

Faculty of Medicine, University of Ruhuna Third Examination for Medical Degrees - Part II September 2010

Pathology Paper I

Wednesday 08th September 2010

9.00am to 11.00 am **2 hours**

Answer ALL FOUR questions.

Answer each part in a SEPARATE book.

Part A

A 20 year old male presented with shortness of breath, high fever with chills and productive cough of 2 days duration. Examination of the respiratory system revealed increased respiratory rate and bronchial breathing in the left lower lobe of the lung.

1.1 What is the most likely diagnosis?

(05 marks)

1.2 Outline the relevant investigations in this patient.

(15 marks)

1.3 Describe the macroscopic and microscopic appearances of the lungs in this patient.

(50 marks) (30 marks)

1.4 Describe the complications of the disease you have mentioned in 1.1

Part B

2 2.1 Describe the pathological basis of the following.

2.1.1 Dysphagia in a patient who has ingested a corrosive chemical 3 months ago

(25 marks)

2.1.2 Nutmeg liver in congestive heart failure

(25 marks)

2.2 Describe how you would investigate and confirm the diagnosis of the following.

2.2.1 Vitamin B12 deficiency

(25 marks)

2.2.2 Multiple myeloma.

(25 marks)

Part C

Write notes on the following.

3.1 Germ cell tumours of the testis

(40 marks)

3.2 Tuberculous meningitis

(30 marks)

3.3 Amniotic fluid embolism

(30 marks)

Part D

A 70 year old man presented to the medical ward with insidious onset of periorbital and bilateral ankle odema. He was diagnosed with type II diabetes mellitus and hypertension in his early fifties. Urine ward test for reducing substances was negative. Heat coagulation test for protein was positive.

4.1 What is the most likely underlying condition which explains the above clinical features?

(05 marks)

4.2 List five relevant biochemical investigations and describe their expected findings.

(25 marks)

4.3 Explain the rationale for requesting the above tests.

(20 marks)

4.4 Describe the expected pathological changes in the glomeruli of this patient. (30 marks)

4.5 Briefly describe the possible macroscopic changes in the aorta of this patient.

(20 marks)