### 1. A 55 Years-old patient has bone pain, skeletal deformity, and fracture with arthritis, particularly of the hip and the spine with bowing of the tibia with Neurologic complications in the form of deafness, vertigo, and tinnitus. He has markedly elevated alkaline phosphatase levels. Later he develops high-output cardiac failure. Most likely disease is:

(a) Rickets  
(b) Osteomalacia  
(c) Osteodystrophy  
(d) Pagets Disease

### 2. Feature of Ankylosing spondylitis is association with:

(a) HLA-DR2  
(b) HLA-DR3  
(c) HLA-DR4  
(d) HLA B 27

### 3. Dry mouth and dry eyes can be seen in:

(a) Felty's Syndrome  
(b) Sjogren's Syndrome  
(c) Reiter's Syndrome  
(d) Behcets Syndrome

### 4. Nerve related to shoulder joint is:

(a) Ulnar nerve  
(b) Median nerve  
(c) Radial nerve  
(d) Axillary nerve

### 5. Radiological bone defects, exophthalmos and diabetes insipidus are seen in:

(a) Hand–Schuller–Christian disease  
(b) DIDMOAD Syndrome  
(c) Thyrotoxicosis fasciata  
(d) Huthle cell carcinoma

### 6. Main features of multiple myeloma are all except:

(a) Monoclonal protein in serum or urine  
(b) Increased plasma cells in the bone marrow  
(c) Osteogenic bone lesions  
(d) Hypercalcemia

### 7. March fracture usually involves:

(a) 3rd metatarsal  
(b) 2nd metatarsal  
(c) 4th metatarsal  
(d) 5th metatarsal

### 8. Codman's triangle and Sunray appearance are seen in:

(a) Osteosarcoma  
(b) Ewing's sarcoma  
(c) Osteoclastoma  
(d) Chondrosarcoma

### 9. Trimalleolar fracture is:

(a) Jone's fracture  
(b) Pott's fracture  
(c) Smith's fracture  
(d) Cotton's fracture

### 10. Markedly elevated alkaline phosphatase levels are seen in:

(a) Rickets  
(b) Osteomalacia  
(c) Osteodystrophy  
(d) Pagets Disease

### 11. Which one of the following is the investigation of choice for evaluation of suspected Perthes' disease:

(a) Plain X-ray  
(b) Ultrasonography (US)  
(c) Computed Tomography (CT)  
(d) Magnetic Resonance Imaging (MRI)
### 12. Intervertebral disc is made up of:
- (a) Fibro cartilage
- (b) Elastic cartilage
- (c) Hyaline cartilage
- (d) None

### 13. Rheumatoid Arthropathy typically affects:
- (a) Lumbar Spine
- (b) Symmetrically small joints
- (c) Sacroiliac joints
- (d) Distal interphalangeal joints

### 14. A 44-years-old Female who is a typist presents to her physician with mild complaints of burning and tingling sensations in the left hand for several months. She is frequently awakened at night by pain in the same hand. The pain is elicited by extreme dorsiflexion of the wrist. Which of the following is the most likely diagnosis?
- (a) Angina pectoris
- (b) Colles fracture
- (c) Cubital Tunnel syndrome
- (d) Carpal tunnel syndrome

### 15. A two-years-old presents with multiple fractures in different stages of healing brought by over concerned parents. Most likely cause is:
- (a) Osteogenesis Imperfecta
- (b) Sexual abuse
- (c) Myositis ossificans
- (d) Battered Baby Syndrome

### 16. A six-years-old with bilateral and symmetrical fractures and blue scleras presented Bones are osteopenic and brittle. Likely cause is:
- (a) Osteogenesis imperfecta
- (b) Sexual abuse
- (c) Myositis ossificans
- (d) Battered Baby Syndrome

### 17. A patient with multiple injuries on day 2 deteriorates and develops Tachycardia, Tachypnea, ↓PO2, and rash. Most likely cause is:
- (a) Hemorrhage
- (b) Embolism
- (c) Thrombosis
- (d) Neurogenic shock

### 18. Increased bone density is seen in:
- (a) Hypervitaminosis B and Hypervita-minosis D
- (b) Hypervitaminosis C and Hypervita-minosis D
- (c) Hypervitaminosis E and Hypervita-minosis D
- (d) Hypervitaminosis A and Hypervita-minosis D

### 19. A 22-years-old young boy presents to a Rheumatology clinic with chief complaints of low back pain for the past 6 months which was accompanied by stiffness of the lower spine. He denies any gastrointestinal or genital infections. Detailed Physical Examination reveals moderate limitation of back motion and tenderness of the lower spine. X-ray films of the vertebral column and pelvic region show flattening of the lumbar curve and subchondral bone erosion involving the sacroiliac joints. Which of the following is the most likely diagnosis?
- (a) Psoriatic arthritis
- (b) Gout
- (c) Caplans syndrome
- (d) Ankylosing spondylitis

### 20. A bony disease is characterised by Increased generation and overactivity of osteoclasts and the calcification rate is characteristically increased with increased urinary excretion of small peptides containing hydroxyproline reflects:
- (a) Myeloma
- (b) Osteogenesisimperfecta
- (c) Pagets Disease
- (d) Eosinophilic granuloma

### 21. Claw hand is caused by lesion involving:
- (a) Ulnar nerve
- (b) Median nerve
- (c) Radial nerve
- (d) Posterior interosseous nerve

### 22. A 15 years-old boy presented with a mass in the distal femur. X-ray from the lesion showed features of Codman’s triangle and Sunray appearance. The diagnosis is:
- (a) Osteosarcoma
- (b) Ewing’s sarcoma
- (c) Osteoclastoma
- (d) Chondroblastoma
23. The “Gold Standard” for the diagnosis of Osteoporosis is:
   (a) CT
   (b) Dual energy X-ray absorptiometry
   (c) MRI
   (d) Single energy X-ray absorptiometry

24. Rotator Cuff is formed by all, except:
   (a) Infraspinatus
   (b) Supraspinatus
   (c) Teres Major
   (d) Teres Minor

25. Saturday Night Palsy caused due to:
   (a) Radial nerve injury in hand
   (b) Radial nerve injury in spiral groove
   (c) Ulnar nerve injury in hand
   (d) Ulnar nerve injury in spinal groove

26. In an elderly male with knee pain Identification of calcium pyrophosphate crystals in joint aspirates is diagnostic of:
   (a) OA
   (b) Rheumatoid arthritis
   (c) Gout
   (d) Pseudogout

27. A hard and tender swelling arising from diaphysis of bone with characteristic feature of onion skinning has:
   (a) Bone cyst
   (b) Chondroma
   (c) Chondrosarcoma
   (d) Sarcoma

28. Which of the following is a ‘Pulsating tumor’ of bone?
   (a) Osteosarcoma
   (b) Chondrosarcoma
   (c) Ewing’s sarcoma
   (d) Eosinophilic Granuloma

29. Autologous bone graft is commonly taken from:
   (a) Iliac crest
   (b) Tibial tuberosity
   (c) Greater trochanter
   (d) Fibula

30. Coronary ligaments of the knee are:
   (a) Ligaments connecting the menisci to femur
   (b) Ligaments connecting the menisci to tibia
   (c) Ligaments connecting the anterior horns of both menisci
   (d) Ligaments connecting the lateral meniscus to capsule

31. In acute knee injuries with swelling and hemarthrosis with muscle spasm which of the following tests in most sensitive to detect anterior cruciate ligament injury:
   (a) Lachman’s test
   (b) Pivot shift test
   (c) Apley’s grinding test
   (d) Anterior drawer test

32. A Patient with HIV is on therapy with protease inhibitors. He presents with limitation of abduction and internal rotation of the hip. The most probable diagnosis is:
   (a) Tuberculosis of hip joint
   (b) A vascular necrosis (AVN) of femoral head
   (c) Secondary osteoarthritis of hip
   (d) None

33. In a patient with gouty arthritis, Diagnostic synovial fluid aspiration will show:
   (a) Monosodium Urate crystals
   (b) Calcium Pyrophosphate crystals
   (c) Mononuclear Leucocytosis
   (d) Polymorphonuclear Leukocytosis

34. Recurrent dislocations are least commonly seen in:
   (a) Ankle
   (b) Hip
   (c) Shoulder
   (d) Patella

35. All the following nerves are involved in entrapment neuropathy, except:
   (a) Femoral nerve
   (b) Median nerve
   (c) Ulnar nerve
   (d) Lateral cutaneous nerve of thigh
<table>
<thead>
<tr>
<th>Test Papers for Practice</th>
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<tbody>
<tr>
<td><strong>36.</strong> Milkman’s fracture is a type of:</td>
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<tr>
<td>(a) Pseudofracture</td>
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<tr>
<td>(b) Clavicular fracture</td>
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<tr>
<td>(c) Humeral fracture</td>
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<tr>
<td>(d) Metacarpal fracture</td>
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| **37.** Which of the following statements about ‘Menisci’ is not true: |
|   (a) Medial meniscus is more mobile than lateral |
|   (b) Lateral meniscus covers more tibial articular surface than lateral |
|   (c) Medial meniscus is more commonly injured than lateral |
|   (d) Mensci are predominantly made up of Type I Collagen |

| **38.** A Benign Tumors lesion characterized by pathological nidus is: |
|   (a) Osteochondritis dissecans |
|   (b) Osgood-Schlatter disease |
|   (c) Osteoid osteoma |
|   (d) Legg-Calve Perthes disease |

| **39.** “Sacrolitis with HLA B 27” association and diminished chest expansion are seen in: |
|   (a) Osteoarthritis |
|   (b) Juvenile rheumatoid arthritis |
|   (c) Psoriatic arthritis |
|   (d) Ankylosing spondylitis |

| **40.** “Bamboo Spine” is seen in: |
|   (a) Osteoarthritis |
|   (b) Juvenile rheumatoid arthritis |
|   (c) Psoriatic arthritis |
|   (d) Ankylosing spondylitis |

| **41.** Soft tissue swelling erosions, periostitis, asymmetrical sacroiliitis, and spondylitis with asymmetrical nonmarginal bulky syndesmophytes are seen in: |
|   (a) Osteoarthritis |
|   (b) Juvenile rheumatoid arthritis |
|   (c) Psoriatic arthritis |
|   (d) Reiter’s syndrome |

| **42.** The Nerve supply to Triceps is: |
|   (a) Ulnar nerve |
|   (b) Median nerve |
|   (c) Radial nerve |
|   (d) Axillary nerve |

| **43.** Freiberg’s Disease is: |
|   (a) Osteochondritis of lunate |
|   (b) Osteochondritis of Metatarsal head |
|   (c) Osteochondritis of capitulum |
|   (d) Osteochondritis of vertebrae |

| **44.** “Extra-articular manifestations” in Ankylosing spondylitis are all, except: |
|   (a) Uveitis |
|   (b) Urethritis |
|   (c) Aortitis |
|   (d) None |

| **45.** Walking on a slippery floor the lady fell onto her outstretched right hand. After sometime she felt tenderness in the area of anatomical snuff box. The bone she would have most likely fractured is: |
|   (a) Hamate |
|   (b) Scaphoid |
|   (c) Lunate |
|   (d) Capitate |

| **46.** Median nerve injury is seen with: |
|   (a) Supracondylar fracture |
|   (b) Scaphoid fracture |
|   (c) Carpal tunnel syndrome |
|   (d) Colles fracture |

| **47.** A 12 years old boy comes to an orthopedic clinic with difficulty walking. There is Pain and limp. X-ray shows distorted femoral neck and Head. The diagnosis is: |
|   (a) Perthes Disease |
|   (b) Severs Disease |
|   (c) SCFE |
|   (d) Osgood Schalters Disease |
48. A young adult with tuberculosis of spine after 3 years presents with swelling in upper thigh. Most Likely diagnosis is:
   (a) Psoas abscess
   (b) Subphrenic abscess
   (c) Ischiorectal abscess
   (d) Pelvic abscess

49. Keinbock’s Disease is:
   (a) Osteochondritis of lunate
   (b) Osteochondritis of Metatarsal head

50. Men I Syndrome is also called as:
   (a) Polyglandular Type 1
   (b) Polyglangular Type 2
   (c) Wermer syndrome
   (d) Sipple syndrome
1. The Nerve supply to Triceps is:
   (a) Ulnar nerve
   (b) Median nerve
   (c) Radial nerve
   (d) Axillary nerve

2. Osteitis deformans is also known as:
   (a) Rickets
   (b) Osteomalacia
   (c) Osteodystrophy
   (d) Paget's Disease

3. Inferior dislocation of shoulder involves:
   (a) Posterior interosseous nerve
   (b) Axillary nerve
   (c) Suprascapular nerve
   (d) Median nerve

4. Deltoid is supplied by:
   (a) Ulnar nerve
   (b) Median nerve
   (c) Radial nerve
   (d) Axillary nerve

5. “OsGood Schalters” disease is:
   (a) Osteochondritis of lunate
   (b) Osteochondritis of Metatarsal head
   (c) Osteochondritis of Tibial Tubercle
   (d) Osteochondritis of vertebrae

6. Identification of calcium pyrophosphate crystals in joint aspirates is diagnostic of:
   (a) OA
   (b) Rheumatoid arthritis
   (c) Gout
   (d) Pseudogout

7. All are true about Sciatic nerve, except:
   (a) Is the thickest nerve in the body
   (b) Begins in the pelvis and terminates at the superior angle of the popliteal fossa by dividing into the tibial and common peroneal nerves
   (c) This is the largest branch of sacral plexus
   (d) Is accompanied by an artery which is a branch of superior gluteal artery

8. Nerve not arising from Posterior cord of Brachial plexus is:
   (a) Radial
   (b) Medial cutaneous nerve of arm
   (c) Nerve to latissimus dorsi
   (d) Upper and lower subscapular

9. Incorrect about spinal nerves is:
   (a) Cervical-8
   (b) Thoracic-10
   (c) Lumbar-5
   (d) Sacral-5

10. Needle shaped negatively birefringent and Tophi are diagnostic of:
    (a) OA
    (b) Rheumatoid arthritis
    (c) Gout
    (d) Septic arthritis

11. Bony enlargement of the DIP (Heberden nodes) and PIP (Bouchard nodes) joints are seen in:
    (a) OA
    (b) Rheumatoid arthritis
    (c) Gout
    (d) Septic arthritis

12. Paget's disease develops into:
    (a) Osteosarcoma
    (b) Osteoclastoma
    (c) Osteoid Osteoma
    (d) Bone cyst

13. Tumor Sensitive to NSAIDS is:
    (a) Osteosarcoma
    (b) Osteoclastoma
    (c) Osteoid Osteoma
    (d) Bone cyst
14. Hexagonal benzene ring shaped crystals are a feature of:
   -(a) Cystine stones
   -(b) Uric acid stones
   -(c) Triple phosphate
   -(d) Calcium stones

15. Meralgia paresthetica is due to injury of:
   -(a) Ilio-inguinal
   -(b) Ilio-hypogastric
   -(c) Lateral cutaneous nerve of thigh
   -(d) Sciatic

16. All are true about Fat embolism syndrome, except:
   -(a) Id due to fat entering torn venous channels at fracture site
   -(b) Presents with pyrexia, tachycardia, tachypnoea, reduced consciousness
   -(c) May develop petechial rash
   -(d) Arterial gases show hypocapnia

17. Increased levels of urinary excretion of hydroxyproline and excretion of pyridinoline cross-links is seen in:
   -(a) Rickets
   -(b) Osteomalacia
   -(c) Osteodystrophy
   -(d) Pagets Disease

18. Nerve involved in Wrist drop is:
   -(a) Ulnar nerve
   -(b) Median nerve
   -(c) Radial nerve
   -(d) Axillary nerve

19. Keinbocks disease is characterized by pain and swelling over:
   -(a) The Medial Epicondyle
   -(b) Lunate
   -(c) 1st Metatarsal
   -(d) Femoral Condyle

20. Kohler's disease is characterized by Avascular Necrosis of:
   -(a) The Femoral Head
   -(b) Lunate

21. Friebergs disease is characterized by Avascular Necrosis of:
   -(a) The Femoral Head
   -(b) Second Metatarsal
   -(c) Tarsal Navicular
   -(d) Scaphoid

22. In Hammer toe there is a:
   -(a) Extension deformity at the proximal interphalangeal joint, and the metatarso-phalangeal joint is flexed.
   -(b) Flexion deformity at the proximal interphalangeal joint, and the metatarso-phalangeal joint is extended.
   -(c) Extension deformity at the proximal interphalangeal joint, and the metatarso-phalangeal joint is extended.
   -(d) Flexion deformity at the proximal interphalangeal joint, and the metatarso-phalangeal joint is extended.

23. In Mallet toe there is a:
   -(a) Extension deformity at the distal interphalangeal joint
   -(b) Extension deformity at the Proximal interphalangeal joint
   -(c) Flexion deformity at the Proximal interphalangeal joint
   -(d) Flexion deformity at the distal interphalangeal joint

24. The Disease that represents an extension contracture with dorsal subluxation of the metatarsophalangeal joint in association with flexion deformities of both the proximal and distal interphalangeal joints is:
   -(a) Claw toe
   -(b) Mallet toe
   -(c) Hammer toe
   -(d) Tennis toe

25. Tennis Elbow is characterized by pain and swelling over:
   -(a) The Medial Epicondyle
   -(b) The Lateral Epicondyle
   -(c) Tibial Condyle
   -(d) Femoral Condyle
26. The Golfer’s Elbow is characterized by pain and swelling over:
   (a) The Medial Epicondyle
   (b) The Lateral Epicondyle
   (c) Tibial Condyle
   (d) Femoral Condyle

27. March Fracture is characterized by pain and swelling over:
   (a) The Scaphoid
   (b) The Calcaneum
   (c) Metatarsal
   (d) Radial Styloid process

28. Jones Fracture is characterized by pain and swelling over:
   (a) 1st Metatarsal
   (b) 2nd Metatarsal
   (c) 3rd Metatarsal
   (d) 5th Metatarsal

29. Chauffers Fracture is characterized by pain and swelling over:
   (a) The Scaphoid
   (b) The Calcaneum
   (c) Metacarpals
   (d) Radial Styloid process

30. Multicentric origin and onion peel appearance are seen in:
   (a) Ewings sarcoma
   (b) Osteoclastoma
   (c) Chondrosarcoma
   (d) Osteosarcoma

31. Multicentric origin and High response to radiotherapy is seen in:
   (a) Ewings sarcoma
   (b) Osteoclastoma
   (c) Chondrosarcoma
   (d) Osteosarcoma

32. Histopathology of a bony lesion suggesting pseudorossettes in a 15 years old child is seen in:
   (a) Ewings sarcoma
   (b) Osteoclastoma

33. Combination of low hemoglobin, increased calcium with elevated ESR with osteolytic vertebral lesions but with normal alkaline phosphatase levele indicates:
   (a) Ewings sarcoma
   (b) Osteoclastoma
   (c) Myeloma
   (d) Osteosarcoma

34. Serum electrophoresis with urine examination would be most beneficial in:
   (a) Ewings sarcoma
   (b) Osteoclastoma
   (c) Myeloma
   (d) Osteosarcoma

35. Typical moth eaten appearance in a highly radiosensitive tumor resembling ewings sarcoma with better prognosis is indicative of:
   (a) Reticulum cell sarcoma
   (b) Osteoclastoma
   (c) Myeloma
   (d) Osteosarcoma

36. PAS Positivity in a lesion resembling osteomyelitis with raised ESR is suggestive of:
   (a) Ewings sarcoma
   (b) Chondrosarcoma
   (c) Chondroma
   (d) Bone cyst

37. Hair pin arrangement of vessels is seen in:
   (a) Diaphysis
   (b) Metaphysis
   (c) Epiphysis
   (d) Periosteum

38. Commonest site of Osteomyelitis in a bone is:
   (a) Diaphysis
   (b) Epiphysis
   (c) Metaphysis
   (d) Periosteum
39. Drugs used in treatment of Paget's disease are:
   (a) Mithramycin
   (b) Gallium
   (c) Calcitonins
   (d) All of above

40. Masonnere's Fracture refers to fracture of:
   (a) The base of Scaphoid
   (b) The neck of fibula
   (c) The first Metacarpal
   (d) Ulnar Styloid process

41. Malgaignes fracture is characterized by pain and swelling over:
   (a) The Medial Epicondyle
   (b) Lunate
   (c) 1st Metatarsal
   (d) Supracondylar area

42. Bennet's Fracture refers to fracture of:
   (a) The base of Scaphoid
   (b) The neck of Fibula
   (c) The Base of first Metacarpal
   (d) The Base of first Metatarsal

43. Pott’s fracture is:
   (a) Bimalleolar fracture
   (b) Trimalleolar fracture
   (c) Fracture of styloid processes of upper limb
   (d) Fracture of styloid process of skull

44. Student's elbow is:
   (a) Olecranon Bursitis
   (b) Subacromial Bursitis
   (c) Bursitis around Medial Epicondyle
   (d) Bursitis around Lateral Epicondyle

45. Dawburn’s Sign is Positive in:
   (a) Olecranon Bursitis
   (b) Subacromial Bursitis
   (c) Bursitis around Medial Epicondyle
   (d) Bursitis around Lateral Epicondyle

46. Irritation of the bursa near the attachment of the sartorius and hamstring muscles is:
   (a) Prepatellar bursitis
   (b) Infrapatellar bursitis
   (c) Anserine bursitis
   (d) Trochanteric bursitis

47. Ischial Bursitis is:
   (a) Housemaid's knee
   (b) Weaver's Bottom
   (c) Clergyman's Knee
   (d) Irritable hip

48. The Term “Scheurmanns” disease is:
   (a) Osteochondritis of Tibial Tubercle
   (b) Osteochondritis of Metatarsal head
   (c) Osteochondritis of Lunate
   (d) Osteochondritis of Vertebrae

49. In a Patient with Injury to upper limb with Subcoracoid dislocation of shoulder would involve:
   (a) Anterior interosseous nerve
   (b) Posterior interosseous nerve
   (c) Axillary nerve
   (d) Median nerve

50. In Paralysis of Triceps and Anconeus the nerve damaged is:
   (a) Ulnar nerve
   (b) Median nerve
   (c) Radial nerve
   (d) Axillary nerve
1. In a Patient with Injury to upper limb with Mid shaft injury to Humerus would involve:
   (a) Axillary nerve
   (b) Median nerve
   (c) Radial nerve
   (d) Ulnar nerve

2. In a Patient with Injury to upper limb with injury to area around medial epicondyle would involve:
   (a) Brachial Plexus
   (b) Median nerve
   (c) Radial nerve
   (d) Ulnar nerve

3. In a Patient with Injury to Surgical Neck of Humerus would involve:
   (a) Axillary nerve
   (b) Median nerve
   (c) Radial nerve
   (d) Ulnar nerve

4. Paralysis of Deltoid would be a result of injury to:
   (a) Axillary nerve
   (b) Median nerve
   (c) Radial nerve
   (d) Ulnar nerve

5. Winging of Scapula would be a result of injury to:
   (a) Axillary nerve
   (b) Median nerve
   (c) Thoracodorsal nerve
   (d) Ulnar nerve

6. Paralysis of Triceps Brachii would be a result of injury to:
   (a) Axillary nerve
   (b) Median nerve
   (c) Radial nerve
   (d) Ulnar nerve

7. Klumpke’s Palsy is entrapment of the:
   (a) Upper Trunk of Brachial Plexus
   (b) Sural nerve

8. A 44 years old man had a (RTA) Road traffic accident and sustained fracture of femur. Two days later he developed sudden breathlessness. The most probable cause can be:
   (a) Pneumonia
   (b) Congestive heart failure
   (c) Bronchial asthma
   (d) Fat Embolism

9. A 45 years old was given steroids after Renal transplant surgery. After three years he had difficulty in walking and pain in both hips. Which one of the following is most likely cause:
   (a) Primary Osteoarthritis
   (b) Avascular necrosis
   (c) Tuberculosis
   (d) Aluminum toxicity

10. “Looser’s zones” can be characteristically seen in:
    (a) Osteomalacia
    (b) Paget’s disease
    (c) Osteogenesis imperfecta
    (d) All of the above

11. X-ray features of Hypoparathyroidism are the following, except:
    (a) Osteosclerosis
    (b) Calvarial thickening
    (c) Subperiosteal resorption
    (d) Subcutaneous calcification

12. Expansile lytic lesion with fluid-fluid levels within it in the metaphysis of fibula seen on CT scan and MRI in an early adolescent female is typical of:
    (a) Giant cell tumor
    (b) Aneurysmal bone cyst
    (c) Hemangioma
    (d) Fibrous dysplasia