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 Two** 

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## **ACEM Fellowship Trial Examination**

2018.2

## **Short Answer Questions**

**SAQ Paper** 

## **Booklet** two

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 10 (9 Minutes) (Total 18 marks)

#### **Candidate name:**

You are working in the retrieval service when you receive a call for advice from a junior medical officer who is working in a small rural hospital 300km from the tertiary centre.

They have a 34-year-old male patient who has sustained burns to his chest and arms whilst lighting a fire on his farm.

| 1. | List 2 different methods that could be used to estimate the TBSA% of | this patient's burns.<br>(2 Marks) |
|----|----------------------------------------------------------------------|------------------------------------|
|    |                                                                      |                                    |
|    |                                                                      |                                    |
|    |                                                                      |                                    |
|    |                                                                      |                                    |
|    |                                                                      |                                    |
| 2. | What key features of this patient's assessment would suggest the pre | sence of airway burr<br>(4 Marks)  |
|    |                                                                      |                                    |
|    |                                                                      |                                    |
|    |                                                                      |                                    |
|    |                                                                      |                                    |
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|    |                                                                      |                                    |
|    |                                                                      |                                    |
|    |                                                                      |                                    |
|    | What features in patient presentation and assessment would indi      |                                    |
|    | given?                                                               | (3 Marks)                          |
|    |                                                                      |                                    |
|    |                                                                      |                                    |
|    |                                                                      |                                    |
|    |                                                                      |                                    |
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|    |                                                                      |                                    |

| If fluids are required, outline your advice about how to calculate the initial fluid requiren (2 Marks)                      |
|------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                              |
|                                                                                                                              |
|                                                                                                                              |
|                                                                                                                              |
| List Conitonia that would indicate that this matient magnines reformed to a house control                                    |
| List 6 criteria that would indicate that <u>this</u> patient requires referral to a burns centrongoing management. (3 Marks) |
|                                                                                                                              |
|                                                                                                                              |
|                                                                                                                              |
|                                                                                                                              |
|                                                                                                                              |

| 6. | Complete the table by listing 4 early (<72hrs) and 4 long term (>72hrs) complications that |
|----|--------------------------------------------------------------------------------------------|
|    | may occur from this patient's burns.                                                       |

(4 marks)

| Immediate Complications | Long term Complications |
|-------------------------|-------------------------|
|                         |                         |
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# SAQ 11: (6 Minutes) (Total 12 Marks)

His vital signs are:

**Candidate Name:** 

A 45 year old man known to be HIV positive presents to your department with fever, non-productive cough, weight loss and mild confusion.

| PR<br>BP<br>Sats<br>Temp<br>BSL | 105/min<br>110/70<br>94% on room air<br>38.6 degrees<br>5.4 |                                                                        |
|---------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------|
| 1.                              | List 4 important differential dia                           | agnoses to be considered in this patient.                              |
|                                 |                                                             | (2 marks)                                                              |
|                                 |                                                             |                                                                        |
|                                 |                                                             |                                                                        |
|                                 |                                                             |                                                                        |
|                                 |                                                             |                                                                        |
|                                 |                                                             |                                                                        |
|                                 |                                                             |                                                                        |
| 2.                              | List and justify 4 specific invest patient's illness        | igations that will help in differentiating the cause of this (4 marks) |
| Invest                          | tigation                                                    | Reason                                                                 |
|                                 |                                                             |                                                                        |
|                                 |                                                             |                                                                        |
|                                 |                                                             |                                                                        |
|                                 |                                                             |                                                                        |

| 3. | The patient's new girlfriend is in attendance. She is concerned regarding her contracting HIV. List 4 factors that influence your decision to commence Post Prophylaxis (PEP) in this patient. |                              |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
|    |                                                                                                                                                                                                |                              |
|    |                                                                                                                                                                                                |                              |
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|    |                                                                                                                                                                                                |                              |
|    |                                                                                                                                                                                                |                              |
|    |                                                                                                                                                                                                |                              |
|    | 4. List 4 things that a clinician must discuss with patients to whom they are p                                                                                                                | orescribing PEP<br>(4 Marks) |
|    |                                                                                                                                                                                                |                              |
|    |                                                                                                                                                                                                |                              |
|    |                                                                                                                                                                                                |                              |
|    |                                                                                                                                                                                                |                              |

| <b>SAQ 12</b> | 2: (6 | Min)   |
|---------------|-------|--------|
| (Total        | 12 N  | Marks) |

#### **Candidate Name:**

A 39 year old woman presents to your emergency department complaining of a headache. She is G1 P0 at 36 weeks gestation.

| weeks gestation                                                                                                                                              | <i>3</i> 11.                   |                 |   |          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------|---|----------|
| Her vital signs                                                                                                                                              | are:                           |                 |   |          |
| Temp<br>HR<br>BP<br>SaO2                                                                                                                                     | 36.7<br>90<br>150/90<br>99% RA |                 |   |          |
| Questions:                                                                                                                                                   |                                |                 |   |          |
| 1. List 5                                                                                                                                                    | differential diagnoses fo      | r this patient? | ( | 5 marks) |
|                                                                                                                                                              |                                |                 |   |          |
|                                                                                                                                                              |                                |                 |   |          |
|                                                                                                                                                              |                                |                 |   |          |
|                                                                                                                                                              |                                |                 |   |          |
|                                                                                                                                                              |                                |                 |   |          |
|                                                                                                                                                              |                                |                 |   |          |
| 2. For the table below, list examination or investigation features that help you between these possible diagnoses? Include a justification. (7 marks, 0.5 fo |                                |                 |   |          |
| Examination/                                                                                                                                                 | Investigation                  | Justification   |   |          |
|                                                                                                                                                              |                                |                 |   |          |
|                                                                                                                                                              |                                |                 |   |          |
|                                                                                                                                                              |                                |                 |   |          |
|                                                                                                                                                              |                                |                 |   |          |

| The Prince Charles Hospital<br>Emergency Department | The Royal Brisbane &Women Hospi<br>Emergency Department | tal Redcliffe and Caboolture<br>Emergency Departments | Sunshine Coast U Hospital<br>Emergency Departments |
|-----------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------|
|                                                     |                                                         |                                                       |                                                    |
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## SAQ 13:(6 minutes) (Total 12 marks)

#### **Candidate Name:**

You are the ED consultant on the evening shift in a busy tertiary hospital. The following patient is brought in by ambulance after an altercation with a workmate.

His vital signs are as follows:

HR 90/min

BP 110 /75 mmHg SpO2 96% on room air

GCS 15/15



| Describe the key feature of this injury.                            | (1 Marks)                                                                                                     |
|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
|                                                                     |                                                                                                               |
|                                                                     |                                                                                                               |
| List 5 signs that would raise concern that this natient's airway is | at risk from this injury                                                                                      |
| and a signa that would ruise consort that this patient a univary as | (5 marks)                                                                                                     |
|                                                                     |                                                                                                               |
|                                                                     |                                                                                                               |
|                                                                     | Describe the key feature of this injury.  List 5 signs that would raise concern that this patient's airway is |

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|-----------------------------------------------------|------------------------------------------------------------|---------------------------------------------------|----------------------------------------------------|
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|                                                     |                                                            |                                                   |                                                    |
|                                                     |                                                            |                                                   |                                                    |
|                                                     |                                                            |                                                   |                                                    |
|                                                     | velops worsening hypoxia and e to manage this situation?   | respiratory distress.                             | List 6 immediate actions<br>(6 Marks)              |
|                                                     |                                                            |                                                   |                                                    |
|                                                     |                                                            |                                                   |                                                    |
|                                                     |                                                            |                                                   |                                                    |
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# SAQ 14: (6 minutes) (Total marks 12)

**Diagnosis** 

**Candidate Name:** 

A 7 year old boy presents to your ED with Right sided testicular pain. You work in a hospital that does not operate on children <10yrs of age.

**Exam finding** 

| 1. | List 4 differential diagnoses other than testicular torsion? | PFor each diagnosis, state a specif | ic |
|----|--------------------------------------------------------------|-------------------------------------|----|
|    | examination finding related to that condition.               |                                     |    |
|    |                                                              | (8 Marks)                           |    |

| The registrar looking | g after the patient reports back to you that t | the surgical registrar at the local |
|-----------------------|------------------------------------------------|-------------------------------------|

### SAQ 15 :(6 minutes) (Total 12 Marks)

#### **Candidate Name:**

A 55 year old male patient presents with a painful, swollen foot for the past week.

His vital signs are:

| Temp    | 38.1   |
|---------|--------|
| HR      | 95     |
| BP      | 95/50  |
| RR      | 20     |
| 02 Sats | 96% RA |



#### Questions:

1. Describe the pertinent findings on this X-ray & state the most likely diagnosis. (2 marks)

| Finding:   |  |
|------------|--|
| Diagnosis: |  |

| 2. What are the likely organisms causing this condition?                 | (3 marks)                  |
|--------------------------------------------------------------------------|----------------------------|
|                                                                          |                            |
|                                                                          |                            |
|                                                                          |                            |
| 3. List 5 groups of patients that may be predisposed to developing th    | is condition.<br>(5 marks) |
|                                                                          |                            |
|                                                                          |                            |
|                                                                          |                            |
|                                                                          |                            |
|                                                                          |                            |
| 4. List 2 factors that would give the patient with this condition a poor | rer prognosis              |
|                                                                          | (2 marks)                  |
|                                                                          |                            |
|                                                                          |                            |

# SAQ 16: (6 Minutes) (Total marks 12)

**Candidate Name:** 

A 56-year old patient presents to your emergency department on a Saturday evening. He is known to have end-stage renal failure and is on continuous ambulatory peritoneal dialysis. He is complaining of fever and diffuse abdominal pain.

|    | State the criteria required for the diagnosis of peritoneal dialysis assoc |                          |
|----|----------------------------------------------------------------------------|--------------------------|
|    |                                                                            | (3 ma                    |
|    |                                                                            |                          |
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| _  |                                                                            |                          |
| 2. | Name three organisms commonly causing peritoneal dialysis associated       |                          |
| 2. | Name three organisms commonly causing peritoneal dialysis associated       | d peritonitis<br>(3 mar) |
| 2. | Name three organisms commonly causing peritoneal dialysis associated       |                          |
| 2. | Name three organisms commonly causing peritoneal dialysis associated       |                          |
| 2. | Name three organisms commonly causing peritoneal dialysis associated       |                          |
| 2. | Name three organisms commonly causing peritoneal dialysis associated       |                          |
| 2. | Name three organisms commonly causing peritoneal dialysis associated       |                          |
| 2. | Name three organisms commonly causing peritoneal dialysis associated       |                          |
| 2. | Name three organisms commonly causing peritoneal dialysis associated       |                          |

3. Complete the following table for the empiric treatment of suspected peritoneal dialysis peritonitis.

(6 marks)

| Dose (0.5 mark) | Frequency and route (0.5 mark) |
|-----------------|--------------------------------|
|                 |                                |
|                 |                                |
|                 |                                |
|                 |                                |
|                 | Dose (0.5 mark)                |

### **SAQ 17: (6 Minutes)** (Total Marks 12)

#### **Candidate Name:**

A 4-month-old male infant is brought to the ED with 2 days history of progressive irritability and fever.

His vital signs are:

HR 180 38 RR

Sat 96%

Temp 38.7

His photograph is included in the props booklet:



Questions:

| 1. | List the | key 1 | teatures ( | )t | the a | bove | pho | tograp | h. |
|----|----------|-------|------------|----|-------|------|-----|--------|----|
|----|----------|-------|------------|----|-------|------|-----|--------|----|

(3 marks)

| 2. What is the most likely diagnosis?               | (1 mark)                                    |
|-----------------------------------------------------|---------------------------------------------|
|                                                     |                                             |
|                                                     |                                             |
| 3. List 3 other possible causes for the above prese | entation.<br>(3 marks)                      |
|                                                     |                                             |
|                                                     |                                             |
|                                                     |                                             |
|                                                     |                                             |
|                                                     |                                             |
| 4. List your immediate management steps, includ     | ing any drugs, doses and end p<br>(5 marks) |
| 4. List your immediate management steps, includ     |                                             |
| 4. List your immediate management steps, includ     |                                             |
| 4. List your immediate management steps, includ     |                                             |
| 4. List your immediate management steps, includ     |                                             |
| 4. List your immediate management steps, includ     |                                             |

### SAQ 18 (9 minutes) (Total 18 Marks)

Candidate name:

A 38 year old female presents to your ED with a referral letter from her GP requesting a blood transfusion for anaemia. She does not have any obvious source of bleeding other than a history of menorrhagia.

| Her FB                  | Her FBC is shown below.                 |           |  |  |  |
|-------------------------|-----------------------------------------|-----------|--|--|--|
| Hb<br>MCV<br>WCC<br>Plt | 74 g/L<br>75<br>7.4<br>380              |           |  |  |  |
| Questi                  | ons:                                    |           |  |  |  |
| 1.                      | List 5 possible causes for her anaemia. | (5 marks) |  |  |  |
|                         |                                         |           |  |  |  |
|                         |                                         |           |  |  |  |
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|                         |                                         |           |  |  |  |

| 2. List three indications for a l | blood transfusion in this patient?                                                   | (3 marks)           |
|-----------------------------------|--------------------------------------------------------------------------------------|---------------------|
|                                   |                                                                                      |                     |
|                                   |                                                                                      |                     |
|                                   |                                                                                      |                     |
|                                   | ood transfusion and you have a discussio<br>nsfusion due to concerns about the risks |                     |
| 3. List 4 early and 4 late comp   | lications of blood transfusion.                                                      | (8 marks)           |
| Early Complications               | Late Complications                                                                   |                     |
|                                   |                                                                                      |                     |
|                                   |                                                                                      |                     |
|                                   |                                                                                      |                     |
|                                   |                                                                                      |                     |
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|                                   |                                                                                      |                     |
|                                   |                                                                                      |                     |
|                                   |                                                                                      |                     |
| 4. List 2 alternative treatment   | options you could consider in this pa                                                | tient.<br>(2 marks) |
|                                   |                                                                                      | (2 marks)           |
|                                   |                                                                                      |                     |
|                                   |                                                                                      |                     |
|                                   |                                                                                      |                     |
|                                   |                                                                                      |                     |