

## General Pathology Tutorial (2) – 20/02/2018

Group A (2.15-3.15pm)

Group B (3.15-4.15pm)

### Question 1

1. A 10-year-old boy is admitted with suspected acute appendicitis.

1.1 Define acute inflammation. 15 marks

1.2 List four (4) macroscopic changes that you would see in this patient's inflamed appendix at the time of surgery. 20 marks

1.3 Describe the pathological basis of one of the features that you have mentioned in 1.2 30 marks

1.4 List three (3) important microscopic features that you would see in the inflamed appendix. 15 marks

1.5 Name two (2) sequelae of acute inflammation. 10 marks

1.6 List two (2) investigations that are useful in monitoring a patient with acute inflammation. 10 marks

### Question 2

“Cell death is a constant feature in both health and disease. A particular type of cell death is apoptosis”.

2.1 Define apoptosis. 10 marks

2.2 Briefly describe the differences between apoptosis and necrosis. 30 marks

2.3 Describe the light microscopic appearances that you observe in a cell undergoing apoptosis.

10 marks

2.4 List **two (2)** genes that control apoptosis. 10 marks

2.5 Briefly describe the importance of apoptosis in

a) A Pathological condition. 20 marks

b) A physiological condition. 20 marks

### Question 3

3.1 A 55-year-old man with peripheral vascular disease, presents with an ulcer in the foot.

3.1.1 State the pathophysiological basis of ulcer formation in this patient 10 marks

3.1.2 Describe the mechanisms of cellular injury occurring at the ulcer site. 30 marks

3.2 A malignant tumor is removed from the abdomen of a 60-year-old man at surgery. A tumor marker is used in the follow up of this patient.

Explain the pathophysiological basis for the use of a tumor marker in the follow up of this patient. 30 marks

3.3 Pyloric stenosis is known to follow the healing of a chronic peptic ulcer in the antropylic region. Explain the pathophysiological basis of the above. 30 marks

