

UNIVERSITY OF CAPE TOWN
STELLENBOSCH UNIVERSITY

MMed Emergency Medicine
Primary examination
Written examination
16 March 2007

Pathology and Pharmacology long answer paper

1300 - 1600

This paper consists of **THREE** long answer questions. All questions are to be answered. Each question is worth 100 marks.

Answer each question in a separate book.

1.

Discuss the pathophysiological differences between hyperglycaemic ketoacidosis and non ketotic hyperosmolar episodes.

2.

A 65 year old male presents with central chest pain lasting over an hour. He has a family history of ischaemic heart disease and is a heavy smoker. Despite his chest pain he has stable vital signs. An ECG shows a normal sinus rhythm and ST depression > 2mm in V4-6. A provisional diagnosis of Acute Coronary Syndrome is made.

Discuss the appropriate sequential emergency pharmacological management (indications, mechanism of action, dose / duration, and major adverse effects / cautions) for this patient.

3.

What are the current indications for adrenaline in the Emergency Department? Include routes of administration, mechanism of action, dose and pharmacokinetics.

What are the contraindications to its use?

Describe common side effects of adrenaline.