

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

Facility/hospital/clinical service name

Metro North Hospitals ACEM Fellowship Trial Examination

2018.1

Short Answer Questions

SAQ Paper

Questions Only

Booklet one

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ACEM Fellowship Trial Examination

2018.1

Short Answer Questions

SAQ Paper

Booklet one

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 1 (9 Minutes)
(Total 18 marks)

Candidate name:

A 28 yr old female is brought to your emergency department following a collapse in the street. She is pale, diaphoretic and complaining of abdominal pain.

1. List the top three differentials for her presentation. (3 Marks)

2. On review her vital signs are:

GCS 15/15
HR 110
BP 90/60
sats 100% RA
RR 22

She is tender in her left iliac fossa with peritonism.

- List the investigations that should be performed immediately: (3 Marks)

3. You perform a bedside USS. List and interpret the main findings shown. (3 Marks)

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1-
2-
Interpretation:

4. Outline 4 management priorities:

(4 Marks)

5. You have been tasked by your director to outline a local guideline for the use of bedside ultrasound in early pregnancy. What inclusion/exclusion criteria will be included.

(3 Marks, 0.5 for each box)

Inclusion	Exclusion

6. Outline the preferred technique for fetal wellbeing assessment using POCUS in the <14/40 population:

(2 Mark)

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**SAQ 2 (6 Minutes)
(Total 12 Marks)**

Candidate Name:

A junior doctor approaches you for help regarding a patient. They have just seen an 11 month old girl who was brought in with increased work of breathing and cough. There is a 3 day history of coryzal features, but no other significant medical history. Examination demonstrated an alert interactive child with widespread fine crepitation's across both lung fields.

Observation:

HR 155bpm
RR 45r/min
SpO2 89% RA
Febrile 37.1

The junior doctor is concerned by the patient's observations and has organised for them to be moved to a resuscitation bay. They have written up orders for an adrenaline neb (5mg), and a salbutamol burst (6 puffs x3) as initial therapy.

1. State the likely diagnosis. (2 mark)

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2. State the immediate management of this patient. (5 marks)

The child's parents are endocrinologists employed at the hospital and are curious as to what criteria will be used to determine when the child is suitable for discharge.

3. List the criteria for discharge. (5marks)

SAQ 3 (6 Minutes)
(Total 12 marks)

Candidate Name:

A 34 year old man is pulled from the surf face down and unconscious. He received CPR at scene and en route to your department.

1. List 4 key phases in the drowning process. (4 marks)

2. List the Conn and Modell classification for neurological function in drowning. (3 marks)

3. What factors suggest a poor prognosis in drowning? (3 marks)

4. When should resuscitation cease following drowning? (2 marks)

SAQ 4 (6 Minutes)
(Total 12 Marks)

Candidate Name:

A 9 year old girl is brought in to ED by her mother. She states that her daughter has been on 2 courses of antibiotics for her ear infection which she doesn't feel has helped. The child is now complaining of a headache and is vomiting. On examination, her tympanic membrane is erythematous and there is discharge in the external auditory canal. There is also some post-auricular erythema of her right ear with swelling.

Her vitals on arrival

Temp 38.9
HR 120 bpm
BP 90/60
Sats 98% on room air

1. List four (4) differential diagnoses to consider for her presentation

(4 marks)

2. List four (4) important features you would look for on examination with reasoning

(4 marks)

3. List four (4) investigations you would consider performing with justification
(4 marks)

Investigation	Justification

SAQ 5 (6 minutes)
(Total 12 Marks)

Candidate Names

A 25 year old male patient is to be retrieved from a remote property by your helicopter service. The nearest tertiary hospital is 1 hour flight time. He has fallen from his horse 30 minutes ago and has sustained a closed head injury and is now unresponsive. He also has a deformed L lower leg with an open wound. Local ambulance staff are on the scene and have obtained IV access and applied 15L O2 via NRB mask. On your arrival he is GCS 5 (E1V1M3).

His vital signs are:

T 36
HR 55
BP 160/65
RR 8
O2 sats 96% 15L mask

- 1. What drugs would you use for RSI in this patient? (2 marks)**

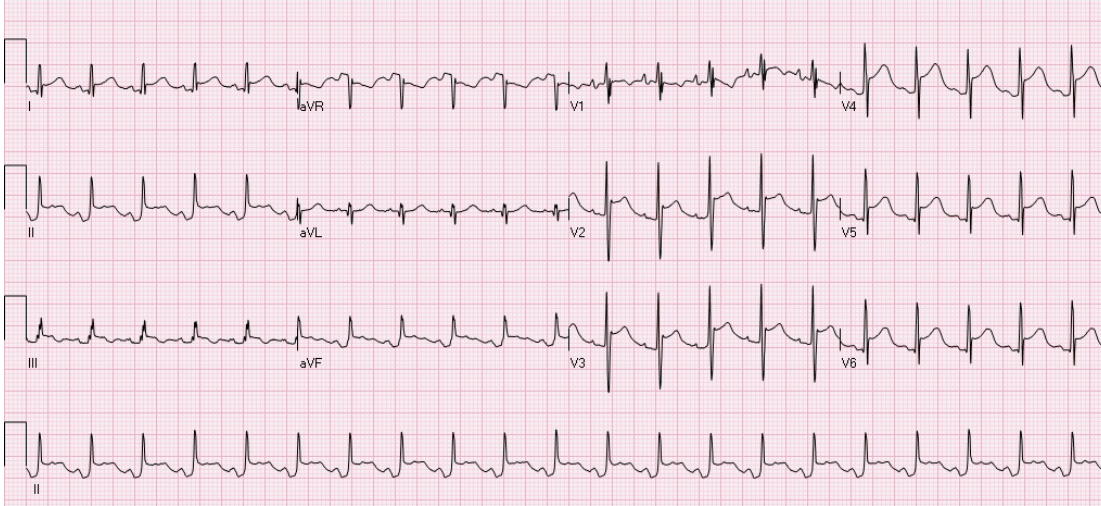
- 2. Describe the measures you would take to minimise secondary brain injury in this patient enroute to the nearest neurosurgical centre (6 marks)**

**3. List 4 other management priorities for this patient other than those listed above.
(4 marks)**

SAQ 6 (6 Minutes)
(Total 12 Marks)

Candidate Name:

A 22 year old male is brought to your emergency department following the ingestion of 'some pills' at a nightclub.
He is diaphoretic, pale and complaining of chest pain.



1. Describe three (3) main features on his ECG (3 Marks)

He remains GCS 15 but agitated,
His vital signs are:

HR 120
BP 180/95
Sats 100% NRB.

2. List two (2) illicit drugs and their class are likely to be responsible for his presentation.
(4 Marks)

Drug class	Drug name

3. Outline your management of this patient specifically in regards to his cardiovascular status.
(5 Marks)

SAQ 7: (6 Minutes)
(Total 12 Marks)

Candidate Name:

You are the Consultant in charge of a rural Emergency Department. Your Registrar has seen a 6 month old child with cellulitis and prescribed Flucloxacillin intravenously. During the infusion the child deteriorates and you are called by the nurse to urgently review the child.

The vital signs are:

HR 176
RR 60
BP 60/40
SpO2 87% in room air
GCS 14

She has obvious wheeze on examination and has a widespread erythematous urticarial rash.

1. List 5 immediate management steps (Include any doses and routes) and state the endpoints you would aim for as appropriate.

(5 marks)

The patient does not respond to the initial treatment.

2. List 2 further treatment options would you consider. (2 marks)

3. You decide the child will need to be intubated as she has developed stridor that is not improving. SpO2 is still below 90% despite treatment.

What equipment will you need to intubate this patient in your ED? (5 marks)

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**SAQ 8: (6 Minutes)
(Total 12 Marks)**

Candidate Name:

A 74 year old man is being managed in your department. He has a history of benign prostate disease and nothing else of note. He has been unwell for three days with fevers, dysuria and frequency. Today he feels more unwell and dizzy.

On examination he is febrile, and warm peripherally. He is alert, his chest is clear and he has some mild low abdominal tenderness. He has no rashes.

His vital signs are:

Temp 38.9 C
P 130 sinus rhythm
BP 80/45 after two litres of crystalloid
RR 24
O2 98% room air
GCS 15

His urine sample suggests a UTI and he is commenced on appropriate intravenous antibiotics. He has received a total of two litres of crystalloid in boluses over ninety minutes since arrival. You start haemodynamic support.

1. What inotrope/vasopressor do you choose? Give starting dose, range of doses and end points. (2 marks)

Your preferred agent is commenced peripherally and his perfusion improves. You elect to insert a central venous catheter to continue the agent.

2. In general what factors can make the insertion of a CVL more difficult? (5 marks)

The CVL is inserted correctly, and the central venous pressure (CVP) is measured at 20cmH₂O.

3) What factors, *in any patient*, can lead to an elevated CVP? (5 Marks)

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

Candidate Name

A 35 year old male has represented to your ED with right wrist swelling and pain. He was seen the night before following a fall off his pushbike. The junior registrar on shift diagnosed him with a distal radius fracture, applied a backslab and referred him to the fracture clinic. On examination, the patient is in obvious discomfort. He has a short arm backslab in place and his visible fingers are markedly swollen with a capillary refill time of 3 seconds.

His XRAYs from the night before has been reproduced below:



1. List 3 radiological abnormalities seen in the XRAY above. (3 marks)

2. List 3 potential complications that may occur as a result of his injury. (3 marks)

3. State 7 priorities in your assessment and management of this patient. (7 marks)

Following internal review, you have identified that the registrar involved in this case was only promoted from a senior house officer position 3 months ago. Feedback from your fellow FACEM colleagues have identified an issue with his professionalism. Their main concerns relate to his punctuality and regular sick calls. You have decided to meet up with this registrar.

4. State 5 important points that you would discuss in this meeting. (5 marks)
