

**KENYA MEDICAL TRAINING COLLEGE**

**FACULTY OF CLINICAL SCIENCES**

**DEPARTMENT OF ORTHOPAEDIC & TRAUMA MEDICINE**

**PROMOTIONAL EXAMINATION**

**FOR**

**CERTIFICATE IN ORTHOPAEDIC PLASTER TECHNOLOGY**

**PAPER: ORTHOPAEDICS**

**DATE: TIME: 3 HOURS (9:00AM – 12:00 NOON)**

**INSTRUCTIONS**

1. This paper consists of:

* Section 1 (40 Multiple Choice Questions)
* Section 2 (8 Short Answer Questions)
* Section 3 (1 Long Answer Question)

1. Attempt **ALL** Questions
2. Write the **EXAMINATION NUMBER** given on all the answer sheets provided and on the question paper.
3. Ensure that all examination answer scripts are handed in at the end of the examination
4. Ensure you sign the examination register provided

EXAMINATION NUMBER ………………………………………………………………

**SECTION 1: MULTIPLE CHOICE QUESTIONS (40 Marks)**

1. **Acute osteomyelitis is commonly caused by:**
2. Staphylococcus aureus.
3. Streptococcus pyogenes.
4. Haemophylus influenzae.
5. Salmonella.
6. **Sun ray appearance of osteosarcoma is because of:**
7. Periosteal reaction.
8. Osteonecrosis.
9. Calcification along vessels.
10. None of the above.
11. **Bone metastasis in male commonly arises from cancer of:**
12. Lung.
13. Prostate.
14. Kidney.
15. Thyroid.
16. **Osteomalacia predominantly affects the:**
17. Spine.
18. Pelvis.
19. Skull bones.
20. Metatarsals.
21. **Osteoid osteoma originates from:**
22. Periosteum.
23. Cortex.
24. Medullary cavity.
25. All of the above.
26. **Perthes' disease is common to age group of:**
27. 1-5.
28. 6-10.
29. 11-15.
30. 16-20.
31. **The sequestrum in X-ray appears**:
32. Dense.
33. Light.
34. Isodense as surrounding bone.
35. Any of the above.
36. **A sequestrum is**
37. a piece of soft dead tissue
38. a piece of dead skin
39. a dead tooth
40. **a** piece of dead bone
41. A **benign tumor forming osteoid is**
42. a synovioma
43. a chondroma
44. an osteoma
45. a fibroma
46. an adenoma
47. A **Brodie's abscess is**
48. a subperiosteal abscess due to infection of the mastoid air cells
49. a type of breast abscess
50. a chronic abscess of the bone
51. an abscess arising in the inguinal lymph nodes
52. **The initial abnormality in primary osteoarthritis is**
53. in the synovial membrane
54. sclerosis of cartilage
55. fibrillation of cartilage
56. an osteophyte
57. **The word talipes refers to**
58. long feet with spidery toes
59. knock knee
60. flat feet
61. club feet
62. **Osteoporosis is a deficiency in:**
63. Calcium metabolism
64. Calcium deposition
65. Protein supporting tissue
66. All of the above
67. **Which of the following is NOT a benign bone tumours**
68. Haemangioma
69. Lipoma
70. Neurofibroma
71. myeloma
72. **Tumor like conditions in Bone include the following EXCEPT**
73. Solitary bone cyst
74. Paget's disease of bone
75. Aneurysmal bone cyst
76. Giant cell tumour of bone
77. **Concerning abscess,which one is FALSE**
78. Healing usually requires surgical drainage of the contents.
79. Rupture of the abscess may result in spontaneous drainage,
80. Flucloxacillin 500mg 6 hourly for 14 days
81. Sometimes associated with the formation of chronic draining sinuses.
82. **Typical features for septic arthritis include**
83. swelling in a unilateral large joint
84. fever
85. redness
86. all the above
87. **In osteoarthritis**
88. Marginal osteophytes are not seen on x-rays
89. Small joints are never involved
90. Arthroplasty has no role in treatment
91. Joint fixation has role in treatment
92. **Antibiotics are required in the treatment of the following condition**
93. Osteoarthritis
94. Gouty arthritis
95. Osteomyelitis
96. Ganglion
97. **Which of the following is not involved in treatment of osteoarthritis**
98. NSAIDs
99. Steroids
100. Chondroitin sulphate
101. Flucloxacillin
102. **True concerning osteoma, EXCEPT**
103. A benign osteoblastic lesion,
104. less than 1.5cm in size
105. commonest in the spine
106. Clearly demarcated outline
107. **Diagnostic features of osteoid osteoma include the following EXCEPT**
108. Severe pain at night.
109. Pain worsens with alcohol.
110. relieved with aspirin
111. Swelling and redness
112. **Which is NOT TRUE concerning treatment of giant cell tumours include**
113. Curettage + bone grafting
114. Resection + joint reconstruction
115. En bloc excision
116. Amputation
117. **Malignant Bone Marrow tumours include**
118. Haemangioma
119. Ewing’s sarcoma
120. Giant cell tumour
121. osteosarcoma
122. **Surgical options for osteoarthritis include the following EXCEPT**
123. Amputation
124. Open Arthrotomy
125. Osteotomies
126. Total Joint arthroplasty
127. **Which of the following statements are true regarding cellulitis?**
128. Is a spreading infection of epithelium
129. Is a spreading inflammation of connective tissue
130. The commonest causative organism is *Staphylococcus aureus*
131. The commonest causative organism is β-haemolytic *Streptococcus*
132. **The most important diffential diagnosis of Ewing's tumor is:**
133. Chondrosarcoma
134. Osteogenic sarcoma
135. Acute osteomyelitis
136. Malignant metastasis
137. **Septic arthritis of infancy usually affects which of the following joints:**
138. Shoulder
139. Elbow
140. Wrist
141. Hip
142. **Rheumatoid arthritis primarily involves the:**
143. Articular cartilage
144. Subchondral bone
145. Synovial membrane
146. Capsule
147. **Complications of rheumatoid arthritis in the hands include:**
148. Tenosynovitis
149. Rupture of extensor tendons
150. Carpal tunnel syndrome
151. Ulnar deviation at the metacarpophalangeal
152. **Spina bifida occulta is**
153. Infection of the spine
154. Traumatic fracture of the spine
155. Congenital fusion of the body of the vertebra
156. Congenital non fusion of the spina lamina
157. **The club foot characteristically involves**
158. Foot and ankle
159. Foot, ankle and leg
160. Foot only
161. Foot, ankle , leg and knee joint
162. **The most common deformity of the foot seen in club foot**
163. Talipes equino varus
164. Equinus
165. Equino valgus
166. Calcaneo equino varus
167. **Early CTEV is treated by**
168. CTEV cast 1st day postnatal day
169. Manipulation
170. Manipulation and strapping
171. Operative repair as early as possible
172. **Which of the following test is useful in diagnosis of congenital hip dislocation**
173. Barlow’s test
174. Thomas test
175. Hibb’s test
176. Russells test
177. **Phocomelia is**
178. Absence of short bones
179. Complete absence of extremeties
180. Defect of long bones of limb
181. Partial absence of extremeties
182. **Club foot is commoner among**
183. Males
184. Binovular twins
185. Females
186. Uniovular twins
187. **The most common site for acute osteomyelitis in infants** is
188. Radial
189. Femur
190. Hip joint
191. Tibia
192. **Brodies abcess usually involves**
193. Long bones
194. Short bones
195. Pelvic bones
196. Flat bones
197. **Tuberculosis of the spine is known as**
198. Pott’s disease
199. Scheuermann’s disease
200. Perthes disease
201. Frieberg disease

**SECTION 2: SHORT STRUCTURED QUESTIONS(40 MARKS)**

1. Name any 5 benign bone tumors. **(5marks)**
2. List risk factors for osteopenic fractures.**(5marks)**
3. Name 5 causes of osteoporosis/**(5marks)**
4. Define rheumatoid arthritis. **(1 mark)**
5. Name 4 classical features of rheumatoid arthritis.**(4marks)**
6. A patient has been diagnosed with Gouty arthritis, briefly explain the treatment of this patient/**(5marks)**
7. Name 5 congenital bone deformities.**(5marks)**
8. Name 5 indications for amputation.**(5marks)**
9. Briefly classical features of osteosarcoma.**(5marks)**

**SECTION 3: LONG ANSWER QUESTION (20 marks)**

1. Discuss acute osteomyelitis under the following subheadings
2. Causative organism **(1mark**)
3. Clinical features **(5 marks)**
4. Radiological features **(2 marks)**
5. Differential diagnosis**(5 marks)**
6. Management **(7 marks)**