

Candidate name: _____

~~Department of~~
~~Emergency Medicine~~

~~Princess Alexandra Hospital~~

FELLOWSHIP TRIAL EXAMINATION
2019.1

WRITTEN EXAMINATION

SHORT ANSWER QUESTIONS

EXAMINATION TIME: 3 HOURS

DIRECTIONS TO CANDIDATES

1. The booklet is divided in to three parts
 - Each part is composed of 9 questions
2. Each mark is of equal weight
3. Write your name on the front page of each question paper
4. Write your initials on each subsequent page of the question paper
5. Answer each question in the space provided
6. Cross out any errors completely
7. Do not begin the exam until instructed to do so
8. No examination papers or materials to leave the room

Candidate initials: _____

PAH 2019.1 trial SAQ paper

PART 1

Questions 1 – 9

1 hour

Candidate initials: _____

Q1 (9 min)

A 28 year old man has presented to the ED after falling 2 metres from a ladder landing on to his head.

As part of his assessment, a CT scan of his cervical spine was performed. One image from this scan is provided in the **PROPS BOOKLET**.

1. State the diagnosis, supported by 3 abnormalities on the CT scan. (4 marks)

Diagnosis

Radiological abnormalities

There are no other injuries.

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2. List 5 key features of your examination. For each, state the clinical relevance. (10 marks)

Examination feature	Clinical relevance

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3. Complete the table by listing the appropriate spinal cord levels as per the ASIA classification standard. (4 marks)

Key muscle group	Spinal level
Elbow flexors	
Elbow extensors	
Knee extensors	
Ankle plantar flexors	

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Q2

You are working in a metropolitan ED without an obstetric service on site. A 19 year old woman has presented to the ED with abdominal pain. She is 29 weeks pregnant.

- 1. List 5 features of your history or examination that would suggest premature labour. (5 marks)**

- 2. List 2 investigations that would provide further evidence of premature labour. (2 marks)**

Candidate initials: _____

Your assessment is consistent with premature labour.

3. State 5 steps in your management of this patient. (5 marks)

1) _____

2) _____

3) _____

4) _____

5) _____

Candidate initials: _____

Q3 (9 min)

A 26 year old woman has been brought to the ED after being found unconscious in her bed at home. She has not been seen for 2 days.

Her blood chemistry is provided in the **PROPS BOOKLET**.

1. State the main abnormality related to the Na, K, Cl and HCO₃ results. Include your justification and the most likely cause of the abnormality. (3 marks)

Main abnormality

Justification

Most likely cause

Candidate initials: _____

2. State the main abnormality related to the urea and creatinine results. Include your justification and the most likely cause of the abnormality. (3 marks)

Main abnormality

Justification

Most likely cause

Candidate initials: _____

3. State the main abnormality related to the total protein, albumin and globulin results. Include your justification and the most likely cause of the abnormality. (3 marks)

Main abnormality

Justification

Most likely cause

Candidate initials: _____

4. State the main abnormality related to the liver function test results. Include your justification and the most likely cause of the abnormality. (3 marks)

Main abnormality

Justification

Most likely cause

5. List 3 further tests you would perform to determine the cause of the overall clinical picture. For each, state how the test will be useful. (3 marks)

1) _____

2) _____

3) _____

Q4

A 67 year old man has presented with severe central chest pain radiating to his back. You are concerned that he has an aortic dissection.

1. List 4 risk factors for aortic dissection. (4 marks)

2. Describe the Stanford classification system for aortic dissection. (2 marks)

The patient has a confirmed proximal aortic dissection on CT angiogram of the chest.

His vital signs are:

GCS	15	
Pulse	95	/min
BP	180/95	mmHg

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3. State 4 steps in your management of this patient. Include drug doses and end-points where appropriate. (4 marks)

1) _____

2) _____

3) _____

4) _____

Shortly after returning from the CT scanner, the patient develops hypotension.

4. List 3 likely causes for the patient's hypotension. (3 marks)

Q5

A 10 month old boy has been brought to the ED by his mother. She is concerned that he has been crying and not using his left arm. An x-ray has been performed due to apparent arm tenderness on examination.

The x-ray is provided in the **PROPS BOOKLET**.

1. Describe the abnormalities on the x-ray. Include your clinical impression. (3 marks)

2. State 3 components of your examination of this child. (3 marks)

1) _____

2) _____

3) _____

Candidate initials: _____

3. State 4 components of your management of this child. (4 marks)

1) _____

2) _____

3) _____

4) _____

Q6

A 25 year old man has presented with 2 days of fever, dysuria and right sided back pain. He has no other medical problems.

On arrival, his vital signs are:

Temperature	39.0	degrees
Pulse	125	/min
BP	90/60	mmHg

Your provisional diagnosis is right sided pyelonephritis.

- 1. State 3 steps in your initial management of this man. Include doses and end-points where appropriate. (3 marks)**

1) _____

2) _____

3) _____

- 2. List 3 likely bacterial pathogens that could cause this man's illness. (3 marks)**

Candidate initials: _____

3. List and justify 4 investigations you would perform. (4 marks)

Investigation	Justification

Candidate initials: _____

Q7

A 16 year old girl with an exacerbation of anorexia nervosa has been referred by her local doctor for a medical admission.

1. List 5 criteria for admission under a medical team. (5 marks)

1) _____

2) _____

3) _____

4) _____

5) _____

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You have assessed the patient as requiring admission for refeeding.

2. List 5 complications that might occur during the initial stages of refeeding. (5 marks)

1) _____

2) _____

3) _____

4) _____

5) _____

Q8

A 14 year old boy has presented to the ED with a painful right hand. He injured his index finger 2 days prior while climbing a tree. The patient has type 1 diabetes mellitus.

A clinical photograph of the right hand is provided in the **PROPS BOOKLET**.

1. List 4 abnormalities in the photograph. (4 marks)

1) _____

2) _____

3) _____

4) _____

2. List the most likely diagnosis. (1 mark)

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3. List and justify 3 investigations you would perform. (3 marks)

Investigation	Justification

Candidate initials: _____

The patient's vital signs are:

Temperature 38.5 degrees

Pulse 90 /min

BP 110/75 mmHg

4. State 5 steps in your management of this patient. Include doses and end-points where relevant. (5 marks)

1) _____

2) _____

3) _____

4) _____

5) _____

Candidate initials: _____

Q9

A 45 year old man with a history of alcohol abuse has presented to your department with intractable vomiting.

On examination, the patient is diaphoretic with epigastric tenderness.

A venous blood gas is provided in the **PROPS BOOKLET**.

1. State your interpretation of the RESPIRATORY acid-base status and list 3 differential diagnoses. (4 marks)

Interpretation (1 mark)

Differential diagnoses (3 marks)

1) _____

2) _____

3) _____

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2. State your interpretation of the METABOLIC acid-base status, show your supporting calculations and list 2 differential diagnoses. (5 marks)

Interpretation (1 mark)

Supporting calculations (2 marks)

Differential diagnoses (2 marks)

1) _____

2) _____

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3. List 4 other investigations you will perform in this patient. Provide justification for each.
(4 marks)

Investigation	Justification