

Illawarra Shoalhaven Local Health District Emergency Medicine Fellowship Program



Trial Written Exam 2019.2

Candidate Instructions

- Duration = 3hrs
- The examination is divided into 3 booklets, each consisting of 9 questions
- Props are included within the examination booklets
- Allocated marks for each question are shown
- Each mark is of equal weight
- There is no negative marking
- Write answers CLEARLY, and cross out any errors
- Answer within space provided
- Do not begin until instructed
- No examination paper or material is to leave the examination room



Good Luck!

Candidate Name: _____

Book 1

Candidate Name: _____

Question 1 (9 marks)

A 4 week old boy is brought to the ED by her mother with a rash. He has felt slightly hot but is behaving and feeding normally with wet nappies being changed every 3-4 hours.

His vital signs are:

T 37.6

P 172

Central CRT 2sec

RR 39

SaO2 100% RA

Clinical photographs of the child's rash are shown below



Describe the important features of the photograph provided (3 marks)

Candidate Name: _____

What is the most likely diagnosis? (1 mark)

Name 2 other causes of blistering rashes in children? (2 marks)

Outline the key components of your management of this child (3 marks)

Candidate Name: _____

Question 2 (13 marks)

You are reviewing a patient with your intern who has presented with sudden onset headache 8 hours ago. Your intern is concerned about the possibility of subarachnoid haemorrhage and has performed a non-contrast CT brain that has been reported as normal.

What are the components of the Ottawa Subarachnoid Haemorrhage rule? How can it be used? (5 marks)

Given the patient presented >6 hours after the onset of the headache, name two options for the next investigation, along with a pro and con of each (4 marks)

Ix:	Ix:
Pro:	Pro:
Con:	Con:

Name 4 acute complications of subarachnoid haemorrhage (4 marks)

Candidate Name: _____

Question 3 (15 marks)

A 72 year old gentleman comes to the ED as an out of hospital cardiac arrest. His initial rhythm was asystole and he underwent 4 cycles of ALS prior to ROSC during which time he received 2mg of adrenaline and was intubated. His vital signs are:

P 70

BP 73/39

SaO₂ 94% on 100% O₂ via ETT/BVM

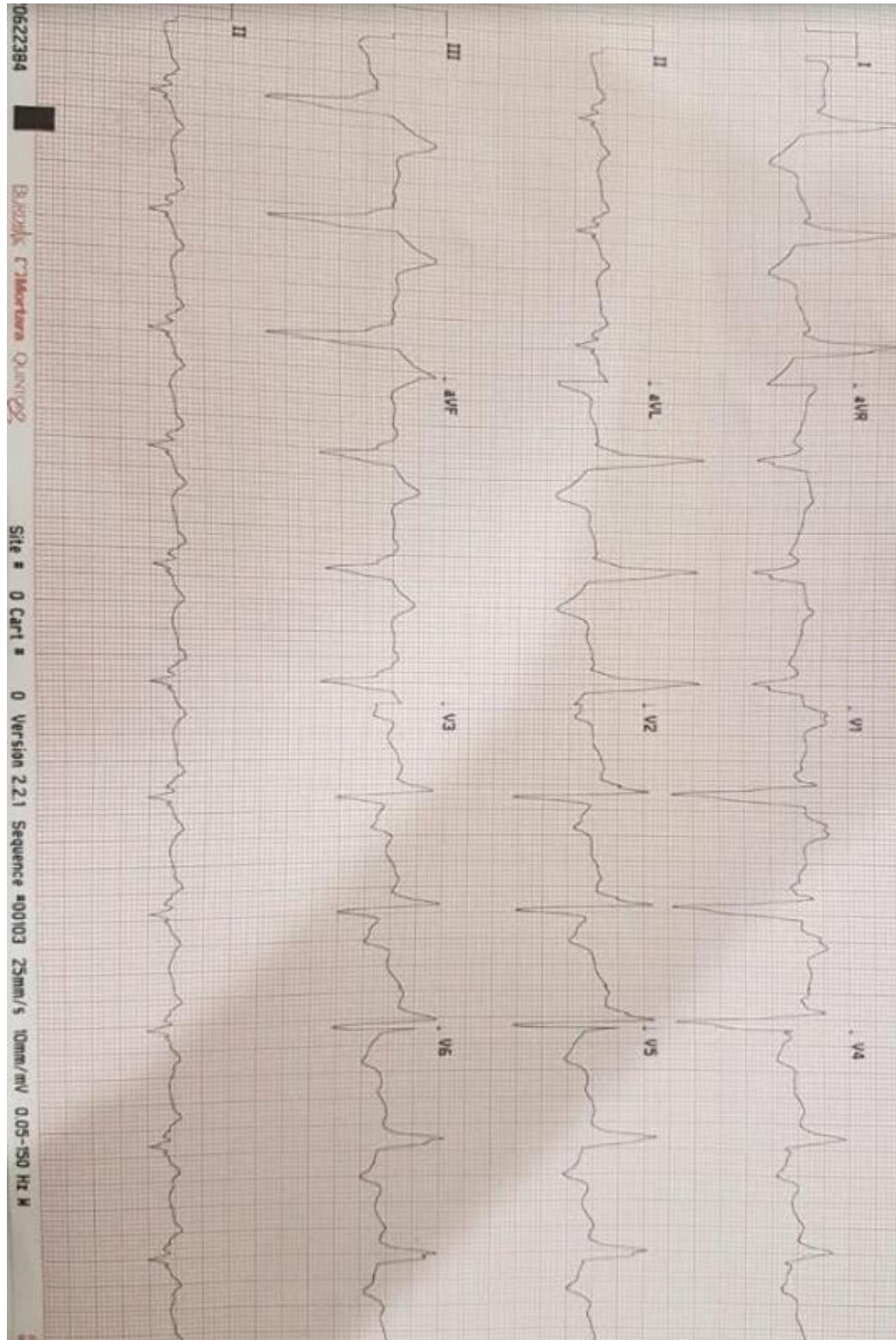
T 36.2

Name 3 causes of post-cardiac arrest hypotension (3 marks)

Discuss the priorities of post-cardiac arrest care (5 marks)

A 12 lead ECG is done (below) please describe main features and interpret ECG in this context (4 marks)

Candidate Name: _____



Candidate Name: _____

Name one trial evaluating endotracheal intubation vs. supraglottic airway device in patients in cardiac arrest? Summarise findings (3 marks)

Candidate Name: _____

Question 4 (11 marks)

You are the emergency consultant in charge of a tertiary emergency department when the ambulance transports a 33 year old man who has been struck by a car whilst skate-boarding. He arrives in your resuscitation bay and IV access is obtained, he is in significant pain and a clinical photograph is provided below.



Describe 4 abnormal findings on this clinical photograph (4 marks)

Candidate Name: _____

What are your next three priorities in assessment of this patient (3 marks)

What are the management priorities for this limb injury? (5 marks)

Candidate Name: _____

Question 5

An 18 month old girl is brought into the emergency department with her mother who is concerned about her rash (pictured below). The girls vital signs are normal and you find no other concerning features on exam.



Describe this rash from the photograph provided (3 marks)

What is your provisional diagnosis? What is the most common differential diagnosis for this rash? (2 marks)

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Please give 2 causes of this condition, from 2 separate categories (4 marks)

Category 1	1. 2.
Category 2	1. 2.

What specific treatment does this condition require? (1 mark)

Candidate Name: _____

Question 6

A 42 year old man presents with lower abdominal pain and difficulty passing stool or flatus. He has an abdominal Xray which is shown below.



Outline the key finding on this abdominal Xray (1 mark)

List 2 complications that may arise from this condition (2 marks)

Candidate Name: _____

List patient factors that necessitate this condition be handled in the operating theatre (4 marks)

Outline your options for anaesthesia for removal of the foreign body in the ED (2 marks)

List 3 techniques for removing this foreign body (3 marks)

Candidate Name: _____

Question 7

A 63 year old man presents to the emergency department with left elbow pain and redness. He thinks he may have had minor trauma a week ago but there are no wounds or bruising on examination. He feels generally well and has normal vital signs. He has reduced range of movement and global joint tenderness and arthrocentesis is performed.

What factors should be covered in consent for this procedure (5 marks)

A sample is obtained and sent to the laboratory (report below)

Appearance	Turbid
CELL COUNT / WET PREPARATION (per HPF)	
White Cells	137200 x10 ⁶ /L
Red Cells	140 x10 ⁶ /L
Wet Film	+ Urate crystals
GRAM STAIN (per OIF) / WET PREPARATION (per OIF)	
Pus cells	+++
Gram Positive Cocci	Nil
Gram Positive Bacilli	Nil
Gram Negative Cocci	Nil
Gram Negative Bacilli	Nil
Yeast	Nil

Please interpret the results and give your provisional diagnosis (2 marks)

Candidate Name: _____

Outline your management of this patient (3 marks)

Candidate Name: _____

Question 8 – (10 marks)

You are a new consultant and asked to attend a meeting with hospital management regarding emergency department key performance indicators. Prior to attending you ensure you adequately understand some of the relevant areas:

Regarding triage, please complete the table (5 marks)

AUSTRALASIAN TRIAGE SCALE CATEGORY	TREATMENT ACUITY (Maximum waiting time for medical assessment and treatment)	PERFORMANCE INDICATOR THRESHOLD
ATS 1		
ATS 2		
ATS 3		
ATS 4		
ATS 5		

Explain ETP including the relevant target figure (3 marks)

What is 'Transfer of care? What is the target?'(2 marks)

Candidate Name: _____

Question 9 (10 marks)

A 22 year old woman who is 7 weeks gestation in her pregnancy presents to the ED with severe nausea and vomiting. She has not been able to tolerate anything orally for 4 days and has been feeling pre-syncope. She has had a dating scan confirming an intrauterine pregnancy and is otherwise healthy.

Her vital signs are:

T 37.1

P 122

BP 94/62

RR 20

SaO₂ 99% RA

BSL 6.4 mmol/L

pH 7.29

pCO₂ 32

pO₂ 43

HCO₃ 17

Na 132

K 3.2

Cl 86

Cr 80

Lactate 1.2

She has a venous blood gas which is attached. Please outline your interpretation of her acid-base status (4 marks)

What is the most likely unifying clinical diagnosis? How would you confirm? (2 marks)

Candidate Name: _____

Outline the key aspects of your management of this woman (4 marks)

END OF BOOKLET

Candidate Name: _____