

**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY**

**OF**

**AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2015/2016**

**YEAR 3 EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN CLINICAL MEDICINE (DIRECT ENTRY)**

**PEAD E300: PAEDIATRICS**

**DATE: August 2016 TIME: 2 HOURS**

**INSTRUCTIONS:**

**This paper has two sections, read carefully the instructions preceding each section**

**SECTION A: MCQ (60 MINUTES)**

**There are 40 MCQ to be answered in 60 minutes. Answer each choice with True or False. A correct answer earns you one mark while incorrect answer earns you negative half a mark.**

1. The following is/are true about an apathetic, edematous three year old child:
2. This child has normal temperature control
3. Crystalline penicillin adequately covers the organisms that may cause infections in this patient
4. If this child has PTB, the mantoux test will not probably be positive
5. Feeds should be initiated at 130ml/kg/day
6. This condition is more prevalent in low social economic settings
7. Advantages of breastfeeding to the baby include:
8. Better intellectual development of the baby
9. Breast milk contains high levels of iron and vitamin D
10. Has secretory IgA
11. Reduced incidence of atopic dermatitis
12. Lower frequency of pneumonia and otitis media in breastfed infants
13. Kepha is a 3 year old child who weighs 8kg. He represents with diarrhea and vomiting. On examination he has cold extremities and radial pulse is not palpable. Correct management of this child includes;
14. Intravenous ringers lactate at 20ml/kg given as rapidly as possible
15. Intravenous half strength Darrow’s solution at 20ml/kg given as rapidly as possible
16. Intravenous ringers lactate solution with 5% at 20ml/kg given over 2 hours
17. Intravenous normal saline at 20mls/kg over 1 hour
18. Blood given at 20mls/kg over 30 minutes
19. A normal 4 year old would be expected to be able to:
20. Catch a ball
21. Draw a circle
22. Count to 10
23. Tell you his/her name
24. Get dressed alone
25. The following is/are true of plasmodium falciparum malaria;
26. Hypoglycemia is one of the features of severe malaria
27. Co-artem is used in treatment of non-severe malaria
28. Acute renal failure is a recognized complication of the severe form
29. Is common in neonates
30. A positive blood slide is confirmatory for diagnosis
31. Kioko aged 3 years present with a three day history of cough and body hotness. On examination he has lower chest wall indrawing. He is unable to feed or drink;
32. He has severe pneumonia
33. Should be started on intravenous antibiotics
34. Should be managed as an outpatient
35. Oxygen should be prescribed
36. There is an effective vaccine against the most common offending agent
37. Measles vaccine;
38. Is a toxoid
39. May lead to measles infection later in life
40. Is a live attenuated vaccine
41. A booster is given at 12 months
42. Is heat sensitive
43. About typical febrile convulsions;
44. Can occur in 4 month old infant
45. There is usually a history of head injury
46. Usually follows some focus of injection in the CNS
47. Fever is not necessary to make the diagnosis
48. Are caused by low blood sugar
49. Congenital acyanotic heart disease include
50. Transposition of great vessels
51. Ventricular septal defects
52. Tricuspid Atresia
53. Patient ductus Arteriosus
54. Infective Endocarditis
55. Joshua is a 10 year old boy who presented to outpatient department with status asthmaticus. Which of the following drugs are/is recommended
56. Intravenous diazepam
57. Subcutaneous Epinephrine
58. Salbutamol through nebulization
59. Intravenous steroid
60. Parenteral antibiotics
61. Presenting features in Meningitis;
62. Headache
63. Fever
64. Sudden change in behavior
65. Positive Kernigs sign
66. Nerve pain
67. About managing a neonate with hyperbilirubinaemia
68. Adequate caloric intake is important
69. Phototherapy is mandatory for all cases
70. Exchange transfusion may be necessary
71. Phenobarbitone may be used
72. Blood group of the mother needs to be done
73. The following is/are presentations of Wilm’s Tumor (Nephroblastoma)
74. Obesity
75. Abdominal mass
76. Low grade fever
77. Haematuria
78. Hypertension
79. Post-term babies are likely to have;
80. Absence of lanugo hair
81. Long nails
82. Heavy vernix caseosa
83. Reduced fat tissue
84. Peeling skin of the palms
85. The following are true of injective endocarditis;
86. Prophylactic benzathine penicillin is necessary for prevention
87. Is associated with vegetation of the valves
88. Does not occur in prosthetic values
89. Commonly caused by bacteria
90. Prior tooth extraction is an important risk factor
91. The management of acute diarrhea with no dehydration include;
92. 75mls/kg of ORS over 4 hours
93. 10mls/kg of ORS after each bout of diarrhea
94. Zinc sulphate in children younger than 6 months
95. Sustained breastfeeding and intake of other fluid
96. Intravenous fluids for all those with very frequent loose motions even if not severely dehydrated
97. In a child presenting with generalized tonic clonic seizures (GTCS) attack;
98. Long term treatment may be similar to that of complex convulsions
99. Phenobarbitone 10-20mg/kg/day in dividend doses is useful
100. Violent muscular activity should be restrained
101. Metabolic disorder and intoxication must be excluded
102. Intravenous access is optional in status epicepticus
103. Infants of diabetic mothers have the following associated problem;
104. Congenital heart disease
105. Respiratory distresss syndrome
106. Large for gestation age
107. Neonatal jaundice
108. Anaemia
109. Which of the following investigations can be performed on a child with suspected meningitis?
110. Random blood sugar
111. Full haemogram
112. Cerebrospinal fluid microscopy
113. Cryptococcal antigen test
114. Blood cultures
115. The following vaccines can be given to symptomatic HIV +ve babies;
116. Pentavalent
117. Measles
118. Yellow fever
119. Hepatitis B
120. BCG
121. The following are normal features in a newborn;
122. Chest circumference greater than head circumference
123. Head circumference of 42-43cm
124. Caput succedaneum
125. Haemorrhagic conjunctiva
126. Bilateral cephalohaematoma
127. A ten year old girl presents with swelling of her face and legs for 2 weeks duration. There are no complaints about urine output or colour of urine. Her urinalysis showed 3+ proteins
128. Urinalysis will show 3+ blood
129. Blood pressure might be elevated
130. Serum albumin levels are low
131. Treatment with prednisone is indicated
132. Majority of Kenyan patients will recover fully
133. In the management of diabetic keto-acidosis
134. Infusion of normal saline is the first requirement
135. Insulin should be given before an insulin has been inserted
136. Potassium should be added to iv fluid once the patient has passed urine
137. When blood sugar is below 6mmol/l normal saline should be replaced by dextrose 5%
138. Blood sugar measurements be done twice daily
139. A Z weeks old baby is brought to the pediatric unit with prolonged jaundice. He has dry skin with normal skin turgor. He has low voice on crying, has obstipation and is not feeding well
140. The most common cause of his condition is absence or hypoplasia of the gland
141. Maternal alcohol ingestion is a contributing factor
142. Learning difficulties will be a feature in delayed treatment
143. Treatment is necessary till puberty has been reached
144. Routine neonatal screening for this
145. Which of the following is correct concerning Type I Diabetes in children?
146. Insulin therapy should be given only when oral hypoglycemic agent fails
147. There is a strong hereditary component
148. The onset of the disease is usually acute
149. There is no rule of environmental factors in pathogenesis
150. The disease often presents with diabetic ketoacidosis
151. He following are important in paraffin poisoning;
152. Rehydration
153. Gastric lavage
154. Continued feeding
155. Induction of emesis
156. Blood transfusion
157. Prevention of mother to child transmission of HIV entails
158. Exclusive breastfeeding for 6 months
159. Mixed feeding for 6 months
160. Avoiding breastfeeding completely and using replacement feeds
161. Exclusive breast feeding for 2 years
162. Nevirapine within 72 hours of birth
163. Muturi is an 8 months old weighing 5kg. The mother has noticed that he gets easily tired on breastfeeding. He has been coughing;
164. Captopril is indicated in his management
165. Furosemide has no role
166. Her cough is likely to worsen on lying down
167. This is likely to be congenital heart disease
168. Finger clubbing unlikely
169. Acute otitis media in children;
170. Is best treated by syringing the ear
171. Bulging red eardrum is a feature
172. Is characterized by foul smelling discharge
173. Is more commonly seen in children aged 10-15 years
174. Broad spectrum antibiotic recommended
175. In rheumatic fever;
176. It commonly affects joint and the heart
177. It is an autoimmune disease
178. History of sore throat is rare
179. ASOT test confirms the diagnosis
180. Acute osteomyelitis can be a differential
181. In neonatal resuscitation;
182. Drying the baby is step number one
183. Head is positioned at neutral position
184. If heart rate is below 60 give compressions
185. Ventilation alone cannot improve heart rate that is between 60 and 100
186. Ambu-bagging is required if respiratory rate is less than 30
187. Concerning measles
188. Neurological complication of measles include excessive sleeping, drowsiness and coma
189. It’s a rare contagious bacterial diseases
190. Child with measles should be given vitamin A
191. Causes severe malnutrition
192. Corneal clouding
193. Gacheri presented with easy fatigability, she has pale hands;
194. There is need to check her haemoglobin level
195. Her ethnicity is important in management
196. She could be having haemoglobinopathies
197. May have been born prematurely
198. May have concylostoma duodenale infection
199. The following features are consistent with congenital rubella syndrome;
200. Patent ductus arteriosus
201. Microcephaly
202. Hydrocephalus
203. Cataract
204. Corneal ulcer
205. Suggestive features of tuberculosis on chest x-ray include;
206. Enlarged cervical nodes
207. Hilar lymphadenopathy
208. Lung consolidation
209. Cardiomegaly
210. Pleural effusion
211. The cardinal signs of congenital cardiac failure are;
212. Tender splenomegaly
213. Tender hepatomegaly
214. Cyanosis
215. Tachycardia
216. Cardiomegaly
217. Rickets is associated with
218. Cupping of lower ends of radius and ulna
219. Renal disorders
220. Very low birth weight babies
221. Prolonged phenobarbitone administration
222. Temperate climates
223. A child with severe dehydration presents with the following;
224. Unable to drink
225. Return of skin pinch in 1-2 seconds
226. AvPU is <A
227. Irritability
228. Drinks eagerly
229. A sick child presents to the outpatient department triage area, the following are emergency signs;
230. Weak/absent breathing
231. Cold hands with capillary refill >3 seconds
232. Convulsion
233. Peripheral cyanosis
234. Diarrhea with sunken eyes
235. In acute asthmatic attack;
236. Chest could be silent
237. Rhonchi present
238. Cyanosis could be present
239. Has to have history of wheeze
240. Always tachypnoenic

**SECTION B: 60 minutes.**

**Answer all questions. Start each question on a separate piece of answer sheet.**

**Long essay question**

1. Discuss the general danger signs as enumerated in the integrated management of childhood illness under the following headings
2. List the general danger signs (5marks)
3. Assessment of the general danger signs in a sick child (7marks)
4. Management of the various danger signs (8marks)

**Short Answer Questions**

1. i. Define persistent diarrhea (2marks)

ii. List three causes of persistent diarrhea (1.5marks)

iii. List (useful) investigations (2.5marks)

iv. Outline treatment (4marks)

1. Outline preventive measures of acute respiratory infection of childhood (10marks)
2. A 7 year old girl presents to outpatient with frequency, dysuria and smelly urine. Outline the investigations and treatment you would offer (10marks)