BOWEN UNIVERSITY, IWO COLLEGE OF HEALTH SCIENCES FACULTY OF CLINICAL SCIENCES MBBS PART III FINAL EXAMINATIONS PAEDIATRICS PAPER I 9TH NOVEMBER 2020

TIME ALLOWED: 1HR INSTRUCTIONS:

- 1. Answer all Questions
- 2. Indicate T (for True) and F (for False) against each of the statements below on the answer sheet provided.\
- 3. Please do not write or make any marks on the question paper which should be returned with the answer sheet.
- 1. The following murmurs are suggestive of heart disease in a child
- a. Pansystolic murmur
- b. Grade III murmur
- c. Grade II murmur
- d. Still's murmur
- e. Associated with an abnormal 2nd heart sound
- 2. The following are indications for steroids in the management of tuberculosis
- a. Endobronchial tuberculosis
- b. Milliary tuberculosis
- c. Renal tuberculosis
- d. Pulmonary tuberculosis
- e. Abdominal tuberculosis
- 3. The anterior frontanelle of a child should have closed
- a. before 6 months
- b. before 9 months
- c. after 24 months
- d. after 36 months
- e. by 6 weeks of life
- 4. Concerning Vit. D and Calcium metabolism
 - a) Deficient calcium absorption leads to secondary hyperparathyroidism
 - b) Deficient Vit. D leads to craniotabes in infancy
 - c) Treatment of hypocalcaemia requires the use of IV 10% Ca Gluconate /ml/kg to prevent complications
 - d) Vit. D deficiency is a common cause of BLOUNT'S Disease
 - e) The use of calcium supplement is essential in the management of nutritional rickets
- 5. Differential diagnosis of a 4-day old term male neonate brought into the neonatal ward on account of bleeding

- a. Haemorrhagic disease of the newborn
- b. DIC
- c. severe perinatal asphyxia
- d. sickle cell disease
- e. VSD
- 6. The likely age of a child who feeds self with a spoon, mimics others and walks up the stairs with some assistance
- a. 18 months
- b. 6 months
- c. 36 months
- d. 9 months
- e. 10 months
- 7. The following are signs of vit A deficiency:
- a. Conjunctival xerosis
- b. Bitot's spot
- c. Night blindness
- d. b & c only
- e. Corneal xerosis
- 8. A five-year- old boy has precocious puberty BP 130/80. Estimation of which of the following will help in diagnosis?
- a.17 Hydroxyprogesterone
- b.11- Deoxycortisol
- c.Aldosterone
- d. Testosterone
- e.Adrenalin
- 9. A 9-year-old known female, HbSS presenting to the ER with chest pain, cough, difficulty in breathing, intercoastal recessions, SPO2 was 86% in room air. Differential diagnosis includes
- a. Acute chest syndrome
- b. Lobar pneumonia
- c. bronchopneumonia
- d. atrial septal defect
- e. rheumatic heart disease
- 10. Concerning the most likely diagnosis of the child in question 9 above, a chest radiograph will likely show
- a. New pulmonary infiltrates
- b. Cavitations on film
- c. Enlarged heart
- d. pneumothorax
- e. air-fluid levels
- 11. Which of the following is not true regarding cretinism

- a. Short limbs compared to trunk
- b. Proportionate shortening
- c. Short limbs and short stature
- d. Short mental limbs long stature
- e. All of the above
- 12. The following fluids are useful in the correction of hypovolaemic shock
- a. Normal Saline
- b. Albumin
- c. Ringers lactate
- d. 5% dextrose water
- e. 3% hypertonic saline
- 13. 4-day-old male Term baby presenting with jaundice noticed on the second day of life.
- SB 18mg/dl, child sucks well.
 - a. Should have single volume EBT immediately
 - b. Should be commenced on phototherapy immediately
 - c. Should have double volume EBT immediately
 - d. A & B are correct
 - e. None of the options is correct
- 14. The following statements are true about the maintenance fluid for a 2-year-old toddler:
- a. 100mls/kg for the 1st 10kg body weight
- b. 400mls/m2 is total maintenance fluid
- c. 50mls/kg for the 2nd 10kg body weight
- d. A &C are correct
- e. All are true
- 15. The following are true concerning neonatal hyperbilirubinaemia:
- a.60-hour-old term baby with SB of 15mg/dl, conjugated fraction 0.9mg/dl should be reassured and allowed home
- b. 60-hour-old male neonate with SB 6mg/dl should be commenced on phototherapy immediately
- c. jaundice progresses in a cranio-caudal fashion
- d. total bilirubin of a child with yellowness of the skin reaching the ankles and wrist is approximately 18mg/dl
- e. ABO incompatibility is a recognised cause.
- 16. Concerning neonatal sepsis
- a. Late onset is onset after one week, and is community acquired
- b. Early onset caused by the organism GBS (Group B Streptococcus)
- c. Symptoms are variable and non-specific
- d. Gram negative organisms are recognised causes
- e. All are correct
- 17. The most frequent valvular affectation in rheumatic heart disease is
- a. Aortic
- b. pulmonary
- c. Mitral
- d. tricuspid valve

- e, all of the above
- 18. An eight- month-old child presents with 2-day history of diarrhea and vomiting, examination revealed a lethargic child with sunken eyeballs, depressed anterior frontanelle, no tears on crying, fast thready pulses. Your management plan includes
- a. passing a urethral catheter to monitor urine
- b. counselling the mum on home-based fluids and allowing home
- c. giving Intravenous normal saline at 10% deficit plus maintenance
- d. giving 5% dextrose water at 20mls/kg over one hour
- e. giving IVF fluid at 5% deficit plus maintenance over the 1st 8hours then ongoing losses over the remaining 16 hours.
- 19. A 5-year-old boy with decreased level of consciousness who opens eye to pain, makes some sound and extends his upper limb when his anterior chest is squeezed has a Glasgow Coma score of:
- a. 6
- b. 8
- c. 11
- d. 5
- e. 7
- 20. Concerning gastrointestinal bleeding in children,
- a. Haematochezia may rarely be due to upper GI bleeding.
- b. Microcytic hypochromic anaemia may be an associated finding
- c. Apt-Downey test may be indicated in a newborn presenting with GI bleeding
- d. Endoscopy is contraindicated in the management
- e. Maternal use of aspirin is not a recognised cause in the newborn.
- 21. Common causes of acute kidney injury in children:
- a. Glomerulonephritis
- b. Nephrotic syndrome
- c. Haemolytic uraemic syndrome
- d. Obstructive uropathy
- e. Septicaemia
- 22. Concerning leukaemias
- a. it is commoner than lymphomas in this environment
- b. chronic leukaemia is commoner than acute in children
- c. aplastic anaemia is a differential
- d. recurrent anaemia is an infrequent feature
- e. Hemarthrosis is not a feature in children
- 23. Concerning hypertension in children,
- a. obesity is a recognised cause
- b. it is an infrequent feature of acute glomerulonephritis
- c. It is a constant feature of nephrotic syndrome
- d. It is defined as average SBP and/or diastolic BP (DBP) that is \geq 85th percentile for gender, age, and height taken on 3 occasions.
- e. urinary tract infections may be a predisposing factor

- 24. A 6-year-old boy presented with brown-coloured urine following sore throat 1 week earlier. On physical examination, his blood pressure is 136/88 mm Hg, and he has mild swelling of the face and lower extremities. The following, are true
- A. Patient may have low C3 complement value
- B. Urinalysis may be normal
- C. Positive antineutrophil cytoplasmic antibody titer
- D. About 50% would advance to rapidly progressive glomerulonephritis
- E. Proteinuria of atleast 3+ is diagnostic of this condition
- 25. The features of hyperkalaemia on electrocardiography include: prolong PR interval, widened QRS complex tall-peaked T waves. The serum level of potassium can be lowered through the following methods:
- A. insulin /glucose infusion
- B. 10% calcium gluconate at 0.5ml/kg
- C. Oral kayaxalate
- D. Nebulized Salbutamol
- E. Dialysis
- 26. Concerning the clinical features of paediatric HIV/AIDS;
- a. Persistent generalised lymphadenopathy is stage II disease
- b. Extrapulmonary tuberculosis is a feature of stage IV disease
- c. Kaposi sarcoma is an AIDS defining condition
- d. Oesophageal candidiasis is a feature of stage III disease
- e. Extensive warts infection is a feature of stage II disease

27. Bronchial asthma:

- a. is associated with chronic persistent cough
- b. It is inherited in a Mendelian fashion
- c. May be associated with flexural eczema
- d. Rarely occurs in infancy
- e. May requires laboratory investigation for diagnosis
- 28. A three-year-old girl presented with fever, cough and breathlessness. On examination there was dullness on percussion and diminished air entry over the left lower lobe.
- a. This child has right lobar pneumonia
- b. A preceding history of measles is likely
- c. Pulmonary tuberculosis is a likely diagnosis
- d. Pleural tap is an important part of management
- e. Empyema is not likely because of the dull percussion note
- 29. Laryngotracheobronchitis can be differentiated from epiglottitis by the following features
- a. Very abrupt onset
- b. Isolation of a virus in a trachea aspirate
- c. Fixed circumferential subglottic narrowing on the lateral X-ray of neck
- d. Inspiratory stridor
- e Dramatic response to antibiotic therapy

- 30. An 18-month old boy with history of nasal discharge, reduce feeding, cough and difficulty breathing was seen at the CEU. Examination revealed an acutely ill-looking child with hoarseness, respiratory distress, and inspiratory stridor. The following are true
- a. This condition is frequently caused by RSV
- b. Low grade fever usually develops about 3 days after the onset of signs of upper airway obstruction
- c. Is a benign infection requiring only supportive therapy
- d. It is often a life-threatening infection
- e. Dexamethasone is useful in its treatment
- 31. The following are risk factors for pneumonia:
- a. Macrosomic babies.
- b. Lack of measles immunization
- c. Malnutrition
- d. Sickle cell trait
- e. Cyanotic congenital heart disease with right-to-left shunt
- 32. With regards to lung abscess in childhood
- a. is uncommon in children
- b. Chest radiograph shows a thick wall localized air collection
- c. Often associated with finger clubbing
- d. Haemophilus influenza is the most frequently cultured organism from the sputum
- e. It can be preceded by history of gastroesophageal reflux
- 33. The following are correct concerning bronchiectasis
- a. It is a disease characterized by reversible abnormal bronchial dilatation and distortion of the bronchial tree
- b. Plain chest radiograph is the current gold standard for diagnosis, and it shows signet ring appearance
- c. It can be a congenital disorder
- d. Fever and dry cough can occur with infectious exacerbations
- e. Spirometry often demonstrate obstructive pattern
- 34. An 11-month-old boy was brought to the emergency department after having 2 episodes of generalized convulsion. 4 days before convulsion, mother notice a yellowish discharge from the left ear and child had refused to suck well. Two months earlier, there was a history of pain and discharge in the right ear which subsided with medication. The following are true
- a. Child may have an underlying immune deficiency
- b. In the absence of neck stiffness, intravenous 3rd generation cephalosporins is not indicated
- c. Regular ear cleaning and intermittent antibiotic eardrop will prevent recurrence
- d. Exclusive breastfeeding practice is protective against the condition
- e. Analysis of the cerebrospinal fluid is not necessary since the child is conscious.
- 35. The following is correct about chest radiograph
- a. It is useful for confirmation of epiglottitis.

- b. If pleural fluid is suspected presence of homogenous opacity, loss of costophrenic and cardiophrenic angle is diagnostic
- c. A repeat chest x-ray is mandatory after treating bronchopneumonia.
- d. It is an important tool in the diagnostic approach of cardiac diseases.
- e. In the presence foreign body, localized failure of the lung to empty reflects bronchial obstruction
- 36. The cardiac lesion of Tetralogy of Fallot include
- a. Aortic stenosis
- b Pulmonary artery atresia
- c Overriding Aorta
- d Ventricular septal defect
- e Cardiomegaly
- 37. The following conditions are associated with congenital heart disease
- a. Maternal diabetes mellitus
- b. Rubella infection after the 16th week of pregnancy
- c. Marfan's syndrome
- d. Corticosteroid use
- e. Turner's syndrome
- 38. Concerning Tetralogy of Fallot, the following are true
- a. Growth retardation is an uncommon feature
- b. Sodium bicarbonate may be indicated in its management
- c. The lung field in a chest x-ray show increased vascular markings
- d. There is evidence of left ventricular hypertrophy in ECG
- e. Acute bacterial endocarditic is a common complication
- 39. Congenital Rubella manifestations are all except:
 - a. Rash appears first on trunk
 - b. Pre auricular lymph nodes
 - c. Arthralgia
 - d. Retinopathy
 - e. All of the above

40. Concerning Paediatric HIV/AIDS:

- a) Vertical transmission accounts for most cases in Nigeria.
- b) Primary prevention of HIV infection in women of reproductive age group is an unimportant control measure
- c) Positive HIV antibodies in an infant is diagnostic of the condition
- d) Positive HIV antibody testing in a 13month old baby is an indication for commencement of HAART
- e) Breast feeding is the commonest route of vertical transmission of the virus.
- 41. The following are true of cardiac failure in the infant
- a. Bronchopneumonia is a common precipitating factor
- b. The absence of pedal oedema rules out the diagnosis
- c. There is usually associated raised jugular venous pressure
- d. Bradycardia is a common feature in severe cases

- e. The vaccine treatment is indicated irrespective of aetiology
- 42. The following are correct about the apex beat
- a. It is located in the 4th left intercostal space in most infants
- b. It is diffuse in volume overload situations
- c. It has a tapping character in patients with mitral stenosis
- d. It is best felt with the patient lying supine
- e. It is located in the right hemi-thorax only in patients with congenital heart disease
- 43. Complications of large left to right shunt include
- a. recurrent chest infection
- b. mental retardation
- c. Cerebrovascular Accident
- d. kwashiorkor
- e. pericardial effusion
- 44. With regards to infective endocarditis (IE)
- a. It is an infection of the myocardium and heart valves.
- b. it is a primary complication of congenital heart disease alone
- c. It is usually present in patients with atria septal defect
- d. If left untreated vegetation usually remain within the heart chambers only
- e. Staphylococcus aureus is the most common aetiology in subacute IE
- 45. Causes of intrauterine growth retardation (IUGR):
 - (a) Chromosomal anomalies
 - (b) Chronic placental insufficiency
 - (c) Malaria in pregnancy
 - (d) Pregnancy induced diabetes
 - (e) Malnutrition
- 46. Common causes of Cerebral Palsy in Nigeria include:
 - a) Severe Birth Asphyxia
 - b) Severe Neonatal Jaundice
 - c) Pyogenic meningitis
 - d) Intrauterine factors
 - e) Poliomyelitis
- 47. Creatinine Clearance is a test of:
- a. Renal blood flow
- b. Tubular reabsorption
- c.Tubular secretion
- d.GFR
- e.None of the above
- 48. The followings are common findings in Nephrotic syndrome except:
- A. Massive proteinuria
- B. Red blood cell casts in urine
- C. Hypoproteinaemia
- D. Oedema
- E. Hyperlipidaemia

- 49. Concerning anaemias,
- a. Normochromic normocytic anaemias are seen in chronic kidney disease
- b. Macrocytosis may be seen in children on zidovudine therapy
- c. Microcytic anaemias may be found in iron deficiency anaemia
- d. Macrocytosis may be seen in liver disease
- e. Clinical features may not be seen in haemoglobin levels greater than 7g/dl
- 50. Concerning Congenital Adrenal Hyperplasia
 - a) Most common manifestation is ambiguous genitalia
 - b) Salt loosing syndrome occurs in 11 Hydroxylase deficiency
 - c) It is a cause of short stature
 - d) Hypertension does not occur
 - e) 20,22 Desmolase deficiency is not compatible with life