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

### Week 30

### **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 working in a Tertiary emergency department with obstetric and paediatric services on site. A 24 year-old multiparous woman who is 36 weeks pregnant presents to triage in suspected labour.

	a. Define the stages of labour. State the start and finish of each stage. (3 marks)
	The patient appears to be having frequent contractions and is in severe pain. She is transferred directly to the resuscitation room. On examination you note that the head is on view. The baby is successfully delivered within minutes. The cord is clamped and cut.
	b. List five (5) steps in the routine management of a well newborn infant. (5 marks)
1.	
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2.	
3.	
4.	
5.	

# Question 1 (continued)

The placenta is still in situ. The Obstetric team is yet to arrive.

	C.	List five (5) steps in the management of the mother over the next 10 minutes. (5 marks)
1.		
2.		
۷.		
3.		
4.		
5.		

### **Question 1 (continued)**

You successfully develop the placenta. The patient continues to have on-going, heavy per vaginal bleeding. An assistant has notified the obstetric service who are still at least 10 minutes away.

C	d.	List five (5) steps in your management of the bleeding in the next 10 minutes. (5 marks)
1.		
2.		
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3.		
4.		
5.		

### Question 2 (12 marks)

A 65 year old woman presents with chest pain. You decide that she requires further investigation to investigate the possibility of acute coronary syndrome.

a. List two (2) important pros and one important (1) con for the investigative options below for this patient. (12 marks)

Imaging option	Pros (4 marks)	Con (2 marks)
Exercise stress test	2.	1.
Nuclear	1.	1.
medicine stress test	2.	

Continued over...

# Question 2 continued

Imaging option	Pros (4 marks)	Con (2 marks)
Stress ECHO	2.	1.
CT Coronary	1.	1.
Angiography	2.	

### Question 3 (12 marks)

A 12 year old girl presents to the emergency department with a rash on her lower limbs.

### A photograph of her lower limbs is taken- see props booklet page 1.

	a.	Define petechia, purpura and ecchymosis. (4 marks)
	b.	Other than Idiopathic Thrombocytopaenia purpura, list four (4) LIKELY differential diagnoses for this rash for this patient. (4 marks)
1.		
2.		
3.		
4.		

# Question 3 (continued)

After complete assessment, you suspect a diagnosis of Idiopathic Thrombocytopaenia Purpura.

c.	What is the prognosis for this patient with no active treatment? (1 mark)
You de	ecide to commence active treatment.
d.	What is your preferred initial treatment for this patient? (1 mark)
e.	List one (1) additional treatment option for this patient at presentation. (1 mark)
f.	Under what circumstances would you consider this treatment at presentation? (1 mark)

# Question 4 (12 marks)

A 34 year old man presents with upper abdominal pain.

### Liver function tests are taken- refer to the props booklet page 2.

	a.	List five (5) LIKELY differential diagnoses. (5 marks)
1.		
2.		
3.		
4.		
5.		

# Question 4 (continued)

	b.	List three (3) features of these investigations that support established cirrhosis. (3 marks)
1.		
2.		
2		
ქ.		
		In addition to information given, list four (4) other features that would indicate severe hepatic disease for this patient. (4 marks)
1.		
2.		
3.		

### Question 5 (12 marks)

A 35 year old man is brought in to your emergency department following a high speed motor bike accident.

### An Xray of his right knee is taken- refer to the props booklet- page 3.

	a.	State three (3) abnormal findings shown in this xray. (3 marks)
1.		
2.		
3.		
	b.	List four (4) local, non- bony structures that are LIKELY to be injured in association with this injury. (4 marks).
1.		
2.		
۷.		
3.		
4.		

# **Question 5 (continued)**

	C.	List five (5) possible complications of this injury after the first 1 week. (5 marks)
1.		
3.		
4.		
_		

## Question 6 (12 marks)

epididymitis in this patient. (4 marks)

A 15 year-old boy presents to your emergency department with his parents, with a painful right testicle for the last 6 hours.

a. List four (4) key clinical features that may help to distinguish torsion from

1.	
2.	
3.	
4.	
	b. List two (2) pros for the use of Ultrasound in this patient. (2 marks)
1.	
2.	

# **Question 6 (continued)**

c.	List two (2) cons for the use of Ultrasound in this patient. (2 marks)
1	
2	
An ult	rasound is performed within 1 hour and confirms a right testicle with no flow.
d.	List four (4) pieces of information that you would communicate to the patient and his parents. (4 marks)
1	
2	
3	

### Question 7 (12 marks)

A 28 year old man is brought into your emergency department after being stabbed whilst at a night club. He is brought in by ambulance after having been intubated for respiratory distress.

### A photo is taken- see the props booklet- page 4.

Soon after this photograph, is taken he rapidly deteriorates and is found to have pulseless electrical activity.

a.	List six (6) LIKELY causes for his haemodynamic deterioration. (6 marks)	
1.		
2.		
3.		
4.		
5.		
6.		

# Question 7 (continued)

Despite appropriate treatment, the patient dies shortly after in the department.

b.	List six (6) steps in your management of the situation in the next 2 hours. (6 marks)
1.	
2.	
3.	
4.	
5.	
6.	

### Question 8 (14 marks)

Complete the table below, by listing one (1) expected clinical effect of the following mild or severe inhalational exposures. (6 marks)

Inhalational agent	Clinical effects (6 marks)
Ammonia (2 marks)	Mild:  Severe:
Chlorine (2 marks)	Mild: Severe:
Phosgene (2 marks)	Mild: Severe:

## **Question 8 (continued)**

a. Complete the table below, stating the syndrome and one (1) clinical effect seen at each level of increasing ionising radiation. (8 marks)

Radiation level	Syndrome (4 marks)	Clinical effect (4 marks)
	1.	1.
Low exposure (2-10 Gray)		
(2 marks)		
	1.	1.
Medium exposure (10-15 Gray) (2 marks)		
(2 marks)		
High exposure (15-30 Gray) (2 marks)	1.	1.
Extreme exposure	1.	1.
(>30 Gray) (2 marks)		

### Question 9 (18 marks)

A 78 year old man is brought to your emergency department after a syncopal event at home. His only past medical history is of congestive cardiac failure, and he is unable to remember his medications.

### An ECG is taken- see props booklet- page 5.

	a.	State five (5) abnormal findings in this ECG. (5 marks)
1.		
2.		
3.		
J.		
4.		
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# **Question 9 (continued)**

	b.	List four (4) different medications (each to be from a different pharmacological class) that may be causative agents for these findings in this patient. (4 marks)
1.		
2.		
3.		
4.		

### Question 9 (continued)

It is confirmed that the patient has been non-compliant with his medications for the last 3 months. His venous blood gases show normal electrolytes. His vital signs are:

BP	60/55	mmHg
RR	26	/min
Sats	97%	RA
Temperature	36.2	°C

c. List three (3) treatment options that may improve this patients' haemodynamic state. Provide one (1) important pro and one (1) important con for each of these methods in this patient. (9 marks)

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

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

Week 30

**PROP BOOKLET** 



# Question 4

# Reference range

Total bilirubin	125 μmol/ L	0- 20
Protein	65 g/L	60- 80
Albumin	37 g/L	33- 47
Alkaline phosphatase	118 U/L	30- 100
γGT	450 U/L	0-50
AST	2854 U/L	0- 35
ALT	2785 U/L	0- 40
LDH	205 U/L	120- 250
Hb	125 g/L	115- 165
wcc	5x 10 <sup>9</sup> /l	4.0- 11.0
Plt	95 x 10 <sup>9</sup> /l	150- 400
INR	1.8	





