

ID NUMBER:

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
----------------------	----------------------	----------------------	----------------------	----------------------

**University Hospital, Geelong
Emergency Medicine
Trial Fellowship Exam
Short Answer Questions (SAQ)
Week 22**

DIRECTIONS TO CANDIDATE

1. Answer each question in the space provided in this question paper.
2. Do not write your name on this question paper.
3. Enter your examination number in the space below.
4. Cross out any errors completely.
5. Do not begin the exam until instructed to do so.
6. Do not take examination paper or materials from this room.
7. The booklet binder may be removed during the exam.

**QUESTION & ANSWER
BOOKLET**

Question 1 (18 marks)

A 10 month old boy is brought to the Emergency Department by his mother via his GP. The child has been unwell for 48 hours with a fever. The GP has not been able to identify a source of fever.

On examination you note:

Grizzly child
HR 135 bpm
RR 22 per min
Temperature 38.9 °C
No obvious focus of infection.

A nurse has collected a bag urine specimen for this patient.

a. State three (3) cons for the use of a bag urine specimen in this patient. (3 marks)

- 1. _____
- 2. _____
- 3. _____

b. State three (3) ways in which a white cell count result might influence your management in this case. (3 marks)

- 1. _____
- 2. _____
- 3. _____

Question 1 (continued)

- c. State three (3) pros and three (3) cons for the role of blood cultures in this child. (6 marks)

Pros:

1. _____
2. _____
3. _____

Cons:

1. _____
2. _____
3. _____

Question 1 (continued)

Following your complete assessment, the child remains with no focus of infection identified.

d. List six (6) criteria that must be met for you to safely discharge this child. (6 marks)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Question 2 (10 marks)

A 25 year old male presents to your emergency department following a motor car accident. His GCS is 15. After examination he appears to have isolated injuries to his head.

An X-ray is taken- refer to the prop booklet page 2.

a. State four (4) abnormal findings shown in this xray. (4 marks)

1. _____
2. _____
3. _____
4. _____

b. List two (2) indications for lateral canthotomy for this patient. (2 marks)

1. _____
2. _____

Question 2 (continued)

c. Define the following terms: (6 marks)

Le Fort type 1:

Le Fort type 2:

Le Fort type 3:

Question 3 (12 marks)

You have been asked to set up a local research trial investigating the role of the effect of cooling as a neuro-protective strategy in post VF patients in the ED.

The aim of your study is to assess the neuro-protective effects of cooling via rapid IV infusion of 2L of cold Hartmans on post-VF patients in the ED.

- a. List six (6) key factors in the scientific design of this study. (6 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Question 3 (continued)

b. List six (6) key steps required to implement this study in your department. (6 marks)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Question 4 (10 marks)

A 75 year old lady presents to your emergency department with headache and blurriness of vision.

2 photos are taken with the patient requested to look straight ahead- refer to the prop booklet page 3.

a. State one (1) abnormality shown in photo 1. (1 mark)

1. _____

b. State two (2) abnormalities shown in photo 2. (2 marks)

1. _____

2. _____

Question 4 (continued)

c. List seven (7) likely underlying causes for this condition. (7 marks)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

Question 5 (11 marks)

A previously well, 74 year old woman presents to your emergency department with chest pain for 2 hours.

An ECG taken on arrival- refer to the prop booklet page 4.

a. What is the significance of these findings? State three (3) points of significance.(3 marks)

- 1. _____
- 2. _____
- 3. _____

b. What is the most appropriate definitive treatment for this patient? State two (2) points of justification for your choice. (3 marks)

Definitive treatment:

Justifications:

- 1. _____
- 2. _____

Question 5 (continued)

- c. List five (5) features that would suggest successful treatment of this condition in the first 4 hours. (5 marks)

1. _____
2. _____
3. _____
4. _____
5. _____

Question 6 (18 marks)

You are the Consultant in an urban Emergency Department. You receive ambulance pre-notification about a domestic dispute. Ambulance are transporting a patient with shotgun wounds to chest and abdomen. ETA is 10 minutes.

A resuscitation bay has been identified as suitable to receive the patient.

A senior doctor will take control of the rest of the department.

a. State four (4) key steps to be performed prior to patient arrival. (4 marks)

1. _____
2. _____
3. _____
4. _____

Question 6 (continued)

b. What three (3) circumstances must be met for a thoracic gun shot to be managed with ICC alone (ie not require formal surgical intervention)? (3 marks)

1. _____

2. _____

3. _____

c. What is the significance of a missile fragment appearing blurred on a Chest Xray? (1 mark)

d. What is the role of CT tractogram? State one (1) point in your answer. (1 mark)

e. Under what circumstance should abdominal gunshot wounds proceed to laparotomy? State one (1) circumstance in your answer. (1 mark)

Question 6 (continued)

f. What is the mechanism of death from a high velocity bullet striking the chest? (1 mark)

g. List seven (7) principles of forensic evidence collection for this patient. (7 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

Question 7 (12 marks)

You are asked to review a 24 year old woman who presented 5 days post partum with per-vaginal bleeding. Her initial Hb was 65 and her initial vital signs were within normal limits. She is receiving her first unit of packed red blood cells.

Her observations are:

BP	60/40	mmHg
HR	120 (thready)	/ min
RR	40	/ min
Temp.	40°C	

Your clinical examination has excluded ongoing vaginal bleeding.

a. List four (4) differential diagnoses for her clinical state. (4 marks)

1. _____
2. _____
3. _____
4. _____

Question 7 (continued)

b. List eight (8) key actions that you would take in the next 30 minutes. (8 marks)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Question 8 (12 marks)

A 65 year old man presents with abdominal pain and vomiting for 24 hours. He is known to have chronic excessive alcohol excess.

Several pathology tests are taken- refer to the prop booklet page 5.

Observations on arrival:

BP	110/50	mmHg
HR	120	/min (regular)
RR	26	/min
SaO2	95	% on air
Temp	37	deg C
GCS	15	

- a. State a unifying diagnosis for this patient. (1 mark)

- b. List six (6) findings in these investigations that support this diagnosis. (6 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Question 8 (Continued)

c. List five (5) key treatments that you would commence for this patient in the first 30 minutes of your care. (5 marks)

1. _____
2. _____
3. _____
4. _____
5. _____

Question 9 (12 marks)

A 25 year old woman presents following a deliberate quetiapine overdose.

- a. Complete the table below to demonstrate your dose related risk assessment. (4 marks)

Dose range (1 mark)	Clinical effects (3 marks)
	1.
	1. 2.

- b. What is the most common ECG abnormality in significant overdose and what is the significance of this change (2 marks)?

ECG change: _____

Significance: _____

Question 9 (continued)

- c. Complete the table below by stating the role of decontamination and elimination in this poisoning. (2 marks)

Management task	Role (2 marks)
Decontamination (1 mark)	
Enhanced elimination (1 mark)	

- d. List four (4) specific circumstances that must be met to safely discharge a patient from the Emergency department following a rapid release Quetiapine overdose. (4 marks)

1. _____
2. _____
3. _____
4. _____

University Hospital, Geelong Fellowship Exam Short Answer Questions
Week 22

ID NUMBER:

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
----------------------	----------------------	----------------------	----------------------	----------------------

**University Hospital, Geelong
Emergency Medicine
Trial Fellowship Exam
Short Answer Questions (SAQ)
Week 22**

PROP BOOKLET

Question 2



Question 3

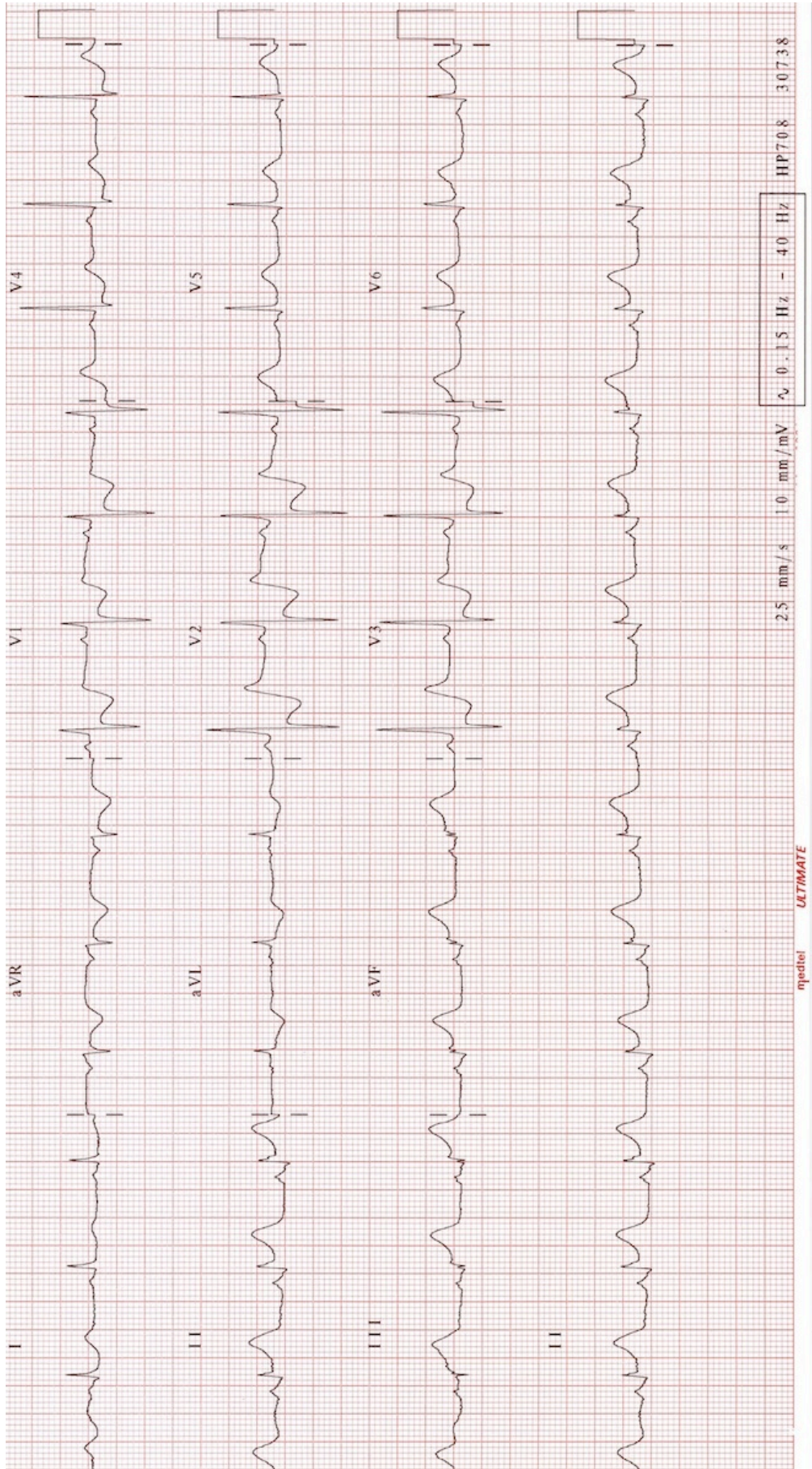
Photo 1



Photo 2



Question 5



Question 8

		Reference range
Na ⁺	135 mmol/l	134-146
K ⁺	4.0 mmol/l	3.4- 5.0
Cl ⁻	85 mmol/l	98- 106
Bicarbonate	12 mmol/l	22- 28
Urea	12.5 mmol/l	2.5- 6.4
Creatinine	0.05 mmol/l	0.05- 0.1
Glucose	6.8 mmol/l	
Lactate	2.0	
Total bilirubin	15 μmol/ L	0- 20
Protein	64 g/L	60- 80
Albumin	31 g/L	33- 47
Alk phosphatase	85 U/L	30- 100
LDH	210 U/L	120- 250
γGT	250 U/L	0-50
AST	90 U/L	0- 35
ALT	50 U/L	0- 40
FWT	Ketones ++	(others normal)