



**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: 23RD JUNE, 2022

TIME: 3 HOURS (9:00 A.M – 12 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

1. In regards to newborn examination, which of the following statements is correct?
- Initial examination should be performed after one week
 - Breast hypertrophy is uncommon and when present denotes a problem
 - The liver is usually not palpable
 - Imperforate anus is not always visible and may require evidence by gentle insertion of the little finger.
2. Which of the following is a complication of phototherapy?
- Vomiting
 - Cyanosis
 - Respiratory distress
 - Skin rashes
3. Which of the following reflexes is correctly matched with the appropriate age?
- Moro reflex at birth
 - Grasp reflex at 1 year
 - Ankle clonus at 73 months
 - Extensor plantar at 48 months.
4. What is most likely cause of diarrhoea in children less than five (5) years according to World Health Organization?
- Arbovirus
 - Bacteria
 - Parvovirus
 - Rota virus
5. Corticosteroid are indicated primarily at what symptom of Acute rheumatic fever?
- Rash
 - Fever
 - Arthritits
 - Severe carditis
6. Which of the following is indicated in the management of hemophilia in children?
- Omeprazole
 - Fresh frozen plasma
 - Avoid Aspirin
 - Digoxin
7. Earliest sign of rickets is;
- Rachitic rosary
 - Craniotabes
 - Bow legs
 - Harrison groove

8. A 5 year old boy is admitted with convulsions. The appearance was cloudy, WBC count is high and the glucose content was low. Which type of meningitis is this most likely to be?
- Bacterial
 - Viral
 - Fungal (cryptococcal)
 - Tuberculous (TB)
9. An infant is brought to the casualty unconscious. Random blood sugar done reveals the child has hypoglycaemia. On further examination, you find that the child has malnutrition. The correct dose of I.V. 10% glucose for this child would be:
- 5ml/kg over 5-10 minutes
 - 2 ml/kg over 5-10 minutes
 - 2.5ml/kg over 5 minutes
 - 3 ml/kg stat
10. Anticipated problems in a preterm infant include the following except;
- Hypoglycaemia
 - Polycythaemia
 - Infection
 - Temperature instability
11. Which one of the following is not a risk factor for mother to child transmission of HIV infection?
- Mixed feeding
 - Small for gestation baby
 - Advanced maternal HIV disease
 - Low CD4 counts
12. Tetralogy of fallot include the following anatomical defects except;
- Congestive Heart failure
 - Ventriculoseptal defect
 - Over-riding of Aorta
 - Pulmonary stenosis
13. Which of the following statements about Rheumatic fever is correct?
- Commonly follows skin infection due to staphylococcal pyogenes
 - Arthritis causes destruction of joints
 - Rheumatic chorea commonly causes permanent disability of motor co-ordination
 - Aspirin therapy is effective in rheumatic carditis.
14. With regards to DKA; which of the following option is not true?
- Random blood sugars of 8mmol/L
 - Coma occurs
 - Polyuria
 - Responds to insulin therapy

15. Regarding nephrotic syndrome;
- High protein diet is indicated in its management
 - Malaria can cause it
 - Abdominal ultrasound is an important diagnostic tool
 - Steroids are not indicated in treatment.
16. Burkitt's lymphoma;
- Is a non-Hodgkin's lymphoma
 - Commonly presents with abdominal mass
 - May involve the central nervous system.
 - Wilm's tumor is a differential diagnosis.
17. Diazepam is contraindicated in neonates. One major side-effect of diazepam is;
- Hyperactivity
 - Drowsiness
 - Dryness of mucous membrane
 - Respiratory depression
18. Jaundice observed soon after birth (less than 24 hours) in newborn is most likely;
- Physiologic jaundice
 - Pathological jaundice
 - Neonatal jaundice
 - Obstructive jaundice
19. A 10-year old child from the slum presents to you with profuse, watery diarrhoea. It is frequent, has rice water consistency and it is not blood stained/mucoid. What is the most likely diagnosis is?
- Dysentery
 - Typhoid fever
 - Cholera
 - Amoebiasis
20. A four-week old boy is brought to you with a history of non-bilious, projectile, vomiting immediately after breastfeeding. On examination there is a peristaltic wave on the abdomen and a palpable olive mass on right side of the umbilicus. What is the most likely diagnosis?
- Intussusception
 - Hirschsprung's disease
 - Gastroesophageal reflux
 - Hiatal hernia
21. The following are classified as cardinal features of CCF in children under five years except;
- Tachycardia
 - Sacral Oedema
 - Cardiomegally
 - Hepatomegaly

38. With regard to congenital abnormalities, which of the following is not compatible with life?
- Cleft Lip
 - Hypospadias
 - Anencephaly
 - Ano-rectal Malformation
39. John is a 6 year old boy brought to Casualty with a history of diarrhea and vomiting for 2 days. On examination, he is unconscious. What other feature are you likely to find as you examine?
- Weak thready pulse
 - Fruity breath
 - Hyperactive precordium
 - Jaundice
40. When conducting a newborn resuscitation, what is the correct ratio of giving chest compressions to ventilations?
- 2:1
 - 5:2
 - 15:2
 - 10:2

SECTION 2 SHORT ANSWER QUESTIONS (40 MARKS)

41. A 6 year old girl was admitted with features suggestive of acute glomerulonephritis.
- State four (4) cardinal features of Acute glomerulonephritis. **(2 marks)**
 - Indicate three (3) common laboratory findings that would support this diagnosis. **(3 marks)**
42. Good care and breastfeeding of neonates is essential for normal growth.
- Briefly outline five (5) features of good attachment and good positioning in breastfeeding. **(2.5 marks)**
 - Outline five (5) advantages of breast feeding. **(2.5 marks)**
43. Neonatal sepsis is common in paediatric units in Kenya.
- Mention four (4) common bacterial causes of Neonatal sepsis. **(2 marks)**
 - Briefly discuss the Specific management of child with neonatal sepsis in new born units. **(3 marks)**
44. A six (6) year old boy presented with history of fever of 39^oc, convulsions which were generalized, tonic clonic, lasting for 10 minutes. On examination the neck was stiff and Kernig's sign was positive.
- What is your likely diagnosis **(2 marks)**
 - List three (3) differential diagnoses that you would consider. **(3 marks)**

45. A four-year old child presents at the outpatient clinic with a history of jaundice, dactylitis, hepatosplenomegaly. On laboratory investigation, the full haemogram reveals that he has chronic anaemia.
- What is the probable diagnosis? (2 marks)
 - Outline possible crisis indicating most common precipitating factors (3 marks)
46. Concerning asthma in children;
- Enumerate four (4) clinical features of Asthma in an 8 year old child. (2 marks)
 - Outline the management of the same child suffering from an Acute Asthmatic attack. (3 marks)
47. Diabetes has become a common health problem affecting children in developing countries.
- Mention two (2) types of diabetes that affect children (2marks)
 - Outline important investigations necessary for confirming diabetes mellitus. (3 marks)
48. Pneumonia is a common cause of morbidity and mortality in the under-five (5) year old.
- Classify pneumonia and indicate two (2) cardinal features of each class according to WHO. (3 marks)
 - Identify two (2) common bacterial causes of pneumonia in children. (2 marks)

SECTION 3**LONG ANSWER QUESTION****(20 MARKS)**

49. A four-year-old was admitted with complications of diarrhoea and vomiting. On examination, the child has a weight of 9kg, oedema of the feet and MUAC (Mid-upper arm circumference) of less than 11.5 cm.
- What is your probable diagnosis? (2 marks)
 - What are the predisposing factors to the condition? (6 marks)
 - Which other features will you find on examination? (4 marks)
 - Outline the management of the above child. (8 marks)