



UNIVERSITY OF JAFFNA, SRI LANKA
FINAL EXAMINATION FOR MEDICAL DEGREES—JUNE 2020
PAEDIATRICS PAPER II

Date: 17.06.2020

Time: 03 hours

ANSWER ALL THE SIX (6) QUESTIONS

Answer each question in separate answer book

- 1 A sixteen year old mother, delivered 1.2Kg baby after completion of 34 weeks of gestation at a peripheral unit. Following the initial resuscitation the baby maintained oxygen saturation above 95% with face mask oxygen. Two hours later the baby developed grunting and respiratory rate was 80 breaths/minutes. The baby was transferred to the tertiary unit for further management.
- 1.1 List five(5) problems that you have identified (20 Marks)
- 1.2 List five(5) possible causes of respiratory distress in this baby (20 Marks)
- 1.3 What precautionary measures will you take prior to transferring this baby to the tertiary care unit (20 Marks)
- 1.4 List the long-term complication this baby can develop. (20 Marks)
- 1.5 Describe the management of the most likely condition that you have listed in 1.2 (20 Marks)
- 2
- 2.1.1 Define the term Acute Kidney Injury (AKI) (05 Marks)
- 2.1.2 Mention three modalities (types) of Paediatric Renal Replacement Therapy (RRT). (15 Marks)
- 2.1.3 List five specific indications for the initiation of renal replacement therapy(RRT) for a child with acute kidney injury (15 Marks)
- 2.2 Mention five (5) methods of collecting a urine sample? (15 marks)
- 2.3 A 5-year-old boy presents to the Accident and Emergency room with generalised body swelling, reduced urine output and shortness of breath. Two days prior to admission the mother noticed gradual worsening of swelling and he became more dyspnoeic. On examination he was tachypnoeic, had facial puffiness, and BP was 110/60 mmHg (95th centile 115/74mmHg). Abdominal examination showed ascites and auscultation of the lungs showed bilateral reduced air entry. Urine ward test was 3+ for protein.
- 2.3.1 Mention how you will investigate this child further? (20 marks)
- 2.3.2 Describe the steps in the management of this child. (30 Marks)

- 3 5-year-old girl diagnosed child with acyanotic congenital heart disease with left to right shunt was admitted with a history of fever for 8 days duration. On examination she was ill looking and mildly pale. Pulse rate was 112 beats per minute and a 2 cm soft spleen was palpable below the costal margin.
- 3.1 What is the most likely diagnosis? (10 Marks)
- 3.2 What further information will you obtain from the **history and examination** to arrive at a diagnosis? (20 Marks)
- 3.3 List the **investigations** you will request to arrive at a diagnosis giving reasons. (30 Marks)
- 3.4 Briefly describe the **management plan** of the most likely diagnosis (40 Marks)
- 4 A 3-year-old boy was admitted following **blood-stained vomitus** of one day duration. He was born preterm and was treated for neonatal jaundice and sepsis. He attends clinic regularly for persistence of jaundice.
- 4.1 Give three (3) differential diagnosis for this presentation (15 marks)
- 4.2 What further information will you obtain in the history to arrive at the diagnosis (25 Marks)
- 4.3 The child's **weight was 10Kg (< - 3SD) and height was 85cm (< - 3SD)**. He was found to be **pale** and icteric. On palpation of the abdomen the liver was 2 cm and the **spleen was 5 cm** below the costal margin.
Give the most likely complete diagnosis? (10 Marks)
- 4.4 Explain the pathophysiology of the clinical features highlighted in bold based on the diagnosis mentioned in 4.3 (30 Marks)
- 4.5 The full blood count report of the child is given below:
 WBC $2.8 \times 10^9/L$ (4-11)
 N – 37%, L – 51%, M – 5%
 Platelets $120 \times 10^9/L$
 Haemoglobin 7.8g/dl (11-15)
 Name the complication the child has developed (10 Marks)
- 4.6 List the steps in the management of the complication mentioned in 4.5 (10Marks)

- 5 Describe the **management plan** for the following situations
- 5.1 A-5- year- old boy admitted with the history of fever for 4 days. (50 Marks)
vomiting and abdominal pain of one day duration. On examination he was afebrile, pulse rate was 148 beats/minutes, low volume and the blood pressure was 80/60.His weight was 20 Kg
Outline the management plan for the next 48 hours.
- 5.2 A- 7- year- old girl was admitted to the emergency department with (50 Marks)
Acute severe Bronchial Asthma. She was managed with back to back nebulization with salbutamol and IV hydrocortisone. Even though her clinical condition improved initially, she started to deteriorate. Her Saturation dropped to 85% with 10 liters of face mask oxygen.
Outline the management plan for this girl for the next 24 hours.
- 6 Describe the **Information you will provide** in the clinical scenarios mentioned below
- 6.1 A mother who wants to know how she can stimulate the development (30 marks)
of her 12-month-old child at home
- 6.2 A Mother who wants to know about hypoglycaemia in her child with (30marks)
diabetes mellitus
- 6.3 Dietary advice to a mother who wants to start complementary food to (40 marks)
her 6-month-old baby