

UNIVERSITY OF CAPE TOWN
STELLENBOSCH UNIVERSITY
Faculty of Health Sciences

MMed Emergency Medicine
Final examination

MPhil Emergency Medicine
Written examination

24 March 2009

Clinical short answer paper 2

1300 - 1600

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

This paper consists of **FIFTEEN** short answer questions. All questions are to be answered. Each question is worth 10 marks.

Answer questions in the following books:

Question	Book
1-4	1
5	2
6-9	3
10	4
11-13	5
14-15	6

If you need to continue an answer in an extra book, do not mix answers in one book other than as detailed above.

1. A 65 year old male was found on the floor of his flat and brought to the Emergency Centre (EC) with a depressed level of consciousness. His daughter had last spoken to him the day before when he had sounded confused.
 - a. List 10 causes of stupor/ coma 5
 - b. Describe his osmotic status if the following is available:
Measured osmolarity 290 mmol/l
Na 126 mmol/l
Urea 8 mmol/l
Glucose 12 mmol/l 3
 - c. List three causes for this abnormality. 2
2.
 - a. Write notes on the American Heart Association's science advisory: *Call to action for bystander response to adults who experience out-of-hospital sudden cardiac arrest.* 5
 - b. Describe a practical approach to identify the treatable causes of pulseless electrical activity. Base your answer on current best evidence. 5
3. A 32 year old male presents via EMS to the EC with a distal femur fracture. He is not cannulated and on interview claims to have a needle-phobia. Describe your approach to providing pain relief.
4. A 24 year old female presents to the EC with severe chest pain. Her partner tells you that they have been smoking crack all day. Explain how you will manage this patient if her ECG reveals an infarct pattern.
5. Discuss Acute Salt Water Aspiration Syndrome with reference to SCUBA Diving.
6. Discuss briefly the management of a patient with sickle cell crisis. In your answer explain the purpose of each of your interventions.
7. Explain the differences when intubating and ventilating a pregnant patient as compared to a non-pregnant patient of the same age.
8. Discuss the clinical presentation and management of inadvertent ingestion of mushroom from the *Inocybe* genus.

9. A 54 year old diabetic patient presents to the EC following a TIA which has completely resolved. Explain the evidenced-based clinical decision rule that can be used to decide whether to admit for investigation or discharge for outpatient work-up.
10. You are on call for EMS and get a phone call from the Communication Centre requesting your advice. A rural doctor would like to transfer a patient with suspected viral haemorrhagic fever from Clanwilliam to Tygerberg Hospital. What advice should you give, and why?
11. Which patients should be given supplementary oxygen during procedural sedation? Discuss the pros and cons and what other factors might influence your decision.
12. Write short notes on non-traumatic causes of a widened mediastinum and describe possible investigations you might consider in a stable patient with acute chest pain.
13. List pertinent markers of severity in acute pancreatitis in the EC, and life threatening complications of this disease.
14. A 35 year old female with a severe debilitating migraine presents in desperation to the EC. She suffers from sporadic migraines with no specific treatment regime. This episode has been ongoing for 8 hours and has resisted all over the counter medications. She is now too nauseous to take orally. Discuss current treatment options for acute migraine in the EC.
15. Write short notes on radiological investigations for suspected acute renal colic.