

UNIVERSITY OF CAPE TOWN
STELLENBOSCH UNIVERSITY
Faculty of Health Sciences

MMed Emergency Medicine
Primary examination

14 March 2008

Pathology

0900 – 1200

**NO CALCULATORS AND/OR
ELECTRONIC EQUIPMENT/AID WILL BE ALLOWED**

This paper consists of **FIVE** short answer questions and **TWO** long answer questions. Overall marks for this paper are allocated as follows:

Short answer questions: 33%
Long answer questions: 67%

All questions are marked as a percentage: if a question is in sections, the percentage allocated to that section is given as a guide to you.

All questions are to be answered.

Answer questions in the following books:

Question	Book
1-2	1
3-4	2
5	3
6	4
7	5

Short Answer Questions

1.

Explain the pathogenesis of cardiac dysrhythmias.

2.

Write short notes on fracture healing.

3.

Describe the pathophysiological basis for jaundice.

4.

Write short notes on the pathogenesis of microcytic anaemia.

5.

Write short notes on the major organ effects of cyanide.

Long Answer Questions

- 6.
- a. Draw the coagulation cascade. (35)
- b. Indicate on your diagram the sites of action of the following drugs on the cascade:
- Warfarin
 - Heparin
 - Streptokinase
 - Tranexamic acid
 - Aprotinin
 - Recombinant factor VIIa
 - Phytonadione (Vitamin K1)
 - Protamine sulphate
 - Enoxaparin
 - Tenecteplase
- (20)
- c. Indicate whether each of these drugs has an agonist or antagonist effect on coagulation, and give one indication for each of these drugs. (20)
- d. Discuss the effects of streptokinase administration on the coagulation system, and indicate how this system contributes to its side effects (10)
- e. Discuss 5 steps for reversing a severe warfarin overdose (INR = 8) with bleeding. (15)
7.
Discuss the pathogenesis of an acute bronchospastic event.