



**KENYA MEDICAL TRAINING COLLEGE  
FACULTY OF CLINICAL SCIENCES  
DEPARTMENT OF CLINICAL MEDICINE**

**FINAL QUALIFYING EXAMINATION  
FOR  
DIPLOMA IN CLINICAL MEDICINE AND SURGERY**

**PAPER: PAEDIATRICS**

**DATE: 29<sup>th</sup> July, 2021**

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

**EXAMINATION NUMBER** .....

## PAEDIATRICS

### SECTION 1: MULTIPLE CHOICE QUESTIONS - (40 MARKS)

1. In congestive cardiac failure, which of the following is a cardinal feature in infants?
  - a) pedal edema
  - b) tachycardia
  - c) bradycardia
  - d) arrhythmias
2. Which of the following is a side effect of gentamycin?
  - a) Steven Johnson Syndrome
  - b) Gum hypertrophy
  - c) ototoxicity
  - d) adrenal failure
3. Which of the following conditions is highly infectious in children?
  - a) tuberculosis
  - b) tetanus
  - c) bronchiolitis
  - d) asthma
4. About diabetic ketoacidosis, which statement is true?
  - a) may cause cerebral edema
  - b) rarely occurs in newly diagnosed children
  - c) is associated with hypotonic dehydration
  - d) severe acidosis is irreversible
5. In regards to IMCI which of the following is not a danger sign?
  - a) inability to feed✓
  - b) hyperpyrexia
  - c) convulsing
  - d) vomiting everything✓
6. Early neonatal infections can be prevented by all the following except
  - a) hand washing
  - b) chlorhexidine cream for cord care
  - c) prophylactic antibiotics to all babies
  - d) keeping the child warm
7. Which of the following is an important cause of neonatal jaundice
  - a) prematurity
  - b) sickle cell disease
  - c) congenital heart disease
  - d) Hyperthyroidism
8. Which of the following is a normal developmental milestone?
  - a) smiles at 6 weeks
  - b) can stand at 7 months

- c) says mama or dada at 9 months with meaning  
d) pincer grasp by 6 months
9. Measles vaccine  
a) contraindicated in HIV  
b) is a toxoid  
c) is live attenuated  
d) is administered at 8 months
10. The least likely cause of death is severe acute malnutrition is  
a) dehydration  
b) hypothermia  
c) hypoglycaemia  
d) flaky paint dermatitis
11. which of the following is not a cause of haematuria in children  
a) schistosoma haematobium  
b) trauma  
c) acute glomerulonephritis  
d) beverages
12. The following present with stridor except  
a) epiglottitis  
b) LTB  
c) pneumonia  
d) retropharyngeal abscess
13. One of the following is not a feature of infective endocarditis  
a) changing heart murmurs  
b) petechiae Haemorrhage  
c) macroscopic haematuria  
d) osler nodes
14. The following are features of WHO paediatric HIV clinical state III except  
a) Hairy leucoplakia  
b) Angular cheilitis  
c) Pulmonary tuberculosis ✓  
d) Unexplained persistent fever ✓
15. Which of the following is not a behavioural disorder  
a) thumb sucking  
b) enuresis  
c) eucopresis  
d) syncope
16. One of the following is not an emergency sign in triage  
a) central cyanosis  
b) cold hands  
c) temperature  $>39^{\circ}\text{C}$   
d) convulsing
17. F-75 used in the initial phase in management of malnourished children stands for  
a) food with 75gms of protein

- b) formulae feeds with 75kcal/100mls  
 c) feeding the child 75 times a day\*  
 d) formulae was introduced in the market in 1975\*
18. All are features of neonatal tetanus except  
 a) trismus  
 b) Dirty cord  
 c) muscle spasms ✓  
 d) ability to breastfeed.
19. Which of the following is contraindicated in treatment of kerosene poisoning  
 a) oxygen  
 b) gastric lavage  
 c) antibiotics  
 d) feeds
20. A four year old child with circumscribed hair loss, scaling and itching of the scalp  
 a) start the child on Amphotericin B  
 b) he has tinea corporis  
 c) it is a hereditary phenomenon\*  
 d) griseofulvin is the drug of choice
21. congenital malformations can be prevented by all except  
 a) malaria prophylaxis in pregnancy  
 b) vaccinations  
 c) copious intake of alcohol during first trimester  
 d) supplementation
22. Cerebral palsy  
 a) hyperactivity is a feature  
 b) is a non-progressive motor deficit disorder  
 c) speech development is normal  
 d) diagnosis is by a skull x-ray
23. Which of the following is not a predisposing factor of child abuse?  
 a) mental retardation  
 b) post-traumatic stress disorder (PTSD)  
 c) domestic violence  
 d) stable families
24. Common causes of prolonged neonatal jaundice include the following except  
 a) congenital hypothyroidism  
 b) biliary atresia ✓  
 c) ABO incompatibility  
 d) neonatal hepatitis ✓
25. Anaemia in the newborn may be caused by the following except  
 a) haemophilia ✓  
 b) birth trauma ✓  
 c) foetal maternal transfusion ✓  
 d) blood group incompatibility\*



26. Which of the following is a cyanotic heart disease
- ventricular septal defect
  - tetralogy of fallot
  - atrial septal defect
  - patent ductus arteriosus
27. Which of the following is not a feature of severe pneumonia
- oxygen saturation of >90%
  - grunting
  - inability to drink
  - cyanosis
28. In regard to neonatal resuscitation, which statement is not true
- head positioning is crucial for airway management
  - the ratio of cardiac compression to ventilation is 3:1
  - monitor pulse rate regularly
  - IV adrenaline is recommended if the baby is gasping
29. All the following are metabolic complications of an infant of a diabetic mother except
- hypoglycaemia
  - hyperglycaemia
  - hypocalcaemia
  - hypomagnesaemia
30. Which of the following is a feature of acute glomerulonephritis
- polyuria
  - normal blood pressure
  - hypotension
  - oliguria
31. About nephrotic syndrome, which one is true?
- hyperalbuminemia is a feature+
  - most idiopathic cases lead to minimal change lesions
  - blood lipids are reduced+
  - steroids have no role in management+
32. The following is a major criterion in Rheumatic fever
- fever
  - increased ESR
  - migratory polyarthritis
  - elevated C-reactive protein
33. Geographical origin of a child will help in the diagnosis of:
- Whooping cough
  - Kala-azar
  - Tuberculosis
  - Covid-19
34. The following organisms cause acute diarrhea except
- Escherichia Coli

- b) Rota Virus  
c) Shigella  
d) Klebsiella
35. Which of the following conditions causes massive splenomegally  
a) Acute myeloid leukaemia  
b) sickle cell anaemia  
c) Tuberculosis  
d) Typhoid Fever
36. Risk factors for mother to child transmission of HIV include all except  
a) advanced maternal disease  
b) low CD<sub>4</sub> counts  
c) mixed feeding  
d) prolonged rupture of membranes more than 6 hours
37. Side effects of isoniazid  
a) optic neuritis+  
b) peripheral neuropathy  
c) Ref colored urine  
d) Gum hypertrophy
38. In pyogenic meningitis, one of the investigations is true concerning CSF analysis  
a) polymorphs are increased  
b) protein is 0.4gm/l  
c) sugar is >2.5mmol/L  
d) clear colour
39. Spina bifida occulta present with all the following except  
a) Lipoma  
b) tuft of hair ✓  
c) flaccid paralysis  
d) dimple ✓
40. Differential diagnosis of a floppy infant:  
a) Down's Syndrome  
b) underweight  
c) Turner's syndrome  
d) hyperthyroidism

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**SECTION 2: SHORT ANSWER QUESTIONS - (40 MARKS)**

1. Exclusive breast feeding is recommended in the first 6 months in infants (2 marks)
  - a) List four advantages of breast feeding (3 marks)
  - b) Outline four signs of good attachment you would look for when a baby is being breastfed
  
2. An eight-month old infant is brought to the OPD with a history of having 10 bouts of watery stool in the last 24 hours and 3 bouts of vomiting in the last 3 hours. There is no blood in stool. On examination she is weak, unable to suckle, eyes are deeply sunken and skin pinch goes back more than 2 seconds (1 mark)
  - a) Classify her illness *severe* (4 marks)
  - b) What immediate treatment do you give this child *2a+8*  
*2(5/1)*
  
3. A 2 $\frac{1}{2}$  year-old child weighing 13kg is brought to outpatient convulsing (1 mark)
  - a) What are your immediate concerns, outline two (4 marks)
  - b) If the convulsion does not stop by 10 minutes after treatment, what action will you take.
  
4. A two weeks old baby is brought to the paediatric filter clinic with history of refusal to breastfeed. On examination, the temperature is 37.5°C and the umbilical cord has pus (1 mark)
  - a) What is the probable diagnosis *Neonatal sepsis* (4 marks)
  - b) Outline the definitive treatment
  
5. A three year old child presents to you with a 2 day history of cough and difficulty in breathing. On examination the child has a temperature of 38°C and respiratory rate of 48 cycles per minute. There is notable grunting and he is unable to feed (1 mark)
  - a) What is the diagnosis? *Severe pneumonia* (4 marks)
  - b) How would you treat this child
  
6. A four year old child from a high risk malaria area presents with fever, history of convulsions and inability to feed. On examination he has a temperature of 38°C and is moderately pale. He weighs 16kg (1 mark)
  - a) What is the diagnosis? (4 marks)
  - b) outline the treatment
  
7. Lorua was born three days ago. Her mother noted yellow coloration of eyes on her bay some few hours after delivery. The yellowness has spread to the whole body. (1 mark)
  - a) What is the diagnosis (4 marks)
  - b) List four important investigations you would order for this baby

8. A six-year-old girl is brought to you with history of headache, puffiness of face which is worse in the morning and has passed tea coloured urine of reduced volume. She was treated for sore throat two weeks ago
- a) What is your diagnosis? (1 mark)
- b) List four important investigations and expected results (4 marks)

**SECTION 3: LONG ANSWER QUESTIONS - (20 MARKS)**

1. In a table format, describe the Kenya Expanded Programme on Immunization under the following headings: (20 marks)
- i) Vaccine
  - ii) Age
  - iii) Route of administration
  - iv) Dose
  - v) Common side effects