



FACULTY OF MEDICINE

UNIVERSITY OF RUHUNA

**FINAL EXAMINATION FOR MEDICAL DEGREES – MARCH 2022
PAEDIATRICS PAPER I**

15.03.2022

1.00 p.m. – 4.00 p.m. (Three hours)

1. There are six parts (A, B, C, D, E & F).
2. There is one question in each part.
3. Answer all six questions.
4. Answer each question in the space provided.
5. Write the index number in the space provided on top of each part.

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Part A - Question No 1

Index No: -

A 6- year-old boy presented to the casualty paediatric unit with fever associated with chills and rigors for 3 days. Mother has noticed that the child has poor urine stream. Examination revealed a palpable urinary bladder and tender left loin.
Urine dipstick showed field full pus cells.

1.1. List **two (2)** differential diagnoses. (20 marks)

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1.2. List **five (5)** relevant investigations you would perform in the acute stage. (20 marks)

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1.3. List **three (3)** important steps you would take in the management of this child in the acute stage. (30 marks)

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Part B - Question No 2

Index No: -

2.1. Name **two (2)** inflammatory bowel disorders seen in children. (5 marks)

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2.2 Enumerate **five (5)** distinguishing features in the *gastrointestinal system* seen in the conditions mentioned in 2.1. (25 marks)

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2.3 Mention **five (5)** investigations that are helpful in the diagnosis of inflammatory bowel disease with expected findings. (30 marks)

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2.4. List **five (5)** *extra-gastrointestinal* manifestations of the inflammatory bowel disease. (25 marks)

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2. 5. Name **three (3)** available modalities of treatment for inflammatory bowel disease. (15 marks)

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Part C - Question No 3

Index No: -

3.1. Define perinatal asphyxia (10 marks)

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3.2. List **five (5)** risk factors for perinatal asphyxia (20 marks)

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3.3. List **four (4)** parameters you would use to assess an asphyxiated newborn. (10 marks)

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3.4. List **five (5)** early complications of perinatal asphyxia (10 marks)

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3.5. List **five (5)** late complications of perinatal asphyxia (10 marks)

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3.6. Mention **two (2)** predictors for poor neurodevelopmental outcome following asphyxia. (10 marks)

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3.7. Mention **three (3)** important aspects in the follow-up care in a baby who was asphyxiated at birth. (15 marks)

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3.8. State **three (3)** steps you would take to reduce Neonatal Mortality Rate (NMR) due to perinatal asphyxia in the country. (15 Marks)

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Part D - Question No 4

Index No: -

A five year old asthmatic was admitted to the A & E department with acute severe asthma. She was on steroid inhaler therapy for the last 12 months but had several episodes of acute exacerbation during this period.

4.1. List **five (5)** clinical parameters that would help in grading the severity of asthma in this child. (20 marks)

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4.2. Briefly describe the **three (3)** important initial steps in the management of the above patient with acute severe asthma. (15 marks)

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4.3. She failed to improve with the above mentioned initial steps in the management.

List **three (3)** alternative therapeutic agents that can be used at this stage. (30 marks)

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4.4. List **two (2)** investigations that would be helpful in managing this patient. (10 marks)

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4.5. List **two (2)** possible reasons for the failure of improvement of the acute stage.

(10 marks)

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4.6. List **five (5)** reasons for the failure of prophylaxis.

(15 marks)

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Part E - Question No 5

Index No: -

A 1 year old boy from a childrens' home was admitted for the 3rd time during last three months with a lower respiratory tract infection. He is diagnosed to have a large ventricular septal defect and is on captopril and frusemide, awaiting corrective surgery. His birth weight was 2.6 kg and the current weight is 5.5 kg. His length is 70 cm and weight for height is <3SD according to the WHO child growth standards.

5.1. What is the 'nutritional' diagnosis of this child? (15 marks)

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5.2. List **three (3)** factors that would have contributed for the diagnosis in 5.1 (15 marks)

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5.3. Briefly discuss **five (5)** most important steps in the nutritional management of this child. (30 marks)

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5.4 List the **two (2)** main treatment methods of controlling this patients' heart failure prior to the corrective surgery. (20 marks)

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5.5. List **two (2)** indications which would make this child require early surgery. (20 marks)

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Part F - Question No 6

Index No: -

A 12-year-old boy presents with a history of fever, arthralgia and shortness of breath for one week. He gives a history of a febrile illness with arthralgia two years back, for which he received medications from a general practitioner. His cardiovascular examination revealed a gallop rhythm with a grade IV pan systolic murmur best heard at the apex.

6.1 Mention **two (2)** differential diagnoses for the current presentation. (20 marks)

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6.2 List **two (2)** important questions you would ask in the history to support the diagnosis of each condition mentioned in(6.1). (20 marks)

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6.3 State **two (2)** important physical signs you would look at in each condition mentioned in (6.1) (20 marks)

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6.4 List **five (5)** important investigations you would perform to differentiate the conditions mentioned in (6.1) (20 marks)

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6.5 Outline the management of this child until the definitive diagnosis is made (20 marks)

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