

University Hospital, Geelong

Emergency Medicine

Trial Fellowship Exam

Short Answer Questions (SAQ)

Week 20

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 30 year old woman, G1P0 who is currently 36 weeks pregnant, presents to your emergency department.

a. List three (3) physiological changes that you may expect to see in her ECG. (3 marks)

1.	
2.	
3.	

Question 1 (Continued)

This patient presented with a concern of 1 week of increasing dyspnoea and chest discomfort. Her pregnancy is otherwise progressing normally. She is previously well, with no significant past history and she takes no medications. Her observations on arrival are:

BP	110/60	mmHg
RR	30	/ min
Oxygen saturation	98%	on room air
GCS	15	
Temperature	37.8°C	

An ECG is taken on arrival- refer to the prop booklet page 2

b. State four (4) abnormalities shown in this ECG. (4 marks)

1.	
2.	
3.	
4.	

c.	Interpret this ECG for th	is patient. List two	(2) points of in	terpretation. (2 marks)
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1. _____

2. _____

Question 1 (Continued)

d. Complete the table below by stating three (3) investigation options that may assist with confirmation of the diagnosis in this patient. For each investigation state one significant pro and one significant con for each investigation for this patient. (9 marks)

	Investigation that may assist with diagnosis confirmation (3 marks)	Pro (3 marks)	Con (3 marks)
1			
2			
3			

Question 2 (12 marks)

A 9 month old boy is brought in to your emergency department by his mother after he became distressed at home.

An X-ray is taken- refer to the prop booklet page 3.

a. State four (4) relevant positive or negative findings in this xray. (4 marks)

1.	
2.	
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0.	
4.	
4.	
	b. List four (4) relevant historical factors that you would seek in this case. (4 marks)
	b. List four (4) relevant historical factors that you would seek in this case. (4 marks)
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1.	
2.	
Ζ.	
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3.	

4.		 	

Question 2 (Continued)

c. Other than examination of the limb involved, list four (4) specific examination findings that you would seek in this case. (4 marks)

1.	
2.	
3.	
4.	

Question 3 (12 marks)

A 68 year old man is brought in to your emergency department via private car from a Queensland beach.

A photograph of a section his left forearm is taken- refer to the prop booklet page 4.

- a. State the likely organism involved in this case? (1 mark)
- b. List three (3) acute complications of this condition. (3 marks)
- - c. List three (3) long term complications of this condition? (3 marks)

1.	 	
2.	 	
2		
3.	 	

Question 3 (Continued)

 d. List five (5) current controversies in the management of this condition. (5 marks)

 1.

 2.

 3.

 4.

 5.

Question 4 (12 marks)

You are preparing to perform a rapid sequence intubation for a 65 year old woman.

	b.	State four (4) steps that you would take if a difficult airway is identified. (4 marks)
1.		
2.		
3.		
4.		
5.		

Question 4 continued

c. State three (3) methods that you may utilise to confirm correct endotracheal tube position post intubation. (3 marks)

1.	
2.	
3.	
4.	

Question 5 (12 marks)

A 58 year old man presents to your emergency department complaining of shortness of breath.

A photograph of the man is taken- refer to the prop booklet page 5.

- a. List two (2) abnormal findings shown in this photograph. (2 marks)
- - b. State the significance of these findings. (1 mark)

	c.	List six (6) likely underlying causes for these findings in this patient. (6 marks)
1.		
2.		
3.		
4.		
5.		
6.		

Question 5 (continued)

d. State three (3) key investigations that you may order to assist confirm the underlying cause. (3 marks)

1.	 	
2.	 	
3.		

Question 6 (12 marks)

A 35 year old man presents to your emergency department with a painful R forearm. He has a history of IV drug use.

A photo of the man is taken- refer to the prop booklet page 6.

	a.	What is the diagnosis? (1 mark)
1	b.	State three (3) findings in this photograph to support this diagnosis. (3 marks)
1.		
2.		
3.		
	c.	List four (4) key investigations for this patient. (4 marks)
1.		
2.		
3.		
4.		

Question 6 (continued)

d. List four (4) definitive treatment options for this patient. (4 marks)

1	 	
2.	 	 <u>, </u>
3.	 	
4.		

Question 7 (13 marks)

A 67 year old man is brought in to your emergency department by his wife from home. He has been increasingly short of breath and unsteady on his feet over the past week. His has no significant past history and takes no medications.

Selected serum biochemical results are taken- refer to the prop booklet page 7.

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

Derived value 1: _____

b. Interpret these results in the setting of this scenario. List three (3) points of interpretation. (3 marks)

c.	List two (2) likely differential diagnoses for this presentation. (2 marks)

2. _____

Question 7 (continued)

d. List three (3) urgent, key investigations that you would order for this patient. State one (1) justification for each choice. (6 marks)

	Investigation (3 marks)	Justification (3 marks)
1		
2		
3		

Question 8 (12 marks)

A 65 year old male presents is successfully resuscitated after experiencing an out of hospital ventricular fibrillation arrest.

a. What is your temperature aim for his ongoing care? (1 mark)

	b.	Provide justification for this choice.	State five (5) points in your answer. (5 marks)
1.			
2.			
3.			
4.			
4.			
5.			

Question 8 (continued)

The ambulance ACLS protocol in your region does not include vasopressin.

- c. What is the current role of vasopressin in:
 - i. Out of hospital arrest. State three (3) points. (3 marks)

ii. In- hospital arrests. State three (3) points. (3 marks)

1	 	
2		
3.		

Question 9 (18 marks)

A 70 year old woman is brought into your emergency department by her son, who reports that she has had 2 days of confusion with episodes of agitation following using promethazine for an itchy rash.

a. Other than confusion and agitation, list four (4) examination features that would be consistent with promethazine toxicity. (4 marks)

1.		
2.		
3.		
4.		
	b.	List four (4) other potential causes of a similar toxidrome (each to be from a different drug type and a different type to promethazine). (4 marks)
1.		
2.		
3.		

4. _____

Question 9 continued

- c. What is the role of decontamination in possible promethazine overdose? State two(2) points in your answer. (2 marks)
- 1. _____
- 2. _____
 - d. What is the role of enhanced elimination in possible promethazine overdose? State one (1) point in your answer. (1 mark)
 - e. What is the role of antidote use in possible promethazine overdose? State one (1) point in your answer. (1 mark)

Question 9 continued

f. List six (6) features on examination that might raise the possibility of elder neglect. (6 marks)

1.	
2.	
3.	
4.	
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6.	



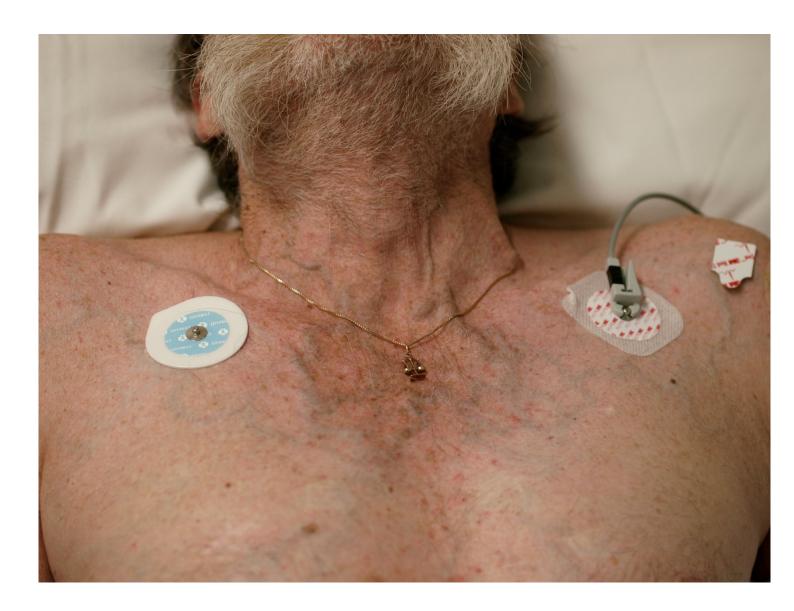
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PROP BOOKLET

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Serum biochemistry

Reference range

Na⁺	145	mmol/l	134-146
K^{+}	8.0	mmol/l	3.4- 5.0
Cl	107	mmol/l	98- 106
Bicarbonate	5	mmol/l	22- 28
Urea	63.2	mmol/l	2.5-6.4
Creatinine	3.40	mmol/l	0.05-0.1