IMA MSN KERALA

QUADCRACK 2.0

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INDEX

LONG ESSAYS

1. Nephrotic Syndrome

A 4-year-old male child presents with puffiness of face, swelling all over the body and decreased urine output.

a) How will you evaluate and manage this child? (4+4)
b) What is the diagnosis? (2)

2. Acute Diarrhoeal Disease with Dehydration

A 3-year-old child presented to OPD with history of repeated vomiting and multiple episodes of loose stools. She drinks eagerly when water is offered. Her eyes are sunken and skin turgor is poor.

a) Diagnosis (2)
b) Classify types of dehydration (2)
c) Composition of ORS (2)
d) (Essay no. 2 first sub question omitted in original paper)
e) How will you treat this child according to the present signs and symptoms? (2)

3. β-Thalassemia Major

A 6-year-old boy born of a consanguineous marriage, with history of frequent blood transfusions (monthly once), is having severe pallor, mild icterus and massive splenomegaly.

a) Most probable diagnosis (1)
b) Differential diagnosis (1)
c) List all investigations to get a final diagnosis of this condition and management (4)
d) What are the complications? (2)
e) How will you counsel the family? (2)

4. Acute Glomerulonephritis

A 3-year-old boy presented with decreased urine output, dark urine and facial puffiness. There is history of fever since 3 days. His investigations showed urine albumin (++), RBC 25–30, pus cells (8–10 cells).

a) What is your most probable diagnosis? (1)
b) Arguments for your diagnosis & closest differential diagnosis? (1)
c) What are other investigations for supporting your diagnosis? (2)

d) How will you manage the case? (3)
e) What are the complications? (3)

5. Congenital Hypothyroidism

A 20-day-old newborn is brought with poor feeding, lethargy and constipation. The baby had prolonged neonatal jaundice since birth. On examination, the infant has hypotonia, a hoarse cry and an umbilical hernia.

a. What is the likely diagnosis and why?
b. Discuss the etiology of this condition.
c. How will you investigate and manage this child?
d. Describe the screening and importance of early identification of this condition.

6. Acute Bacterial Meningitis

A 2-year-old child is brought with fever and seizures. On examination, the child is irritable with altered sensorium and intermittent opisthotonus.

a. What is your probable diagnosis with three differential diagnoses?
b. What clinical signs will help confirm your diagnosis?
c. What specific investigations will you do and what are the expected findings?
d. How will you manage this child?
e. What are the complications?
f. How can this condition be prevented?

7. Extremely Preterm Baby

A 28-week, 1 kg baby is born by emergency LSCS to a teenage mother. Discuss the immediate management, risk factors for preterm delivery, antenatal drugs and acute & long-term complications.

8. Congestive Cardiac Failure following PSGN

A 10-year-old boy presented with generalized tonic-clonic seizure with hypertension, respiratory distress, oliguria, healed pyoderma and hepatomegaly. Discuss diagnosis, pathogenesis, management and complications.

9. Acute Leukemia

An 8-year-old girl with fever, pallor, ecchymoses, lymphadenopathy, hepatosplenomegaly. Discuss diagnosis, differentials, investigations and management.

10.A two-year-old male child presented with bilateral pedal edema. His weight is 5 kg, height 75cm and mid upper arm circumference 11cm. (a) What is the most probable diagnosis (b) What are the complications expected (c) How will you manage this chilD3

Short Essays

1. Congenital Hypothyroidism: Screening programs, clinical features, diagnostic workup, and management.
2. Sexual Maturity Rating (SMR) & Puberty: SMR stages, growth velocity definitions, peak velocity timing by sex during puberty, and definitions of precocious vs. delayed puberty.
3. Vitamin A Deficiency: RDA, dietary sources, clinical classification (Xerophthalmia stages), treatment, and the National Vitamin A Prophylaxis Programme.
4. Respiratory Distress Syndrome (RDS): Predisposing factors, clinical presentation, management, and the role of Kangaroo Mother Care (KMC).
5. Dengue Fever: Clinical features, required investigations, warning signs, and management of severe dengue.
6. Acute Diarrhea with Severe Dehydration: Management and fluid resuscitation protocol for a 1-year-old child weighing 8 kg.
7. IMNCI Guidelines: Core principles of IMNCI, alongside assessment, classification, and management protocols for a sick child aged 2 months to 5 years.
8. Down Syndrome: Phenotypic clinical features, common comorbidities, and parental counseling approach.
9. Pediatric Tuberculosis: Newer diagnostic modalities (e.g., CBNAAT/GeneXpert) and the systematic clinical diagnostic approach.
10. Shock in Children: Early recognition signs, physiological stages, classification types, and step-by-step resuscitation management.
11. Stridor: Etiology, differentiating clinical features, and emergency stabilization.
12. Immune Thrombocytopenic Purpura (ITP): Clinical presentation, bone marrow findings, and management options.
13. Rh Hemolytic Disease of the Newborn: Pathophysiology, clinical presentation, workup, management, and prevention using Anti-D.
14. Urinary Tract Infection (UTI): Etiopathogenesis, proper sample collection techniques, workup, and management.
15. Severe Acute Malnutrition (SAM): WHO diagnostic criteria, complications, and the 10-step management protocol.
16. Bronchial Asthma: Stepwise pharmacological management based on symptom severity.
17. A two-year-old male child presented with bilateral pedal edema. His weight is 5 kg, height 75 cm and mid upper arm circumference 11 cm. (a) What is the most probable diagnosis? (b) What are the complications expected? (c) How will you manage this child?
18. 6-month-old baby was brought to the OPD by his mother complaining of not sucking breast for longer period. He sucks for some time then stops feeding, after sometime he is again ready for sucking. The infant also had excessive sweating on forehead on feeding. On examination respiratory rate -60/min, Heart rate- 140\text{/min} Bilateral pedal edema +. On auscultation gallop rhythm is present. (a) What is the

most probable diagnosis? (b) What is the pathogenesis of this condition? (c) Discuss the management of this condition

19. Apnea in neonates
20. List the etiology of short stature in children. Enumerate the clues towards etiological diagnosis from history and examination of a child with short stature
21. Describe the etiopathogenesis of Neural tube defects. Add a note on the prevention
22. Kawasaki disease
23. Rheumatic fever - diagnostic criteria treatment and prophylaxis
24. Thalassemia types, inheritance and management
25. How will you classify pneumonia according to ARI control programme? How will you manage a child with severe pneumonia?
26. SMR staging in girls and boys
27. Clinical features and treatment of congenital hypothyroidism
28. Clinical and radiological features of rickets

Short Answers

1. MCP Card: Maternal and Child Protection card contents and its utility.
2. HBYC Programme: Home Based Care for Young Child programme objectives and strategy.
3. Child Sexual Abuse: Clinical approach toward early recognition, documentation, and institutional response.
4. Autism Spectrum Disorder (ASD): Early red flags, diagnostic criteria, and management principles.
5. Adolescent Immunization: Recommended vaccines, optimal dosing schedule, and routes.
6. Idiopathic Hypertrophic Pyloric Stenosis (IHPS): Clinical signs, classic metabolic alkalosis, ultrasound findings, and management.
7. Kerosene Poisoning: Toxicity features, contraindications (why emesis/lavage is avoided), and respiratory management.
8. Nutritional Rickets: Pathophysiology, radiological findings, and high-dose/stoss therapy protocols.
9. Anemia Mukt Bharat: Core strategies, target age segments, and specific dosing of prophylactic iron-folic acid.
10. Fetal Circulation: Structural anatomy, shunts, and oxygen saturation gradients across different chambers.
11. Intussusception: Clinical triad presentation, "red currant jelly" stools, ultrasound findings, and reduction techniques.
12. National Immunization Schedule (NIS): Current target schedule detailing vaccine types, timing, doses, and administration routes.
13. ARI Control Program: Core strategies for managing and reducing mortality from acute respiratory infections.
14. Counsel a mother regarding febrile seizures on discharge of a three-year-old child
15. Clinical features and urinary findings in acute glomerulonephritis
16. Antenatal diagnosis of Down syndrome
17. Empyema
18. Fetal circulation
19. Temper tantrum
20. Management of febrile seizures
21. Short stature - definition and causes
22. Developmental milestones of a 2-year-old child
23. WHO grading of xerophthalmia
24. A one-year old boy is brought to you with developmental delay, he has clinical features of Down syndrome. How would you explain the condition to the parents? What advice would you give on further investigation and management?
25. Definition and causes of microcephaly

SINGLE RESPONSE

1 . The most common cause of congenital hypothyroidism

a. Iodine transport disorders
b. b. TSH beta gene defects
c. **c.Thyroid dysgenesis**
d. d. Pendred syndrome

2 . A three year old child can do the following EXCEPT

a. Rides a tricycle
b. b.Builds a tower of 9 cubes
c. c. Knows his age and gender
d.
e. d.**Draws a triangle.**

3 . Drug of choice for severe case of LeptospirosiS

a. Doxycycline 200 mg once daily orally for 7 **days**

b. Penicillin 6-8 million units/m2/day IV 6th hourly for 7 days

c. Amoxicillin 15mg/kg/dose orally thrice daily for 5 days

d. Ceftriaxone 100 mg/kg/day IV in 2 divided doses for 7 days

4 . Most common adverse effect of inhaled corticosteroids
a. Tachycardia

b. Loss of smell

c**.Oropharyngeal candidiasis**

d. Bradycardia

5 . Which of the following is NOT a symptom of celiac disease

a. Short stature **b.Precocious puberty** c. Failure to thrive d. Refractory iron deficiency anaemia

6. Last case of wild virus polio in India was in the year
a. 2021
b. 2011
c. 2010
d.2001

7 .According to IMNCI, 4 year old child is said to have fast breathing if respiratory rate is

a.>60 b.>50 **c.>40** d. >30

8 .Drug of choice in pneumococcal pneumonia

a.**C.Penicillin**

b. Azithromycin

c.Ceftriaxone

d.Gentamicin

9 .Commonest cause for congenital hypothyroidism in a newborn

A.Dyshormonogenesis

b.iodine deficiency

c. Autoimmune

d. **Agenesis of thyroid**

10 .Nephrotic range proteinuria is. _____mg/m^3/hr

a.20 b. 30 **c.40** d. 50

11. The birth length of a child doubles at the age of

a. 5 months

b. 12 months

c. 4 years

d. 5 years

12. A child changes a rattle from one hand to another at the age of

a. 3 months

b. 6 months

c. 9 months

d. 1 year

13. Which one of the following is the correct order of events at puberty in a girl?

a. Thelarche-pubarche-menarche-growth spurt

b. Pubarche-thelarche-growth spurt-menarche

c. Menarche-growth spurt-thelarche-pubarche

d. Thelarche-pubarche-growth spurt-menarche

14. Which one of the following vitamin deficiencies causes corneal vascularization, poor growth and photophobia?

a. Riboflavin

b. Pyridoxine

c. Retinol

d. Thiamine

15. Small for gestational age babies are neonates with birth weight

a. < 3rd percentile for that gestational age

b. < 10th percentile for that gestational age

c. < 2000 grams

d. < 2500 gram

16 . All are coagulation disorders except

a. Hemophilia

b. ITP

c. Afibrinogenemia

d. vit K deficiency

17 . Wimberger ring' sign is seen in

a. Scurvy

b. Rickets

c. TB

d. Achondroplasia

18 .Commonest cause of rash in a newborn at 24-48 hrs of life is

a. Haemangioma

b. Erythema toxicum

c. Harlequin skin change

d. Erythema Nodosum

19 . Which of the following is not pathological jaundice ?

a. Jaundice detected < 24 hrs of life

b. Serum bilirubin > 15 mg/dl

c. Direct bilirubin > 2 mg/dl at anytime

d. Jaundice persisting > 1 week of life

20 .Primary amoebic meningoencephalitis is caused by

a. Acanthamoeba polyphaga

b. Balamuthia mandrillaris

c. Naegleria fowleri

d. Acanthamoeba castellani

21 .Moderate dehydration in an infant when weight loss is

a. 0-5%

b. 5-10%

c. 10-15%

d. >15%

22 . Average Na concentration in diarrhea fluid

a. 25 meq/L

b. 48 meq/L

c. 58 meq/L

d. 124 meq/L

23 .After initial dose of Anti Snake Venom WBCT is repeated after

a. 2 hrs

b. 6 hrs

c. 24 hrs

d. 12 h

24 .The most common cause of ambiguous genitalia in a newborn is

a. 21α hydroxylase deficiency

b. 11β hydroxylase deficiency

c. 17α hydroxylase deficiency

d. 3β hydroxylase deficiency

25 .Which among the following is not a reflex needed for breastfeeding?

a. Reaching

b. Rooting

c. suckling

d. swallowing

26 .The cut off value of Development Quotient below which taken as the development delay

a. 80%

b. 70%

c. 60%

d. 50%

27 .The primary metabolic abnormality in congenital hypertrophic pyloric stenosis

a. Hypochloremic Hypokalemic Metabolic Alkalosis

b. Hyperchloremic Hypokalemic Metabolic Alkalosis

c. Hypochloremic Hypokalemic Metabolic Alkalosis

d. Hypochloremic Hypokalemic Metabolic Acidosis

28 .While plotting the Weight against Gestational age in Intrauterine Growth Curve, Small for Gestational Age babies are classified

a. Below 3rd Centile

b. Below 10th Centile

c. Between 10th and 25th Centile

d. None of the above

29 .Which primitive reflex is considered to persist life long

a. Hand Grasp Reflex

b. Moro Reflex

c. Parachute reflex

d. Asymmetric Tonic Neck Reflex

30 . Which of the following is considered as standard risk for Acute lymphoblastic Leukemia

a. Age < 1 year

b. Initial leukocyte count >50000/cum

c. Hyperdiploidy

d. T cell lineage

36 . Preferred wavelength range of light source for phototherapy in newborn

a. 360-460mm

b. 460-490Nm

c. 550-650mm

d. 420-450mm

37 .Weight gain in grams per day for the first 3 months

a. 10-20

b. 20-40

c. 30-50

d. 40-60

38 .Cruising around furniture starts by

a. 7-8 months

b. 10-11 months

c. 12-13 months

d. 15-16 months

39 .Calorie requirement per day for a 4 year old child weighing 12 Kg would be ---

a. 1100 *(Note: Calculated by Holiday-Segar formula: 1000 kcal for first 10kg + 50 kcal/kg for next 2kg = 1100 kcal)*

b. 1250

c. 1600

d. 1300

40 .Antidote for paracetamol poisoning

a. NAPQI

b. N-acetylcysteine

c. Naloxone

41 .Which of the following is not a biochemical marker to detect aneuploidy in fetus

a. Plasma protein A (PAPP A)

b. HCG

c. Inhibin A

d. Lumacaftor

42 .IMNCI classifications are

a. Not Necessarily specific diagnosis, but indicates what actions need to be taken.

b. Color coded(Pink-for hospital referral Green-for home management)

c. A and B are correct

d. All children of less than 2 years need to be referred.

43 .Elevated maternal serum alpha-fetoprotein is a sensitive marker of

a. Down's syndrome

b. Turner's Syndrome

c. Neural tube defects

d. Duchenne muscular dystrophy

44 . All are warning signs of delay in development at three months except

a. No social smile

b. No eye contact

c. Persistent squint

d. lack head controL

45 .A child has a CA of 36 months and developmental quotient of 75. What is the child's developmental age (DA)

a. 24m

b. 30m

c. 27m

d. 33m

46 .Hand-foot-mouth disease is one of the more distinctive rash syndromes; it is MOST frequently caused by

a. coxsackie virus A6

b. coxsackie virus A16

c. ECHO virus

d. coxsackie virus B2

47 .Which virulence factor of Streptococcus pyogenes plays a key role in the development of Acute Rheumatic Fever?

a. Capsule

b. Lipopolysaccharide (LPS)

c. M protein

d. Teichoic acid

48 .Rashtriya Bal Swasthya Karyakram (RBSK) program involves screening of children from birth to 18 years with all of the following exceptions.

a. Defects at birth

b. Deficiencies

c. Diseases

d. Developmental delays

e. Disaster

49 .A 7-year-old boy is brought to the emergency department with a 2-day history of vomiting and diarrhea. He is lethargic, with a temperature of 39°C, heart rate of 140/min, and blood Pressure of 80/40 mmHg. What type of shock is he most likely experiencing?

a. Hypovolemic shock

b. Septic shock

c. Cardiogenic shock

d. Distributive shock

50 . PDA is seen in all of the following except

a. Congenital Rubella Syndrome

b. Fetal Hydantoin syndrome

c. Treacher Collins syndrome

d. William syndrome

51 . Which of the following is not a feature of complex febrile seizure

a. Duration more than 15 min

b. Focal seizure

c. Generalized tonic clonic seizure

d. Recurrence within 24 hours

52 . Object permanence developmental milestone develops by

a. 6 months

b. 9 months

c. 12 months

d. 18 months

53 . The first sign of puberty in females

a. Menarche

b. Thelarche

c. Andrache

d. Pubarche

54 . The first lab parameter to improve after starting treatment in iron deficiency anemia is

a. Hb

b. MCV

c. Reticulocyte count

d. MCHC

55 . Which of the following hormones is not involved in fetal growth?

a. Thyroxine

b. Growth hormone

c. Glucocorticoids

d. Insulin like growth factors

56 . At what age Social milestone of asking for food, drinks and toilet develops?:

a. 12 months

b. 18 months

c. 2 years

d. 4 years

57. What is the route of surfactant administration in Hyaline Membrane disease?

a. Intranasal

b. Oral

c. Endotracheal

d. Intravenous

58 . Metered Dose inhaler with spacer with mask to be used in which age group

a. 3 years

b. 5 years

c. 7 years

d . 9 years

59 .What is the antidote for acetaminophen poisoning?

a. Atropine

b. Naloxone

c. Physostigmine

d. N-acetylcysteine

60 . US:LS ratio at birth is

a. 1.8

b. 1.6

c. 1.7

d. 1.1

61 . All of the following are causes of hyperkalemia except

a. Chronic kidney disease

b. Bartter syndrome

c. Adrenal insufficiency

d. Tumor lysis syndrome

62 . Infantile tremor syndrome is caused by deficiency of

a. Vitamin B3

b. Vitamin C

c. Vitamin B12

d. Vitamin B6

63 . Which of the following enzyme deficiency is most common congenital adrenal hyperplasia?

a. 11 beta hydroxylase

b. 17 alpha hydroxylase

c. 11 alpha hydroxylase

d. 21 alpha hydroxylase

64 .Reed-Sternberg cell is a hallmark of a.Non-Hodgkin's lymphoma

a. Non-Hodgkin's lymphoma

b. Acute myeloid leukaemia

c. Chronic myeloid leukaemia

d. Hodgkin's lymphoma

65 .In Home Based Young Child program, home visits are done by

a. PHC doctor

b. Nurse

c. ANM

d. ASHA

66 .Child guidance clinics provide diagnostic & therapeutic services to children with

a. intellectual disability

b. learning disability

c. behavioral disorders

d. all of above

67. Which complication is not associated with pica?

a. encopresis

b. lead poisoning

c. parasitic infestation

d. iron deficiency anemia

68 .Identify the vaccine that should not be given to a child with immune deficiency

a. DPT

b. Hepatitis B

c. OPV

d. PCV

69 .Drugs used in treating hyperkalemia include all except

a. frusemide

b. spironolactone

c. salbutamol

d. sodium bicarbonate

70 .Which vaccine is administered intramuscularly in the anterolateral thigh of infants?

a. BCG

b. Oral polio vaccine

c. Hepatitis B vaccine

d. Rotavirus vaccine

71 .Which lab finding is strongly associated with JIA-associated uveitis?

a. Elevated ESR

b. Positive ANA

c. Leukocytosis

d. Thrombocytosis

72 .A 4-year-old with TB exposure but negative TEST should receive:

a. No treatment

b. 6 months of isoniazid

c. 3 months of rifampin + isoniazid

d. 12 weeks of azithromycin

73 .Preferred diagnostic test for HIV in infants <18 months:

a. ELISA antibody test

b. Rapid antibody test

c. HIV DNA PCR

d. CD4 count

74 .A 6-month-old with wheezing and respiratory distress likely has:

a. Rhinovirus infection

b. RSV bronchiolitis

c. Influenza A

d. Parainfluenza

75 . Prevention of congenital rubella syndrome is achieved via:

a. Maternal varicella vaccine

b. MMR vaccine in adolescent girls

c. Postnatal vitamin A

d. MR vaccine during pregnancy

.A 2-year-old with cyanosis and squatting episodes most likely has:

a. Hypoplastic left heart syndrome

b. Transposition of the great arteries

c. Tetralogy of Fallot

d. Total anomalous pulmonary venous return

77 .The dominant mechanism for infants to increase cardiac output is by:

a. Increasing ventricular contractility

b. Increasing heart rate

c. Increasing end-diastolic volume

d. Decreasing respiratory rate

78 .A prolonged APTT corrected with normal plasma suggests:

a. Hemophilia A

b. von Willebrand disease

c. Factor VII deficiency

d. Vitamin K deficiency

79 .Which feature is not typically associated with Turner syndrome?

a. Coarctation of Aorta

b. Tall stature

c. Shield chest and widely spaced nipple

d. Webbing of neck

80 .Above what age is verbal assent of a child to be taken before a procedure?

a. 5 yrs

c. 7 yrs

c. 10 yrs

d. 12 yrs

81 .Supplementary action of proteins is utilised by combining

a. Milk and cereals

b. Cereals with egg

c. Different pulses together

d. Cereals with pulses

82 . The birth weight of a normal term neonate is

a. 2-3 kg

b. 2.5 to 3.5 kg

c. 3 to 4 kg

d. 2.5 to 4 kg

83 .What is the important clinical sign of congenital diaphragmatic hernia in a newborn with respiratory distress?

a. Scaphoid abdomen

b. Delayed cry at birth

c. Absent bowel sounds

d. Cyanosis

84 .Mature pincer grasp is attained by

a. 9 months

b. 12 months

c. 15 months

d. 18 months

Multiple Correct Answers Type

1. Regarding Vitamin D deficiency in children:

I. Earliest radiological sign is a generalised reduction in bone density *(False - earliest change is widening/fraying of the metaphyseal zone)*

II. Breast milk is a poor source of vitamin D *(True)*

III. Stoss therapy is the currently recommended therapy *(False - oral daily dosing is preferred over high-dose Stoss therapy due to hypercalcemia risks)*

IV. Parathyroid hormone levels are high in nutritional vitamin D deficiency *(True - secondary hyperparathyroidism)*

a. All are false statements

b. Only I & III are true

c. Only II & IV are true

d. Only IV is true

2. Regarding Sickle Cell Disease:

I. Patients who are homozygous for HbS have sickle cell trait *(False - homozygotes have Sickle Cell Anemia/Disease; heterozygotes have trait)*

II. Hydroxyurea is used to increase the production of HbF *(True)*

III. Immunization with pneumococcal vaccine is recommended *(True)*

IV. Splenomegaly is a common finding in older children *(False - autosplenectomy typically occurs by early childhood due to recurrent infarctions)*

a. I, II, III are true

b. Only II & III are true

c. II, III & IV are true

d. Only I & IV are true

3. Which of the following is/are major criteria for acute rheumatic fever according to Revised Jones criteria?

I. Chorea *(True)*

II. Fever *(False - minor criterion)*

III. Carditis *(True)*

IV. Erythema marginatum *(True)*

a. I & IV

b. II & III

c. I, II, III, IV

d. I, III & IV

.

4. [Regarding neonatal cholestasis/persistent jaundice] II. Significant jaundice persisting beyond 4 weeks of life III. Clay coloured stools IV. Direct bilirubin > 1 mg/dl

a. All are true

b. Only I, II & III are true

c. Only II, III, IV are true

d. Only III & IV are true

5. Examples of diseases with X-linked recessive inheritance include: I. Hemophilia A II. Hemophilia B III. Duchenne muscular dystrophy IV. Phenylketonuria

a. I, II, III, IV

b. Only I & III

c. I, II & III

d. I and II

6. Select the 5 cleans among the following: 1. Clean hands 2. Clean eyes 3. Clean tie 4. Clean cord 5. Clean skin 6. Clean surface 7. Clean blade

Options:

A) 1, 2, 3, 4 and 5

B) 3, 4, 5, 6 and 7

C) 1, 2, 4, 6 and 7

D) 1, 3, 4, 6 and 7*.*

7. Select the correct features of Haemolytic Uremic Syndrome: 1. Haemolytic Anaemia 2. Fever 3. Acute Kidney Injury 4. Seizures 5. Thrombocytopenia 6. Leukopenia

Options:

A) 1, 3 and 6

B) 2, 4 and 5

C) 1, 3 and 5

D) 1, 5 and 6

8. The following statements are regarding an Intrauterine Growth Restricted (IUGR) baby. Mark the correct statement: 1. Intrauterine growth restriction can happen in pre-term babies only 2. IUGR babies will have absence of subcutaneous fat and peeling of skin 3. Have risk of hypoglycaemia 4. Symmetric IUGR babies show a better long-term prognosis

Options:

A) Statements 1 & 3 are correct

B) Statements 1, 3 and 4 are correct

C) Statements 2 and 3 are correct

D) All statements are correct

9. Select the correct combination about the components of Tetralogy of Fallot: 1. ASD 2. VSD 3. PS 4. Right Ventricular Hypertrophy 5. PDA 6. Overriding of aorta 7. Coarctation of Aorta

Options:

A) 1, 2, 3 and 4

B) 2, 3, 4 and 7

C) 2, 3, 4 and 6

D) 1, 3, 4 and 6

10. Triad of Congenital Rubella Syndrome: 1. Hepatitis 2. Cataract 3. Microcephaly 4. PDA 5. Hearing loss 6. Diabetes

Options:

A) 1, 2, and 4

B) 3, 4 and 6

C) 4, 5 and 6

D) 2, 4 and 5

11. Goals of maintenance fluids:

a) Prevent dehydration

b) Prevent electrolyte disorders

c) Prevent protein degradation

d) Promote ketoacidosis

12. Criteria for liver transplantation in paracetamol poisoning:

a) Elevated transaminases

b) INR > 2

c) INR > 6

d) pH < 7.3

13. The most suitable site for intramuscular and subcutaneous vaccination is/are:

a) Anterolateral aspect of the thigh

b) Deltoid area of upper arm

c) Fatty area of buttock

d) All of the above

14. A doctor helps the community by:

a) Medical research

b) Innovation

c) Public health initiatives

d) Role model to the community

15. True statements about idiopathic thrombocytopenia purpura:

a) Platelet transfusion is to be avoided

b) One of the modalities of treatment is intravenous immunoglobulin

c) There is prolongation of prothrombin time

d) Hallmark of the illness is increased megakaryocyte in bone marrow

16. The vaccines which can be given subcutaneously are: i) Pentavalent ii) MMR iii) Varicella iv) fIPV v) PCV

a) i & ii

b) ii & iii

c) i, ii & iii

d) iii, iv & v

17. True statements regarding thrombocytopenia: 1. Malaria can result in thrombocytopenia 2. Penicillin group can produce thrombocytopenia 3. In ITP, thrombocytopenia can last up to 1 year 4. Acute ITP needs treatment

a) 1 & 2

b) 1, 2 & 3

c) 2, 3 & 4

d) All 4 are true

18. Regarding ORS, the following are true: 1. Low osmolarity ORS has an osmolarity of 275 mEq/L 2. Disadvantage of low osmolar ORS is that it may cause hyperkalemia 3. Hyponatremia is rare with low osmolar ORS 4. Low osmolar ORS decreases the incidence of vomiting and decreases stool output in acute diarrheal disease

a) 1, 2

b) 1, 3

c) 2, 3

d) All are true

19. In which of the tubercular infections is steroid used in the management? 1. TB Meningitis 2. Endobronchial TB 3. Severe miliary TB 4. Tuberculous pericardial effusion 5. TB lymphadenitis

a) 1, 2, 3, 4

b) 2, 3, 4, 5

c) 1, 3, 4, 5

d) All the above

20. True regarding acute epiglottitis: 1. One of the causes of stridor in children 2. Associated with dyspnea, drooling, dysphagia 3. 'Steeple' sign in X-ray 4. Caused by influenza virus

a) 1 & 2

b) 2 & 3

c) 3 & 4

d) 1 & 4

21. The following vaccines are administered at 9 months of age according to national immunization schedule:

A) OPV

B) PCV

C) fIPV

D) Varicella vaccine

E) MR 1

22. The social and adaptive developmental milestones acquired at 2 years of age are:

A) He points to 5–6 familiar objects

B) Shares toys

C) Asks for food, drink

D) Follows simple orders

E) Domestic mimicry

23. True about pathological jaundice in newborn:

A) Clinical jaundice detected before 24 hours of age

B) Yellowish discoloration of palms and soles

C) Rise in serum bilirubin by more than 2mg/dl/day

D) Clinical jaundice persisting beyond 7 days of life

E) Pale coloured stools

24. The following statements are true in neonatal resuscitation programme:

A) PPV by bag and mask is the initial step of resuscitation

B) Chest compressions are initiated if heart rate <100 bpm

C) PPV is performed at rate of 100 breaths per min

D) Chest compression:ventilation ratio is 3:1

E) The only medications used in resuscitation are epinephrine and normal saline

25. Common organisms causing acute otitis media in children are: 1. Streptococcus pneumoniae 2. Pseudomonas aeruginosa 3. Klebsiella pneumoniae 4. Moraxella catarrhalis 5. H. influenzae

Options:

A) 1, 3, 5

B) 2, 4, 5

C) 2, 3, 4

D) 1, 4, 5

26. True regarding new WHO ORS: 1. Total osmolality is 245 2. Sodium: 75 mmol/L 3. Citrate: 10 mmol/L 4. Potassium: 10 mmol/L 5. Chloride: 75 mmol/L

Options:

A) 1, 2, 3 *(Note: Citrate is 10 mmol/L; Chloride is 65 mmol/L and Potassium is 20 mmol/L, making statements 1, 2, and 3 completely true).*

B) 2, 4, 5

C) 1, 3, 4

D) 2, 3, 5

27. Diseases screened in newborn metabolic screening under Salabham program: 1. 17 OHP 2. G6PD 3. PKU 4. MSUD 5. Galactosemia

Options:

A) 1, 2, 3

B) 2, 4, 5

C) 1, 2, 5

D) 2, 3, 5 *(Note: The typography prints just "D) 2, 3," but matches the correct target answers).*

28. Causes for delayed passage of meconium: 1. Post-term baby 2. Cystic fibrosis 3. Anal atresia 4. Congenital hypothyroidism 5. Hirschsprung's disease

Options:

A) 2, 3, 4

B) 1, 4, 5

C) 1, 3, 4

D) 2, 3, 5

29. Causes for glomerular hematuria in a child: 1. PSGN 2. HSP 3. Calculi 4. IgA nephropathy 5. Cystitis

Options:

A) 1, 2, 4

B) 2, 4, 5

C) 1, 3, 4

D) 2, 3, 5

30. All of the following vaccines are administered via intramuscular route except: a. BCG b. DPT c. IPV d. PCV e. Measles

Options:

A) a, b, e

B) a, c, d

C) a, c, e *(Note: BCG is Intradermal; Measles/MR is Subcutaneous; fractional IPV is Intradermal under standard national schedules).*

D) b, d, e

31. Congenital cyanotic heart disease with increased pulmonary blood flow

a. TAPVC

b. Truncus arteriosus

c. VSD with pulmonary stenosis

d. TGA

Options:

A) a, b, c

B) b, c, d

C) a, b, d

D) a, c, d

32. Complications of obesity include:

a. Insulin resistance

b. Hypertension

c. Obstructive sleep apnoea

d. Metabolic dysfunction associated steatotic liver disease

e. Hyperthyroidism

Options:

A) a, b, c, e

B) a, b, c, d

C) All of the above

D) b, c, d, e

33. Features of raised intracranial tension:

i. Hypertension

ii. Bradycardia

iii. Projectile vomiting

iv. Tachycardia

v. Hypotension

Options:

a. i, ii, iii *(Note: Hypertension, bradycardia, and irregular respirations constitute the classic Cushing's triad).*

b. ii, iii, v

c. iii, iv, v

d. All of the above

34. Karyotype of a child with abnormal facies showed Trisomy 21. The comorbidities you expect in the child include:

a. Endocardial cushion defects

b. Sensorineural hearing loss

c. Hypothyroidism

d. Obesity

e. Acute lymphoblastic leukemia

Options:

A) a, b, c

B) b, c, d

C) a, c, d, e

D) All of the above

35. Symptoms of scorpion envenomation:

a. Fever

b. Salivation

c. Priapism

d. Hypertension

Options:

i) A, B, C correct

ii) A, B, D correct

iii) B, C, D correct

iv) A and D correct

36. Select the true statement regarding Familial short stature:

i) Height velocity is normal

ii) Bone age is abnormal

iii) Puberty is delayed

iv) Adult height is reduced

A) i & iv

B) i & ii

C) iii & iv

D) i & iii

37. Common health problems during adolescence include:

i) Bronchiolitis

ii) Pica

iii) Anaemia

iv) Irregular menstrual cycles

A) i & ii

B) i & iii

C) i & iv

D) iii & iv

38. When complementary feeding is started at 6 months:

i) Consistency should be semisolid

ii) Energy dense food should be preferred

iii) Breastfeeding should be stopped

iv) Complementary feeding should be restricted to once a day

A) iii & iv

B) i & ii

C) i & iii

D) i & iv

39. Identify the true statements about Patent Ductus Arteriosus:

i) Continuous murmur

ii) Weak femoral pulsations

iii) Is a cyanotic heart disease

iv) Severe pulmonary arterial hypertension can cause differential cyanosis

A) i, iii

B) i, iv

C) i, ii

D) ii, iv

40. A 12-month-old child will be able to do:

A) Walks without support

B) Play simple ball game

C) 2–3-word sentences

D) Creeps well

E) Stand without support

a) ABD

b) ABE

c) BDE

d) BCE

41. CSF finding in a case of bacterial meningitis in a child would be?

A) CSF sugar – 70

B) CSF protein – 120

C) CSF cells predominantly polymorphonuclear

D) CSF sugar – 35

E) CSF protein – 40

a) ABD

b) BCE

c) ACE

d) CDE

42. Which of the following are considered as major criteria in Nada's criteria?

A) Systolic murmur of grade 2 or more

B) Cyanosis

C) Abnormal Echo

D) Diastolic murmur

E) Congestive cardiac failure

a) ADB *(Note: Options D, E and B are the major criteria in Nada's scheme).*

b) ACE

c) BCE

d) BDE

43. Which of the following are causes of disproportionate short stature?

1. Rickets
2. Malabsorption
3. Skeletal dysplasia
4. Hypothyroidism

a) 1,2,3

b) 1,3,4

c) 1,2,4

d) 2,3

44. Which of the following are pathognomonic findings in Wilson's disease?

1. Kayser-Fleischer rings

2. Low serum ceruloplasmin
3. Elevated 24-hour urinary copper excretion
4. Haemolytic anaemia
5. Wing-Beating tremors

a) 1,2,3,5

b) 1,2,3,4

c) 1,2,3

d) 1,2,3,5

45. Which statements about rotavirus vaccine administration are correct?

1. First dose should be given between 0–2 weeks
2. First dose should be given between 6–14 weeks
3. Booster doses are given at 12–24 months
4. All doses must be completed by 8 months of age
5. Administered via intramuscular injection

a) 1,3,4

b) 2,4

c) 2,3,4,5

d) 1,2,3,5

46. Which clinical features are typical of severe malaria?

1. Cyclical fever with chills
2. Cerebral malaria (seizures, coma)
3. Severe anaemia (Hb < 7 g/dl)
4. Acute kidney injury
5. Hypoglycaemia

a) 2,3,4

b) 2,3

c) 2,3,4,5

d) 1,3

47. Which inheritance pattern is seen in NF1 and NF2?

1. Autosomal dominant
2. Autosomal recessive
3. X-linked recessive
4. Sporadic (de novo mutation)
5. Mitochondrial inheritance

a) 1,3

b) 1,4

c) 2,4

d) 1,5

48. Biochemical changes in Rickets include:

i. Low phosphate

ii. Low calcium

iii. High $AlkPO_4$

iv. Low PTH

a) i, ii, iii *(*

b) i, ii, iv

c) i, ii, iv

d) i, iii, iv

49. BCG vaccine:

i. Live attenuated vaccine

ii. Can be used up to 4 hours after reconstitution

iii. Route of administration is subcutaneous

iv. It is light sensitive

a) i, iii

b) i, ii, iii

c) i, ii, iv

d) ii, iii, iv

50. Multi-drug-resistant typhoid is defined as resistance to the following drugs:

i. Ampicillin

ii. TMP-SMX

iii. Chloramphenicol

iv. Cefixime

a) i, ii, iii

b) i, iii

c) i, ii, iv

d) ii, iii, iv

51. The common clinical manifestations of extrahepatic portal hypertension are?

i. Jaundice

ii. Variceal bleeds

iii. Splenomegaly

iv. No symptoms

a) i, ii, iii

b) ii, iii

c) ii, iii, iv

d) i, ii, iii, iv

52. Which of the following features suggest a heart disease:

i. Any Systolic murmur

ii. Any Diastolic murmur

iii. Abnormal 2nd heart sound

iv. Cyanosis

a) i, ii

b) ii, iii

c) ii, iv

d) i, ii, iii, iv

53.The following are criteria for Kawasaki disease 1) Bilateral non-purulent conjunctival injection 2) Polymorphous rash 3) Unilateral cervical lymphadenopathy 4) Fever lasting for at least 5 days a) 1 and 2 are correct c) 1, 2 and 3 are correct b) 2 and 4 are correct d) 1, 2, 3 and 4

. ASSERRTION REASON

- **A:** Both A and R are true, and R is the correct explanation for A.
- **B:** Both A and R are true, but R is not the correct explanation for A.
- **C:** A is true, but R is false.
- **D:** A is false, but R is true.

Questions 1 – 12

1. Assertion (A): Wilms Tumor is associated with aniridia (absence of the iris).

Reason (R): This is due to a genetic mutation affecting the WT1 gene.

Correct Option: C

2. Assertion (A): Children with fat malabsorption states are predisposed to vitamin A deficiency.

Reason (R): Fat malabsorption leads to malabsorption of fat-soluble vitamins.

Correct Option: A

3. Assertion (A): Therapy with primaquine is indicated in vivax malaria.

Reason (R): Primaquine prevents the elimination of the exoerythrocytic stages in the liver.

Correct Option: C *(Reason is false; primaquine **causes** the eradication of hypnozoites).*

4. Assertion (A): Children develop fine motor skills before gross motor skills.

Reason (R): Motor development follows a cephalocaudal and proximodistal pattern.

Correct Option: D *(Assertion is false; gross motor skills develop before fine motor skills).*

5. Assertion (A): Short stature in children can be a sign of an underlying medical condition.

Reason (R): Growth hormone deficiency is the most common cause of short stature in children.

Correct Option: C *(Reason is false; familial and constitutional growth delays are much more common).*

6. Assertion (A): Stridor is a danger sign.

Reason (R): Stridor indicates upper airway obstruction.

Correct Option: A

7. Assertion (A): Excess cow's milk ingestion predisposes to iron deficiency anemia.

Reason (R): Calcium in cow's milk inhibits iron absorption.

Correct Option: B

8. Assertion (A): An autosomal dominant genetic disease affecting one parent gives a 50% chance of inheritance in offspring.

Reason (R): Autosomal dominant alleles can cause disease in heterozygous states.

Correct Option: A

9. Assertion (A): Deworming is not recommended for infants below 6 months.

Reason (R): Bile salt-stimulated lipase in breast milk kills intestinal parasites.

Correct Option: C

10. Assertion (A): Children with Down syndrome require routine screening for congenital hypothyroidism.

Reason (R): Trisomy 21 increases the risk of autoimmune thyroiditis.

Correct Option: A

11. Assertion (A): Managing childhood-onset diabetes requires insulin at regular intervals.

Reason (R): Insulin resistance is the primary defect in type 1 diabetes.

Correct Option: C *(Reason is false; insulin deficiency due to beta-cell destruction is the primary defect).*

12. Assertion (A): Iron deficiency anemia is a significant risk factor for poor school performance in children.

Reason (R): Iron deficiency primarily affects physical strength without impacting cognitive function.

Correct Option: C *(Reason is false; iron deficiency profoundly impacts neurodevelopment and cognitive functions).*

Questions 13 – 23

13. Assertion: Breastfeeding during the night should be encouraged.

Reason: Oxytocin secretion is increased in a relaxed mother.

Correct Option: C *(The assertion is true because prolactin levels peak during night-time feeds, rather than being explained by oxytocin release dynamics).*

14. Assertion: In nephrotic syndrome, 2 consecutive relapses while on alternate-day steroids is steroid dependence.

Reason: High-dose steroid is the treatment of choice for steroid-dependent nephrotic syndrome.

Correct Option: C *(Reason is false; steroid-sparing immunosuppressive agents or prolonged alternate-day maintenance are used for dependence).*

15. Assertion: Routine administration of prophylactic vitamin K is recommended at birth to all healthy newborns.

Reason: Newborns don't have adequate intestinal bacterial flora for synthesizing vitamin K.

Correct Option: A

16. Assertion: During a measles outbreak, measles vaccine cannot be given to infants less than 9 months.

Reason: According to the national immunization schedule, MMR vaccine is given at 9-12 months and 16-24 months.

Correct Option: C *(Assertion is false; during outbreaks, a supplemental "zero dose" of measles vaccine can be given from 6 months of age onwards).*

17. Assertion: WHO ORS contains glucose and sodium in a 1:1 ratio.

Reason: WHO ORS uses the principle of glucose-independent sodium and water absorption.

Correct Option: C *(Reason is false; it relies entirely on sodium-glucose* ***co-transport****, which is glucose-dependent).*

18. Assertion: Absence of wheezing in the presence of cyanosis and respiratory distress in asthma should not be considered as evidence of clinical improvement.

Reason: Mucous plug occluding the bronchi may cause collapse of small segments of lung.

Correct Option: A *(This describes the critical "silent chest" sign).*

19. Assertion: Down syndrome children are advised not to participate in contact sports.

Reason: In 10-30% cases of Down syndrome, they are reported to have atlanto-axial/atlanto-occipital subluxation.

Correct Option: A

20 (A). Assertion (A): Short stature in children is always indicative of a serious underlying health condition.

Reasoning (R): Short stature can sometimes be a normal variant in children, such as in familial short stature or constitutional delay of growth and puberty.

Correct Option: D *(Assertion is false; Reason is true).*

20 (B). Assertion (A): If a neonate is not breathing and has a heart rate above 100 beats per minute, positive pressure ventilation should still be provided.

Reasoning (R): Positive pressure ventilation is required to ensure that the neonate's lungs expand and provide oxygenation, even if the heart rate is above 100 beats per minute.

Correct Option: A

21. Assertion (A): Henoch-Schönlein Purpura is associated with glomerulonephritis in a significant number of cases.

Reasoning (R): HSP can cause renal involvement, leading to glomerulonephritis, which manifests as hematuria or proteinuria in some patients.

Correct Option: A

22. Assertion (A): Hyponatremia can occur due to excessive water intake, diluting the sodium concentration in the blood.

Reasoning (R): Hyponatremia can also result from sodium loss through excessive sweating (cystic fibrosis) or diarrhea, leading to decreased sodium levels.

Correct Option: B

23. Assertion (A): Main treatment for Breath-Holding spells is iron supplementation.

Reason (R): Breath-Holding spell is a type of seizure.

Correct Option: C *(Reason is false; breath-holding spells are non-epileptic paroxysmal events).*

Questions 24 – 37

24. Assertion (A): Glucose is one of the main constituents of ORS.

Reason (R): Glucose helps to correct dehydration and electrolyte abnormalities.

Correct Option: A

25. Assertion (A): Iron deficiency anemia is macrocytic anemia.

Reason (R): Macrocytic anemia is due to decreased DNA synthesis.

Correct Option: D *(Assertion is false; IDA is microcytic hypochromic).*

26. Assertion (A): Vit K is given to all newborns at birth.

Reason (R): Hepatitis B vaccine is given to all newborns at birth.

Correct Option: B *(Both are standalone independent birth-dose medical facts).*

27. Assertion: Gastric lavage is contraindicated in hydrocarbon pneumonia.

Reason: It can lead to perforation.

Correct Option: C *(Reason is false; it is contraindicated because it poses a high risk of aspiration, leading to severe chemical pneumonitis).*

28. Assertion: Consumption of goat milk can cause megaloblastic anemia.

Reason: Goat milk is deficient in zinc.

Correct Option: C *(Reason is false; goat milk causes megaloblastic anemia because it is severely deficient in folate/folic acid).*

29. Assertion: Celiac disease is triggered by ingestion of wheat gluten.

Reason: Most common extraintestinal manifestation in celiac disease is iron deficiency anemia.

Correct Option: B *(Both are true statements, but the extraintestinal symptom does not explain the pathogenic trigger).*

30. Assertion: Type 1 diabetes mellitus is a chronic condition in which the pancreas produces little or no insulin.

Reasoning: It is caused by genes and environmental factors such as viruses which destroy insulin-producing beta cells of the pancreas (autoimmune condition).

Correct Option: A

31. Assertion (A): Adding malted food increases energy density.

Reason (R): Amylase-rich food increases the viscosity and bulk of food.

Correct Option: C *(Reason is false; amylase-rich malted food breaks down starches to* ***decrease*** *viscosity and bulk, enabling higher caloric density).*

32. Assertion (A): IVIG is used in the treatment of ITP.

Reason (R): In ITP, there is immune-mediated platelet destruction.

Correct Option: A

33. Assertion (A): Bone age is less than the chronological age in constitutional delay of growth and puberty.

Reason (R): IGF1 levels tend to be low for chronological age but normal for bone age in these patients.

Correct Option: A

34. Assertion (A): Developmental surveillance must be done in a routine manner.

Reason (R): Child development is a dynamic process and is difficult to quantify by one-time assessment.

Correct Option: A

35. Assertion (A): In AGN (Acute Glomerulonephritis), hypertensive encephalopathy is one of the complications.

Reason (R): In AGN, there is a decreased colloid osmotic pressure.

Correct Option: C *(Reason is incorrect; hypertension in AGN is driven by fluid overload and salt/water retention, not low oncotic pressure).*

36. Assertion (A): Respiratory distress syndrome is common in a preterm born to an IDM (Infant of a Diabetic Mother).

Reason (R): Infants of diabetic mothers are macrosomic.

Correct Option: B *(Both are true, but hyperinsulinism delaying surfactant synthesis is the reason for RDS, not macrosomia itself).*

37. Assertion (A): $^{+}$ is the most abundant cation of ECF.

Reason (R): Hyperkalemia can be associated with flat T wave and shortened QT interval.

Correct Option: D

Questions 38 – 56

38. Assertion: Breast milk has an anti-infective effect.

Reason: Breast milk is rich in IgE and lactoferrin.

Correct Option: B *(Textbook key choice B; note that immunologically it is rich in secretory IgA rather than IgE).*

39. Assertion: Cardiogenic shock is the most common cause of shock in the pediatric age group.

Reason: Hypotension is an early sign and seen in compensated shock.

Correct Option: D *(Both are false; hypovolemic shock is the most common pediatric shock, and hypotension is a late, decompensated sign).*

40. Assertion: Malaria fever appears at the merozoite stage of Plasmodium.

Reason: The infective stage of Plasmodium is the sporozoite.

Correct Option: B

41. Assertion: Gingival hypertrophy and bleeding are symptoms of scurvy.

Reason: Lack of fresh fruits and vegetables in the diet causes scurvy.

Correct Option: A

42. Assertion: Commonest cause of newborn jaundice is Rh isoimmunization.

Reason: Rh isoimmunization occurs when the baby's blood group is Rh negative.

Correct Option: C *(Both statements are false; physiological jaundice is the most common, and Rh isoimmunization happens with an Rh-positive fetus).*

43. Assertion: Infant starts to roll over by 5 months.

Reason: Asymmetric Tonic Neck Reflex (ATNR) disappears by 4 months.

Correct Option: A

44. Assertion: Rickets is a metabolic disease of growing bones in children.

Reason: Renal Tubular Acidosis can cause rickets in children.

Correct Option: A

45. Assertion: Severe dengue is characterized by severe plasma leakage and severe organ impairment.

Reason: In severe dengue there is respiratory distress and increased liver transaminases.

Correct Option: A

46. Assertion: Nephrotic syndrome is defined by presence of proteinuria > 40 mg/m^2/hr (or > 1 g/m^2/day) and hypoalbuminemia (< 3g/dl).

Reason: Steroid-sensitive nephrotic syndrome has a poor long-term outcome.

Correct Option: C *(Reason is false; SSNS typically carries an excellent long-term prognosis).*

47. Assertion: Guillain-Barré Syndrome is a cause of acute flaccid paralysis.

Reason: It is caused by an upper motor neuron lesion.

Correct Option: C *(Reason is false; GBS is a classic lower motor neuron disorder).*

48. Assertion: To prevent asthma exacerbation, weekly dry dusting of the floor should be done.

Reason: Dry dusting decreases exposure of the child to house dust.

Correct Option: C

49. Assertion: Infants who consume cow's milk are prone to iron deficiency.

Reason: Cow's milk protein allergy causes gastrointestinal blood loss.

Correct Option: A

50. Assertion: Children with nephrotic syndrome are at risk for thrombosis.

Reason: Hypercholesterolemia is common in nephrotic syndrome.

Correct Option: B *(Both are true features of the hypercoagulable state, though urinary loss of Antithrombin III is the primary cause).*

51. Assertion: *Escherichia coli* is the most common organism associated with urinary tract infection.

Reason: *E. coli* constitutes the predominant periurethral flora.

Correct Option: A

52. Assertion: Gastric lavage is the management of choice in kerosene poisoning.

Reason: Kerosene ingestion causes chemical pneumonitis.

Correct Option: D *(Assertion is completely false; gastric lavage is contraindicated due to aspiration risks).*

53. Assertion: Gingival hypertrophy and bleeding are symptoms of scurvy.

Reason: Lack of fresh fruits and vegetables in diet causes scurvy.

Correct Option: A *(Duplicate string validation)*

54. Assertion: Commonest cause of newborn jaundice is Rh isoimmunization.

Reason: Rh isoimmunization occurs when the baby's blood group is Rh negative.

Correct Option: C *(Duplicate string validation)*

55. Assertion: An infant sits before standing and walking.

Reason: Development progresses in the cephalocaudal direction.

Correct Option: A

56. Assertion: Children with congenital immunodeficiency should not be given Measles vaccine.

Reason: Measles vaccine is a killed vaccine.

Correct Option: C *(Reason is false; measles is a live attenuated vaccine).*

Questions 57 – 67

57. Assertion: A child with spastic quadriplegia is at risk of recurrent aspiration pneumonia.

Reason: A child with spastic quadriplegia usually has associated pseudobulbar palsy.

Correct Option: A

58. Assertion: Gingival hypertrophy and bleeding are symptoms of scurvy.

Reason: Lack of fresh fruits and vegetables in diet causes scurvy.

Correct Option: A

59. Assertion: Commonest cause of newborn jaundice is Rh isoimmunization.

Reason: Rh isoimmunization occurs when the baby's blood group is Rh negative.

Correct Option: C

60. Assertion: An infant sits before standing and walking.

Reason: Development progresses in the cephalocaudal direction.

Correct Option: A

61. Assertion: Diarrhoea with severe dehydration is an example of hypovolemic shock.

Reason: Hypovolemia results from loss of more than 20 per cent of the ECF.

Correct Option: A

62. Assertion: Mid-upper arm circumference (MUAC) is an age-independent criterion for assessment of wasting.

Reason: MUAC does not alter significantly with age between 6 months to 5 years.

Correct Option: A

63. Assertion: Microcephaly is one of the stigmata of intrauterine infection.

Reason: Toxoplasmosis is an intrauterine infection that affects fetal development.

Correct Option: B

64. Assertion: Grunt is a sign of respiratory distress in an infant with pneumonia.

Reason: A grunt is produced by forced expiration against a closed glottis.

Correct Option: A

65. Assertion: Prothrombin time is a sensitive indicator of acute liver damage.

Reason: Factors II, VII, IX, and X are Vitamin K dependent factors synthesized by the liver.

Correct Option: A

66. Assertion: Children with congenital immunodeficiency should not be given Measles vaccine.

Reason: Measles vaccine is a killed vaccine.

Correct Option: C

67. Assertion: A child with spastic quadriplegia is at risk of recurrent aspiration pneumonia.

Reason: A child with spastic quadriplegia usually has associated pseudobulbar palsy.

Correct Option: A

CLINICAL BASED MCQ

1. Case Scenario – Breech Presentation

i. Commonest cause of breech presentation

- **a. Prematurity**
- b. Hydrocephalus
- c. Placenta previa
- d. Polyhydramnios

ii. Best method to deliver arms in breech

- **a. lovsets method**
- b. Burns Marshall method
- c. Mauriceau-Smellie-Veit method
- d. Pinard's maneuver

iii. Most common type of breech presentation

- **a. frank breech**
- b. Complete breech
- c. Footling breech
- d. Knee presentation

iv. ECV contraindicated in all except

- a. Placenta previa
- b. Twins / Multiple pregnancy
- **c. previous Cs**
- d. Severe oligohydramnios

v. On ECV fetal bradycardia occurred. The next course of action is

- **a. reversion to the original position immediately**
- b. Proceed with version rapidly
- c. Emergency lower segment cesarean section (LSCS)
- d. Immediate artificial rupture of membranes (ARM)

3. Case Scenario – Pediatric Tuberculosis (TB)

i. Presumptive Pediatric TB

- a) cough > 1 week
- **b) fever > 2 weeks**
- c) acute weight gain
- d) transient painless localized lymphadenopathy

ii. Microbiologically confirmed TB

- a) Positive Mantoux test
- **b) CBNAAT**
- c) Suggestive chest X-ray
- d) Raised ESR

iii. TB preventive therapy in children less than 5 years

- **a) 3 months Isoniazid + Rifampin**
- b) 6 months Pyrazinamide
- c) 2 months Ethambutol
- d) 12 months Streptomycin

iv. NTEP guidelines on treatment of drug-sensitive TB (Intensive Phase)

- a) 2HRZ
- **b) 2HRZE+4HRE**
- c) 6HRZE
- d) 2HRE

v. All presumed TB cases are tested for resistance to which drug upfront?

- a) Isoniazid
- **b) Rifampicin**
- c) Ethambutol
- d) Pyrazinamide

4. Case Scenario – Neonatal Seizures & LBW

i. All can be causes of seizure in this baby except

- a) hypoglycemia
- **b) hypercalcemia**
- c) hypomagnesemia
- d) birth asphyxia

ii. What is the preferred initial antiepileptic drug?

- a) Phenytoin
- b) Lorazepam
- c) Valproate
- **d) phenobarbitone**

iii. Definition of LBW is birth weight less than

- a) 1.5 Kg
- b) 2.0 Kg
- **c) 2.5Kg**
- d) 3.0 Kg

iv. All of the following can lead to LBW except

- **a) GDM**
- b) Maternal anemia
- c) Pregnancy-induced hypertension (PIH)
- d) Severe maternal malnutrition

v. Which is the scoring system for assessing gestational age in a newborn

- a) APGAR score
- b) Silverman-Andersen score
- **c) Ballard's score**
- d) Downe's score

5. Case Scenario – Measles Infection

i. What is the most probable diagnosis?

- (A) Rubella
- **(B) Measles**
- (C) Roseola infantum
- (D) Erythema infectiosum

ii. What is the pathognomonic oral lesion in this disease and site of location?

- (A) Aphthous ulcers on the soft palate
- **(B) Grey/ white grains of sand like lesions opposite upper second molar on buccal mucosa**
- (C) Strawberry tongue on the dorsum of tongue
- (D) Vesicles with surrounding erythema on the hard palate

iii. Which is the most common complication you expect in this disease?

- (A) Otitis media
- **(B) Bronchopneumonia**
- (C) Encephalitis
- (D) Subacute sclerosing panencephalitis (SSPE)

iv. Which Vitamin do you give in this child as treatment to reduce morbidity and mortality?

- (A) Vitamin D 6 Lakh IU intramuscularly
- (B) Vitamin C 500 mg orally
- **(C) Vitamin A 1 Lakh IU orally**
- (D) Vitamin K 1 mg intramuscularly

v. What is the vaccine given and its schedule according to the national immunization schedule to prevent this disease?

- (A) BCG vaccine at birth
- (B) Pentavalent vaccine at 6, 10, 14 weeks
- **(C) MR vaccine at 9 months and 16-24 months**
- (D) DPT vaccine booster at 5 years

6. Hypercyanotic Spell

- a) Breath-holding spell
- b) Epileptic fit
- **c) Hypercyanotic spell**
- d) Vasovagal syncope

7. Eating Disorders

- a) Bulimia nervosa
- **b) Anorexia nervosa**
- c) Binge eating disorder
- d) Pica

8. Hematology

- a) Iron deficiency anemia
- b) Sickle cell anemia
- **c) Thalassemia major**
- d) Hereditary spherocytosis

9. TB Chemoprophylaxis

- a) INH daily for 6 months
- b) Rifampicin for 4 months
- **c) INH and rifampicin 3 months**
- d) Ethambutol for 2 months

10. Vasculitis

- a) Kawasaki disease
- **b) HSP**
- c) Polyarteritis nodosa
- d) Takayasu arteritis

11. Case Scenario – Congenital Diaphragmatic Hernia (CDH)

i) What is the diagnosis?

- a) Congenital lobar emphysema
- b) Tracheoesophageal fistula
- **c) CDH**
- d) Respiratory distress syndrome

ii) Most common location of this condition

- **a) left side**
- b) Right side
- c) Bilateral
- d) Anterior substernal (Morgagni)

iii) How is it diagnosed?

- **a) Chest x ray**
- b) Bronchoscopy
- c) Arterial Blood Gas analysis
- d) Barium meal swallow

iv) Bag and mask are contraindicated.

- a) No
- **b) Yes**

v) What is the most common symptom?

- a) Projectile vomiting

- **b) respiratory distress**
- c) Abdominal distension
- d) Congenital stridor

12. Case Scenario – Rheumatic Fever

i. Which of the following statement is true regarding polyarthritis

- a) It is a small joint symmetrical arthritis
- b) It leaves behind structural deformity
- **c) Inverse Relationship between severity of arthritis and carditis**
- d) It occurs in less than 20% of acute cases

ii. Carditis is associated with murmur and

- **a) Tachycardia**
- b) Bradycardia
- c) Hypertension
- d) Splenomegaly

iii. Patient with carditis with cardiomegaly should receive

- a) High-dose Aspirin alone
- b) Paracetamol with Ibuprofen
- **c) Steroid + Aspirin on tapering steroid**
- d) Penicillin monotherapy

iv. First line treatment for Sydenham chorea is

- a) Aspirin
- b) Prednisolone
- c) Phenobarbitone
- **d) Haloperidol**

v) Duration of prophylaxis with penicillin in patients who had carditis with residual heart disease

- a) 5 years or till 21 years of age, whichever is longer
- b) 10 years or till 21 years of age, whichever is longer
- c) 5 years or till 40 years of age, whichever is longer
- **d) 10 years or till 40 years whichever is longer**

13. Case Scenario – Ventricular Septal Defect (VSD)

i). What is the most likely cardiac diagnosis?

- a) Atrial Septal Defect (ASD)
- **b) VSD**
- c) Patent Ductus Arteriosus (PDA)
- d) Tetralogy of Fallot (TOF)

ii. What is the most common type based on the location of the defect?

- a) Muscular
- b) Supracristal
- **c) Membranous**
- d) Inlet type

iii. Is a loud harsh, holosystolic murmur with thrill along the left lower sternal border suggestive of a large lesion in the diagnosis given above?

- a) Yes
- **b) No**

iv) Which of the following is not a part of Nada's major criteria ?

- a) Diastolic murmur
- **b) Abnormal X-ray**
- c) Cyanosis
- d) Congestive heart failure

v) All the following Inherited syndromes are associated with VSD except:

- a) Down syndrome

- **b) Turner syndrome**
- c) Edward syndrome
- d) Patau syndrome

14. Case Scenario – Post-Streptococcal Glomerulonephritis (PSGN)

i) What is the most probable diagnosis

- a) Minimal change disease
- b) IgA nephropathy
- **c) PSGN**
- d) Lupus nephritis

ii). What is the usual level of complement in the above disease?

- a) Both C3 and C4 low
- b) Both C3 and C4 normal
- c) C3 normal C4 low
- **d) C3 low C4 normal**

iii). All are indications for renal biopsy in the above disease except?

- a) Gross hematuria persistent beyond 4-6 weeks
- **b) Normal complement level**
- c) Persistent low C3 beyond 8 weeks
- d) Rapidly progressive renal failure

iv). Treatment of the above condition?

- **a) Symptomatic**
- b) High-dose corticosteroids
- c) Cyclophosphamide therapy
- d) Intravenous Immunoglobulins

v) Electron microscopy findings of above condition?

- a) Sub endothelial deposits

- **b) Sub epithelial humps**
- c) Mesangial deposits
- d) Splitting of basement membrane

15. Case Scenario – Pediatric Pneumonia

i. Which bacterial pathogen is the most likely cause of this child's pneumonia?

- a) Mycoplasma pneumoniae
- b) Staphylococcus aureus
- c) Haemophilus influenzae
- **d) Streptococcus pneumoniae**

ii. What factor most likely predisposed this child to bacterial pneumonia after a recent viral upper respiratory infection (URI)?

- a) Increased production of alveolar surfactant
- **b) Viral-induced disruption of respiratory epithelium**
- c) Enhanced systemic immune responsiveness
- d) Decreased bacterial adherence to mucosa

iii. Which antibiotic is first-line for treating uncomplicated bacterial pneumonia in this child?

- a) Azithromycin
- b) Ciprofloxacin
- c) Ceftriaxone
- **d) Amoxicillin**

iv. Which of the following symptoms would be most concerning and require immediate hospitalization?

- a) Mild rhinorrhea and dry cough
- b) Temperature of 38°C responsive to paracetamol
- **c) Altered mental status or severe respiratory distress**
- d) Intermittent non-projectile vomiting

v. Which of the following is a key factor in preventing pneumonia in children?

- a) Routine Pneumococcal Conjugate Vaccination (PCV)
- b) Exclusive breastfeeding for the first 6 months
- c) Avoiding exposure to secondhand tobacco smoke
- **d) All of the above**

16. Case Scenario – Respiratory Distress Syndrome (RDS)

i. Most probable cause for the respiratory problem is

- A. Transient tachypnea of the newborn (TTNB)
- **B. Respiratory distress syndrome**
- C. Meconium aspiration syndrome
- D. Neonatal pneumonia

ii. Etiology for the above condition is

- A. Delayed clearance of fetal lung fluid
- B. Chronic intrauterine hypoxia
- **C. Surfactant deficiency.**
- D. Vertical transmission of Group B Streptococcus

iii. The risk for this condition can be prevented by treating the mother with

- A. Progesterone analogues
- B. TMG or Indomethacin
- C. Magnesium sulfate
- **D. Dexamethasone**

iv. The treatment for this condition includes all except

- A. Oxygen therapy via CPAP
- B. Exogenous surfactant replacement
- C. Mechanical ventilation
- **D. Tracheobronchial lavage**

v. Gestational age & birth weight of this baby is

- **A. Preterm, Very low birth weight**
- B. Term, Low birth weight
- C. Preterm, Extremely low birth weight
- D. Post-term, Normal birth weight

17. Case Scenario – Immune Thrombocytopenia (ITP)

i) Which of the following is the most appropriate initial treatment?

- **A) Corticosteroids and intravenous immunoglobulin**
- B) Platelet transfusion and Vitamin K
- C) Immediate emergency splenectomy
- D) Broad-spectrum intravenous antibiotics

ii) Of the following, the LEAST likely feature of acute immune thrombocytopenia (ITP) is

- A) Sudden onset of petechiae and purpura
- B) Recent history of viral illness
- C) Normal hemoglobin and white blood cell count
- **D) Isolated splenomegaly**

18. Case Scenario – Febrile Seizure

i) Which of the following is the most likely diagnosis?

- A) Viral meningitis
- **B) Febrile seizure**
- C) Structural epilepsy
- D) Hypoglycemic convulsion

ii) Which of the following is the most appropriate next step in management?

- A) Perform an immediate emergency lumbar puncture
- B) Start long-term daily Phenytoin maintenance therapy

- C) Schedule an urgent brain MRI scan under sedation
- **D) Reassure the parents and provide supportive care**

iii) Drug which can be used for intermittent prophylaxis for the above condition

- A) Sodium valproate
- B) Carbamazepine
- C) Levetiracetam
- **D) Clobazam**

19. Case Scenario – Congenital Heart Disease Clinical Triads

i) Which is the most likely acyanotic heart disease in this infant?

- a) Tetralogy of Fallot
- **b) Ventricular septal defect**
- c) Transposition of Great Arteries
- d) Tricuspid atresia

ii) NADAS major criteria for clinical diagnosis of congenital heart disease include

- a) Diastolic murmur
- b) Left axis deviation on ECG
- **c) Congestive heart failure**
- d) Cardiomegaly on X-ray

iii) First line of management in congestive cardiac failure is

- a) Digoxin
- **b) Diuretics**
- c) Beta-blockers
- d) Epinephrine

iv) High volume collapsing pulse is a feature of

- a) Coarctation of aorta
- b) Aortic stenosis

- **c) Patent ductus arteriosus**
- d) Pulmonary stenosis

v). In which of the following conditions, the left atrium is NOT enlarged?

- a) Mitral regurgitation
- b) Ventricular septal defect
- **c) Atrial septal defect.**
- d) Large patent ductus arteriosus