

Candidate name: \_\_\_\_\_

## **PAH 2018.1 trial SAQ paper**

### **PART 3**

**Questions 19 - 27**

**1 hour**

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**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) \_\_\_\_\_

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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

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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

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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			

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**Q20**

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) \_\_\_\_\_
- 3) \_\_\_\_\_
- 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.

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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	
Process	
Individual	

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**Q21**

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) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_
- 5) \_\_\_\_\_
- 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) \_\_\_\_\_



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

(3 marks)

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

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**Q22**

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) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_

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

**(1 mark)**

\_\_\_\_\_

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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) \_\_\_\_\_  
\_\_\_\_\_
- 3) \_\_\_\_\_  
\_\_\_\_\_
- 4) \_\_\_\_\_  
\_\_\_\_\_

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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 anterior source of bleeding.

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

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

4) \_\_\_\_\_

5) \_\_\_\_\_

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The patient is taking warfarin.

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

1) \_\_\_\_\_

\_\_\_\_\_

2) \_\_\_\_\_

\_\_\_\_\_

3) \_\_\_\_\_

\_\_\_\_\_

4) \_\_\_\_\_

\_\_\_\_\_

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**Q25**

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)

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

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

4) \_\_\_\_\_



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

Complication	Management

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**Q26**

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)

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

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_

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

1) \_\_\_\_\_

\_\_\_\_\_

2) \_\_\_\_\_

\_\_\_\_\_

3) \_\_\_\_\_

\_\_\_\_\_

4) \_\_\_\_\_

\_\_\_\_\_

5) \_\_\_\_\_

\_\_\_\_\_

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**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) \_\_\_\_\_

\_\_\_\_\_

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

1) \_\_\_\_\_

\_\_\_\_\_

2) \_\_\_\_\_

\_\_\_\_\_

3) \_\_\_\_\_

\_\_\_\_\_

4) \_\_\_\_\_

\_\_\_\_\_

5) \_\_\_\_\_

\_\_\_\_\_