

SECTION A: Multiple Choice Questions (MCQs) - 40MARKS

1. When taking history in children, which statement is true?
 - a) Closed questions should not be use
 - b) A 4-year-old child can be relied on to give history
 - c) A child should remain still for the clinician to successfully take the history
 - d) The presenting complaints should be listed in the order in which they are stated by the mother

2. As regards physical examination in children:
 - a) Abdominal auscultation should be done before palpation
 - b) The apex is normally found in the 5th intercostal space mi-clavicular line
 - c) Pleural effusion gives a resonant note on percussion
 - d) ENT examination should be done at the beginning of the systemic examination

3. TORCHES include the following EXCEPT:
 - a) German measles
 - b) Cryptococcus infection
 - c) Toxoplasmosis
 - d) Herpes simplex

4. TRUE of neonatal infections is that:
 - a) A negative blood culture rules out sepsis
 - b) The commonest cause of ophthalmia neonatorum is Neisseria gonorrhoea
 - c) The correct duration for the treatment of neonatal sepsis is 5 day
 - d) The treatment of choice for cord infection currently in Kenya is 7% Chlorhexidine

5. In the care of large for gestational age infants, the most common problem in the first 24 hours after delivery is:
 - a) Hyperglycemia
 - b) Hypoglycemia
 - c) Birth injury
 - d) Hypothermia

6. Which of the vaccine below is correctly matched with the age at which it is normally administered?
 - a) Measles6 and 18 months
 - b) BCG.....6 weeks

- c) Rota.....6 and 10 weeks
- d) Pentavalent.....10 and 14 weeks

7. A one-year-old is brought to the MCH clinic for the routine monitoring. What statement below reflects normal growth and development at this age?

- a) A weight of 14kgs
- b) A head circumference of 47cm
- c) Crawling
- d) A 2-word sentence

8. Poliomyelitis is a notifiable disease. A correct statement about poliomyelitis is that:

- a) Most of the infections result in paralysis
- b) It leads to an ascending paralysis similar to Gullian Barre Syndrome
- c) Full recovery follows paralytic disease
- d) Intramuscular injections increase the risk of paralytic disease

9. Choose among the listed conditions an acyanotic congenital heart disease:

- a) Patent ductus arteriosus
- b) Truncus arteriosus
- c) Ebstein anomaly
- d) Tetralogy of fallot

10. Congestive cardiac failure in children is characterized by which of the following cardinal features on physical examination?

- a) Crying a lot
- b) Cyanosis
- c) Elevated temperature
- d) Displaced apex

11. Identify among the following that which belongs to the minor criteria for the diagnosis of Acute Rheumatic fever:

- a) Sydenham's chorea
- b) Elevated Antistreptolysin O titres
- c) Prolonged PR interval
- d) Migratory Polyarthritits

12. Joe is admitted with features that are highly suggestive of pulmonary tuberculosis. Which of the following is true of PTB in children?

- a) Children suffer open as opposed to close PTB
 - b) Isoniazid is associated with peripheral neuropathy
 - c) Sputum is easily obtained through coughing up in all ages of children
 - d) The total duration of treatment is 4 months
13. Hookworms in the paediatric age group are likely to cause:
- a) Iron deficiency anaemia
 - b) Bloody stools
 - c) Intestinal obstruction
 - d) Severe vomiting
14. Dysentery is most likely to be caused by which of the following organism?
- a) Rota virus
 - b) Entamoeba histolytica
 - c) Giardia lamblia
 - d) Campylobacter jejuni
15. True of upper airway infections in children is:
- a) Epiglottitis is commonly caused by viruses
 - b) Enlarged adenoids are likely to present with mouth breathing
 - c) Laryngotracheobronchitis (croup) is best treated with antibiotics
 - d) It is safe to use a spatula to examine the throat if one suspects diphtheria
16. Regarding the WHO classification and management of dehydration:
- a) Some dehydration is best managed with IV Ringers Lactate
 - b) A weak or absent pulse is a sign of severe dehydration
 - c) Hypovolemic shock is first treated with IV boluses of Normal saline
 - d) No dehydration does not require any treatment in the presence of loose stools
17. UTI in young children is likely to present with:
- a) Dysuria
 - b) Frequency
 - c) Enuresis
 - d) Failure to thrive
18. Which of the statement below is correct about Nephrotic syndrome?
- a) It presents with mild periorbital oedema
 - b) It occurs after a throat infection with GABH streptococcus
 - c) Bee stings is a differential diagnosis
 - d) IV Dexamethasone is the main drug used in its treatment
19. Acute kidney injury:
- a) Mostly results in chronic kidney disease

- b) Severe dehydration is a common cause in children
 - c) Hypertension is present in most cases
 - d) Convulsions do not occur in this condition
20. A feature of Hypothyroidism in infants among the following is:
- a) Crying all the time
 - b) Good appetite
 - c) Poor cold tolerance
 - d) Small tongue
21. Kwashiorkor is characterized by one of the stated features below:
- a) Moon faces
 - b) Wizenod look
 - c) Ferocious appetite
 - d) Weight for age of less than 60%
22. Downs syndrome:
- a) Is trisomy 22
 - b) Is also called cretinism
 - c) Ventriculoseptal defects are an associated
 - d) The children have normal IQ
23. The test that is included as part of cerebrospinal fluid analysis is:
- a) The protein level
 - b) Viral culture
 - c) Electrolytes
 - d) Immunoglobulins
24. The correct level of placing the lumbar puncture needle in children is between:
- a) L1 and L2
 - b) L2 and L3
 - c) L3 and L4
 - d) L4 and L5
25. Convulsions are common in children. True of convulsions is that:
- a) Febrile convulsions occur in the 6 months to 4 years' window
 - b) Low magnesium levels are a contributing factor
 - c) A history of a fall from a height is not significant
 - d) The most common type is the tonic type
26. Sickie cell disease:
- a) Is an autosomal dominant inherited disorder
 - b) Presents with hand and foot syndrome in children older than 2 years

- c) Life span in these patients is less than 20 years
d) The painful crisis is the same as the thrombotic crisis
27. As regard the Hemophilias:
- Christmas disease is also known as Hemophilia A
 - Hemarthrosis is the commonest presentation
 - Hemophilia A is caused by deficiency of factor IX
 - Hemophilia B is caused by deficiency of factor VIII
28. Acute leukemia:
- Leucopenia is a likely laboratory finding
 - AML has a better prognosis than ALL
 - Radiation is the main mode of treatment
 - Diagnosis is made through a total blood count mostly
29. The following vaccine is a live vaccine:
- Diphtheria
 - Pertussis
 - Hepatitis B
 - Tetanus Toxoid
30. A side effect of phototherapy is:
- Convulsions
 - Grey baby syndrome
 - Damage to the cornea
 - Burns
31. Which of the following is true concerning HIV infection in children?
- A positive HIV Elisa test in a child less than 18 months old shows that the child is HIV infected.
 - An HIV virologic test is necessary to make a diagnosis of HIV in children of all ages.
 - HIV ELISA tests for presence of antibodies to HIV in blood.
 - HIV PCR tests for presence of antibodies to HIV in blood.
32. According to the WHO staging of HIV, a diagnosis of PTB puts the patient in which stage?
- Stage 1
 - Stage 2
 - Stage 3
 - Stage 4
33. The following treatment is indicated in a child who is convulsing now:
- I.V. Diazepam 0.3 mg/kg/body weight STAT
 - I.M. Diazepam 0.5 mg/kg/body weight STAT
 - I.V. Phenobarbitone 3mg/kg/body weight STAT

- d) Phenobarbitone per oral 3-8mg/kg/body weight
34. In the lifecycle of the malaria parasite, which stage below occurs in the mosquito?
- Merozoite
 - Trophozoite
 - Sporozoite
 - Gametocyte
35. The following is a risk factor for Mother to child transmission of HIV:
- High viral load
 - High CD4 count
 - Malaria
 - Multiple gestation
36. What drug that can be used safely if needed during new born resuscitation?
- IV Adrenalin 0.1-0.3ml/kg of 1:1000 solution
 - IV Sodium bicarbonate 1-2mmol/kg of the 8.4% solution
 - IV 10% dextrose 2.5ml/kg STAT
 - IV Aminophylline
37. The following is not a differential diagnosis for a wheezing child aged 3 years:
- Bronchiolitis
 - Congestive Heart failure
 - Empyema Thoracis
 - Foreign body aspiration
38. The following drug can be routinely and safely given to a 1-year-old baby who you are treating for acute gastroenteritis:
- IV Ceftriaxone 50mg/kg OD for 5 days
 - Oral Zinc sulphate 20mg OD for 14 days
 - Oral Vitamin A 300,000IU STAT
 - Syrup Amoxycillin 125mg three times per day for 5 days
39. The first test done at the bedside on the cerebrospinal fluid is:
- White blood cell count
 - Glucose level determination
 - Looking for turbidity
 - Protein level
40. The following are examined under higher centers in Central Nervous system examination in a 5-year-old:
- Hallucinations

- b) Balance
- c) Level of consciousness
- d) Deep tendon reflexes

Section 2: SHORT ANSWER QUESTIONS (SAQs) - 40MARKS

1. Baby Anita is born at 30 weeks' gestation. She is stable but is admitted to the new born unit.
- a) State 6 features of a prematurity. **(3 Marks)**
 - b) State 4 aspects of supportive management for preterm babies. **(2 Marks)**
2. Amani is 2 years old and is admitted with vomiting and fever for 2 days. When examined he is found to have a bulging anterior fontanel and a stiff neck.
- a) What is your likely clinical impression? **(1 Mark)**
 - b) State 3 laboratory tests that will help confirm the diagnosis. **(3 Marks)**
 - c) Name 2 drugs that are used in the treatment of this condition. **(1 Mark)**
3. Measles remains an important vaccine preventable disease that is still causing morbidities and mortalities in our setting.
- a) Indicate 4 cardinal features of Measles **(2 Marks)**
 - b) List 4 known complications. **(2 Marks)**
 - c) State the ages at which the Measles vaccine is given in a HIV positive child in Kenya. **(1 Mark)**
4. A 4-year-old is admitted with features suggestive of congestive cardiac failure. Regarding CCF:
- a) What 4 possible underlying causes at this age? **(2 Marks)**
 - b) State 3 radiological tests that are relevant in the evaluation of this child. **(3 Marks)**
5. Agnes is a 2-year-old child who is seen in the Paediatric emergency unit with history of cough, runny nose and hotness of the body for last 3 days. Upon examination she is found to have a respiratory rate of 55/minute and lower chest wall in drawing.
- a) What is the WHO classification of her condition? **(1 Mark)**
 - b) Prescribe fully the antibiotic you will use for her treatment. **(2 Marks)**
 - c) Advise the mother regarding what to watch out for at home. **(2 Marks)**
6. Peter who is 5 years old presents with coca cola coloured urine which is also little in amount. The blood pressure is elevated for his age.
- a) What is the likely diagnosis? **(1 Mark)**
 - b) What is most common organism that triggers this condition? **(1 Mark)**

c) What are three likely findings in urinalysis?

(3 Marks)

7. Rickets affects the developmental milestones of young children. Answer the following questions about rickets.

a) 4 clinical features in infants

(2 Marks)

b) 3 findings in bone biochemistry that help to confirm the diagnosis.

(3 Marks)

8. Severe acute malnutrition is a common entity in many 3rd world countries. Thus the diagnosis, management and prevention are extremely important.

a) What are the first 6 step in the management of SAM according to WHO guidelines?

(3 Marks)

b) Mention 2 commercially prepared feeds that are used in the feeding of the children with SAM.

(2 Marks)

SECTION 3: LONG ANSWER QUESTION (LAQs) - 20MARKS

1. Abigail is a 3-year-old who accompanied the parents to visit the grand mum at her home in Nyanza 2 weeks ago. She now presents with hotness of the body and vomiting in the last 24 hours. She is also reported to have had a convulsion 2 hours ago. On examination she has severe pallor and jaundice. Abdominal examination reveals a tender hepatomegaly of 4cm below the costal margin. The clinical diagnosis is severe Malaria and the haemoglobin is 4g/dl.

a) Name 4 stages of the malaria parasite in the human host.

(4 Marks)

b) State the role of the thick and thin film in the diagnosis of Malaria.

(4 Marks)

c) What is the definitive treatment for Abigail given the above narrative?

(4 Marks)

d) Outline 4 ways in which malaria can be effectively controlled at the community level.

(4 Marks)

e) How would you manage Abigail if she presented to you having a convulsion?

(4 Marks)