II and III fractures shaft of humerus are:

- a. Ulnar nerve injury.
- b. Posterior interosseous nerve injury.
- c. Median nerve injury.
- d. Axillary nerve injury.
- e. Radial nerve injury with drop wrist.

132. Condylar fractures include all except:

- a. Extension type supracondylar fracture.
- b. Flexion type supracondylar fracture.
- c. Intercondylar fracture.
- d. Transcondylar fracture.
- e. Fracture of olecranon process.

133. Flexion type dislocation of the elbow is treated by:

- a. Above elbow plaster in flexion.
- b. Above elbow plaster in extension.
- c. Open reduction and internal fixation.
- d. Below elbow plaster.
- e. Shoulder spica.

134. The most serious complication of supracondylar fracture of the humerus is:

- a. Median nerve injury.
- b. Myositis ossificans of the brachialis muscle.
- c. Cubitus valgus deformity.
- d. Non union and delayed union.
- e. Volkmann's ischaemic contracture.

135. The characteristic deformity of Volkmann's ischaemic contracture is:

- a. Cubitus varus deformity.
- b. Cubitus valgus deformity.
- c. Drop hand and drop wrist.
- d. Complete claw hand.
- e. Madelung's deformity.

136. Steps of ttt of Volkmann's ischaemic contracture are:

- a. Reduction of unreduced supracondylar fracture.
- b. Removal of tight plaster.
- c. Intra-arterial injection of papaverine solution in the spastic segment.
- d. Thrombendartrectomy if a thrombus is present.
- e. Resection of the spastic segment with grafting.

137. Myositis ossificans complicating supracondylar fracture of the humerus:

- a. Abnormal calcification of muscle haematoma.
- b. It affects triceps and biceps muscles more.
- c. Brachialis muscle is affected in over 90% of cases.
- d. X-ray is very diagnostic.
- e. Excision is the treatment of choice.

138. Frykman classified Colles' fracture to:

- a. 4 degrees.
- b. 6 degrees.
- c. 3 degrees.
- d. 8 degrees.
- e. 7 degrees.

139. The most diagnostic sign of Colles' fracture clinically is:

- a. Marked oedema on the dorsum of the hand.
- b. Characteristic dinner-fork deformity.
- c. Characteristic crepitus at the lower end of the radius.
- d. Marked tenderness of wrist joint.
- e. Styloid process of radius is higher than styloid process of ulna or at the same level.

140. Colles' fracture is commonly associated with fracture of:

- a. Styloid process of radius.
- b. Head of radius.
- c. Head of ulna.
- d. Styloid process of ulna.
- e. Lower third of ulna.

141. Madelung's deformity:

- a. Radial deviation of the hand complicating Colles' fracture
- b. It is due non-union of the fracture site.
- c. It is very common complication of Colles' fracture in old age.
- d. It is due to arrest of growth of radius with overgrowth of the ulna.
- e. It is treated by excision of head of ulna.

142. The most serious complication of Colles' fracture is:

- a. Madelung deformity.
- b. Ischemia of the hand.
- c. Sudek's atrophy.
- d. Median nerve injury (carpal tunnel syndrome).
- e. Pseudoarthrosis.

143. Sudeck's atrophy:

- a. Osteoporosis of carpal bones complicating Colles' fracture.
- b. It is due to spasm of the blood supply of carpal bones.
- c. It presents clinically by painful stiffness of the wrist, and vasomotor symptoms in form of swelling, pallor or cyanosis of the fingers.
- d. Plain x-ray of the wrist shows characteristic spotty osteoporosis.
- e. It is treated by physiotherapy and vasodilators and arthrodesis of the wrist in severe cases.

144. Fraying (rupture) of flexor pollicis tendon:

- a. Commonly complicates Colles' fracture.
- b. It occurs immediately after the fracture.
- c. It occurs 4-8 weeks after fracture.
- d. It presents clinically with loss of extension of the thumb.
- e. It is treated by tendon transfer from extensor carpiradialis brevis.

145. Diathesis of inferior radio-ulnar joint:

- a. Complicates Colles' fracture.
- b. There is a wide separation between the two bones.
- c. The head of ulna becomes less prominent.
- d. There is loss of supination while pronation is preserved.
- e. Treated by above elbow plaster in extension.

146. Smith's fracture:

- a. Fracture lower inch of radius with forward displacement of distal fragment.
- b. It is caused by fall on the back of the hand with severe flexion of the wrist.
- c. Median nerve injury is more common than in Colles' fracture.
- d. Clinically it simulates Colles' fracture.
- e. Very common fracture in children.

147. Dislocation of shoulder is more common than dislocation hip due the following causes:

- a. Wide range of movements of the shoulder.
- b. Shallowness of the glenoid cavity.
- c. Laxity of the capsule of the shoulder joint.
- d. Lack of support by strong muscles.
- e. Trauma of the shoulder is more common.

148. The followings are characteristic signs of anterior dislocation of the shoulder joint:

- a. Flat shoulder.
- b. Lengthening of the upper limb.
- c. Hamilton ruler sign.
- d. Gallaway's sign.
- e. Braynt's sign (down displacement of the anterior fold of axilla)

149. Duga's sign in dislocation shoulder:

- a. Increase of the circumference of the axilla on the affected side.
- b. Flat shoulder on the affected side.
- c. A ruler can be put straight between tip of acromion and lateral epicondyles of the humerus.
- d. Downward displacement of anterior fold of axilla.
- e. Inability to touch the tip of the normal shoulder by fingers of the dislocated upper limb.

150. Barton's fracture:

- a. Colles' fracture in children is called barton's fracture.
- b. Intra-articular fracture of the distal radius.
- c. There is volar displacement of triangular fragment along with the whole carpus.
- d. Treatment by below elbow plaster.
- e. Treated by open reduction and Ellis-T-plate.

151. The commonest complication of dislocation shoulder is:

- a. Ischemia of the upper limb.
- b. Axillary nerve injury.
- c. Injury of the radial nerve.
- d. Rupture of the supraspinatus tendon.
- e. Recurrence of dislocation.

152. Fractures commonly associated with dislocation shoulder are:

- a. Greater tuberosity.
- b. Lesser tuberosity.
- c. Surgical neck of the humerus.
- d. Coracoid process of the scapula.
- e. Fracture of the glenoid cavity.

153. Posterior dislocation of the shoulder:

- a. It is a rare type of dislocation shoulder (9%).
- b. It is caused by direct trauma to front of the shoulder.
- c. Subacromial type is more common than subspinous type.
- d. Lateral view x-ray is diagnostic.
- e. It is treated by immobilization in shoulder spica for 3-4 weeks.

154. The most diagnostic clinical sign of posterior dislocation of the shoulder is:

- a. Marked tenderness at the shoulder joint.
- b. Palpable crepitus of associated fracture.
- c. Shortening of the upper limb on affected side.
- d. Fixed medial rotation of the arm with flattening of the shoulder joint.
- e. Duga's sign.

155. Greater tuberosity fracture (simple or fissure) is treated by:

- a. Sling of the upper limb to the neck.
- b. Wrapping of the upper limb to the trunk by adhesive plaster.
- c. Above elbow plaster for 6-8 weeks.
- d. Immediate open reduction and internal fixation by a screw.
- e. Immobilization in shoulder spica with abduction 90 degrees and flexion of the elbow 90 degrees.

156. Comminuted fracture of greater tuberosity is treated by:

- a. Above elbow plaster in extension for 6-8 weeks.
- b. Immobilization in shoulder spica for non-displaced severe fracture.
- c. Open reduction and internal fixation by screws.
- d. Below elbow plaster for 6 weeks.
- e. Sling of the upper limb to the neck.

157. Fracture lesser tuberosity:

- a. It can occur alone on top of severe contraction of subscapularis muscle.
- b. Commonly associates dislocation of the shoulder.
- c. It is treated by shoulder spica for 6-8 weeks.
- d. It must be treated by open' reduction and internal fixation by a screw.
- e. It is a stable fracture, needs no treatment.

158. Fracture lateral epicondyle of the humerus:

- a. Rare fracture of children.
- b. It may with minimal or maximal displacement.
- c. In maximally displaced fracture the articular surface of the fractured segment looks medially.
- d. Minimally displaced fracture is treated by open reduction and internal fixation.
- e. Maximally displaced fracture is treated by closed reduction & above elbow plaster in flexion for 4-6 wks.

159. Monteggia's fracture:

- a. Fracture upper 1/3 of ulna & dislocation of head of radius
- b. Fracture upper 1/3 of radius with dislocation of head of ulna.
- c. Fracture lower 1/3 of radius with dislocation of ulna.
- d. Fracture lower 1/3 of the ulna with head of radius.
- e. Fracture upper 1/3 of ulna with dislocation of head of ulna.

160. Characters of Monteggia's fracture:

- a. Anterior type is commoner than posterior type (90% and 10%).
- b. In the anterior type the head is dislocated anteriorly with anterior angulation of the ulna.
- c. Anterior (extension) type is unstable fracture.
- d. Anterior type is less liable to complications.
- e. It is better treated by open reduction and internal fixation.

161. Complications of anterior type of Monteggia's fracture include the followings:

- a. Non-union.
- b. Persistent dislocation of the radius.
- c. Myositis ossificans around the radius.
- d. Cross union between radius and ulna.
- e. Median nerve injury (carpal tunnel syndrome).

162. Flexion type Monteggia's fracture:

- a. Rare type of Monteggia's fracture (10%).
- b. Head of the radius is displaced backward.
- c. Ulna is angulated posteriorly.
- d. Head of radius must be excised in children but not in adults.
- e. Closed or open reduction can be used for treatment.

163. Galeazzi 's fracture:

- a. Fracture lower third radius and dislocation of inferior radio-ulnar joint.
- b. Fracture lower third of the ulna with diathesis of inferior radio-ulnar joint.
- c. Anterior (extension) type is less common (40%).
- d. In adults it is treated by open reduction and compression plate of radius.
- e. In children it is treated by closed reduction and immobilization in full plaster cast for 6 weeks.

164. The best line of treatment of fractures radius and ulna at different levels is:

- a. Closed reduction and above elbow plaster for 6-8 weeks.
- b. Intramedullary nailing of both radius and ulna.
- c. Open reduction of the ulna and closed reduction of radius.
- d. Open reduction and internal fixation by plate and screws.
- e. Below elbow plaster in extension.

165. The commonest complication of fracture both bones radius and ulna is:

- a. Ischemia of the forearm muscles.
- b. Non-union of fractures.
- c. Medial nerve injury.
- d. Sudek's atrophy.
- e. Cross union with loss of supination and pronation.

166. Fracture of the lunate bone:

- a. Commonly caused by fall on dorsi-flexed hand.
- b. It lies in the carpal tunnel compressing median nerve and flexor tendons.
- c. It is characterized clinically by swelling in front of the wrist and limitation of movements of the wrist joint.
- d. Extension of the fingers is pathognomic of lunate fr
- e. Recent cases are treated by closed reduction while neglected cases are treated by open reduction and or excision of the lunate bone if necessary.

167. Bennet's fracture dislocation:

- a. Common in boxers.
- b. It is caused by direct trauma or fall on the radial side of the hand.
- c. It is oblique fracture of the first metacarpal bone.
- d. It is usually unstable from displacement of flexor and extensor tendons at the base of the thumb.
- e. is ttt by wire finger splint incorporated in plaster cast.

168. Fractures of metacarpal bones and phalanges:

- a. Caused by blows or fall on hands.
- b. May be transverse or oblique fractures.
- c. Fragments of fracture phalanges are angulated forward by tension of the lumbrical and interossei.
- d. Minimal displacements are present.
- e. Carpal bones are treated by dorsal plaster slab for 3 weeks, while fractures of the phalanges are treated by correction of the angulation by traction and flexion.

169. Fracture neck of femur:

- a. Common fracture in old age.
- b. Trauma must be marked severe trauma.
- c. More common in females.
- d. Intracapsular fractures are more common than extracapsular ones (80% and 20% respectively).
- e. May lead to neurogenic shock.

170. Adduction type of transcervical fracture:

- a. It is a vertical type fracture (fracture angle is more than 45 degrees).
- b. It is unstable fracture and displaced.
- c. Less liable to healing and more liable to complications.
- d. It is always impacted fracture.
- e. Distal fragment is externally rotated by weight of lower limb.

171. Hypovolemic shock is very common complication of the following fractures of the lower limb:

- a. Fracture neck of the femur.
- b. Pott's fracture.
- c. Fracture tibia and fibula.
- d. Fracture patella of the comminuted type with haemarthrosis of knee joint.
- e. Fracture of mid-shaft of the femur.

172. Displaced fracture neck femur is treated by:

- a. Closed reduction and external fixation by hip spica.
- b. Closed reduction and internal fixation by smith paterson's nail and plate.
- c. It can be treated by 2-3 pins in children.
- d. Recently it is treated by dynamic hip screw (DHS).
- e. Excision of the head and its replacement by hip prosthesis is indicated in old age and with marked displacement.

173. The commonest general complication of fracture neck femur is:

- a. Neurogenic shock.
- b. Pulmonary embolism.
- c. Crush syndrome.
- d. Long stay in bed leading to deep vein thrombosis and orthostatic pneumonia.
- e. Paralytic ileus.

174. The commonest local complication of fracture neck femur (Intracapsular fracture):

- a. Coxa vara.
- b. Coxa valga.
- c. Hypovolemic shock.
- d. Avascular necrosis of the head.
- e. Spasm of the femoral artery with ischemia of the L.L.

175. Coxa vara deformity:

- a. Commoner than coxa valga.
- b. Neck-shaft angle is less than 120 degrees.
- c. Common to complicate adduction type fracture of neck femur.
- d. More serious than coxa valga.
- e. It is treated by subtrochanteric abduction osteotomy.

176. Mc Murray osteotomy:

- a. Used for treatment of talipes valgus deformity of foot.
- b. Used for treatment of coxa valga.
- c. Used for treatment of genu valgum.
- d. Operation for treatment of talipes equino-varus.
- e. Operation for treatment of coxa vara deformity of the hip.

177. Mc Murray abduction osteotomy:

- a. The operation of choice for coxa vara deformity of hip.
- b. It consists of subtrochanteric osteotomy with abduction of the distal end of the femur.
- c. It corrects the deformity of the hip.
- d. It relieves pain of the hip during walking.
- e. It avoids osteoarthritis of the hip joint.

178. Avascular necrosis of head of femur:

- a. Common complication of intracapsular fracture neck femur.
- b. It occurs due to cut of the blood supply of head which is mainly comes from the retinacular vessels and the nutrient artery of the femur.
- c. Head appears denser in the x-ray of the hip.
- d. The main blood supply of the head comes of artery of ligamentum teres.
- e. It is treated by its replacement by artificial head of the Austin-Moore type.

179. Artificial hip prothesis:

- a. Austin-Moore type is replacement of the head only.
- b. Total hip with replacement of the head and acetabulum is indicated if the acetabulum is diseased or fractured.
- c. Excision arthroplasty of the Whitman's type is indicated in severe infection of the hip joint.
- d. Rejection of the hip commonly occurs on top of infection.
- e. In Whitman's arthroplasty the head is removed and the acetabular fossa is filled with muscles.

180. Subtrochanteric fracture shaft of the femur:

- a. Complicated direct severe trauma like car accidents.
- b. It is unstable displaced fracture.
- c. Proximal fragment is abducted. Flexed and laterally rotated by iliopsoas and glutei muscles.
- d. Distal fragment is pulled upwards & backward by hamstring
- e. It is treated by internal fixation with smith-paterson nail and plate.

181. Fracture mid-shaft femur:

- a. Commonly complicates direct trauma in form of car accidents.
- b. It may transverse, spiral or comminuted fracture.
- c. Over-riding, angulation and rotations are common in this fracture.
- d. Usually complicate with hypovolemic shock due to big size of its haematoma (may be up to one liter or more).
- e. Proximal fragment is pulled forwards by quadriceps femoris muscle.
- f. Distal fragment is adducted, pulled upwards and backwards by the adductors and the hamstring muscles.

182. Level III (supracondylar fracture shaft femur).

- a. Rarest type of fracture shaft of femur.
- b. Proximal fragment is pulled forwards by quadriceps femoris muscle.
- c. Distal fragment is strongly flexed by gastrocnemius.
- d. There is very high liability of injury of the popliteal vessels.
- e. It needs open reduction and internal fixation by plate and screws.

183. Level I fracture shaft femur (subtrochanteric) is treated by the following measures:

- a. Closed reduction and hip fixation by hip spica.
- b. Intramedullary nail (Kuchner nail).
- c. Smith-Paterson's nail and plate.
- d. Dynamic hip screw (DHS).
- e. Total hip replacement of the Austin-Moore's type.

184. Treatment of fracture mid-shaft include:

- a. Birth fracture is treated by Crede's method.
- b. Mid shaft fracture of infants and children is treated by Gallows's traction.
- c. Fracture from age of 5-15 years is treated by skin traction on Thomas's splint.
- d. Mid shaft fracture in adults is treated by skeletal traction using Kirschner-wire or Steinmann's pin.
- e. Open reduction and internal fixation is indicated in comminuted fractures, complicated fractures or multiple fractures of femur.
- f. Intra-medullary nail is used for transverse fracture while spiral and comminuted fractures need plate and screw fixation.
- g. Mid-shaft fracture in old age is treated by internal fixation.

185. The commonest complication of fracture mid shaft is:

- a. Hypovolemic shock.
- b. Neurogenic shock.
- c. Septicemic shock.
- d. Deep venous thrombosis.
- e. Paralytic ileus.
- f. Crush syndrome.

186. The commonest local complication of fracture mid-shaft femur is:

- a. Mal-union with angulation deformity.
- b. Acute ischemia of the limb distally.
- c. Injury of the lateral popliteal nerve with drop foot.
- d. A vascular necrosis of the head of femur.
- e. Osteoarthritis of the hip and knee joints.
- f. Laceration of the surrounding muscles.
- g. Gas-gangrene infection.

187. The commonest complication of supracondylar fracture femur is:

- a. A vascular necrosis of the two condyles of femur. ,
- b. Injury of the lateral popliteal nerve.
- c. Injury of the medial popliteal nerve.
- d. Volkmann's ischaemic contracture of the muscles of the leg.
- e. Deep vein thrombosis of the calf veins.

188. Medial popliteal nerve injury:

- a. Deformity is talipes calcaneo-valgus.
- b. There is paralysis of the calf muscles.
- c. Loss of sensations on posterior aspect of the leg and sole.
- d. Complicate supracondylar fracture shaft of femur.
- e. Usually of the neurtemesis type which is irreparable.

189. Lateral popliteal nerve injury:

- a. Talipes equino-varus deformity.
- b. The foot is dropped (plantar flexion).
- c. The foot is inverted (varus deformity).
- d. There is paralysis of anterior and lateral groups of muscles of the leg
- e. Deformity can not corrected clinically in comparison to congenital talipes equino-varus.

190. The followings are complications of fracture patella:

- a. Traumatic knee effusion.
- b. Haemoarthrosis.
- c. Injury of the medial and lateral popliteal nerves.
- d. Stiffness of the knee joint.
- e. Tear of the quadriceps tendon.

191. Indication of patellectomy are:

- a. Comminuted fracture patella.
- b. Disease of the patella as T.B
- c. Tumours of the patella.
- d. Fracture patella with haemoarthrosis of the knee joint.
- e. Compound fracture patella.

192. Pott's fracture:

- a. Fracture dislocation of ankle joint.
- b. All fractures of the lower ends of tibia and fibula including ankle joint.
- c. Abduction type is the commonest type.
- d. The vertical type is the most serious type.
- e. Stiffness of the ankle is the commonest complication of Pott's fracture.

193. Abduction type of Pott's fracture:

- a. Caused by severe abduction trauma of the foot as in gladiators.
- b. In the first degree, there is fracture of one malleolus.
- c. In the second degree there is fracture of both malleoli.
- d. In its third degree there is fracture of three malleoli with ligamentous injuries of the ankle joint.
- e. Second and third degrees are treated by open reduction and internal fixation of the ankle.

194. First degree of abduction type of fracture consists of the followings:

- a. Oblique or spiral fracture of lateral malleolus.
- b. Transverse (avulsion) type fracture of medial malleolus.
- c. Oblique or spiral fracture of lateral malleolus.
- d. Transverse fracture of medial malleolus.
- e. Fracture of lateral malleolus with tear of medial ligament.

195. Second degree of abduction type of Pott's fracture:

- a. Transverse fracture of medial malleolus and oblique fracture of lateral malleolus.
- b. Transverse fracture of lateral malleolus and oblique fracture of medial malleolus.
- c. Fracture of medial malleolus with oblique fracture of lateral malleolus and lateral displacement of the talus.
- d. Fracture of medial malleolus with fracture shaft of the lower end of fibula.
- e. Transverse fracture of medial malleolus with fracture of lower end of fibula and diathesis of inferior tibio-fibular joint.

196. The third malleolus of third degree Pott's fracture is:

- a. Posterior part of the lateral malleolus.
- b. Posterior part of the medial malleolus.
- c. Posterior part of the talus.
- d. Posterior part of the fibula.
- e. Posterior part of inferior surface of tibia.

197. Third degree of vertical type of Pott's fracture:

- a. Comminuted fracture of tibia.
- b. Fracture of lateral malleolus.
- c. Diathesis of inferior tibio-fibular joint.
- d. Fracture of the medial malleolus.
- e. Upward displacement of the talus.

198. Reduction and immobilization of Pott's fracture:

- a. Closed reduction and external fixation in below knee plaster is done for first degree of Pott's fracture of any type.
- b. Open reduction and internal fixation are indicated in second and third degrees of Pott's fracture.
- c. External immobilization can be achieved by plaster or by traction.
- d. Internal immobilization can be achieved by screws or arthrodesis of the ankle joint.
- e. Ankle prosthesis is recently used for severe degrees of Pott's fracture.

199. The commonest general complication of Pott's fracture is:

- a. Hypovolemic shock.
- b. Crush syndrome.
- c. Pulmonary embolism.
- d. Paralytic ileus.
- e. Neurogenic shock.

200. The commonest local complication of Pott's fracture is:

- a. Osteoarthritis of the ankle joint.
- b. Malunion of fracture with varus or valgus deformity of the foot.
- c. Injury of the musculo-cutaneous nerve.
- d. Injury of the anterior tibial vessels.
- e. Injury of tendons of the foot.

201. Medial ligamentous injury of the knee joint:

- a. Caused by severe abduction of the knee.
- b. Medial rocking of the tibia over the femur is diagnostic of ligamentous rupture with pain and swelling on the medial side.
- c. Knee effusion is usually found.
- d. Abduction of the extended knee will decrease pain markedly.
- e. Treated by knee cast or plaster for 2 ms in case of rupture

202. Injuries of semilunar cartilages of the knee joint:

- a. Common in foot players.
- b. Medial meniscus injury is more than lateral meniscus.
- c. Weight bearing with external rotation of abducted flexed knee joint.
- d. Usually complicated by osteoarthritis of knee joint.
- e. Treated by removal of the torn meniscus either operatively or arthroscopically.

203. Fractures of tibia and fibula:

- a. Common fractures, as tibia is subcutaneous.
- b. Both bones are common to be fractured.
- c. Upper and lower thirds of tibia are commoner to be fractured than middle third of the tibia.
- d. Displacement may be very mild or severe displacement.
- e. Spiral and oblique fractures are usually unstable, often associated with overriding and or angulation of bones.

204. Compound fracture of the tibia is best treated by:

- a. Closed reduction and plaster immobilization.
- b. Internal fixation is mandatory.
- c. External fixation by traction especially in presence of vascular damage.
- d. Intero-external fixation is the method of choice.
- e. Nothing to be done to the fractured ends,

205. The common types of isolated fractures of the pelvis outside the pelvic ring are.

- a. fracture of the superior ramus of pubic bone.
- b. fracture of the inferior ischio-pubic ramus.
- c. fracture of the wing of the ilium ..
- d. anterior iliac spine.
- e. fracture both rami of the pubic bone.

206. Incomplete injuries of the pelvic ring with minimal displacement include:

- a. fracture of ischio-pubic rami.
- b. fracture of iliac bone.
- c. anterior superior iliac spine fracture.
- d. separation of the symphysis pubis.
- e. sacro-iliac subluxation.

207. Complete injuries of the pelvic ring with marked displacement include:

- a. double fractures.
- b. double dislocations.
- c. fr of pubic ramus with separation of symphysis pubis.
- d. subluxation of sacro-iliac joint and fracture of the ilium.
- e. fractures of anterior superior and inferior iliac spines .

208. Common general complications of severe fracture pelvis

- a. hypovolemic shock.
- b. paralytic ileus.
- c. deep vein thrombosis of lower limbs.
- d. crush injury.
- e. pulmonary shock.

209. Visceral complications of fractures pelvis include:

- a. rupture of the urethra.
- b. rupture of the urinary bladder.
- c. injury of the rectum leading to peritonitis.
- d. injury of the appendix.
- e. injury of the uterus.

210. vascular injuries of fracture of the pelvis:

- a. spasm or tear of external iliac artery.
- b. tear of the common iliac vein leading to severe hge.
- c. injuries of capillaries leading to severe retroperitoneal haematoma and hypovolaemic shock .
- d. injury of the femoral artery.
- e. injury of median sacral artery.

211. Severe retroperitoneal haematoma of the pelvis complicating fracture of tile pelvis is treated by:

- a. conservative ttt with bl transfusion & no surgical ttt at all
- b. immediate exploration of the haematoma with control of hge.
- c. immediate evacuation of the haematoma and fixation of bone fractures.
- d. conservative treatment and surgery if indicated. It must be done after doing pelvic angiography to localize the bleeding vessels.
- e. if the cause of haematoma is injury of the common iliac artery it is repaired immediately by suture or grafting.

212. Nervous injuries of fracture of tile pelvis:

- a. injury of lumbo-sacral plexus of nerves .
- b. injury of the plexus is mild and needs no treatment.
- c. injury .of the plexus is severe damage, which is irreversible damage.
- d. they end in sensory and motor effects.
- e. immediate nervous repair may help.

213. Fractures of the cervical spine can be caused by one of the following traumas:

- a. flexion trauma.
- b. extension trauma.
- c. lateral flexion trauma.
- d. rotational flexion or extension trauma.
- e. vertical compression trauma (falls on head).
- f. whip-lash injury (sudden recoil of head in car accidents)

214. Characters of wedge fracture of cervical spine:

- a. it is caused by hyperflexion trauma of the neck.
- b. it is unstable fracture ..
- c. posterior ligament is intact.
- d. there is high liability of spinal cord injury.
- e. it is treated by either a plastic collar or collar of plaster.

215. Stability of fracture spine depends on:

- a. shape of the fracture.
- b. comminuted fractures are less stable than non-comminuted ones.
- c. intact anterior longitudinal ligament is the most important factor.
- d. intactness of the posterior longitudinal ligament is the most important factor responsible for stability.
- e. wedge fractures are usually unstable.

216. The commonest type of fracture cervical spine is:

- a. wedge fracture.
- b. dislocation fracture or subluxation.
- c. burst fracture.
- d. fracture of. Neural arches.
- e. fracture of odontoid process.
- f. fracture of the atlas.

217. Burst fracture of the body of vertebra:

- a. it occurs on top vertical compression.
- b. rupture of body of vertebra and inter vertebral disc.
- c. it is a stable fracture.
- d. posterior ligament is intact.
- e. spinal cord is liable to be injured by a piece of bone.
- f. it is treated by external support (collar) in absence of cord injury, and internal fixation is needed if there is cord injury.

218. Extension subluxation fracture:

- a. caused by extension trauma.
- b. there is rupture of anterior longitudinal ligament.
- c. spinal cord may be stretched or no.
- d. spine is not stable in extension.
- e. it is treated by flexion of neck in plaster collar for 2 months.

219. Flexion subluxation:

- a. caused by flexion rotational trauma.
- b. forward displacement of one vertebra.
- c. fracture is unstable.
- d. cord is not liable to be injured.
- e. it is treated by reduction in extension and fixation of spine in a plaster collar for 2 months.

220. Fracture dislocation of cervical spine:

- a. forward displacement of one vertebra with overriding of articular surface, with compression of vertebra or fracture of neural arch.
- b. very stable fracture.
- c. associated with severe cord damage.
- d. it is reduced by skull traction under x-ray control.
- e. internal fixation is mandatory in presence of cord damage.

221. Fracture of thoracolumbar spine:

- a. caused by fall of heavy objects on back.
- b. hyperflexion injuries may lead to wedge fracture or burst fracture.
- c. fracture is unstable if the posterior cord is intact.
- d. cord transection is very liable to occur in thoracic injuries.
- e. cauda equine injury is more common with lumbar injuries.

222. The commonest fracture of thoracolumbar spine is:

- a. wedge fracture.
- b. burst fracture ..
- c. fracture dislocation.
- d. subluxation of vertebra.
- e. fracture transverse process.

223. Complete cord injury is very common in:

- a. cervical region.
- b. thoracic region.
- c. thoraco-lumbar region.
- d. lumbar region. ,
- e. sacral region is the most common site of cord damage.

224. Stage of spinal shock in complete cord damage:

- a. it occurs immediately after cord injury.
- b. it lasts for 48 hours.
- c. there is spastic paralysis of muscles affected.
- d. there is complete sensory loss.
- e. there is suppression of visceral reflexes.
- f. retention of urine is characteristic.

225. Automatic or cord bladder:

- a. it complicated transection of the spinal cord above the sacral segment.
- b. it follows transection of cord at the cauda level.
- c. It starts with retention with overflow.
- d. automatic bladder occurs after 1-3 months of cord damage.
- e. no recovery if the cord is completely transected.

226. Autonomous bladder:

- a. it follows transection of sacral segments of cord or cauda equina.
- b. periodic emptying of bladder is dependent upon a local reflex in the bladder wall.
- c. abdominal straining and compression of abdominal wall will induce reflex of bladder emptying.
- d. recovery is common if the cauda lesion is neurapraxia or axontemesis.
- e. neurtemesis of the cauda lesion is irreversible.

227. Treatment of fracture spine:

- a. cervical spine injuries are treated by traction through skull calipers if there is no displacement and open reduction and internal fixation if there is bony displacement.
- b. thoracic spine injuries are treated by operative correction and internal fixation by plate or by nursing care.
- c. thoraco-lumbar region injuries are treated by immediate operation.
- d. care of the paraplegic patient.
- e. care of the bladder and rehabilitation.

228. Acute haematogenous osteomyelitis:

- a. common below age of 10 years.
- b. more common in boys.
- c. common to affect patients with low resistance.
- d. it may complicate compound fracture of bone.
- e. it must be treated surgically, no place for medical treatment.

229. Bones commonly affected by acute osteomyelitis are:

- a. lower end of femur.
- b. upper end of tibia.
- c. lower end of tibia.
- d. upper end of humerus.
- e. lower end of radius.

230. Stages of osteomyelitis are:

- a. intraosseous abscess stage on top of infected haematoma.
- b. subperiosteal abscess.
- c. subcutaneous abscess.
- d. sequestrum.
- e. involucrum and multiple cloaca.

231. Clinical presentations of acute osteomyelitis:

- a. marked rise of temperature up to septicaemic shock.
- b. severe throbbing pain of the bone affected.
- c. marked tenderness of the bone affected especially at site of abscess.
- d. sympathetic effusion of near by joint is present.
- e. irregular cystic tender swelling is diagnostic.

232. The most diagnostic radiological sign of acute osteomyelitis is:

- a. soft tissue shadow of the abscess cavity.
- b. shadow of subperiosteal abscess.
- c. presence of sequestrum.
- d. presence of multiple cloaca and involucrum.
- e. marked osteoporosis of the bone affected.
- f. non of the above.

233. Plain x-ray of acute osteomyelitis is negative:

- a. first 10 days in children.
- b. first 30 days in children,
- c. first 2 days in children.
- d. first 21 days in adults.
- e. first 50 days in adults after which it turns chronic.

234. Metaphysis is the commonest site of acute osteomyelitis because:

- a. most vascular area of the bone.
- b. special arrangement of blood vessels in the metaphysis.
- c. the weakest area of the bone.
- d. the site of muscular attachment (liable to trauma).
- e. the very rapid circulation in the metaphysis.

235. Treatment of acute osteomyelitis include the followings measures except:

- a. broad spectrum antibiotics.
- b. blood transfusion and fluid therapy.
- c. analgesics and antipyretics.
- d. bone drilling of intraosseous abscess.
- e. amputation to avoid septicemia.

236. Complications of acute osteomyelitis are:

- a. septicemia or pyaemia.
- b. subcutaneous abscess with sinus discharging pus.
- c. septic arthritis.
- d. pathological fracture.
- e. chronicity with sequestrum and cloaca formation.
- f. amyloidosis.

237. The commonest cause of chronic osteomyelitis following acute osteomyelitis is:

- a. inadequate treatment of acute osteomyelitis.
- b. moderate virulence of the organisms.
- c. presence of sinuses.
- d. giving antibiotics in presence of pus.
- e. presence of foreign bodies (sequestrum).

238. Chronic osteomyelitis:

- a. affects children and young adults.
- b. more common in boys.
- c. staphylococci albus and citreus and streptococci viridans and faecalis are common organisms.
- d. common sites of affection are lower ends of femur, tibia, radius and upper end of humerus, it may affect mandible and vertebrae.
- e. presents clinically by persistent sinus discharging pus or pieces of bones.
- f. pathological fracture is a common complication.

239. The most diagnostic radiological findings of chronic osteomyelitis are:

- a. sequestrum.
- b. deformity of the bone affected.
- c. involucrum.
- d. pathological fracture.
- e. presence of multiple cloacae.

240. Sequestrum of chronic osteomyelitis:

- a. new bone formation due irritation of periosteum of inflamed bone.
- b. presence of bone cavity filled with air.
- c. Dead part of infected bone due cut of blood supply.
- d. it appears less dense than normal bone.
- e. it appears more dense than normal bone.

241. Treatment of chronic osteomyelitis:

- a. medical treatment in form of antibiotics and blood transfusion.
- b. surgical treatment in form of sequestrectomy.
- c. sequestrectomy, and saucerization of bone cavity.
- d. sequestrectomy, saucerization, and filling of the bone cavity with antibiotic pills.
- e. Winnet- Orr technique is the best line of treatment.

242. Complications of chronic haematogenous osteomyelitis are the followings:

- a. septicemia and pyaemia.
- b. amyloidosis.
- c. sinuses.
- d. pathological fracture.
- e. malignant transformation.
- f. deformity of bone affected.

243. The commonest complication of chronic osteomyelitis is:

- a. amyloidosis.
- b. malignant transformation.
- c. acute exacerbation.
- d. pathological fracture.
- e. deformity.
- f. sinuses discharging pus or pieces of bone.

244. Cloacae of chronic osteomyelitis are:

- a. multiple bone cavities filled with air.
- b. multiple irregular areas of new bone formation.
- c. multiple areas of dead bone inside cavity of osteomyelitis.
- d. multiple sinuses filled with air.
- e. multiple deformities of the infected bones.

245. The most serious complication of Winnet-Orr technique in management of chronic osteomyelitis is:

- a. septicemia and pyaemia.
- b. stiffness of the near by joint.
- c. deep vein thrombosis due to long stay in bed.
- d. anaerobic wound infection in form of gas gangrene and tetanus.
- e. bad healing of bone fracture by this technique.

246. Brodie's abscess:

- a. chronic specific or non-specific localized type of osteomyelitis.
- b. it is common to affect young adult males.
- c. commonest site is the upper end of the tibia.
- d. organisms may be typhoid bacilli or spirochetes of other nonspecific organisms.
- e. very common to complicate by pathological fracture of the bone.
- f. it simulates bone cyst.

247. Pathology of Brodie's abscess is formed of:

- a. well-formed abscess cavity.
- b. dense sclerosis around the abscess cavity.
- c. small or no sequestrum.
- d. marked deformity of the bone affected.
- e. no involucrum.

248. Inverted bottle of champagne is characteristic of:

- a. osteosarcoma of the bone.
- b. Ewing sarcoma of the long bones.
- c. Brodie's abscess of a long bone.
- d. peroneal muscle atrophy.
- e. chronic septic osteomyelitis.
- f. syphilitic periostitis.

249. Treatment of Brodie's abscess include:

- a. derroofing of the abscess cavity.
- b. saucerization of the abscess cavity with removal of sequestrum if present.
- c. closure of the abscess cavity by muscle flap.
- d. broad-spectrum antibiotics and I.V. fluids.
- e. winnet-orr technique.
- f. amputation of the bone affected for fear of malignancy.

250. Radiological findings characteristic of Brodie's abscess are:

- a. well-formed abscess cavity (translucent area).
- b. bone sclerosis.
- c. involucrum.
- d. large sequestrum filling cavity of bone.
- e. pathological fracture.
- f. soft tissue shadow of subperiosteal abscess.

251. Chronic septic osteomyelitis:

- a. complicates compound fractures.
- b. it may complicate orthopedic operation.
- c. common organisms are streptococci viridans or staph albus or citrus.
- d. sequestrum is characteristically ring sequestrum.
- e. there are no cloacae.
- f. involucrum is in the form of periosteal spur.

252. Tuberculosis of bones:

- a. always secondary (never primary).
- b. infection of bone is almost blood borne infection.
- c. human T.B bacilli are more common than bovine ones.
- d. very common below age of 10 yrs and may affect young adults.
- e. affects low resistant patients especially diabetics.

253. Tuberculous osteitis commonly affects:

- a. vertebrae.
- b. ribs.
- c. short long bones (phalanges of hands and feet).
- d. sternum.
- e. skull.
- f. long bones like femur, humerus and tibia.

254. Tuberculous periosteitis commonly found in:

- a. ribs and pelvic bones.
- b. vertebrae.
- c. short -long bones as phalanges of hands and feet.
- d. skull.
- e. sternum.

255. The commonest site of Pott's disease:

- a. high-thoracic (T6-T7).
- b. sacrum.
- c. lumbo-sacral (L5-S1).
- d. cervico-dorsal region (C7-T1).
- e. dorso-lumbar (T12-L1).

256. Pathology of Pott's disease of the spine:

- a. affects children and young adults.
- b. more common to affect males.
- c. it is T.B osteitis (osseous tissue of the vertebra).
- d. cervico-dorsal site is the commonest site of affection.
- e. destruction of the vertebra and intervertebral disc occur of children.
- f. periosteal (peripheral) type with wedging of the vertebrae and formation of cold abscess.

257. Clinical presentation of Pott's disease of spine:

- a. constant dull aching pain which increases by movements.
- b. pain may be completely absent until complications occur.
- c. cold abscess formation.
- d. deformity of the spine.
- e. cord compression with paraplegia.

258. Clinical signs characteristic of Pott's disease:

- a. tenderness at site of affected vertebra.
- b. rigidity of the near by muscles.
- c. marked limitation of spinal movements.
- d. presence of deformity in form of kyphosis or kyphoscoliosis.
- e. cold abscess formation.

259. Sites of cold abscesses complicating cervico-dorsal

Pott's disease are:

- a. retropharyngeal abscess.
- b. paravertebral.
- c. posterior triangle of the neck.
- d. mediastinum.
- e. axilla.
- f. suboccipital triangle.

260. sites of cold abscesses complicating lumbosacral tuberculosis are:

- a. paravertebral.
- b. ischio-rectal abscess.
- c. pelvic abscess.
- d. popliteal abscess.
- e. psoas abscess.

261. Pott's paraplegia:

- a. occurs in 10% of cases of Pott's disease.
- b. it is mainly motor.
- c. less sensory affection.
- d. marked sphincteric troubles of bladder and bowel functions.
- e. it is reversible if treated early.

262. The commonest cause of Pott's paraplegia is:

- a. edema of the spinal cord.-
- b. compression of blood vessels.
- c. compression of the cord by cold abscess or by sequestra.
- d. severe kyphosis of vertebral column.
- e. thrombosis of the cord vessels.

263. Radiological signs characteristic of Pott's disease of the spine are:

- a. osteoporosis of affected vertebra.
- b. wedging of the vertebra affected.
- c. angular deformity of spine.
- d. narrowing of intervertebral disc spaces.
- e. shadow of the paravertebral abscess.
- f. deformity in form kyphosis or scoliosis.

264. The most recent effective treatment of Pott's disease of the spine consists of the following steps:

- a. antituberculous treatment and immobilization of cervical spine by plaster of Minerva.
- b. anterior approach of vertebral column with removal of diseased bones.
- c. bridging of the bone cavity by bone grafts.
- d. immobilization of the vertebral column by plaster.
- e. immobilization of the vertebrae by plate and screws.

265. Cold abscess is treated by:

- a. aspiration of the abscess cavity.
- b. drainage of the abscess cavity.
- c. spinal cord decompression by costo-transversectomy.
- d. anti-tuberculous treatment without surgical drainage.
- e. follow up of the patient for fear of complications.

266. Acute suppurative arthritis:

- a. affects any age and any sex.
- b. complicates penetrating injuries.
- c. extension from osteomyelitis (intracapsular metaphysis).
- d. may complicate gonorrhea in adults.
- e. it may be blood borne infection (in infants only).

267. Pathology of septic arthritis consists of:

- a. thickened congested synovial membrane.
- b. joint cavity is full of serous or sero-purulent fluid.
- c. articular cartilages are destroyed in neglected cases.
- d. pus may burst through the capsule leading to superficial abscess.
- e. it ends by fibrous or bony ankylosis.

268. Clinical picture of septic arthritis:

- a. severe pain in the joint affected.
- b. fever, anorexia, headache, and malaise are severe with loss of function of the joint affected.
- c. joint is swollen warm, tender, and distended with fluid.
- d. there is restriction of all movements of the joint.
- e. x-ray of joint affected may show diffuse rarefaction and loss of cartilage space in late cases of arthritis.

269. The best line of treatment of septic arthritis is:

- a. rest and antibiotics with splintage of the joint.
- b. ultrasound guided aspiration.
- c. arthrotomy and drainage of pus.
- d. arthroscopic drainage of joint with irrigation with antibiotic solution.
- e. aspiration and immediate physiotherapy treatment to avoid stiffness of the joint affected.

270. Tuberculous arthritis:

- a. affects children.
- b. boys are more affected than girls.
- c. always secondary.
- d. hip and knee are the common joints to be affected.
- e. human T.B Bacilli are more common than bovine ones.

271. Pathological types and changes of tuberculous arthritis:

- a. synovial type affects synovial membrane first (commonest type).
- b. osseous type affects epiphysis or metaphysis and then spread to joint (less common type).
- c. synovial membrane is markedly thickened and transformed to tuberculous granulation tissue.
- d. no spasm or wasting of the surrounding muscles.
- e. destruction of epiphyseal cartilage occurs first then erosion of the underlying bones.
- f. dislocation of joint never occurs.

272. Complications of tuberculous arthritis are:

- a. dislocation is very common.
- b. cold abscess formation.
- c. sinus formation.
- d. tuberculous lymphadenitis.
- e. bony ankylosis of the joint affected.
- f. malignant transformation.

273. Clinical presentation of tuberculous arthritis:

- a. loss of weight and night fever and night sweating.
- b. dull aching pain on exercise or at rest.
- c. sharp pain occurs at night.
- d. swelling of the joint affected.
- e. sinus discharging caseous material opposite the joint affected.

274. Night stars or night cries are characteristic of:

- a. acute haematogenous osteomyelitis.
- b. chronic osteomyelitis.
- c. Brodie's abscess.
- d. septic arthritis.
- e. tuberculous arthritis.

275. Tumour album:

- a. large lipoma in white patient.
- b. amelanotic melanoma.
- c. tumour of white collagen fibers which is whitish on cut surface.
- d. pallor of skin of the joint with tuberculous arthritis due to empty capillaries and thickening of the synovial membrane of joint affected.
- e. sclerosed haemangioma of the skin.
- f. big sized lymphangioma.

276. Local signs characteristics of T.B arthritis are:

- a. inspection revealed deformity, swelling, wasting of muscles and sinus formation.
- b. palpation revealed warmth, tenderness, thickened synovial membrane and easy palpation of bone ends.
- c. there is limitation of all types of movements.
- d. shortening of the limb is a true shortening.
- e. marked atrophy of the surrounding muscles.

277. Radiological findings characteristic of T.B arthritis:

- a. rarefaction of bones adjacent to joint affected.
- b. narrowing of the joint space.
- c. pathological dislocation.
- d. new bone formation.
- e. soft tissue shadow of cold abscess.

278. The common sites of bone rarefaction of tuberculous arthritis of the hip joint:

- a. Upper part of the acetabulum.
- b. Superior pubic ramus.
- c. Lesser trochanter.
- d. Lower part of the neck of femur close to epiphysis.
- e. Greater trochanter of femur.

279. Sites of formation of cold abscess in T.B of hip joint are:

- a. Posteriorly in the region of greater trochanter.
- b. Anteriorly in Scarpa's triangle.
- c. Laterally in iliopubic tract.
- d. Downward in the popliteal fossa.
- e. Rarely in the pelvis.

280. The commonest age of T.B of the hip joint is:

- a. Above age of 50 years.
- b. Below age of 2-5 years.
- c. Between ages of 30-40 years.
- d. Neonates.
- e. Young adults.

281. The commonest type of T.B arthritis of the hip is:

- a. Synovial type.
- b. Fibrous type.
- c. Fibro-caseous type.
- d. Osseous type.
- e. Granulomatous type.

282. Babcock's triangle:

- a. Tip of the lesser trochanter.
- b. Tip of the greater trochanter.
- c. Upper shelf of the acetabulum cavity.
- d. Lower part of neck of the femur close to epiphysis.
- e. Neck-shaft angle of the femur.

283. Broken or interrupted Shenton's line in T.B arthritis of the hip is diagnostic of:

- a. Bony ankylosis.
- b. Destruction of the neck of the femur.
- c. Widening of the acetabulum.
- d. Narrowing of the joint space.
- e. Dislocation of the head of the femur.

284. Tuberculosis of the knee joint:

- a. Very common in adult age.
- b. Commonest type is the synovial type.
- c. There is thickening of the synovial membrane with effusion of the knee joint (T.Bhydrops).
- d. It is characterized by triple subluxation.
- e. There is limitation of extension of the knee while flexion is normal.

285. Treatment of T.B arthritis of the knee include:

- a. Antituberculous treatment with polyvitamins.
- b. Rest in bed with immobilization of the knee in a splint for 3-6 months.
- c. If x-ray is normal after 3 ms we start active movements.
- d. If x-ray shows bone destruction, we continue immobilization for 3-6 months again.
- e. Arthrodesis by Charnley's intra-articular compression is done at age of 16 years,
- f. Artificial knee prosthesis may be used recently.

286. The commonest type of dislocation of the hip joint is:

- a. Traumatic anterior dislocation.
- b. Traumatic posterior dislocation.
- c. Central dislocation.
- d. Congenital dislocation.
- e. Pathological dislocation on top of tuberculous arthritis.

287. Posterior dislocation of the hip joint:

- a. Complicates dashboard accident.
- b. It may be iliac or sciatic subtypes of posterior dislocation.
- c. Commonly associated with fracture of posterior rim of acetabulum.
- d. There is supra-trochanteric shortening clinically.
- e. Characteristic deformity is flexion, adduction and internal rotation.

288. Shenton's line:

- a. Smooth curve made by neck shaft angle of the femur and inferior surface of superior pubic ramus.
- b. It is characteristically broken if subtrochanteric fracture of shaft of femur.
- c. It is diagnostic of dislocation of the hip joint.
- d. It is broken if fracture neck of the femur.
- e. Characteristic of rheumatoid arthritis.

289. The common complications of posterior dislocation of the hip joint are:

- a. Fracture of the acetabulum.
- b. Sciatic nerve injury.
- c. Osteoarthritis of the hip joint.
- d. Avascular necrosis of the head of femur.
- e. Injury of femoral vessels.
- f. Paralytic ileus.

290. Anterior dislocation of the hip joint:

- a. Rare type of dislocation of the hip joint.
- b. It is caused by forcible abduction and lateral rotation of the hip.
- c. It is of two types (obturator and pubic types).
- d. Its deformity is flexion, abduction and lateral rotation.
- e. Only dislocation of body with lengthening of the limb.

291. Central dislocation of the hip joint:

- a. Very rare type of dislocation of the hip.
- b. Caused by severe direct trauma on the greater trochanter.
- c. Head is displaced inside the pelvis.
- d. Broken shenton's line is diagnostic of dislocation.
- e. Best line of ttt is open reduction and internal fixation.
- f. Head of the femur can be felt by pr examination.

292. The common complications of central dislocation of the hip of the joint are:

- a. All general complications like shock crush injury, paralytic ileus and complications of long stay in bed.
- b. Fracture of the acetabulum.
- c. Injury of the sacral plexus and or obturator nerves.
- d. Visceral complications in form of rupture of the rectum or the urinary bladder.
- e. Fracture of the neck of the femur.
- f. Osteoarthritis of the hip joint which may need arthroplasty.

293. Syphilitic arthritis (clutton's joint):

- a. Hereditary type of syphilis.
- b. It appears at the puberty age.
- c. Presents clinically by bilateral painless effusion of a large joint.
- d. Other data of syphilis are present as keratitis, orchitis and labrynthitis.
- e. Treatment is mainly medical treatment

294. The commonest benign tumour of bones is:

- a. Ivory osteoma.
- b. Ecchondroma.
- c. Enchondroma.
- d. Giant cell tumour.
- e. Cancellous tumour.

295. The commonest malignant tumour of bones is:

- a. Multiple myelomatosis.
- b. Ewing sarcoma.
- c. Fibrosarcoma.
- d. Chondrosarcoma.
- e. Osteosarcoma.
- f. Lymphomas of bones.

296. Osteosclerotic secondaries come from the following tumours:

- a. Carcinoma of the prostate.
- b. Carcinoma of the thyroid.
- c. Carcinoma of the breast.
- d. Hypernephroma of the kidney.
- e. Bronchogenic carcinoma.
- f. Choriocarcinoma.

297. Ivory osteoma of bones:

- a. Hamartoma of compact bones.
- b. Common in children and young adults.
- c. Skull is the commonest bone to be affected.
- d. It causes pathological fracture of the bone from which it arises.
- e. It produces conductive deafness if affecting the external auditory meatus.

298. Sites of ivory osteoma are:

- a. Outer tables of the skull (frontal region).
- b. Inner table of the skull (frontal and parietal regions).
- c. Maxillary bone.
- d. Mandible.
- e. Vertebrae.
- f. Sternum and ribs..

299. Treatment of ivory osteoma of the skull:

- a. Chizeling.
- b. No treatment especially of the inner table.
- c. Removal as a trephine disc by giggly saw.
- d. Irradiation of the tumour.
- e. Recently it can be treated by laser therapy.

300. The commonest site of cancellous osteoma:

- a. Lower end of the femur.
- b. Upper end of the tibia.
- c. Lower end of tibia.
- d. Upper end of the humerus.
- e. Lower end of the radius.

301. Origin of cancellous osteoma:

- a. Metaphysis of long bones.
- b. Diaphysis of long bones.
- c. Periosteum of the bone.
- d. Endosteium of long bone.
- e. Epiphyseal cartilage plate of long bone.

302. Diaphyseal aclasis:

- a. Rare type of cancellous osteomata.
- b. Multiple cancellous osteomata of a long bone.
- c. Very common to occur around the knee joint.
- d. Malignant transformation is very common.
- e. Treated by amputation of the bone affected for fear of malignancy.

303. Pathology of cancellous osteoma:

- a. Its attachment to the bone is by a narrow pedicle.
- b. It has an expanded head.
- c. Its head is covered by a hyaline cartilage.
- d. Usually single and rare to multiple.
- e. It grows outward from bone like a mushroom.

304. The commonest complication of cancellous osteoma is:

- a. Pressure of near by artery leading to ischaemia.
- b. Pressure of near by nerve leading to sensory or motor effects.
- c. Adventitious bursitis.
- d. Osteoarthritis of the near by joint.
- e. Pathological fracture of the tumour.

305. Precautions in treatment of cancellous osteomata:

- a. Excision by chizeling.
- b. Hyaline cap must be excised to avoid recurrence.
- c. Excision after age of puberty only.
- d. Excision of painful or complicated osteoma if the condition is multiple.
- e. Amputation if complicated by malignant transformation.

306. Ecchondroma:

- a. Common in young aged boys or girls.
- b. It affects hands and feet (phalanges and caipal bones).
- c. It may attain a very huge size especially pelvic tumors
- d. It never turns malignant.
- e. Rare to affect long bones like femur or humerus.

307. The most diagnostic radiological picture of ecchondroma is:

- a. Pedunclated tumour of the bone which is homogeneously opaque.
- b. Huge sized bone mass.
- c. Tumour of the epiphysis of the bone with pathological fracture.
- d. Soap bubble appearance of the bone affected.
- e. Sessile or pedunculated out growth of the bone which is mottled.

308. Enchondroma:

- a. Rare benign tumour of bones.
- b. May be single or multiple.
- c. Affects short-long bones like phalanges and carpal bones.
- d. It may affect long bones like femur or humerus.
- e. Common to affect young aged females.

309. Clinical presentations of enchondromata:

- a. Painless expansion of bone.
- b. Pathological fracture due to thinning out of the cortex.
- c. Eggshell crackling sensation can be elicited in bone affected.
- d. X-ray shows a filling defect inside a bone.
- e. May be associated with haemangioma (maffuci's syndrome).
- f. It may simulate T.B cavity , bone cyst and or Broidie's abscess.

310. Ollier's disease:

- a. Multiple ecchondromata of long bones.
- b. Multiple enchondromas of flat bones like pelvic bone or ribs.
- c. Multiple enchondroma of long bones like femur or tibia.
- d. It is called dyschondroplasia.
- e. It is a pre-malignant condition.

311. Treatment of enchondroma:

- a. Irradiation of the tumour which is very radiosensitive.
- b. Excision or curettage of the tumour.
- c. Amputation of the bone affected for fear of malignancy.
- d. No treatment if it presented clinically with pathological fracture.
- e. Excision and bone grafting of bone cavity by bone chips.

312. Osteoclastoma:

- a. Benign tumour with tendency of malignant transformation.
- b. Benign tumour with tendency of recurrence after surgical excision.
- c. Common to affect males between ages of 15-40 years.
- d. Mandible and vertebrae are very common sites.
- e. It arises from metaphysis of long bones.

313. Pathology of osteoclastoma:

- a. Expansion of one end of a bone with thinning out of the cortex.
- b. There is destruction of bone lamellae.
- c. There is a medullary plug.
- d. Huge soft tissue shadow is characteristic.
- e. Microscopically there is a mixture of spindle cells and osteoclasts.

314. The cut surface of osteoclastoma is characteristically:

- a. White in colour.
- b. Reddish in colour.
- c. Dark brown (maroon) due to haemorrhage and necrosis.
- d. Greysish-white in colour.
- e. Golden yellow in colour due to high contents of fat.

315. Radiological signs of osteoclastoma:

- a. Expansion of one end of a bone.
- b. Soap-bubble appearance.
- c. Medullary plug.
- d. Never to be eccentric.
- e. Soft tissue of tumour shadow outside the bone.

316. Treatment of osteoclastoma:

- a. Excision of bone affected (rib, fibula, or lower end of radius).
- b. Curettage of tumour and bone chips application (femur or tibia).
- c. Excision of bone tumour with bone graft application (mandible).
- d. Irradiation is the treatment of choice for osteoclastoma of the lower end of femur and upper end of tibia.
- e. Amputation is indicated for tumour destroying nearby joint.

317. Cell of origin of osteosarcoma of the bone:

- a. Osteocytes.
- b. Chondrocytes.
- c. Fibroblasts.
- d. Osteoblast.
- e. Osteoclasts.

318. Bone site specific for osteosarcoma is:

- a. Epiphyseal cartilage.
- b. Epiphysis of long bones.
- c. Diaphysis of long bone.
- d. Metaphysis of the bone.
- e. Non of the above.

319. The commonest predisposing factor of osteosarcoma in old age is:

- a. Trauma.
- b. Benign tumours especially cancellous osteoma.
- c. Chronic osteomyelitis.
- d. Irradiation.
- e. Paget's disease of bones.

320. The commonest age of osteosarcoma is:

- a. Below age of 5 years.
- b. Above the age of 50 years.
- c. Between ages of 10 and 20 years.
- d. Above age of 40 years and below age of 50 years.
- e. Neonatal age.

321. The common sites of osteosarcoma of bones are:

- a. Lower end of femur.
- b. Upper end of tibia.
- c. Skull.
- d. Vertebrae and ribs.
- e. Upper end of humerus.
- f. Maxilla.

322. Macroscopic picture of osteosarcoma:

- a. Huge fusiform fleshy growth eroding bone cortex.
- b. Swelling is hard or firm or heterogeneous in consistency.
- c. Deposition of new bone occurs on raised subperiosteal blood vessels.
- d. Infiltration of the skin over the tumour is very common.
- e. Early infiltration of near by joint.
- f. Cut surface is homogenous, greyish white with areas of haemorrhage and necrosis.

323. The commonest method of spread of osteosarcoma is

- a. Local spread to the near by joint.
- b. Local spread to the rest of the bone.
- c. Blood spread to the lungs.
- d. Lymphatic spread to draining lymph nodes.
- e. Blood spread to rest of bones of the body.
- f. Local spread to the overlying skin.

324. The first presenting symptom of osteosarcoma is:

- a. Swelling of the bone affected.
- b. Marked loss of weight and anemia.
- c. Fever of unknown origin.
- d. Ischemia of the limb affected.
- e. Severe intractable pain of the bone affected for 1 -2 months before appearance of a swelling.
- f. Pulmonary metastases.

325. The followings are radiological signs of osteosarcoma:

- a. Huge soft tissue swelling.
- b. Pathological fracture.
- c. New bone formation (sun-ray appearance).
- d. Destroyed epiphyseal cartilage.
- e. Codmann's triangle.

326. The most specific investigations of osteosarcoma are:

- a. Ultrasonography.
- b. Cat scanning of the limb.
- c. Plain x-ray of the limb affected.
- d. Selective arteriography of the limb affected.
- e. Radioisotope scanning by tc99 pyrophosphate.
- f. Biopsy of the bone affected is the most diagnostic.

327. The isotopes specific for osteosarcoma are:

- a. Radioactive hg 203.
- b. Radioactive strontium 85 or 87.
- c. Radioactive iodine.
- d. Radioactive selenium methionine.
- e. Radioactive tc99m pyrophosphate.

328. Codmann's triangle is:

- a. Triangle of metaphysis from which the tumour arises.
- b. Triangle of bone erosion by the tumour.
- c. Triangle of new bone formation at the elevated edge of the tumour due to irritation of subperiosteal blood vessels.
- d. Diagnostic of Ewing sarcoma of bone.
- e. Characteristic of osteoclastoma.

329. Santford technique used in treatment of osteosarcoma consists of:

- a. Pre-operative irradiation by 9000 rads.
- b. Waiting for 6 months then x-ray chest is done.
- c. Amputation is done if there is no metastasis in the lungs.
- d. Post-operative irradiation after amputation.
- e. If there is metastasis in the lungs, palliative chemotherapeutics like adriamycin, vincristine and methotrexate are given.

330. Malignant bone aneurysm is:

- a. Huge intraosseous aneurysm.
- b. Diffuse arterio-venous fistula of the bone.
- c. The telangiectatic type of osteosarcoma of the bone.
- d. It may be totally cystic tumour.
- e. The tumour is pulsating like aneurysm.

331. The commonest type of osteosarcoma is:

- a. Osteogenic osteosarcoma.
- b. Osteolytic osteosarcoma.
- c. Osteoclastoma.
- d. Telangiectatic type (malignant bone aneurysm).
- e. Parosteal osteosarcoma.
- f. Endosteal osteosarcoma.

332. Ewing's sarcoma:

- a. Affects boys between ages of 5-15 years.
- b. Diaphysis is the site of bone to be affected.
- c. Radius is the commonest bone to be affected.
- d. It arises from the osteoblasts of the bone marrow.
- e. Blood spread is the commonest and early method of spread.

333. The cells of Ewing's sarcoma:

- a. Small sized cells resembling lymphocytes.
- b. Large multinucleated cells resembling giant cells.
- c. Are mesodermal in origin.
- d. They arise from the endothelial lining of bone.
- e. Arranged around blood vessels in a rosette shape manner.

334. The rarest method of spread of Ewing's sarcoma is:

- a. Blood spread to the lungs.
- b. Blood spread to other bones.
- c. Local spread to the surrounding muscles.
- d. Lymphatic spread to the lymph nodes.
- e. Blood spread to the liver.

335. The typical presentations of Ewing's sarcoma are:

- a. Fever anorexia, headache and malaise.
- b. Sawing pain of the bone affected.
- c. Painful swelling of the bone affected.
- d. Pathological fracture.
- e. No pain at all.

336. Signs characteristic of Ewing's sarcoma are:

- a. Rise of temperature.
- b. Tachycardia.
- c. Toxaemia.
- d. Irregular, ill defined hard, tender & warm bone swelling.
- e. Signs of pathological fracture.

337. Onion-peel appearance of plain x-ray of the bone is characteristic of the following tumour:

- a. Osteoclastoma.
- b. Osteosarcoma of the osteogenic type.
- c. Osteolytic osteosarcoma.
- d. Fibrosarcoma.
- e. Multiple myelomatosis,
- f. Ewing's sarcoma.

338. The best line of treatment of Ewing's sarcoma is:

- a. Santford technique of treatment.
- b. Amputation.
- c. Excision of the tumour and bone grafting.
- d. Irradiation (very radiosensitive tumour).
- e. Cytotoxic drugs.

339. The cell of origin of multiple myelomatosis is:

- a. Osteoclasts.
- b. Osteoblast.
- c. Plasma'cells of the bone marrow.
- d. Chondroblasts.
- e. Fibroblasts of the periosteum.

340. The commonest bones to be affected by multiple myelomatosis are:

- a. Femur.
- b. Humerus.
- c. Ribs and clavicle.
- d. Vertebrae especially lower lumbar vertebrae.
- e. Skull, sternum, and scapula.

341. Pathology of multiple myelomatosis:

- a. Multiple firm or soft swellings.
- b. The swellings are well defined.
- c. They cause pathological fracture of bones affected.
- d. Formed histologically of large number of plasma cells.
- e. They cause new bone formation in concentric layers.

342. Clinical presentations of multiple myelomatosis:

- a. Anaemia, fever, and loss of weight.
- b. Hypercalcaemia.
- c. Hyperviscosity with thrombotic complications.
- d. Low backache.
- e. Pathological fracture.
- f. Recurrent urinary tract stone formation.

343. The most diagnostic investigation of multiple myeloma is:

- a. Anaemia and increased sedimentation rate.
- b. Plasma electrophoresis for myeloma proteins.
- c. Bone marrow puncture for abnormal plasma cells:
- d. X-ray of all bones of the body.
- e. Bence-john's proteinuria.

344. Bence-john's proteinuria:

- a. Abnormal gamma globulins.
- b. They undergo clotting at 80 degrees.
- c. They undergo clotting at 55°C, dissolved at 80°C and are reformed on cooling to 55°C again.
- d. Diagnostic for multiple myelomatosis.
- e. Positive in only 70% cases of m.myelomatosis.

345. The best line of treatment of multiple myelomatosis is:

- a. Irradiation of all tumours.
- b. Amputation of the bone affected.
- c. Triple attack in form of pre-operative irradiation, amputation, and post-operative irradiation.
- d. Cytotoxic drugs.
- e. General ttt in form of blood transfusion & vitamins.

346. The drug of choice for treatment of multiple myeloma is:

- a. Leukeran.
- b. Interferon.
- c. Methotrexate.
- d. Melphalan (sarcolysin).
- e. Immuran therapy.

347. Chondrosarcoma:

- a. Malignant tumour of chondroblasts.
- b. It may be endosteal or parosteal.
- c. Central type affects long bones like femur, tibia and humerus.
- d. Peripheral type is more common to affect flat bones (ribs and vertebrae).
- e. Common in adult age (30-50).

348. The commonest clinical presentation of chondrosarcoma are:

- a. Anaemia and loss of weight.
- b. Pulmonary metastases.
- c. Painless bone swelling (peripheral type).
- d. Painful swelling of the bone affected (central type).
- e. Pathological fracture.

349. Treatment of chondrosarcoma is:

- a. Irradiation of the bone affected.
- b. Chemotherapeutics.
- c. Amputation is the best line of treatment of operable cases.
- d. Local excision of bone tumour with bone chips.
- e. Prognosis of treatment is better than osteosarcoma.

350. Fibrosarcoma of bones:

- a. Common above age of 50 years.
- b. Femur, tibia, humerus, and radius are common sites.
- c. Common to spread by blood stream to lungs and other bones.
- d. Presents clinically as bone swelling which may be painless or painful (rare).
- e. Amputation is the treatment of choice.
- f. fibrosarcoma is radioresistant.

351. Clinical presentations of bone metastases are:

- a. Anaemia and loss of weight.
- b. Bone swelling.
- c. Bone aches.
- d. Pathological fracture.
- e. Primary cause.

352. Examples of generalized bone deformities are:

- a. Osteogenesis imperfecta.
- b. Diaphyseal aclasis.
- c. Phocomelia.
- d. Osteopetrosis.
- e. Congenital dislocation hip.

353. Fanconi's syndrome:

- a. Rickets.
- b. Hypophosphataemia.
- c. Aminoaciduria.
- d. Glycosuria.
- e. Hepatomegaly and splenomegaly.

354. Congenital hip dislocation (CHD.):

- a. Neonates and infants.
- b. Affects girls more than boys.
- c. Bilateral in 80% of cases.
- d. It is due congenital laxity of ligaments of the hip joint.
- e. Common in the Italian race.

355. Changes occurring due to persistence of the head outside the glenoid cavity are:

- a. Upward and lateral displacement of the head with retardation of its growth.
- b. Neck of femur becomes antedated beyond normal angle for infants.
- c. Acetabulum becomes more deep.
- d. Capsule of the joint becomes more elongated.
- e. Labium of the joint becomes folded in the cavity of the acetabulum.

356. The best method of diagnosis of CHD at birth is:

- a. Symmetry of the buttocks.
- b. Wide range of movement of the hip joint.
- c. Telescopic movement of the limb.
- d. Wide perineum in bilateral cases.
- e. Ortolani's test is diagnostic.

357. The most diagnostic investigation of CHD is:

- a. X-ray of the hip joint.
- b. Ultrasonography.
- c. Cat scanning of the hip.
- d. Arthroscopy and arthrography.
- e. NMR of hip joint.

358. Salter's operation:

- a. Used for treatment of CHD At birth.
- b. Used for treatment of CHD in infants up to age of 4 years.
- c. Of value if other measures failed for treatment. .
- d. It consists of osteotomy of the innominate bone just above acetabulum, and rotation of lower half of bone down and outwards.
- e. May be of value in the adult patients suffering from T.B arthritis.

359. Talipes equino-varus:

- a. Adducted, inverted and plantarly flexed foot.
- b. It may be congenital or acquired on top of paralysis of lateral popliteal nerve.
- c. Congenital deformity can be corrected while acquired one can not.
- d. Acquired deformity is bilateral while congenitalis unilateral.
- e. In the acquired type sole of the foot i full of corrugation.

360. Causes of genu valgum (knock-knees):

- a. Congenital.
- b. Malunited fracture.
- c. Paget's disease of bones.
- d. Rheumatoid or osteoarthritis.
- e. Ricketes.

361. Congenital genu valgum:

- a. Rare disease.
- b. Common between ages of 3-5 years.
- c. With knees straight, malleoli are away from each other.
- d. Usually correctable by growth of the boy or the girl.
- e. Mc ewen osteotomy can correct cases of adult ages.

362. The commonest cause of genu varum (bow legs):

- a. Congenital.
- b. Malunited fracture.
- c. Rheumatoid arthritis.
- d. Ricketes or osteomalacia.
- e. Paget's disease of bones.

363. Examples of osteochondritis with infarction of the epiphysis:

- a. Pertdhe's disease.
- b. Scheurmann's disease.
- c. Calve's disease.
- d. Kohler's disease.
- e. Kienbock's disease.

364. Perthe's disease:

- a. Common between ages of 3-10 years.
- b. Bilateral in 15-20% of cases.
- c. Common in italian girls.
- d. Presents clinically by pain in the hip joint and limping after walking.
- e. The head of the femur undergoes three stages of degeneration, flattening, and regeneration.
- f. There is limitations to all types of movement except medial rotation.

365. Radiological signs characteristic of perthes disease are:

- a. Increase density of the epiphysis.
- b. Fragmentation of the epiphysis.
- c. Head is flat in shape.
- d. Osteoarthritis.
- e. Dislocation of the head of the hip joint.

366. Causes of coxa vara:

- a. Congenital (commonest).
- b. Malunited fracture is the commonest cause.
- c. Perthe's disease of the hip.
- d. Slipped femoral epiphysis.
- e. Septic arthritis of the hip joint.

367. The commonest bone to affected by paget's disease is:

- a. Long bones especially femur.
- b. Vertebrae.
- c. Skull.
- d. Flat bones.
- e. Scapula.

368. The common complications of paget's disease are:

- a. Malignant transformation.
- b. Heart failure.
- c. Osteoarthritis.
- d. Dislocations.
- e. Osteoarthritis.

369. The drug of choice for treatment of pain of perthe's disease is:

- a. Morphia.
- b. Aspirin.
- c. Parathyroid hormone.
- d. Calcitonin.
- e. Vitamin d.

370. Causes of flat foot (club plannus).

- a. Congenital.
- b. Paralytic.
- c. Spastic type.
- d. Malunited fracture (pott's fracture)
- e. Osteoma of the foot.

MCQs Answers

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

24. C
25. D
26. C
27. C
28. E
29. D
30. C
31. B
32. C
33. D
34. B
35. B
36. A
37. B
38. A
39. A
40. C
41. D
42. C
43. D
44. B
45. B
46. B

47. B
48. B
49. E
50. A
51. D
52. B
53. A
54. E
55. D
56. B
57. B
58. B
59. C
60. C
61. B
62. D
63. C
64. C
65. D
66. B
67. A
68. A
69. D

70. C
71. D
72. C
73. D
74. C
75. E
76. B
77. C
78. A
79. C
80. C
81. C
82. C
83. C
84. B
85. C
86. C
87. B
88. C
89. E
90. E
91. C
92. D

93. D
94. D
95. A
96. B
97. C
98. C
99. E
100. D
101. E
102. C
103. D
104. E
105. C
106. D
107. D
108. A
109. A
110. C
111. C
112. D
113. C
114. C
115. E

116. B
117. C
118. C
119. E
120. D
121. B
122. E
123. D
124. E
125. C
126. A
127. B
128. C
129. E
130. E
131. B
132. D
133. E
134. D
135. A
136. E
137. D
138. A
139. D
140. C
141. D

142. C
143. C
144. E
145. A
146. B
147. B
148. E
149. E
150. D
151. C
152. B
153. B
154. C
155. B
156. C
157. A
158. C
159. D
160. A
161. C
162. B
163. D
164. E
165. C
166. E
167. C

168. C
169. E
170. B
171. C
172. A
173. D
174. E
175. E
176. D
177. B
178. D
179. D
180. E
181. E
182. C
183. D
184. C
185. D
186. E
187. C
188. D
189. D
190. B
191. C
192. D
193. D

194. A
195. D
196. D
197. C
198. B
199. C
200. C
201. E
202. B
203. A
204. E
205. D

True & False Answers

1. B, E	25. D	49. A, B, C	73. A, B, C, D	97. A, B, D, E
2. B, D, E	26. NONE	50. A, B, C, D	74. B, C, E	98. A, B, D
3. B, E	27. B, D, E	51. B, C	75. NONE	99. B, C, D
4. A, B, C	28. C, D	52. B, C, D, E	76. A, B, E	100. A, B, C, D
5. A	29. C, D, E	53. B, C, D	77. A, C, E	101. A, B, C, D
6. A, D	30. A, B, D, E	54. A, B, D, E	78. A, C, D, E	102. A
7. B, C, D	31. A, C	55. A, C, D	79. B, C, D	103. A
8. A, C, E	32. D	56. B, D, E	80. B, C	104. D
9. B, D	33. A, D, E	57. A, B, C	81. A, B, C, D	105. D
10. B, D	34. B, D	58. A, B, C, D	82. A, C, E	106. B
11. D	35. C	59. B, D	83. A, B, D	107. D
12. C, D, E	36. B, C, D	60. B, C, E	84. B, C, E	108. B, C, D
13. A, D	37. C, E	61. A, B, D	85. C, D, E	109. D, E
14. A	38. NONE	62. E	86. C, D, E	110. D
15. A, C, D	39. A, B, D, E	63. A, C, D, E	87. A, B	111. ALL
16. A, B, C, D, E	40. A, B	64. B, C	88. B, C	112. E
17. B, C, E	41. NONE	65. A, B, C, D	89. B, D, E	113. D
18. D	42. C, D	66. A, D	90. B, D	114. C
19. A, B, C	43. A, B	67. A, B, D	91. A, B, C, D	115. ALL
20. B	44. B, C, D	68. A, D, E	92. A, B, D	116. A, B, C, E
21. A, B, C	45. A, C, D, E	69. C, D	93. A, B, C	117. D
22. E	46. A, B, C, E	70. B, D	94. A, C, D	118. A
23. A, B	47. A, D, E	71. A, B, C	95. B, D	119. A, B, D, E
24. A, B, C	48. A, C, E	72. A, C, D, E	96. D, E	120. B, C, D, E

121.A,B,C,E	147.ALL	173.A	199.E	225.ALL
122.A,B,C,D	148.ALL	174.D	200.A	226.ALL
123.A,B,C,E	149.E	175.ALL	201.A,B,C,E	227.ALL
124.A,B,C,E	150.B,C,E	176.E	202.ALL	228.A,B,C,D
125.B	151.E	177.ALL	203.ALL	229.ALL
126.B	152.ALL	178.A,B,C	204.D	230.A,B,C
127.B,E	153.ALL	179.ALL	205.A,B,C,D	231.A,B,C,D
128.E	154.D	180.ALL	206.A,B,C	232.F
129.C,E	155.E	181.ALL	207.A,B,C,D	233.A,D
130.C,D	156.B,C	182.ALL	208.A,B,C,E	234.A,B,D
131.A,C,E	157.A,B,D	183.C,D	209.A,B,C,E	235.A,B,C,D
132.A,B,C,D	158.A,B,C	184.ALL	210.B,C	236.A,B,C,D,E
133.C	159.A	185.A	211.D,E	237.E
134.E	160.A,B,C,E	186.F	212.A,B,D	238.ALL
135.D	161.B,C	187.D	213.ALL	239.A,B,E
136.ALL	162.A,B,C	188.A,B,C,D	214.A,C,E	240.C,E
137.A,C,D	163.B	189.ALL	215.B,D	241.D
138.D	164.D	190.A,B,D,E	216.A	242.ALL
139.E	165.E	191.A,B,C,E	217.A,B,D	243.F
140.A,C,D	166.ALL	192.ALL	218.ALL	244.D
141.A,B,D	167.ALL	193.ALL	219.A,B,C,E	245.D
142.C	168.ALL	194.A,B,E	220.A,C,D,E	246.A,B,C,D,F
143.ALL	169.A,C,D,E	195.A,C,D,E	221.A,B,D	247.A,B,CE,F
144.B	170.A,B,C,	196.E	222.B,C,D,E	248.C,D
145.A,B,E	171.E	197.A,C,E	223.A,C,D,E	249.A,B,C,D
146.A,B,C,D	172.B,C,D	198.ALL	224.ALL	250.A,B

251.ALL	277.A,B,C	303.ALL	329.ALL	355.A,B,D,E
252.A,B,D,E	278.A,D	304.E	330.C,D,E	356.C
253.A,C	279.A,B,C	305.A,B,D,E	331.A	357.D
254.A,E	280.B	306.A,B,C,E	332.A,B,E	358.C,D,E
255.E	281.C	307.E	333.A,C,D,E	359.A,B
256.A,B,C,E,F	282.D	308.ALL	334.D	360.ALL
257.A,C,D,E,F	283.E	309.ALL	335.A,B,C,D	361.ALL
258.ALL	284.B,C,D	310.C,D,E	336.ALL	362.ALL
259.ALL	285.ALL	311.B,D	337.F	363.ALL
260.A,B,C	286.B	312.ALL	338.D	364.F
261.A,B,C,E	287.ALL	313.A,B,C,E	339.C	365.ALL
262.A	288.A,C,D	314.C	340.D	366.ALL
263.ALL	289.A,B,C,D	315.A,B,C	341.E	367.B,C
264.B	290.ALL	316.A,B,C	342.ALL	368.A,B,C,E
265.C	291.ALL	317.D	343.C	369.D
266.ALL	292.A,B,C,D	318.D	344.A,C,E	370.A,B,C
267.ALL	293.ALL	319.E	345.D	
268.ALL	294.E	320.C	346.D	
269.C	295.E	321.C	347.ALL	
270.A,B,C,D	296.A,C,E	322.A,B,C	348.C,D,E	
271.A,B,C,E	297.A,B,C,E	323.C	349.C	
272.A,B,C,D	298.ALL	324.E	350.ALL	
273.ALL	299.C,E	325.A,B,C,E	351.ALL	
274.E	300.ALL	326.A,C	352.A,B,D	
275.D	301.E	327.A,B,E	353.????	
276.ALL	302.A,B,C	328.C	354.A,B,D,E	