

**KENYA MEDICAL TRAINING COLLEGE**

**FACULTY OF CLINICAL SCIENCES**

**DEPARTMENT OF ORTHOPAEDIC & TRAUMA MEDICINE**

**PROMOTIONAL EXAMINATION**

**FOR**

**CERTIFICATE IN ORTHOPAEDIC PLASTER TECHNOLOGY**

**PAPER: MEDICINE**

**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 I: MULTIPLE CHOICE QUESTIONS (MCQs) 40MARKS**

1. **Disease that affects many people at different countries is termed as**
2. Sporadic
3. Pandemic
4. Epidemic
5. Endemic
6. **Prophylaxis of cholera is**
7. Protected water supply
8. Environmental sanitation
9. Immunization with killed vaccines
10. Deworming
11. **Tuberculosis is a**
12. Water borne disease
13. Air borne disease
14. Food borne disease
15. Atthropod borne disease
16. **The first antibody to contact invading microorganisms is:-**
17. IgG
18. IgM
19. IgA
20. IgD
21. **The capacity of a given strain of microbial species to produce disease is known as**
22. Pathogen
23. Virulence
24. Infection
25. None of these
26. **The ability of a pathogen to spread in the host tissues after establishing the infection is known as**
27. Adhesion
28. Invasiveness
29. Toxigenicity
30. None of these
31. **The viruses that live as parasites on bacteria are**
32. Fungi
33. Commensels
34. Bacteriophages
35. Normal flora
36. **Congenital diseases are**
37. Diseases present at birth
38. Deficiency disease
39. Occur during life
40. Spread from one individual to another
41. **Amoebic dysentery in humans is caused by**
42. Plasmodium
43. Paramecium
44. Yeast
45. Entamoeba histolytica
46. **A facultative anaerobic is**
47. Only grow anaerobically
48. Only grow in the presence of O2
49. Ordinarily an anaerobe but can grow with O2
50. Ordinarily an aerobe but can grow in absence of O2
51. **The following conditions can be diagnosed on the chest radiograph EXCEPT ONE,**
    1. Lobar pneumonia
    2. Pleural effusion
    3. Hypoxemia
    4. Lung abscess.
52. **These terms are part of virchows triad except one**
    1. Hypercoagulability
    2. Endothelial injury
    3. Blood stasis
    4. Trauma
53. **One of the following is not a cell of innate immunity**
    1. Macrophage
    2. B lymphocyte
    3. Natural killer lymphocyte
    4. Neutrophils
54. **Which DOES NOT provide long term immunity?**
55. Artificially acquired active immunity
56. Artificially acquired passive immunity
57. Naturally acquired active immunity
58. None of the above
59. **Which of the following is the major immunoglobulin in human serum, accounting for 80% of the immunoglobulin pool?**
60. IgA
61. IgD
62. IgG
63. IgM
64. **Naturally acquired active immunity would be most likely acquired through which of the following processes?**
65. Vaccination
66. Drinking colostrum
67. Natural birth
68. Infection with disease causing organism followed by recovery.
69. **Which of the following convey the longest lasting immunity to an infectious agent?**
70. Naturally acquired passive immunity
71. Artificially acquired passive immunity
72. Naturally acquired active immunity
73. one of these
74. **B and T cells are produced by stem cells that are formed in:**
75. Bone marrow
76. The liver
77. The spleen
78. The lymph nodes
79. **Cell mediated immunity is carried out by…………..**
80. B cells
81. T cells
82. Antibodies
83. Phagocytes
84. **While humoral immunity is mainly carried out by………………..**
85. B cells
86. Epitopes
87. T cells
88. Antibodies
89. **The usual infective stage of Malaria to man is the**
90. Gametocytes
91. Sporozoites
92. Schizonts
93. Merozoites
94. **Produces the more severe type of Malaria.**
95. Plasmodium falciparum
96. Plasmodium ovale
97. Plasmodium malariae
98. Plasmodium vivax
99. **Which one does not produce congenital infection in man.**
100. Malaria
101. Syphilis
102. Toxoplasma gondii
103. Pneumocystis pneumonia
104. **Taenia saginata is associated with**
105. Cat
106. Dog
107. Cattle
108. Pig
109. **Blood sucking insects may transmit :-**
110. Ascaris lumbricoides
111. Entamoeba histolytica
112. Wuchereria bancrofti
113. Strongyloides stercoralis
114. **A parasite that must spend atleast part of its life cycle on or in a host is called :-**
115. Facultative parasite
116. Hyperparasite
117. Obligate parasite
118. Pathogenic parasite
119. **which of the following is not an Indication of penicillin :-**
120. Compound fracture
121. Closed fracture
122. Septic wound
123. Bacterial pneumonia
124. **Macrolide antibiotics include :-**
125. Amoxicillin
126. Doxycycline
127. Erythromycin
128. Ceftriaxone
129. **Opioids analgesics includes**
130. Diclofenac , Dihydrocodeine
131. Paracetamol , Heroine
132. Morphine , Tramadol
133. Tramadol , Indomethazine
134. **The following immunoglobulin crosses the placenta and confer the immune to the fetus**
135. Immunoglobulin M
136. Immunoglobulin G
137. Immunoglobulin A
138. Immunoglobulin E
139. **A ten year old boy is brought to you with skin sepsis which you diagnose as an abscess. which one of the following antimicrobials would be best for him?**
140. Crystalline Penicillin
141. Flucloxacillin
142. Ciprofloxacin
143. Ampicillin
144. **The following route of drug administration involves application of the drug on the skin** :-
145. Intravenous
146. Subcutaneous
147. Topical
148. Intradermal
149. **Disadvantages of parenteral drugs administration includes :-**
150. Takes longer period to act
151. Can be so irritable and non-palatable
152. pain in administering the drug
153. Some are poorly absorbed in gastrointestinal tract
154. **Which of the following is NOT an indication of chemoprophylaxis :-**
155. Prevention of opportunistic infections
156. To prevent exacerbations of a chronic infections
157. To treat an established acute infection
158. To suppress an existing infection before it causes a disease
159. **Which white blood cell is elevated when a patient suffers from a acute bacterial infection**
160. lymphocytes
161. Basophils
162. Neutrophils
163. Monocytes
164. **Skeletal muscle relaxants includes :-**
165. Aceclofenac
166. Chlorpheniramine
167. Suxamethonium
168. Hydrocortisone
169. **Concerning epilepsy**
170. Cannot be triggered by loud music
171. Atonic seizures are the most common type
172. Brain tumour is a cause
173. Treatment is not necessary
174. **Local anaesthetics include :-**
175. Diazepam , lignocaine
176. Benzocaine, lidocaine
177. Halothane , diazepam
178. Ketamine, morphine
179. **The best drug given in hypertensive patient with massive oedema is :-**
180. Nifedipine
181. Atenolol
182. Frusemide
183. Losartan
184. **Side effects of steroidal anti-inflammatory drugs are :-**
185. Hypotension
186. Hyperglycaemia
187. Weight loss
188. Improved wound healing

**SECTION II: SHORT ANSWER QUESTION (SAQs) 40 MARKS**

1. Discuss the management of patient with anaemia (5 marks )
2. Discuss the control and prevention strategies of parasitic infections (5 marks)
3. State five (5) modes of transmission of microorganisms (5 marks)
4. State five (5) classes of antibiotics and give one example of each (5 marks)
5. Describe five (5) routes of drug administration (5marks)
6. Discuss cell-mediated immunity (5 marks)
7. State five examples of non-opioids analgesic drugs (5marks)
8. State five (5) mechanisms involved in innate immunity (5marks)

**SECTION III: LONG ANSWER QUESTION (LAQ) 20 MARKS**

1. Peter is a 70 year and a known diabetic patient on follow up. He presents with numbness and pin prick sensation on both distal lower limbs . On examination the blood pressure is normal but he has a painless ulcer (wound ) on the right foot oozing foul smelling discharge.
2. What is the most probable diagnosis (2marks)
3. Which are the other clinical features of the above condition (5marks)
4. State the investigations that you would like to do (5marks)
5. Discuss the treatment of this patient (8 marks)