

Candidate name: _____

PAH 2017.2 trial SAQ paper

PART 2

Questions 10 - 18

1 hour

Q10 (12 min)

A 50 year old farmer has been run over by a tractor.

He has severe pelvic pain.

His vital signs are:

GCS 13	E3 V4 M6	
Pulse	140	/min
BP	70/30	mmHg
O2 Sats	99%	room air

His CXR is normal.

His pelvic x-ray is given in the **PROPS BOOKLET**.

- 1. List 3 abnormalities on the x-ray. (3 marks)**

- 2. Classify the injury pattern using a recognized system. (1 mark)**

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3. State the immediate intervention you would perform. Include the endpoint for your intervention. (2 marks)

Intervention: _____

End-point: _____

4. List 3 injuries that are commonly associated with this type of pelvic injury. For each, list the clinical findings that would support its presence. (6 marks)

Injury	Supportive clinical findings

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As part of your assessment a FAST scan is performed. The image obtained is provided in the **PROPS BOOKLET**.

5. State your conclusion from the image provided. Include the clinical implication of this finding. (2 marks)

Conclusion

Clinical implication

You have initiated a massive transfusion protocol (MTP) –based approach for your resuscitation.

6. List 4 key laboratory end-points you will target to guide your MTP resuscitation. (4 marks)

Parameter	Target result

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7. List 5 complications specific to massive volume transfusion. (5 marks)

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Q11

A 70 year old female is brought to ED with acute breathlessness. Your provisional diagnosis is of acute pulmonary oedema (APO).

- 1. List 4 findings on clinical examination that would support a diagnosis of APO. (4 marks)**

- 2. List 4 possible precipitants for this patient's pulmonary oedema. (4 marks)**

The patient does not require immediate intubation.

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3. List two specific ED treatments you could employ to manage this patient's pulmonary oedema. For each, list your initial treatment prescription and your CLINICAL end-points. (4 marks)

Treatment 1

Clinical end-point

Treatment 2

Clinical end-point

Q12

The ambulance service has brought a 60 year old man to the ED with abnormal behaviour. They were called by motorists who reported him running amongst traffic.

- 1. List 6 features on your history that would suggest an organic cause for the patient's presentation. (6 marks)**

Your initial assessment suggests an organic cause for the patient's abnormal behaviour.

- 2. List 3 investigations you would perform (with rationale) to investigate for possible organic precipitants. (3 marks)**

Investigation	Rationale

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The patient required manual restraint whilst attempting to leave. A member of nursing staff has been bitten on the finger, drawing blood.

3. State 6 key principles of the ED management of this incident. (6 marks)

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Q13

A 5 week old boy has been brought to ED with vomiting and lethargy.

A venous blood gas had been obtained. The result is provided in the **PROPS BOOKLET**.

1. List the acid-base abnormalities present. Include your calculations where relevant.

(5 marks)

2. State your most likely diagnosis, and state how you would confirm this on investigation.

(2 marks)

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You estimate the patient to be 10% dehydrated. He weighs 5 kg.

3. State 3 important aspects of your fluid management of this patient. (3 marks)

Fluid type	
Maintenance rate	
Deficit replacement rate (over 24 hrs)	

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Q14

A 75 year old man has been referred to the ED by his GP with symptomatic anaemia.

- 1. List 5 key differential diagnoses. For each differential diagnosis, state one important supportive finding on FBE/blood film and one other key investigative finding that would support that diagnosis. (15 marks)**

Differential diagnosis	FBE / blood film finding	Other key investigation finding

Q15

A 7 year old girl has been brought to the ED with an exacerbation of asthma.

- 1. List 4 clinical or investigative findings that would indicate an imminent need for intubation. (4 marks)**

The child is experiencing a life-threatening asthma attack. She will require intubation as part of her ongoing management.

Her vital signs are:

GCS	14	E3 V5 M6
Pulse	175	/min
BP	90/55	mmHg
RR	60	/min
O2 sats	89%	15L O2 via non-rebreather mask

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2. List 4 difficulties you anticipate during this patient's intubation and ventilation. Give your strategy to manage each difficulty. (8 marks)

Difficulty	Management strategy

Q16

You have been called to see a patient in your department who is awaiting orthopaedic admission for a complex lower leg fracture requiring operative fixation. Your registrar has placed the patient in an above knee cast which has been split laterally. The nurses are worried that the patient has increasing pain and distress. The orthopaedic registrar has been repeatedly delayed due to theatre cases.

The initial x-ray (prior to immobilisation) is provided in the **PROPS BOOKLET**.

- 1. List 6 radiological abnormalities on this image. (6 marks)**

- 2. Apart from increasing pain, list 4 features of your examination that would suggest the development of compartment syndrome in the leg. (4 marks)**

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Your assessment is highly concerning for compartment syndrome. The orthopaedic registrar is unable to leave the operating theatre for at least another hour.

3. State 4 immediate management priorities in this situation. (4 marks)

Q17

You are the director of your department. You have received a phone call from an angry patient.

The patient stated that he presented to ED with ankle pain and did not have his pain managed adequately. He says he was told to go home and take paracetamol and that “he only had a sprain”. Subsequently, he has been to see his GP and has been told that he has a fracture that requires an operation.

On reviewing the case you note the x-ray from 4 days prior had shown an obvious fracture. The formal report describes a Weber B fracture of the fibula and recommends urgent orthopaedic review. There is no evidence from the notes that the patient was unco-operative with assessment or management.

- 1. In the table below, list one factor in each of the categories given that may have contributed to this situation, and two strategies you may employ to address each factor you have listed. (9 marks)**

Contributing factor	Strategies
System level	
Process level	
Individual level	

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2. List 4 actions you would take to deal with this situation. (4 marks)

Q18

A 30 year old woman has been brought to the ED with dyspnoea.

She is receiving chemotherapy for treatment of melanoma.

Her chest x-ray is provided in the **PROPS BOOKLET**.

1. List 2 relevant positive radiological abnormalities. (2 marks)

2. List 2 relevant negative findings. (2 marks)

3. List 4 potential infectious causes of the x-ray findings. Ensure each cause is from a different microbiological class. (4 marks)

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4. List 4 potential non-infectious causes of the x-ray findings. (4 marks)
