

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (CLINICAL NUTRITION) EXAMINATION -MARCH 2021

Date : 23rd March 2021

Time : 9.00 a.m. -12.00 noon

PAPER I – SEQ

Answer **all five (05)** questions.

Each question to be answered in a separate book.

1. A 30-year-old man with Crohn disease has had several surgeries over the past ten years, leaving him with 140 cm of jejunum anastomosed with the ascending colon. He has needed daily parenteral nutrition for the past two years. He weighs 55 kg with a height of 1.65 m. His usual weight is 55 kg. He is admitted to the emergency room for a third episode of renal colic.
 - 1.1 List 2 nutrition related problems that you identified in this patient with reasons. (20 marks)
 - 1.2 Comment on his body weight. (10 marks)
 - 1.3 Write a detailed prescription for parenteral nutrition. (40 marks)
 - 1.4 What is the most probable cause of the renal colic in this patient? (10 marks)
 - 1.5 What advice should be given to prevent recurrence? (20 marks)

Contd.../2-

2.

2.1 List three validated tools available to screen hospitalized patients for risk of malnutrition and state the most sensitive one for a patient with chronic liver disease. (15 marks)

2.2 State three factors which are useful as predictors of mortality in patients with chronic liver disease at baseline and state the method by which each factor can be measured. (15 marks)

2.2 State the parameters used to calculate the Child-Pugh score used for the classification of severity of cirrhosis. (10 marks)

2.3 Outline the pre-operative nutritional management of a 45-year-old male with cirrhosis (Child-Pugh C), with a BMI of 21 kgm⁻² awaiting liver transplant. (40 marks)

2.4 Outline the postoperative nutritional management of the patient mentioned in 2.3. (20 marks)

3. A 60-year-old man is admitted to the neurology unit after a stroke. His weight is 50 kg and height is 165 cm.

3.1 Comment on the nutritional status of this patient. (10 marks)

3.2 What factors could further aggravate his nutritional status? (15 marks)

3.3 List three likely complications of malnutrition in this patient. (15 marks)

3.4 What screenings are mandatory before feeding this patient? (10 marks)

3.5 Outline how you would perform these screenings. (20 marks)

3.6 Outline the nutritional management of this patient if he is discharged with the gastrostomy tube. (30 marks)

4.

- 4.1 Briefly describe the aetiology of kwashiorkor. (10 marks)
- 4.2 List five effects of kwashiorkor on immunity. (20 marks)
- 4.3 Describe with relevant details on hospital management of a 3-year-old child with kwashiorkor. (40 marks)
- 4.4 List the criteria to be fulfilled before the child could be further managed at home. (15 marks)
- 4.5 Enumerate the services that local health team can provide this child after his discharge. (15 marks)

5.

A 28-year-old lady consults you as she wishes to lose weight. She has been diagnosed with Polycystic Ovarian Syndrome (PCOS). Her current body weight is 113 kg and height is 155 cm. She has a strong family history of Type 2-Diabetes Mellitus. She is keen to follow a ketogenic diet. However, her doctor has recommended a sleeve gastrectomy.

- 5.1 Compare and contrast the suitability of the above treatment options in this patient. (25 marks)
- 5.2 She underwent bariatric surgery. List three main micronutrients you would measure periodically. (15 marks)
- 5.3 Six months later she experienced significant hair loss. What is your nutritional advice to overcome hair fall? (25 marks)
- 5.4 Two years later she became pregnant and her pre pregnant body weight is 65 kg. At the 28 weeks of POA, her weight is 66 kg. What is your nutritional advice to optimize her nutritional needs? (40 marks)

