UNIVERSITY OF JAFFNA, SRI LANKA

FINAL EXAMINATION FOR MEDICAL DEGREES - SEPTEMBER 2025

ACADEMIC YEAR 2018/2019

Paediatrics - Paper II

Date: 24.09.2025 **Time: 1.30 pm to 4.30 pm (03 hours)**

Index No:----------

Question 01

A 26-year-oldprimigravida woman is going to deliver her baby at 30 weeks of POA in 1 hour due to preterm pre-labour rupture of membranes.

1.1. Youare called to attend the delivery. Outlinethe steps you will take to **prepare** before the delivery. (**10 Marks**)

1.2. The baby is delivered with a very weak cry, gaspingand the heart rate is 140/ min. Outline the initial neonatal resuscitation steps you will followwhen the baby is delivered. (**30 Marks**)

1.3. List**ten (10**) immediate complications you may anticipate in this baby during the NICU stay. (**20Marks**)

1.4. After admission to the NICU, outline the immediate management of this infant. (**20 Marks**)

1.5. During the NICU stay the baby developed neonatal meningitis andseizures.

1.5.1. List**five (05)** important long-term complicationsthat may occur in this baby following the neonatal meningitis. (**10 Marks**)

1.5.2. Briefly explain the follow-up plan in this condition while on discharge. (**10Marks**)

UNIVERSITY OF JAFFNA, SRI LANKA

FINAL EXAMINATION FOR MEDICAL DEGREES - SEPTEMBER 2025

ACADEMIC YEAR 2018/2019

Paediatrics - Paper II

Date: 24.09.2025 **Time: 1.30 pm to 4.30 pm (03 hours)**

Index No:----------

Question 02

An eight-month-old baby boy was admitted to a general paediatric wardwith a one day history of progressively increasing cough, difficulty in breathing and high-grade fever with feeding difficulty. He has been hospitalized 4 times in the past for similar respiratory illnesses. He was born at 32 weeks of POA with a birth weight of 1.6 kg and was in the NICU for 28 days.

On general examination, his weight and length were below (-) 3SD. He was febrile(39 °C), irritable, the respiratory rate was 72/min, and the heart rate was 160/min. He was grunting and the saturation was 90% in room air. On Auscultation of the lungs air entry was reduced in the right lower zone with bilateral diffuse rhonchi and fine crackles. There was a grade II systolic murmur heard at the left lower sternal edge.

2.1. Mention **two** differential diagnoses for his respiratory distress (**10 Marks**)

2.2. What additional specific clinical features would you look for to differentiate the two diagnoses mentioned in 2.1? (**10 Marks**)

2.3. List **five (05)**investigations that you would request in this baby. Mention the possible findings (**10 Marks**)

2.4. Describe the initial management of this baby (**30 Marks**)

2.5. Identify **five (5)** risk factors in this baby to get recurrent respiratory tractinfections. (**10 Marks**)

2.6. Mention **six (06)** steps that you will take to prevent recurrent respiratory tract infections in this baby. (**30 Marks**)

UNIVERSITY OF JAFFNA, SRI LANKA

FINAL EXAMINATION FOR MEDICAL DEGREES - SEPTEMBER 2025

ACADEMIC YEAR 2018/2019

Paediatrics - Paper II

Date: 24.09.2025 **Time: 1.30 pm to 4.30 pm (03 hours)**

Index No:----------

Question 03

A previously healthy 10-year-old girl presented with fever vomiting and abdominal pain of 2 days duration. On examination, she is icteric and drowsy. The investigations are given below

AST -	1300 IU/L	(<40)
ALT -	1200 IU/L	(<40)
Total Bilirubin	250 mmol/L	(<17)
Direct Bilirubin	140 mmol/L	
Prothrombin Time	34 Sec	(12-16)
INR	3.2	

3.1.What is the most likely causeofherpresentation? (**05Marks**)

3.2.List **four (4)** possible aetiologies for the above presentation (**20Marks**)

On further questioning, she is a third child born to consanguineous parentswith a normal neonatal period. There was no significant past medical history. Her 16-year-old brotheris being investigated for deterioration in academic performance and episodes of delirium and hallucinations.

3.3.What is the most likely underlying cause for her presentation? (**15Marks**)

3.4. Mention what other clinical information you will look for to exclude the other possible aetiologies in this child that you have mentioned in 3.2. (**15 Marks**)

3.5. List **three (3)** specific evaluations you will arrange for this child to support your underlying aetiology for this presentation and mention your expected findings (**15Marks**)

Six (6) hours after admission, she developed several bouts of vomiting, a short-lasting convulsion and became unresponsive.

3.6. Outline the management plan for the next 6 hours (**30Marks)**

UNIVERSITY OF JAFFNA, SRI LANKA

FINAL EXAMINATION FOR MEDICAL DEGREES - SEPTEMBER 2025

ACADEMIC YEAR 2018/2019

Paediatrics - Paper II

Date: 24.09.2025 **Time: 1.30 pm to 4.30 pm (03 hours)**

Index No:----------

Question 04

4. A 6-year-old girl is referred to the clinic for passing an increased amount of urine for one one-month duration

4.1.List **four (4)** possible causes for this presentation (**10 Marks**)

4.2.Mention the clinical information you will obtain to differentiate the causes you mentioned in 4.1 (**10 Marks**)

4.3.On further questioning, the mother reveals that the child has lost 2 kg in the last one month. The capillary blood sugar test you performedwas 280 mg/dl

4.3.1. What is the most likely diagnosis (**05Marks**)

4.3.2. Mention how you arrived at this diagnosis (**10 marks**)

4.4.What further investigation/swould you like to request in this child at this stage and mention the reasons for selecting it (**10Marks**)

4.5.Outline the management strategies for this child (**30Marks**)

4.6.One month later the child was admitted to the emergency department with a history of vomiting and drowsiness.

4.6.1. List two (02)possible causes for this presentation (**05 Marks**)

4.6.2. Outline the clinical features you will look in this child to differentiate the causes you mentioned in 4.6.1 (**10 Marks**)

4.6.3. The capillary blood sugar revealed 30 mg/dl. Outline the immediate and long-termmanagementplan for this child (**10 Marks**)

UNIVERSITY OF JAFFNA, SRI LANKA

FINAL EXAMINATION FOR MEDICAL DEGREES - SEPTEMBER 2025

ACADEMIC YEAR 2018/2019

Paediatrics - Paper II

Date: 24.09.2025 **Time: 1.30 pm to 4.30 pm (03 hours)**

Index No:----------

Question 05

A 5-year-old girl is on prednisolone 60mg/m^2/day for a first episode of nephrotic syndrome. On day 05of illness, the child complains of severe abdominal pain and vomiting. On examination, she is afebrile, the pulse rate is 156/minute, low volume, blood pressure is 60/40mmHg, and the abdomen is tense with ascites. The previous day, urine output was 0.5ml/kg/hour.

5.1.1. What is the most likely cause of the abdominal pain (**06 Marks**)

5.1.2. List the steps in the management of this child's current situation (**20 Marks**)

She continues to have gross proteinuria despite completing 28 days of Prednisolone.

5.2. State the complete diagnosis (**15 Marks**)

5.3. List **five (05)** secondary causes for the diagnosis mentioned in 5.2. (**15 Marks**)

5.4. Mention **five (5)** clinical information that you will obtain in the history for the secondary causes you have mentioned in 5.3 (**20 Marks**)

5.5. The doctor decides to perform a renal biopsy. List **three (03)** causes to perform a renal biopsy in this condition (**09 Marks**)

5.6. List **three (3)**other therapeutic agents that you can use in this situation. (**09 Marks**)

5.7. She recovers after a few days in the hospital. List **three (3)** key messages that you will give at discharge. (**06 Marks**)

UNIVERSITY OF JAFFNA, SRI LANKA

FINAL EXAMINATION FOR MEDICAL DEGREES -SEPTEMBER 2025

ACADEMIC YEAR 2018/2019

Paediatrics - Paper II

Date: 24.09.2025 **Time: 1.30 pm to 4.30 pm (03 hours)**

Index No:----------

Question 06

A 4-year-old girl is seen at the clinic with Down syndrome as the mother is concerned about her growth and development. She was delivered via cesarean section due to breech presentation and the birth weight was 2.9kg. She had feeding problems initially. She was noticed to be developing slowly as a baby. Her current weight is 15 kg and her height is 95cm.

6.1. Describe the steps in interpreting the growth in this girl (**10 Marks)**

6.2. On development assessment she can run, jump with both feet off the ground, but not hop on one leg and cannot ride a tricycle. She climbs up the steps alternating feet and comes down two feet per step. She scribbles vertical and horizontal lines, draws a circle, stacks 6-7 cubes tower and builds a bridge.

6.2.1. What is the gross motor age of this child? (**10 Marks**)

6.2.2. What is the fine motor age of this child (**10 Marks**)

6.3. Give **three (3)** possible reasons for the developmental concerns in this child, considering the underlying diagnosis (**15 Marks**)

6.4. List **five (05)** evaluations other than the growth and development that you will consider in this child (**20 Marks**)

6.5. How will you manage the developmental concerns in this child (**15 Marks**)

6.6. Describe the steps in evaluating the educational needs of this child and the support that is needed for the education (**10 Marks**)

6.7. Mother is concerned about future pregnancies. What advice will you provide regarding future pregnancies (**10 Marks**)
