

University Hospital, Geelong

Emergency Medicine

Trial Fellowship Exam

Short Answer Questions (SAQ)

Week 21

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)

You are standing at the Triage desk of your emergency department. A distressed man presents to the Triage desk carrying his 5 year old son. He states that he witnessed his son being bitten on the right thigh by a snake, about 30 minutes earlier.

The child is conscious and alert.

You note a small bruised area on the child's right thigh. The child is placed in a resuscitation cubicle with full external monitoring applied.

a. State three (3) key, immediate steps in your management of this child. (3 marks)

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b. List two (2) symptoms and two (2) signs that would be consistent with envenomation in this child. (4 marks)

Symptoms:

-

Question 1 (continued)

 c. List your preferred technique (ie bite site or urine or blood) to collect a sample for Venom detection. Justify your choice. (2 marks)
Preferred site:

Justification:

An FBE and U+E are taken.

d. List three (3) other key blood tests that you would perform for this patient. (3 marks)

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Question 1 (continued)

You suspect envenomation. Antivenom is indicated.

e. Complete the table below. State one (1) justification for each choice. (6 marks)

Management step	Variable (3 marks)	Justification (3 marks)
Antivenom type (2 marks)		
Antivenom dose (2 marks)		
Likelihood of serum sickness		
(2 marks)		

Question 2 (12 marks)

A 25 year old male presents via ambulance to your rural emergency department. He fell from a motorbike and complains of neck pain. After complete examination and investigation, he is found to have an isolated neck injury. Observations:

GCS 15

A cervical spine X-ray is taken- refer prop booklet page 2.

	a.	State three (3) abnormal findings shown in this Xray. (3 marks)
1.		
2.		
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It is determined that the patient requires transfer by road ambulance to a trauma centre 150 km away.

b. State six (6) key preparations for transfer that are specific for this injury. (6 marks)

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Question 2 (continued)

c. You suspect a spinal injury. List one (1) pro and two (2) cons for using steroids for this patient. (3 marks)

Pro:

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Cons	5:		
1.		 	
2.		 	

Question 3 (12 marks)

You are working in a mixed emergency department in an outer suburban hospital with an inpatient Paediatric service.

An 11 month old female developed a rash over a 48 hr period. The rash is present over the entire body, sparing the palms and soles.

A photo of the child is taken - refer to the prop booklet page 3.

- a. What is the diagnosis? (1 mark)
- b. List three (3) likely underlying causes for this condition (each cause to be a different aetiology type).(3 marks)

Question 3 (continued)

c. What is your preferred disposition for this patient? List two (2) points in your answer. (2 marks)

- d. Justify your preferred disposition for this patient. State two (2) points of justification for your choice. (2 marks)
- 1. ______ 2. _____
 - e. Other than disposition arrangements, list four (4) key steps in the management of this condition. (4 marks)

Question 4 (12 marks)

Clinical handover in the emergency department can be performed using several techniques.

a. List one (1) pro and one (1) con for each of the techniques of handover listed below. (6 marks)

Handover technique	Pros (3 marks)	Cons (3 marks)
Paper/whiteboard (2 marks)		
Electronic (2 marks)		
Ward round/bedside (2 marks)		

Question 4 (continued)

b. Assuming appropriate staff participation, list six (6) other important components to a morning handover ward round. (6 marks)

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Question 5 (10 marks)

A 21 year old man presents following an assault with a painful right eye.

A CT face is taken- refer to the prop booklet page 4.

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

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Question 5 (continued)

b. List six (6) associated examination findings that you may expect to be associated with this injury. (6 mark)

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Question 6 (12 marks)

An 82 year old woman presents to your emergency department with 10 hours of abdominal pain. Your clinical assessment leads to a clinical diagnosis of mesenteric ischaemia.

a. List three (3) options for definitive imaging in this patient. State one (1) relevant pro and one (1) con for each of these options. (9 marks)

Imaging option (3 marks)	Pro (3 marks)	Con (3 marks)
1.		
2.		
3.		

Question 6 (continued)

A diagnosis of mesenteric ischaemia is supported by your chosen imaging.

b. State three (3) factors that may affect a decision regarding operative treatment for this patient. (3 marks)

1.	
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Question 7 (11 marks)

A 3 week old boy is brought to emergency with frequent vomiting over a 24 hour period.

Initial blood tests are taken- see prop booklet page 5.

a. Provide one (1) calculation to help you to interpret these results. (1 mark)

Derived value 1: _____

- b. What is the significance of this calculation finding? (1 mark)
- c. What is the most likely diagnosis? (1 mark)
- d. List four (4) investigation findings from these blood tests to support this diagnosis. (4 marks)

Question 7 (continued)

e. List two (2) urgent, key investigations that you would order for this patient. State one (1) justification for each choice. (4 marks)

	Investigation (2 marks)	Justification (2 marks)
1		
2		

Question 8 (18 marks)

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

a. Complete the table below to demonstrate your dose related risk assessment. (10 marks)

Dose range mg/kg (4 marks)	Expected Clinical effects (1 only required for each dose range) (3 marks)	Expected Acid/base disturbance (3 marks)
	Minimal symptoms (no further answer required)	Nil (no further answer required)

Question 8 (Continued)

b. What is the role of serum salicylate levels? State three (3) points in your answer. (3 marks)

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- c. What is the role of decontamination in this poisoning? State two (2) points in your answer. (2 marks)
- 1. _____
- 2. _____

Question 8 (Continued)

d. What is the role of enhanced elimination in this poisoning? State three (3) points in your answer. (3 marks)

1.	 	 	
2.			
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Question 9 (11 marks)

4.

An 18 month old girl presents with respiratory distress and pallor.

An ECG taken on arrival is taken - refer the prop booklet page 6.

a. What is the diagnosis based on this ECG? (1 mark)

	b.	State four (4) features shown in this ECG that support this diagnosis. (4 marks)
1.		
2.		

3. _____

Question 9 continued

The child is placed in a resuscitation cubicle with full external monitoring applied.

c. State six (6) immediate steps in your management, demonstrating your escalation until this condition is adequately treated. Provide drug doses and routes where appropriate. (6 marks)

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University Hospital, Geelong Emergency Medicine Trial Fellowship Exam Short Answer Questions (SAQ) Week 21

PROP BOOKLET





University Hospital, Geelong- Fellowship Exam Short Answer Questions Week 21



Arterial blood gas, serum and urine biochemistry

			Reference range
FiO ₂	0.21		
рН	7.54		7.35- 7.45
pCO2	50	mmHg	35-45
PO2	62	mmHg	80- 95
Bicarbonate	41	mmHg	22-28
Base excess	+ 10		-3 - +3
O2 saturation	99	%	> 95
Na⁺	131	mmol/l	134-146
K ⁺	2.1	mmol/l	3.4- 5.0
Cl	66	mmol/l	98-106
Bicarbonate	45	mmol/l	22- 28
Urea	10.5	mmol/l	2.5-6.4
Creatinine	0.05	mmol/l	0.05-0.1
Glucose	3.4	mmol/l	3.5- 5.5
Urine spot			
Na	22	mmol/l	
К	28	mmol/l	
Cl	<10	mmol/l	

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