# Department of Emergency Medicine

Princess Alexandra Hospital

# FELLOWSHIP TRIAL EXAMINATION 2018.2

# 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 2018.2 trial SAQ paper

PART 1

Questions 1 – 9

1 hour

# Q1 (12 min)

A 3 year old boy has been brought to the ED by ambulance. He has been unwell with fever and vomiting for 2 days. He has developed lethargy and a rash this morning.

The child is unvaccinated.

A clinical photograph has been provided in the **PROPS BOOKLET**.

# 1. List 3 descriptive features from the photo. (3 marks)

1)	 	
2)	 	
3)	 	

Your initial assessment suggests bacterial infection as the most likely cause of the presentation.

# 2. List 4 of the most likely bacterial pathogens that could cause this presentation. (4 marks)

1)	 	 
2)	 	
3)		
- 1		
-1		

# 3. Other than bacterial infection, list 3 differential diagnoses for this presentation. (3 marks)

1)	 	 	
2)	 	 	
3)			

Candidate initials: \_\_\_\_\_

The patient's initial vital signs are:

AVPU	responds to voice	
Pulse	180	/min
BP	80/35	mmHg
Temperature	34.5	degrees
O2 sats	98%	room air

Your clinical assessment is consistent with septic shock.

4. Other than coagulation studies, list your 3 most important initial investigations, including justification. (3 marks)

Investigation	Justification

Candidate initials: \_\_\_\_\_

# 5. State the details of your 2 most important initial treatment steps. (2 marks)

1)	 	 	
2)			
/			

The patient stabilises after your initial management.

One of your laboratory tests is provided in the **PROPS BOOKLET**.

6. Interpret the results. (1 mark)

## 7. List 4 other potential complications of this patient's presentation. (4 marks)

1)	 	 
2)	 	 
3)	 	
4)	 	

A 45 year old man has presented with a painful, red, swollen left testicle. The pain began as a mild ache 7 days ago and has been gradually increasing to the point where it is now severe. He has had fevers and chills for the last 2 days.

On examination, he has a red, swollen left side of the scrotum with an enlarged and diffusely tender left testicle.

## 1. List 4 investigations you would perform. Justify your use of these tests. (4 marks)

Investigation	Justification

## 2. State the most likely diagnosis. (1 mark)

Your clinical assessment confirms this diagnosis.

#### 3. List 4 indications for inpatient admission you would seek to exclude in this man. (4 marks)

1)	 
2)	
3)	
4)	

You clinical assessment is that this patient can be managed safely as an outpatient.

- 4. State 2 steps in your outpatient management of this man. Include drug doses where appropriate. (2 marks)
- 1)\_\_\_\_\_\_

A 77 year old lady has presented with palpitations.

Her ECG is provided in the **PROPS BOOKLET**.

# 1. List the 2 most important features of this ECG. (2 marks)

1)		 
2)	 	 

On examination, she has the following vital signs:

GCS	15	
BP	115/65	mmHg
O2 sats	98%	room air
Temperature	36.5	degrees

2. List 5 drugs you might use in the management of this patient's problem. Include initial doses. For each drug, state the clinical circumstances appropriate for its use. (10 marks)

Drug / dose	Clinical circumstances

A 32 year old woman has presented with headache and visual changes. She is 38 weeks pregnant.

You are concerned about the possibility of pre-eclampsia.

# 1. List 4 examination features that would be supportive of pre-eclampsia. (4 marks)

1)	
2)	
3)	
4)	

# 2. List 4 laboratory abnormalities that would be supportive of pre-eclampsia. (4 marks)

1)	
2)	
-	
3)	 
4)	 

Your clinical assessment is consistent with pre-eclampsia.

The patient's vital signs are:

Pulse	100	/min
BP	160/110	mmHg
O2 sats	99%	room air

While in the ED, the patient begins to have a seizure.

## 3. List 5 components of your management of this situation. (5 marks)

1)	 
2)	 
3)	 
4)	 
5)	 

Your tertiary ED has received feedback that the time to thrombolysis for stroke in your centre is unacceptably long. You have been tasked to remedy this situation.

# 1. List 5 possible contributory factors in the delay to thrombolysis in stroke. (5 marks)

1)	 	 	
2)	 	 	
5)	 	 	

2. State 5 solutions to the issues identified in part 1. (5	marks)
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2)	 	 	 
5)	 	 	 

A 44 year old woman has presented with large volume haemoptysis.

## 1. List 6 investigations you might perform. Provide justification for each. (6 marks)

Investigation	Justification

The patient required intubation as part of her management.

The patient's vital signs are:

Pulse	115	/min
BP	110/70	mmHg
O2 sats	95%	FiO2 0.7

2. List 3 options for definitive management of this patient's haemoptysis. For each, give the clinical circumstances in which it would be appropriate. (6 marks)

Management option	Clinical circumstance

A 65 year old woman has presented to the ED with severe generalised abdominal pain.

Examination reveals a generally tender and guarded abdomen.

Her vital signs are:

GCS	15	
Pulse	120	/min
BP	95/55	mmHg
O2 sats	96%	room air

A slice from her abdominal CT scan is provided in the **PROPS BOOKLET**.

# 1. List 5 abnormalities in the CT scan. (5 marks)

1)	 	 	
2)	 		
5)	 	 	

2. What is the likely diagnosis? (1 mark)

3.	State 4	components of your management of this	s patient.	(4 marks)
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2)	 
3)	
4)	

A 75 year old woman has been brought to the hospital after having a syncopal episode while at home. At the time of your initial examination, she has recovered fully, with no symptoms.

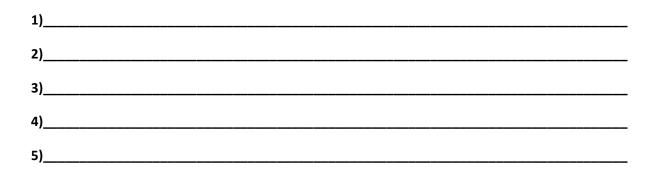
# 1. List 3 causes of neurally mediated syncope. (3 marks)

1)	 	
2)	 	 
3)	 	

# 2. List 3 causes of orthostatic hypotension. (3 marks)

1)	 	
2)	 	
3)	 	

3. List 5 ECG findings that would suggest arrhythmogenic syncope in a currently asymptomatic patient. (5 marks)



A 79 year old man has been brought to the ED after falling in the car park of his local shopping centre.

He has pain in his pelvis.

An x-ray of his pelvis is provided in the **PROPS BOOKLET**.

## 1. List 3 abnormalities in the x-ray. (3 marks)

1)	 	 
2)	 	 
3)	 	 

Three hours after arriving to the ED, the patient has become confused.

His vital signs are:

GCS	13	E4 V4 M5
Pulse	125	/min
BP	95/40	mmHg

2. List 5 potential causes of this patient's deterioration. For each, state how you will assess for its presence (history, examination or investigation). (10 marks)

Potential cause	Assessment feature