PEDIATRICS

PAPER – I

Time : 3 hours
Max. Marks : 100

Attempt all questions in order. Each question carries 10 marks.

1. Write the common causes and differential diagnosis of gross symptomatic hematuria. Provide an algorithm for its laboratory and radiological evaluation. 2+2+6

2. Write the characteristic features of febrile seizures in children. Enumerate the differentiating points for atypical febrile seizure. Outline the indications and regime for continuous prophylaxis in febrile seizures. 2+2+3+3

3. Define acute bronchiolitis. Describe its etiopathogenesis and characteristic features. Outline the essential steps in management of bronchiolitis. 2+2+2+4

4. Tabulate the classification of Juvenile Idiopathic Arthritis and state principles of its treatment. 4+6

5. Enumerate sources of lead poisoning. Outline the mechanism of toxicity and clinical features of lead poisoning. 3+3+4

6. Outline the management of dog bite in a four year old child. 10

7. Describe the types of hearing loss in children. Enumerate the causes of hearing loss in children. 4+6

8. Define hyponatremia. Enumerate the etiology of hyponatremia. Describe the management of hypovolemic hyponatremia. 2+3+5

9. Outline the 10 steps of management of severe malnutrition, as per WHO guidelines, in appropriate sequence. 10

10. Discuss the management of acute diarrhea with particular reference to low osmolarity ORS, zinc, probiotics and antibiotics. 3+2+3+2
Outline the fine motor milestones along with their normal age of achievement in sequence attained between birth and 5 years of age.

2. Define failure to thrive and tabulate its causes. Outline the approach to manage a child with failure to thrive.

3. Discuss the approach to diagnosis of Persistent Pulmonary Hypertension of Newborn (PPHN). Outline the available modalities of management, highlighting their key features, in a tabular format.


5. Outline the risk factors, pathophysiology and principles of management of intraventricular hemorrhage in preterm neonates.

6. Discuss the principles of care of the skin in neonates. Outline the role of touch and massage therapy in newborn infants.

7. Define Under-5 mortality rate. Comment on its current status and etiology in India. Outline important strategies /programs undertaken by Govt. of India to improve Under-5 child survival.

8. Provide algorithms for case-detection and treatment for a child with fever, suspected to have malaria, as per National Vector-borne Disease Control Program:
   a. In an area where microscopy results are available within 24 hours; and
   b. In an area where microscopy results are not available within 24 hours.

9. Define complementary feeding. Outline the attributes of complementary foods. Enumerate the recommendations on complementary feeding, as per the National Guidelines on Infant and Young Child Feeding (IYCF).

10. Discuss the pathophysiology, classification and diagnostic features of necrotizing enterocolitis.
1. Enumerate the complications of acute post-streptococcal glomerulonephritis. Describe their management in brief.

2. Outline the diagnostic criteria of diabetes insipidus. Discuss the management of nephrogenic diabetes insipidus.

3. Enumerate the causes and outline the characteristics and treatment of Supraventricular Tachycardia (SVT) in an infant.

4. Define myoclonic epilepsy. Discuss in brief the characteristic features of different types of myoclonic epilepsies, with onset in infancy.

5. Outline the clinical features, radiological changes, diagnosis and treatment of nutritional vitamin D deficiency rickets.

6. Discuss the clinical features, diagnosis and management of Developmental Dysplasia of Hip (DDH).

7. Discuss evaluation and management of an 8-year old male with primary nocturnal enuresis.

8. Describe the characteristic changes observed in fundus examination of a child with
   i. Chronic hypertension;
   ii. Acute lymphoblastic leukemia;
   iii. Longstanding diabetes mellitus

9. Outline the characteristic clinical features of 'erythema multiforme' and 'Stevens-Johnson Syndrome'. Enumerate the principles of management of Stevens-Johnson syndrome.

10. Outline the management of an 8-year old child with acute liver cell failure and hepatic encephalopathy.
PEDIATRICS

PAPER – IV

Time : 3 hours
Max. Marks : 100

Attempt all questions in order.
Each question carries 10 marks

1. Enumerate the hormones secreted by anterior pituitary and list the factors stimulating and inhibiting secretion of growth hormone. 3+7

2. Discuss the etiology, pathogenesis and diagnostic workup of acute autoimmune hemolytic anemia. 3+3+4

3. Define and explain sensitivity, specificity, positive predictive value and negative predictive value of a diagnostic test. 2.5X4

4. Outline the normal bilirubin metabolism. Outline the principle of phototherapy for treatment of neonatal jaundice. List factors that influence the efficacy of phototherapy. 4+3+3

5. Discuss the lung function abnormalities in severe asthma. What is the role of lung function evaluation in management of asthma in children? 6+4

6. Describe the etiology, pathogenesis, diagnosis and treatment of antibiotic associated diarrhea. 1+2+3+4

7. Enlist the functions of pancreas. Outline the pancreatic function tests and their implications in pediatric practice. 4+6

8. Discuss the pathophysiology of hyaline membrane disease in premature newborns. 10

9. Write short notes on the following:
   a. Grading of vesico-ureteric reflux and indications of surgical intervention in children with vesico-ureteric reflux. 3+2
   b. Peripheral smear findings in iron deficiency and B12 deficiency anemia. 2.5+2.5

10. Describe in brief the diseases in which IVIG is used for treatment. Write the dosage, administration and side effects of IVIG. 5+2+1+2

POSSESSION / USE OF CELL PHONES OR ANY SUCH ELECTRONIC GADGETS IS NOT PERMITTED INSIDE THE EXAMINATION HALL.