| Candidate name:            | <br> |
|----------------------------|------|
|                            |      |
|                            |      |
|                            |      |
|                            |      |
|                            |      |
| PAH 2018.2 trial SAQ paper |      |
|                            |      |
|                            |      |
|                            |      |
|                            |      |
| PART 2                     |      |
| 171112                     |      |
|                            |      |
|                            |      |
| Questions 10 - 18          |      |
|                            |      |

1 hour

| Candidate initials: |  |
|---------------------|--|
|                     |  |

#### Q10 (12 min)

A 25 year old man has been brought to your tertiary ED after a major motor vehicle accident. He was the driver of a van that collided head-on with a sedan on a stretch of highway.

The patient was retrieved by helicopter from a rural hospital where he was intubated due to a reduced level of consciousness and had a right sided intercostal catheter inserted.

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

1. List 4 pathologies demonstrated on this x-ray. Complete the table for each pathology by stating one supportive radiographical feature. (8 marks)

| Pathology | Radiographical feature |   |
|-----------|------------------------|---|
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        | _ |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |
|           |                        |   |

|                              |                  | Candidate initials:           |
|------------------------------|------------------|-------------------------------|
| The initial vital signs are: |                  |                               |
| Pulse                        | 130              | /min                          |
| ВР                           | 75/45            | mmHg                          |
| O2 sats                      | 86%              |                               |
|                              |                  |                               |
| As part of your initial man  | aagomont an arto | rial blood gas has been taken |

As part of your initial management, an arterial blood gas has been taken.

The result is provided in the  $\mbox{\sc PROPS}$  BOOKLET.

# 2. List 4 abnormalities on the arterial blood gas. Give the most likely explanation for each abnormality. (8 marks)

| Candidate initials: |  |
|---------------------|--|
|                     |  |
|                     |  |

|     | 3. State 4 initial actions you would take based on all of the clinical information provided.                              |
|-----|---|
|     | (4 marks)   |
|     |   |
| 1)_ |   |
|     |   |
| 2)_ |   |
|     |   |
|     |   |
|     |   |
| -,_ |   |
|     |   |
|     |   |
|     | 4. List 4 measures you will take in an effort to minimise the chance of this patient developing a coagulopathy. (4 marks) |
|     |   |
| 1)_ |   |
|     |   |
| 2)_ |   |
|     |   |
| 3)_ |   |
| 4)_ |   |
| ′-  |   |
|     |   |

| A 32 year old woman has been brought to the ED following one week of erratic behaviour.   |
|---|
| You are concerned about the possibility of a manic episode.   |
| <ol> <li>List 6 findings from your history or mental status examination that would be consistent<br/>with mania as the cause of the patient's behaviour. (6 marks)</li> </ol> |
| 1)  |
| 2)  |
| 3)  |
| 4)  |
| 5)  |
| 6)  |

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

| Candidate initials: |  |
|---------------------|--|
|                     |  |

| 2. List 6 investigations you might perform in this patient. For each, provide justification |
|---|
|---|

(6 marks)

| Investigation | Justification |
|---------------|---------------|
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |

| Candidate initials: |  |  |  |  |  |
|---------------------|--|--|--|--|--|
|                     |  |  |  |  |  |

You are working a shift in the short stay ward of your ED. Your next patient is a 65 year old alcoholic man who was admitted overnight with vomiting of uncertain cause.

1. List 4 conditions related to his heavy alcohol use that you might find on reviewing this man. For each condition, list 2 findings from your examination or investigation that would support the diagnosis. (12 marks)

| Condition | Examination or investigation finding |
|-----------|--------------------------------------|
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |
|           |                                      |

| Q13   |
|---|
| A 45 year old man has presented to the ED with right eye pain after an injury at work where he was hammering metal. |
| A clinical photograph of his right eye is provided in the <b>PROPS BOOKLET.</b>                                     |
|   |
|   |
| 1. List 4 abnormalities in the clinical photograph. (4 marks)   |
|   |
| 1)  |
| 2)  |
| 3)  |
| 4)  |
|   |
|   |
| 2. Give your clinical interpretation of the information provided. (1 mark)  |
| 2. Cive your chimes into product or the missing the product (2 main)  |
|   |
|   |

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

| Candidate initials: |  |
|---------------------|--|
|                     |  |

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

| 1) | <br> | <br> | <br>            |
|----|------|------|-----------------|
| 2) |      | <br> | <br><del></del> |
| 3) |      |      | <br>            |
|    |      |      | <br>            |
| 5) |      |      | <br>            |

| Candidate initials: |  |
|---------------------|--|
|                     |  |

A 12 day old boy has been brought to the ED by his mother. She has noticed a swelling in the right scrotum this morning while changing the child's nappy.

1. List 3 differential diagnoses. For each, list 2 cardinal examination features and the main principle in management. (12 marks)

| Examination features | Management           |                                 |
|----------------------|----------------------|---------------------------------|
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
| 10.                  |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      |                      |                                 |
|                      | Examination features | Examination features Management |

| <b>Candidate initials:</b> |  |
|----------------------------|--|
|                            |  |

A 45 year old woman has presented to the ED with confusion.

She has a history of primary biliary cirrhosis with chronic liver disease.

Her medications include: frusemide 40mg bd, spironolactone 25md od and propranolol 40mg bd.

1. List 6 investigations you might use to elucidate the cause of this patient's confusion. Provide justification for each of your choices. (12 marks)

| Investigation | Justification |
|---------------|---------------|
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |
|               |               |

| Q16  |
|--|
| A 47 year old father was enjoying his daughter's birthday at a trampoline park when he fell awkwardly on to his right knee. He is complaining of right hip pain. |
| His pelvic x-ray is provided in the <b>PROPS BOOKLET.</b>  |
| 1. State the main pathology demonstrated. (1 mark)   |
|  |

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

2. List 2 imaging modalities that could be used to identify associated complications of this injury. List 2 complicating injuries you would seek for each modality. (6 marks)

| Imaging modality | Associated injury |
|------------------|-------------------|
|                  |                   |
|                  |                   |
|                  |                   |
|                  |                   |
|                  |                   |
|                  |                   |
|                  |                   |
|                  |                   |
|                  |                   |
|                  |                   |
|                  |                   |
|                  |                   |
|                  |                   |
|                  |                   |
|                  |                   |
|                  |                   |
|                  |                   |
|                  |                   |
|                  |                   |

| Candidate | initials: |  |  |  |  |  |  |
|-----------|-----------|--|--|--|--|--|--|
|           |           |  |  |  |  |  |  |

| 1) | <br> |      | <br> |
|----|------|------|------|
|    |      |      | <br> |
| 2) | <br> | <br> |      |
|    | <br> | <br> |      |
| 3) |      |      |      |

3. You elect to provide urgent management of this injury in the ED. State 4 biomechanical

principles in your management of the injury. (4 marks)

| A 67 year old woman has presented to the ED after a cardiac arrest at home. She was seated on the couch watching television when she suddenly complained of chest pain, became blue and stopped breathing. Upon arrival of the ambulance service, she was unresponsive with pulseless electrical activity. Standard advanced life support resulted in a return of spontaneous circulation. |
|--|
| On arrival to the ED, an ECG has been performed. It is provided in the <b>PROPS BOOKLET.</b>   |
| 1. List 5 abnormalities on the ECG. (5 marks)  |
| 1)   |
| 2)   |
| 3)   |
| 4)   |
| 5)   |
| 2. What is the most likely diagnosis? (1 mark)   |
| 3. List 4 findings you might expect to find on bedside ultrasound that would support the diagnosis in Q2. (4 marks)  |
| 1)   |
| 2)   |
| 3)   |
| 4)   |
|  |

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

| A 65 year old man has presented to the ED with a red, swollen right knee.                                  |
|--|
| Your provisional diagnosis is gout.  |
|  |
| 1. List 5 risk factors for gout. (5 marks)   |
|  |
| 1)   |
| 2)   |
| 3)   |
| 4)   |
| 5)   |
|  |
|  |
| 2. List 3 findings that you would expect on joint aspiration that would be consistent with gout. (3 marks) |
|  |
| 1)   |
| 1)   |
| 2)   |
|  |
| 2)   |
| 2)   |
| 2)   |
| 3)  3. List 3 treatment options for acute gout. Include doses. (3 marks)                                   |
| 2)   |

Candidate initials: