## PAH 2018.1 trial SAQ paper

### PART 3

Questions 19 - 27

1 hour

#### Q19 (12 min)

A 35 year old man has presented to the ED with 24 hours of progressive breathlessness.

On assessment, he has increased work of breathing and is hypoxic on room air.

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

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

1)		
2)		
3)	)	

2. In the table below, list 2 differential diagnoses for the patient's presentation. For each, list 3 investigative findings that would help confirm the diagnosis. (8 marks)

Differential diagnosis	Investigative finding

An arterial blood gas taken from the patient is provided in the **PROPS BOOKLET**.

3. State the 2 major acid-base disturbances present, with supporting evidence from the blood gas result. (4 marks)

Acid-base disturbance	Supporting evidence

#### 4. Complete the following table regarding the blood gas results. (9 marks)

	Formula	Calculated result	Clinical implication
Anion gap			
Delta gap / ratio			
Alveolar – arterial oxygen gradient			

A 16 year old indigenous man has presented to your rural ED with lethargy and malaise.

You are considering the diagnosis of acute rheumatic fever.

#### 1. List the 5 major Jones criteria for the diagnosis of acute rheumatic fever. (5 marks)

1)	
2)	
4)	 
5)	 

The patient has acute rheumatic fever.

You note that he presented twice to the ED in the last month with a sore throat and was discharged on both occasions with a diagnosis of viral URTI.

2. List 2 potential contributory factors in each of the following areas that could have led to this situation. (6 marks)

	Potential contributory factors
System	
Drasaa	
Process	
Individual	

You are working as an aeromedical retrieval consultant. You have been tasked to a remote community to retrieve a patient who has presented with an exacerbation of schizophrenia.

# 1. List 6 features on history or examination that would indicate a potential threat to patient and staff safety during transport. (6 marks)

1)_	
2) _	
6) _	 

2. List 3 drugs, with doses, that you might employ as chemical sedation to facilitate safe retrieval of the patient. (3 marks)

1)	 	 	_
2)	 	 	_
3)	 	 	_

3. List 3 other strategies you might employ to facilitate safe management of this patient.

(3 marks)

1) _	
2) _	
3) _	

A 44 year old woman has been struck by a car while walking across a road. She has sustained an isolated right knee injury.

An AP x-ray of her right knee is provided in the **PROPS BOOKLET**.

#### 1. List 4 abnormalities shown in the x-ray. (4 marks)

1)	
2)	
4)	
-/	

2. Provide the name and grade of this injury using a recognised classification system.

(1 mark)

3. List 3 important associated injuries. For each, list a specific examination finding that would support its presence. (6 marks)

Associated injury	Supportive examination finding

#### Q23

A 2 year old boy has been brought to your ED with heat stroke after being left in a hot car. He has suffered prolonged seizure activity.

On arrival to the ED, his vital signs are:

AVPU	unresponsive with ongoing seizure activity	
Pulse	160	/min
BP	80/35	mmHg
O2 sats	99%	15L O2 via non-rebreather mask
Temp	41.0	degrees

#### 1. List and justify 4 investigations you would initiate. (4 marks)

1)	 	
2)		
2)		
3)	 	
4)	 	

You plan to intubate the patient as part of your early management.

#### 2. Complete the table regarding your rapid sequence induction. (4 marks)

	Appropriate choice
Endotracheal tube size	
Length of tube at teeth	
Induction agent with dose	
Paralysis agent with dose	

#### 3. State 3 strategies you would employ for cooling this patient in the ED. (3 marks)

1)	 	 	
2)			
3)			
-,			

#### Q24

A 72 year old man has presented with epistaxis.

- 1. List 3 features in your history or examination that would be suggestive of a posterior source of bleeding. (3 marks)
- 1) \_\_\_\_\_ 2) \_\_\_\_\_ 3) \_\_\_\_\_

Your assessment is suggestive of an <u>anterior</u> source of bleeding.

#### 2. List 5 escalating strategies you could employ to treat this man's bleeding. (5 marks)

1) _	
2) _	
5)_	 

The patient is taking warfarin.

	3. State 4 considerations you would have in deciding upon your actions around warfarin reversal. (4 marks)				
3) _					
4) _					

A 24 year old man has been brought to the ED after diving in to a shallow pool while intoxicated.

His cervical spine x-ray is provided in the **PROPS BOOKLET**.

1. State the injury identified in the x-ray. (1 mark)

#### 2. List 4 abnormalities in the x-ray that support your conclusion. (4 marks)

2)	
3)	
4)	

3. List 3 possible early complications of this presentation. State how you would manage each complication. (6 marks)

Complication	Management

A 42 year old man has presented to the ED with abdominal pain and jaundice.

His liver function tests are provided in the **PROPS BOOKLET**.

1. State your interpretation of the results provided, with justification. (3 marks)

2. List 4 non-infectious causes of this pattern of disease. (4 marks)

1)	 	
2)		
-, 3)		
4)	 	

3. List, with justification, 5 investigations you would perform in the further assessment of this patient. (5 marks)

1)	
2)	
3)	
4)	
5)	

#### Q27

A 3 week old boy has been brought to the ED by his mother. The child is not feeding well and has failed to gain weight since birth.

#### 1. List 5 features of your examination, including the relevance of each feature. (5 marks)

1)			
2)			
3)	 	 	
4)	 	 	
-)			
5)	 	 	

2.	List and justify 5 investigations you might perform.	(5 marks)
		(•

1)	 	 
2)		
3)		
4)	 	 
5)	 	 