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**KENYA MEDICAL TRAINING COLLEGE**

**DEPARTMENT: ORTHOPAEDICS AND TRAUMA MEDICINE**

 **DIPLOMA IN ORTHOPAEDIC PLASTER TECHNOLOGY**

**FINAL QUALIFYING EXAMINATION**

**PAPER:** TRACTION

**DURATION:** 3 Hours

**TIME:** 9 a.m. – 12 Noon

**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. Section three: answer all questions.
5. Section four: answer one question.
6. Do not cheat
7. Use legible handwriting

**SECTION ONE: MCQ [30 MARKS]**

1. **Lignocaine is used during insertion of Steinmann pin in order to?**
2. Control bleeding
3. Relieve pain
4. Prevent infection
5. Localize the site
6. **Which one of the following is an indication of Russel’s skeletal traction**
7. Upper femoral fracture
8. Skull fracture
9. Distal femur fracture
10. Proximal tibia fracture
11. **Which one of the following is not a contraindication of skin traction?**
12. Wounds
13. Bruises
14. Sores
15. Pain
16. **Which of the following is a use of Thomas splint**
17. Splinting fractures
18. Carrying patients
19. Elevating the fractured limb
20. Stabilizing spinal fractures
21. **Which one of the following is an indication of Bohler Braun frame**
22. Splinting fractures
23. Carrying patients
24. Elevating the fractured limb
25. Stabilizing spinal fractures
26. **When putting weight in traction what do you consider?**
27. Patient’s weight
28. Orthopaedic bed
29. Instruction from the surgeon
30. Traction type
31. **What do you need when applying traction?**
32. Patient
33. Orthopaedic Bed
34. Weight
35. All the above
36. **When applying traction, what else can you use in absence of weights?**
37. Weight bags
38. Clothes
39. Boxes
40. None of the above
41. **What is the contraindication for Bohler Braun Frame?**
42. Fractures of femur in children.
43. Fractures of femur in adults.
44. Hip joint dislocation.
45. Vertebral column fractures.
46. **Monkey chains are used for?**
47. Elevation of the limbs
48. Lifting up of the patient
49. Tightening of the bed
50. Splinting fractures
51. **The following are components of the Orthopaedic bed except?**
52. Beams
53. Mattress
54. Fracture board
55. Braun frame
56. **Perkin’s skeletal traction is indicated for?**
57. Fracture distal femur.
58. Fracture upper femur
59. Supracondylar fracture femur
60. Fracture neck femur
61. **Which one of the following is not an indication of skin traction?**
62. Fracture femur in children.
63. Fracture femur in elderly.
64. Fractures of vertebral column.
65. Hip joint dislocation.
66. **What maximum amount of weight can be used in skin traction?**
67. 10lbs
68. 5lbs
69. 20lbs
70. 1lb
71. **The following are all requirements for fixing skin traction except**
72. Steinmann’s pin tray
73. Skin traction kit
74. Weight bags
75. Beams
76. **One of the instructions given to a patient after application of traction is**
77. Not to bear weight
78. Sleep all the time
79. Exercise the limb
80. Always move the limb
81. **How do you confirm the diagnosis of the patient before putting on traction?**
82. Patient file
83. X-rays
84. Patient history
85. Nurses cardex
86. **What is the role of an orthopaedic plaster technician after the application of skeletal traction to the patient?**
87. Discharge the patient home
88. Give antibiotics
89. Train the patient on how to use the crutches
90. Check whether the patient’s traction is in situ
91. **Thomas splint is used for the following except:**
92. Splinting fractures
93. Carrying patients
94. Elevating the fractured limb
95. Stabilizing spinal fractures
96. **What is the role of lignocaine in fixing traction**
97. Used as an analgesic
98. Used as a localizing anesthesia
99. Controls bleeding
100. Improve blood circulation.
101. **Below are traction techniques used in the management of fractures, which of the following is not skin traction technique**
102. Perkins traction
103. Russell’s traction
104. bucks traction
105. gallows traction
106. **Which of the following is not an indication for skin traction?**
107. femoral traction in children
108. displaced acetabulum fractures
109. after reduction of dislocated hip
110. temporary management of fracture of neck of femur
111. **Which of the following is not a traction apparatus?**
112. pulleys
113. stirrups
114. trolley
115. weights
116. **Why should the lateral skin traction tape, applied to a patient being placed in a Thomas splint for treatment of a fractured femur, be placed more posteriorly than the medial one?**
117. To correct external rotation of the limb
118. It will give more traction in that position
119. There will be less skin irritation
120. The groin ring pressure will be lessened
121. **Which is the suitable site for the insertion of the Kirschner wire in skeletal traction technique?**
122. tibia plateau
123. distal radius
124. distal metal carpal bone
125. all of the above
126. **What is the most indication for head halter traction?**
127. fracture lumber
128. neck fractures
129. clavicle fracture
130. none of the above
131. **Which of the following is not a skin traction component?**
132. crepe bandage
133. adhesive strapping
134. Steinman pin
135. foam stirrup
136. **Which of the following is not an indication for cervical spine traction?**
137. Fracture of the skull bones
138. Sub-axial cervical fractures that are mal-aligned
139. Sub-axial cervical facet dislocations
140. Odontoid fractures
141. **The following are complications of the skull traction except**
142. Skull perforation
143. Paraplegia
144. Pin migration
145. Injury to temporalis muscle
146. **Which of the following is a contra-indication of skeletal traction?**
147. Fractures of femur in adult patients
148. Displaced fractures of humerus in adults
149. Temporarily measure of compound femoral fractures in adults
150. Femoral fractures in elderly patients

**SECTION TWO: TRUE/FALSE QUESTIONS [30 MARKS]**

1. **Gallows traction may be useful in children with:**
2. Rickets.
3. Spina bifida.
4. Cerebral palsy.
5. Bilateral fracture of femur.
6. Spinal fractures.
7. **The following are site for Steinmann pin insertion.**
8. Calcaneus.
9. Tibial plateau.
10. Mid shaft femur.
11. Neck of femur.
12. Olecranon process.
13. **The following are uses of continuous mechanical traction in orthopaedic and trauma medicine:**
14. To relief muscle spasms.
15. Temporarily measure in fractures of femur in adults.
16. Management of club foot.
17. Definitive management of femoral fractures in children.
18. Management of clavicle fractures.
19. **Complications of definitive skeletal traction are:**
20. Constipation.
21. Delayed union.
22. Anxiety.
23. Muscle atrophy.
24. Circulatory catastrophe.
25. **Monkey chain is used for the following reasons:**
26. Back exercises.
27. Easy Bathing.
28. Easy toiletry.
29. Easy walking.
30. Patient’s elevation.
31. **Manual traction is useful in:**
32. Reduction of shoulder joint dislocation.
33. Management of contractures at a joint.
34. Reduction of skull fractures.
35. Reduction of long bone fractures.
36. Management of prolapsed intervertebral disc.

**SECTION THREE: SHORT ESSAY QUESTIONS [20 MARKS]**

1. Name five (5) sites of Steinmann pin insertion in the body. [5 marks]
2. List three (3) major types of traction. [3 marks]
3. Name four (4) components of skin traction. [4 marks]
4. Highlight (3) factors to consider when applying traction. [3 marks]
5. Mention five (5) components of Steinmann’s pin tray. [5 marks]

**SECTION FOUR: LONG ESSAY QUESTIONS [20 MARKS]**

**Answer only one question.**

1. Discuss in details the procedure of applying skeletal traction [20 marks]
2. Describe the procedure of applying skin traction on a patient. [20 marks]