Candidate number _____

NSW FELLOWSHIP COURSE EXAMINATION TRIAL PAPER

2017.1

Short Answer Questions

Candidate directions:

1. This is a 3 hour examination
2. There are 3 separate books of 9 questions each. Each book should be completed in 1 hour.
3. Props (images, ECGs) are reproduced in the accompanying props book
4. The first question in each book is a double question. Otherwise questions are of similar value
5. Answer each question in the space provided on the examination paper.
6. Write your candidate number on each page

Candidate number _____

BOOK ONE

Candidate number _____

QUESTION 1 (20 marks) – DOUBLE QUESTION

A 65 year old man has presented to your regional ED with acute onset SOB and chest pain. His pain is severe and radiates to his back.

Vital signs:	HR	125 bpm
	BP	98/52 mmHg
	RR	22 bpm
	SaO2 RA	96%
	Temp	37.2 deg C

i. List 4 important features on this ECG (4 marks)

A 12 LEAD ECG IS SHOWN IN THE PROPS BOOKLET, PAGE 3

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ii. List 4 features on a CXR that would raise your suspicion of acute aortic dissection (4 marks)

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iii. What features on bedside US would help differentiate acute MI from aortic dissection as the cause of shock (4 marks)

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iv. CT imaging is unavailable. Given the patient's history and clinical examination you treat him for an acute aortic dissection. List 6 management steps (6 marks)

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v. List a classification of aortic dissections (2 marks)

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QUESTION 2 (10 marks)

A 40 year old woman presents with symptoms of a common peroneal nerve injury of her left leg following an ankle sprain.

i. Describe the sensory and motor disturbance features of a common peroneal nerve injury (4 marks)

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ii. Where is the commonest site of injury (1 mark)

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iii. List 4 general causes of common peroneal nerve injury other than high ankle sprain (4 marks)

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iv. How is this peripheral nerve lesion differentiated from an L5 radiculopathy (1 mark)

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QUESTION 3 (17 marks)

A 27 year old male driver has been involved in a motor vehicle crash at 140kph. He was taken to a rural base hospital and was intubated soon after arrival in ED. Current vital signs are BP 80/40 mmHg, P 140 bpm.

A CHEST XRAY IS SHOWN IN THE PROPS BOOKLET, PAGE 4

i. List 6 findings on his CXR (6 marks)

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ii. List 5 potential diagnoses in order of severity (5 marks)

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iii. List the next 3 investigations you would order/perform, in order of priority and provide your reasoning (6 marks)

QUESTION 4 (11 marks)

There have been a number of incidents in your emergency department Short Stay Unit where patients have unexpectedly deteriorated during their stay.

i. Define the role of a Short Stay Unit (2 marks)

ii. How would you develop a solution to this problem (4 marks)

iii. You are tasked to develop exclusion criteria for your Short Stay Unit. List 5 criteria (5 marks)

QUESTION 5 (19 marks)

A 28 year old male with a known history of ice abuse has been brought into your tertiary ED by ambulance having required pre-hospital sedation with intramuscular droperidol.

Vital signs are:	T	38.4 deg C
	HR	128 bpm
	BP	158/80 mmHg
	RR	18 bpm
	SaO2	100% on 6L via HM
	GCS	9 (E2V2M5)

i. Describe 5 possible causes of his presentation (5 marks)

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ii. List 5 investigations you would perform and provide your reasoning (5 marks)

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iii. The patient promptly suffers a grand mal seizure. Describe your initial management, including drug doses where appropriate (5 marks)

iv. His Na+ level is 116 mmol/L. Outline the initial management of his hyponatraemia and plan for the next 24 hours (4 marks)

QUESTION 6 (17 marks)

i. List 3 key ECG features of significant HYPOkalaemia (3 marks)

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ii. List 3 key ECG features of significant HYPERkalaemia (3 marks)

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iii. List 3 treatment options for acute severe hyperkalaemia. For each, describe its mechanism of action and time course (9 marks)

Treatment/Dose	Mechanism of Action	Onset & duration of effect

iv. Briefly outline any concerns or issues related to using cation-exchange resins (calcium resonium) for the acute treatment of hyperkalaemia (2 marks)

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QUESTION 7 (16 marks)

A 32 year old man is brought to your ED by ambulance with acute confusion, recent tiredness, 10 kg weight loss and heat intolerance. He appears to have bulging eyes. Vital signs are:

HR	146 bpm
BP	180/110 mmHg
RR	40 bpm
SaO_2	100 % RA
GCS	13
Temp	38.5 deg C

i. State the most likely diagnosis and give 4 differential diagnoses for this presentation (5 marks)

ii. Provide details of 3 specific pharmacological treatments for this condition and the role of each treatment (6 marks)

iii. List 5 other management and disposition priorities (5 marks)

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QUESTION 8 (16 marks)

A 32 year old man presents to your Emergency Department with a history of fever, lethargy and severe pain in his right groin and thigh. He has a history of intravenous drug use but is otherwise well and on no medications. On examination his right thigh is diffusely swollen, erythematous and has palpable crepitus.

His vital signs are:
HR 120 bpm
BP 85/40 mmHg
T 40 deg C
RR 20 bpm
SaO2 99% RA

i. What is your working diagnosis (3 marks)

ii. Outline your key management steps (6 marks)

iii. List 3 likely microorganisms to have caused this patient's infection (3 marks)

iv. The nurse reports this patient is extremely distressed with pain and is crying out for larger doses of analgesia and his methadone. List some principles of pain management in this patient with narcotic addiction (4 marks)

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QUESTION 9 (18 marks)

A 4 year old previously well girl, presents with a sudden onset generalised tonic-clonic seizure lasting 40 minutes, terminated with one dose of midazolam. Immediately afterwards she is GCS 3, and apnoeic.

i. Briefly describe two methods for maintaining ventilation in this situation and the reason for your preferred method (4 marks)

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ii. List 5 possible causes of apnoea in this situation (5 marks)

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The child improves to a GCS of 14 in 30 minutes. There are no focal neurological signs and no preceding illness or fever apart from the occasional headache. The child was born in Australia but spent 3 months in India returning 6 months ago. Her glucose and electrolytes are normal.

iii. List 5 possible causes for the seizure (5 marks)

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iv. Outline a pro and con of CT vs MRI of brain in this situation (4 marks)

	PRO	CON
MRI		
CT		