**KENYA MEDICAL TRAINING COLLEGE**

**FACULTY OF CLINICAL SCIENCES**

**DEPARTMENT OF ORTHOPAEDIC & TRAUMA MEDICINE**

 **FINAL QUALIFYING EXAMINATION**

**FOR**

**CERTIFICATE IN ORTHOPAEDIC PLASTER TECHNOLOGY**

**PAPER: TRAUMATOLOGY**

**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 (40MARKS)**

1. **The following is NOT included in Biodata during history taking**
2. Name of the patient
3. Age of the patient
4. Chief complain
5. Occupation
6. **Acute osteomyelitis usually begins at:**
7. Epiphysis.
8. Metaphysis.
9. Diaphysis.
10. Any of the above
11. **Which of the following is NOT among the symptoms and signs of fracture injuries?**
12. Swelling
13. Tenderness
14. Deformity
15. rhonchi
16. **Which of the following is NOT an indication for open reduction?**
17. Non union
18. Open fracture
19. Polytrauma
20. All of the above.
21. **Rehabilitation is NOT aimed to:**
22. Avoid joint stiffness
23. Avoid muscle atrophy
24. Avoid muscle hypertrophy
25. Prevent stiffness for intra-articular fractures
26. **The following is NOT included in the initial management of fractures**
27. Removing of gross debris
28. Administering of tetanus toxoid
29. Irrigation and stabilization
30. Reduce open fractures
31. **Which is NOT a systemic complication of fractures**
32. Osteomyelitis
33. Sepsis
34. Fat emboli
35. Hemorrhagic shock
36. **The commonest type of shoulder dislocation is**

 a) Anterior

 b) Posterior

 c) Central

 d) Habitual

1. **Fat embolism may occur commonly following the fracture of the**
2. Clavicle
3. Skull
4. Rib
5. Femur
6. **Treatment of the choice for treatment of neck of femur in elderly patient is**
7. Skin traction
8. Skeletal traction
9. Thomas splint
10. Plaster of Paris application
11. **The best treatment for the closed clavicle fracture management in a child aged 6 years is**
12. Open reduction
13. External fixation
14. Casting
15. Sling
16. **The best treatment of the closed complete transverse fracture of patella is**
17. Knee support
18. Knee brace
19. Below knee application
20. Tension band wire
21. **Figure 8 bandage can be used in treatment of the fractures of**
22. Scapula
23. Radis
24. Ulnar
25. Clavicle
26. **Fracture neck of femur is commonly found**
27. Young ladies
28. Young men
29. Elderly men
30. Infant
31. **Galleazi fracture is**
32. Fracture of the proximal ulnar with proximal displacement of radial ulna joint
33. Fracture proximal radius
34. Fracture mid third radial ulna
35. Fracture of the distal radius with inferior radio ulna joint displacement
36. **Colles fracture is**
37. Fracture of the radius
38. Fracture of the ulna
39. Common in elderly women
40. None of the above
41. **Treatment of choice in 7 years child with Gartland classification 3 of supracondylar fracture is**
42. back slab
43. u slab
44. open reduction
45. full casting of arm
46. **What is NOT True of acute pyogenic osteomyelitis**
47. Trauma is a predisposing factor.
48. Common infecting agent is Staph. Aureus.
49. Infection is usually blood borne.
50. All are true.
51. **What is NOT True of Brodie's abscess:**
52. A form of chronic osteomyelitis.
53. Intermittent pain and swelling.
54. Common to diaphysis.
55. Excision is very often required.
56. **Which of the following statements is NOT true about posterior dislocation of the shoulder**
57. Caused by force applied along the axis of the arm
58. Shoulder is adducted, internally rotated and flexed
59. If caused by seizure, bilateral shoulder dislocations
60. Occurs when abducted arm is externally rotated and hyperextended
61. **Dashboard injuries are commonly associated with**
62. Anterior hip dislocation
63. Posterior hip dislocation
64. Ankle injuries
65. Damage to patella
66. **Which of the following is NOT true about posterior hip dislocation?**
67. Clinically presents with limb flexed externally rotated and abducted
68. Clinically presents with limb shortened internally rotated and adducted
69. Sciatic nerve injury is common
70. Due to severe forces to knee with hip flexed and adducted
71. **The carpal bone which is commonly fractured is**
72. Capitate
73. Scaphoid
74. Lunate
75. Pisiform
76. **In injuries with multiple fractures, most important is**
77. Blood transfusion
78. Splints
79. Casting
80. cervical spine support, airway, breathing and circulation maintenance
81. **Open fractures of the open bone [Gustillo Anderson 3] are best treated by**
82. Surgical toilets
83. External fixators
84. Internal fixation
85. All of the above
86. **Radial nerve palsy may occur in fracture of humerus involving:**
87. Surgical neck.
88. Shaft.
89. Lower end.
90. At all of the above locations.
91. **Which nerve is compressed in carpal tunnel syndrome:**
92. Ulnar.
93. Median.
94. Radial.
95. All of the above
96. **Malunion of a fracture is**
97. a fracture which unites in a position of deformity
98. delayed union of a fracture
99. non-union of a fracture
100. followed by pseudo arthrosis
101. **Volkmann's contracture**
102. affects the palmar fascia
103. develops at the ankle in a case of chronic venous ulcer
104. follows ischemia of the forearm muscles
105. is due to excessive scarring of the skin of the axilla following a burn
106. **Pott's paraplegia is due to**
107. hematomyelia following trauma
108. damage to the cord by a piece of bone when vertebrae collapse in tuberculosis of the spine
109. tuberculous pus and angulation in tuberculosis of the spine
110. damage to die corda equina after a fall
111. **Septic arthritis of infancy usually affects which of the following joints:**
112. Shoulder
113. Elbow
114. Wrist
115. Hip
116. **The correct order of priorities in the initial management of head injury is**
117. Airway, breathing, circulation, treatment of extra cranial injuries
118. Treatment of extra cranial injuries, airway, breathing, circulation
119. Circulation, breathing, airway, treatment of extra cranial injuries
120. Airway, circulation, breathing, treatment of extra cranial injuries.
121. **Consider the following signs**
122. Increasing pallor
123. Restlessness
124. Air hunger
125. Water hammer pulse

 Heamorragic shock due to acute blood loss includes

1. 1 & 4
2. 1 & 2
3. 1,2 & 3
4. 2,3 & 4
5. **The most common sites for ligamentous injuries are those of the**
6. Shoulder joint
7. Elbow
8. Knee joint
9. Ankle joint
10. **Investigation for injury of knee cartilage**
11. Aspiration
12. Arthrography
13. X-ray
14. Arthroscopy
15. **Which is the investigation of choice for a sport injury of the knee**
16. Ultrasonography
17. Plain radiography
18. Arthrography
19. Arthroscopy
20. **Distance from olecranon in amputation should be**
21. 5-10 cm
22. 10-15 cm
23. 15-20 cm
24. 20-30 cm
25. **In flap method of amputation which structure is kept shorter than the level of amputation**
26. Bone
27. Muscles
28. Nerves
29. Skin
30. **What is the earliest indication of Volkmann's ischaemia**?
31. Pain
32. Pallor and poor capillary filling
33. Paresthesia in median nerve area
34. Contracture of fingers
35. **Fracture disease can be prevented by:**
36. Plaster immobilization of fracture
37. Cast brace treatment of fracture
38. External fixation of fracture
39. Physiotherapy

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

1. Outline five differential diagnosis of patellar fracture **(5marks)**
2. Outline five indications for open reduction **(5marks)**
3. Immobilization/stabilization is part of management of fractures list 3 types of external stabilization and 2 types of internal stabilization. **(5marks)**
4. List five complications of open fractures. **(5marks)**
5. Outline five causes of avascular necrosis **(5marks)**
6. In classifications of fractures, outline five types of fractures **(5marks)**
7. List five complications specific to forearm fractures **(5marks)**
8. Outline five complications of supracondylar fracture of humerus **(5marks)**

**SECTION 3: LONG ESSAY QUESTIONS (20 marks)**

1. Discuss compartment syndrome under the following subheadings:
2. Etiology (3marks)
3. clinical features (5marks)
4. Management (6marks)
5. Complications (6marks)