



Faculty of Medicine, University of Ruhuna
Third Examination for Medical Degrees (Part II) –April 2017
Pathology Paper I

Monday 3rd April 2017

9.00 am to 11.00 am
Two hours

Answer **ALL FOUR** questions.
Answer each part in a **SEPARATE** book.

Part A

1. A 65 year-old female underwent a laparotomy for an acute abdomen.
 - 1.1 Describe the process of healing of the surgical wound of this patient. *(40 marks)*
 - 1.2 Describe the factors affecting wound healing. *(40 marks)*
 - 1.3 She develops swelling in the left leg on the 4th post-operative day. Deep vein thrombosis is suspected. Describe the pathogenesis of deep vein thrombosis in this patient. *(20 marks)*

Part B

2. Explain the pathological basis of
 - 2.1 haematuria in a patient with infective endocarditis. *(50 marks)*
 - 2.2 brown induration of lungs in a patient with chronic rheumatic heart disease. *(50 marks)*

Part C

3. Describe the macroscopic and microscopic appearances of
 - 3.1 lungs in lobar pneumonia. *(40 marks)*
 - 3.2 intestine in Crohn's disease. *(40 marks)*
 - 3.3 seminoma. *(20 marks)*

Part D

4.
 - 4.1 Leukaemias are rare disorders and can manifest as anaemia and hepatosplenomegaly.
 - 4.1.1 Define leukaemia. *(10 marks)*
 - 4.1.2 State how you would confirm the diagnosis of acute leukaemia. *(10 marks)*
 - 4.1.3 Describe the pathological basis for anaemia and hepatosplenomegaly in leukaemia. *(30 marks)*

- 4.2 A 38 year-old computer programmer underwent a routine medical examination. His BMI was 35 Kg/m². His blood pressure was 120/70 mmHg. He smokes 2-4 cigarettes a day but does not take alcohol. His mother had died at the age of 55 years from a myocardial infarction. He was not on any medication.

Results of the biochemical tests done at the medical examination are given below.

Random plasma glucose	- 220 mg/dL (12.2 mmol/L)
Serum total cholesterol	- 315 mg/dL
Urine protein	- Nil
Urine for reducing substances	- Positive

4.2.1 Interpret his plasma glucose result and state the most likely diagnosis. (10 marks)

4.2.2 List **three** other biochemical tests you would request in the management of this patient giving reasons. (25 marks)

4.2.3 List the risk factors this patient has for the development of atherosclerotic cardiovascular disease. (10 marks)

4.2.4 Physical examination of the abdomen revealed mild hepatomegaly in this patient. State the most likely cause for the hepatomegaly. (05 marks)