

The Prince Charles Hospital
The Royal Brisbane & Women Hospital
Redcliffe Hospital
Caboolture Hospital
SCUH

Metro North Hospitals and SCUH

**ACEM Fellowship Trial
Examination**

2018.2

SAQ Paper

Questions only

Booklet three

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ACEM Fellowship Trial Examination

2018.2

Short Answer Questions

SAQ Paper

Booklet three

Examination time: 180 Minutes

Direction to Candidates:

- 1- All questions must be attempted
- 2- Answer each question in the space provided
- 3- Enter your name for each question
- 4- This paper has been divided into 3 parts, each part is to be completed in 60 minutes

Booklet one:	SAQ 1-9
Booklet two:	SAQ 10-18
Booklet three:	SAQ 19-27
Props Booklet:	All props

SAQ 19: (9 Minutes)
(Total 18 Marks)

Candidate Name:

You are working as the doctor on a helicopter retrieval service that is dispatched to retrieve a patient that has collapsed on a dive boat on a nearby reef.

Questions:

- 1. List 6 diving related and 6 non-diving related differential diagnoses for this collapse. (6 marks)**

Diving related (0.5 Marks each)	Non-diving related (0.5 Marks each)

- 2. Indicate 6 aspects of the history that might help differentiate the cause of the collapse. (6 marks)**

3. List 4 body systems that may be affected by decompression illness and give one clinical feature for each. (4 marks)

Body system	Example

4. Outline 2 key considerations whilst retrieving this patient by helicopter. (2 Marks)

**SAQ 20: (6 Minutes)
(Total 12 Marks)**

Candidate Name:

A 59 year old male presents to your ED with syncope. His ECG shows a broad complex tachycardia.

Questions:

- 1. List 4 different causes of a broad complex tachycardia (2 Marks)**

- 2. List 4 clinical features that increase the likelihood of Ventricular Tachycardia (VT) (4 Marks)**

- 3. List 4 ECG features that increase the likelihood of VT (4 marks)**

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4. List 2 medications used to treat stable VT

(2 Marks)

**SAQ 21: (6 Minutes)
(Total 12 Marks)**

Candidate Name:

Your Registrar has asked you to review a 28-year-old man who is having a reduction of his fractured left radius performed under Bier's block using IV Prilocaine. Fifteen minutes into the procedure he is complaining of shortness of breath and light-headedness.

On examination, he appears cyanotic with oxygen saturation of 85% on pulse oximetry.

1. List 3 differential diagnoses for his deterioration? (3 marks)

2. List 2 investigations you would do in this patient with justification of how it will aid in your diagnosis? (2 marks)

Investigation	Justification

3. List 3 treatment options for the most likely diagnosis? (3 marks)

4. List 4 contraindications, in any patient, to performing a Bier's Block .

(4 marks)

SAQ 22: (6 Minutes)
(Total Marks 12)

Candidate Name:

You join an outer urban Emergency Department as a new consultant. The department occasionally provides road retrieval and inter-hospital transfer services in support of the ambulance service, using a nurse and doctor from the department.

The Department Director asks you to formalise the arrangements and make recommendations for the safe provision of these retrievals.

Questions:

1. List two categories of Personal Protective Equipment (PPE) that should be provided to staff and give an example of each.

(2 Marks)

Categories	Example

2. List four patient monitoring modalities required for the safe transportation of patients.

(4 Marks)

3. List three important items of non-clinical equipment that might be needed.

(3 marks)

4. What clinical governance review processes are required?

(3 Marks)

**SAQ 23: (6 Minutes)
(Total Marks 12)**

Candidate Name:

A 24-year-old male is brought to your Emergency Department by his friends after an altercation. He is moribund, with no palpable radial pulses and a thready carotid pulse, with a HR of 155 bpm.

His photograph is shown below:



1. State three (3) important features in this clinical photograph and their significance.

(3 marks)

2. List 2 ultrasonographic signs that would be consistent with pericardial tamponade on ultrasound? (2 Marks)

3. List 2 indications for emergency department thoracotomy for penetrating trauma. (2 marks)

4. List five potential complications from resuscitative thoracotomy? (5 marks)

SAQ 24: (6 minutes)
(Total Marks 12)

Candidate Name:

A 14 year old girl presents to ED with a rash, as seen in the accompanying clinical photograph. The rash has been present for the last 24 hours. She has been playing rugby league today and has a headache.

She has had heavy PV bleeding for the past hour. B-hCG is negative.

She appears alert and active.
Her vital signs are as follows:

GCS	15/15
HR	88
RR	16
SpO2	100% in room air
Temp	36.5 C
CRT	< 2
BP	119/80



Questions:

1. Describe the main features present.

(2 marks)

You perform a full blood count.

2. List 3 other investigations that you would perform in ED for this patient, with justification

(6 marks)

Investigation	Justification

3. The patient's FBC shows the following:

Hb	112 g/dL	(115-165)
MCV	72fL	(80-100)
WCC	6 x10 ⁹ /L	(4-11)
Neutrophils	47%	(40-70%)
Lymphocytes	30%	(14-45%)
Monocytes	6%	(4-13%)
Eosinophils	1%	(0-7%)
Basophils	0%	(0-3%)
Plt	2 x 10 ⁹ /L	(150-400)

What is the most likely diagnosis in this patient?

(2 marks)

4. Her PV bleeding increases and is difficult to control. Her GCS is now 12. List 2 specific treatments you would give as part of your management to stop her bleeding (2 marks)

SAQ 25 (6 minutes)
(Total marks 12)

Candidate name:

You are the consultant on the morning shift and just before handover the night registrar asks you to whether he should complete a death certificate for a 78-year-old man who died in the emergency department overnight. He had advanced dementia and was suspected to have a ruptured abdominal aortic aneurysm which had been previously deemed unsuitable for surgical intervention by the vascular surgeons.

- a. **List six situations where a death is notifiable to the coroner** **(6 marks)**

- b. **State one important consideration that is required after notifiable death is reported to the coroner or the police** **(1 mark)**

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- c. **List five actions required by a medical officer in the event of a non-notifiable death in the department (5 marks)**

**SAQ 26 (6 Minutes)
(Total Marks 12)**

Candidate name:

A 29- year-old lady presents to ED on a Friday night, with bizarre behaviour following a recent admission under the medical team with cellulitis.
She has a history of depression and self-harm. She is accompanied by her husband, who states that she has not slept since discharge.
She is currently taking antibiotics and an SSRI. Her husband states that she started to hallucinate while she was an inpatient but didn't mention it to medical staff as she wanted to go home.
You are concerned that she has an acute presentation of psychosis.

1. What features of her mental state exam indicate psychosis.

List 4 features:

(4 Marks)

2. Missed medical diagnoses in psychiatric patients are reported in up to 45% of patients. What are the main pitfalls in the "medical clearance process".

List 4 pitfalls:

(2 Marks)

She is calm and responsive to your assessment and request for further investigations. She is referred to the mental health team for review.

3. What features of her presentation suggest she should remain for inpatient assessment?

List 2 features:

(2 Marks)

She suddenly becomes more agitated in the department whilst waiting for the mental health team review. She is pacing in her cubicle and threatening harm to herself. Her husband has left the department.

4. How do you manage this situation?

List 4 steps

(4 Marks)

SAQ 27: (9 Minutes)
(Total 18 marks)

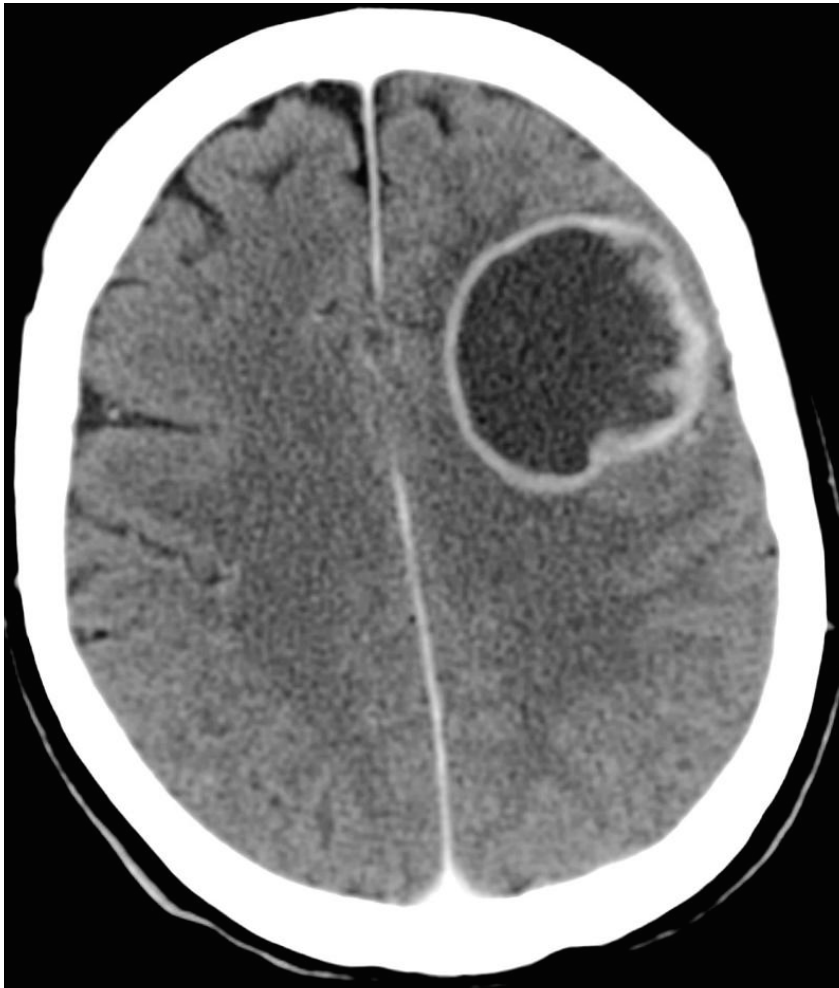
Candidate name:

A 56-year-old female is brought in to your ED after a generalized tonic-clonic seizure. On your assessment, you note that there is right-sided weakness and history reveals frequent falls and headache in recent months.

She has no significant past medical history and as part of the ED assessment, you have performed a CT brain, which is included in the Props booklet.

The patient is now GCS 15 and complaining of a headache. Her vital signs are as follows:

Temp	37.5C
HR	65
BP	135 / 85
RR	15
O2 Sats	97%



Questions:

1. List 3 pertinent findings on this CT.

(3 Marks)

2. List 5 differential diagnoses for these radiological findings.

(5 Marks)

3. List your management priorities in the Emergency Department (5 Marks)

4. State 5 important aspects to breaking bad news to this patient. (5 marks)

Good luck
Oh forgot, you still have the SCQ in the afternoon 😊