****

**KENYA MEDICAL TRAINING COLLEGE**

**DEPARTMENT: ORTHOPAEDICS AND TRAUMA MEDICINE**

**DIPLOMA IN ORTHOPAEDIC AND TRAUMA MEDICINE**

**FINAL QUALIFYING EXAMINATION**

**PAPER:** Orthopedics

**DURATION:** 3 Hours

**TIME:** 9 a.m. – 12 Noon

**DATE:** 12th FEBRUARY, 2019

**INSTRUCTIONS**

1. Write your examination number on answer book/sheet provided
2. Section one: MCQs – choose single best response
3. Section two: mark T(True) or F(False) for each response
4. Short structured questions – **Answer all**
5. Section five: Long Essay questions – **Choose one**
6. Do not cheat
7. Use legible handwriting

**1.Disease where distal interphalangeal joint is characteristically involved.**

* 1. Psoriatic arthritis
  2. Rheumatoid
  3. SLE
  4. Gout

1. **Para-articular erosion are most commonly seen in** 
   1. Osteoarthritis
   2. Rheumatoid arthritis
   3. Gout
   4. Acute suppurative arthritis

1. **The early x-ray changes of Ankylosing spondylitis would be** :
   1. Disc space narrowing
   2. Anterior osteophyte formation
   3. Sacroiliac joint erosion
   4. Facetal joint ankyloses
2. **In Reiter’s disease untrue is** 
   1. Conjunctivitis
   2. Ulcer on palm & soles
   3. Interstitial lung disease
   4. After sexual contact
3. **Hypertrophic osteoarthropathy is best observe in** 
   1. Carcinoma of lung
   2. Mesothelioma of pleura
   3. AVM of lung
   4. Cirrhosis of liver
4. **Swan-neck deformity is** 
   1. Flexion of metacarpophalangeal joint and extension at interphalangeal joint
   2. Extension at proximal interphalangeal joint and flexion at distal interphalangeal joint
   3. Flexion at proximal interphalangeal joint and extension at distal interphalangeal joint
   4. Extension at metacarpophalangeal joint and flexion at interphalangeal joint
5. **Sunray appearance is seen in**:
   1. Osteogenic sarcoma
   2. Ewing’s Sarcoma
   3. Multiple myeloma
   4. Osteoclastoma
6. **Tumor most sensitive to radiotherapy is:**
   1. Osteogenic sarcoma
   2. Ewing’s sarcoma
   3. Chondrosarcoma
   4. Osteoclastoma
7. **Osteogenic sarcoma metastasizes commonly to:**
   1. Liver
   2. Lung
   3. Brain
   4. Regional lymph nodes
8. **In multiple myeloma which of the following is seen**
   1. Raised serum calcium
   2. Raised alkaline phosphatase
   3. Raised acid phosphatase
   4. All of the above
9. **Commonest tumor arising from the metamorphosis is**
   1. Osteoclastoma
   2. Osteosarcoma
   3. Ewing’s sarcoma
   4. Synovial sarcoma
10. **Most common lesion of hand is:**
    1. Enchondroma
    2. Synovioma
    3. Exostosis
    4. Osteoclastoma
11. **A 8 year old child has a swelling in diaphysis of femur. Histology reveals, small clear round symmetrical cells, minimum cytoplasm, necrotic areas, and minimum osteoid and chondroid material cells. Most likely, it contains**
    1. Mucin
    2. Lipid
    3. Iron

d.Glycogen

1. **A 70-year-old lady presented with mild low back pain tenderness in L3 vertebra. On examination Hb 8 gm ESR 110/1hr A/G ratio of 2:4, likely diagnosis**
   1. Walderstorms
   2. Multiple myeloma
   3. Bone secondaries
   4. None
2. **On microscopic examination, suspected Giant cell tumor must be differentiated from**
   1. Osteosarcoma
   2. Osteoid osteoma
   3. Both of the above
   4. None of the above
3. **Ewing’s tumor of bone**
   1. Should be locally excised
   2. Should be treated by immediate amputation
   3. Looks like a cut onion o X-ray
   4. Has a soap bubble appearance on X-ray
   5. None of the above is correct
4. **Osteoclastoma shows** 
   1. Expansile osteolytic area in the diaphysis
   2. Expansile osteolytic area in epiphysis
   3. Osteosclerotic area in the metaphysis
   4. Osteolytic area in the metaphysis
5. **The most common site of enchondroma is** 
   1. Ribs
   2. Phalanges
   3. Clavicle
   4. Sternum
6. **Regarding fibrosarcoma** 
   1. It has predilection for femur and tibia
   2. Amputation is the answer to this
   3. X-ray shows moth eaten appearance about a lytic area
   4. All of the are true
   5. None of the above
7. **Clean- cut multiple, rounded lesions is bone are seen in** 
   1. Eosinophilic granuloma
   2. Multiple myeloma
   3. All of these
   4. None of these
8. **Treatment of choice for Giant Cell Tumour is** 
   1. Surgery + Radiotherapy
   2. Local excision
   3. Chemotherapy
   4. Radiotherapy
9. **Claw hand is seen in** 
   1. Ulnar nerve injury
   2. Carpal tunnel syndrome
   3. Syringomyelia
   4. Cervical rib
10. **Foot drop is seen in** 
    1. Tibial nerve injury
    2. Achilles tendon injury
    3. Popliteal nerve injury
    4. Common peroneal nerve injury
11. **Club foot is commoner among** 
    1. Males
    2. Binovular twins
    3. Females
    4. Uniovular twins
12. **Which of the following statement is wrong in Tendon transfer?**
    1. Contracture should be released priory
    2. Synergistic muscles are used for tendon transfer
    3. Adequate tendon should be mobilized to gain length
    4. All of the above
13. **Which of the following is not true about Myositis ossificans**?
    1. Associated with muscle tendon rupture
    2. Inflammation around the ruptured muscle deposition of hydroxyapatite crystals
    3. Common in supracondylar fracture
    4. Ossification of musculo – periosteal haematoma
14. **Upper motor neuron type paralysis is seen in** 
    1. Poliomyelitis
    2. Peripheral neuropathy
    3. Cerebral palsy
    4. Muscular dystrophy

Paraplegia due to 1.2 fractures dislocation

1. **Commonest site of bone cyst:**
2. Upper end of humerus
3. Lower end of tibia
4. Lower of femur
5. Upper end of femur
6. **Pain in small joints in an elderly lady is most likely due to**
7. Rheumatoid arthritis
8. Psoriatic arthritis
9. Reiter’s disease
10. Osteoarthritis

**30. Neuropathic joints of ankle and foot area most commonly caused by**

a. Polio

b. Club foot

c. Mycetoma

d.Hansen’s disease

**TRUE /FALSE QUESTIONS (30 MARKS).**

1. **Amputation may be used to treat**
2. Trauma
3. Infections
4. Tumours
5. Vascular disease
6. Congenital anomalies

**2. The congenital deformity in which limbs are extremely shortened so that the hands and feet arise from the trunk is called**

1. Dwarfism
2. Hypothyroidism
3. Phacomelia
4. Cretinism
5. Down syndrome

**3. The examination of an orthopaedic patient may include**

1. Inspection
2. Palpation
3. Limb length measurement
4. Stressing
5. Auscultation

4**. Tumours that often metastasize to the bone mainly are:**

1. Lung tumours
2. Breast tumours
3. Prostate tumours
4. Renal tumours
5. Ovarian tumours

**5. Metatarsus adductus is a common peadiatric foot deformity characterized by which one of the following?**

a. A lateral deformity of the sole

b. A medical deformity of the heel

c. A foot that cannot easily be dorsi-flexed

d. Treatment consisting of stretching exercises in mild cases

e.A foot that is easily dorsiflexed

6. **Talipes equinovarus is**

1. Equinus, Inversion, abduction
2. Equinus,Inversion,adduction
3. Equinus,eversion,abduction
4. Equinus, eversion, pronation.
5. Equinus,eversion,adduction

**SHORT ESSAY QUESTIONS (20 marks)**

1. (a) Discuss FIVE methods of treatment in orthopaedic

(b) List down 2 indications for external fixators

1. List five types of ligaments affected in CTEV
2. .Explain FIVE differences between CTEV and ATEV.

1. Classify neoplasms and give FIVE examples each.

**LONG ESSAY QUESTIONS**

1. Discuss SUFE under the following:

1. Definition
2. Causes
3. Clinical presentation
4. Investigations
5. Management

**2. A 35 year old business man presents with sudden severe pain, redness and swelling of the left big toe.**

1. What is the likely diagnosis?
2. UIClinical features?
3. Investigations
4. Management
5. Complications.