

NSW Fellowship Course TRIAL FELLOWSHIP EXAMINATION St George Hospital 2016.1

WRITTEN EXAMINATION

Short Answer Questions

<u> PART 2</u>

Instructions:

- There are 3 separate books, each worth 100 marks (for a total of 300 marks).
- Time Allowed: 3 hours.
- Each booklet should be completed in 1 hour.
- All images are reproduced in the accompanying 'props' book.
- Answer each question on the provided examination paper.
- Write your name on each page in the space provided.

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QUESTION 10 (20 MARKS)

A 25-year-old man has been brought in to your emergency department after sustaining a knife wound to his neck in an assault.

His vital signs and GCS are normal.

See image on page 12 in separate book

1. Describe the injury seen in the picture above: (3 marks)

2. Complete the following table for each of the **three** zones of the neck. (12 marks)

NECK ZONE	ANATOMICAL LANDMARKS	ANATOMICAL STRUCTURES WHICH MAY BE INJURED	INVESTIGATION MODALITY
ZONE III			
ZONE II			
ZONE I			

3.	List the indications for emergent intubation of this patient.	(5 marks)
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QUESTION 11 (12 MARKS)

A young woman has presented following a deliberate self-poisoning of an unknown amount of venlafaxine. She appeared slightly drowsy on arrival, but was otherwise well. BP 120/70, pulse 80.

She was seen by your junior registrar and had agreed to drink 50g of charcoal and was admitted for observation to a non-monitored bed in your short stay unit.

You are called to review her 6 hours later due to a change in her status. She now looks unwell, and you are concerned she may have serotonin syndrome.

1. What are the clinical features of serotonin syndrome? (3 marks)

2. What are the pharmacodynamics effects of venlafaxine? (1 mark)

- 3. List **two** errors made by your registrar in the management of this patient. Why were these errors? (2 marks)
 - (1) _____

(2) _____

		-	nage her suspected serotonin toxicity? (4 marks)
5.	marks)	gs that can cause serotonin toxicity, with 2 examples from each class. (4
	(1)		
		Example 1.	
		Example 2.	
	(2)		
		Example 1.	
		Example 2.	
	(3)		
		Example 1.	
		Example 2.	

QUESTION 12 (12 MARKS)

A four day neonate presents to the Emergency department. The child is shocked. Observations are RR60, HR 190, Capillary refill time centrally is 5 secs. They are responsive to pain.

1.	List three antenatal / perinatal risk factors for neonatal sepsis. (3 marks)
	(1)
	(2)
	(3)
2.	Give three differential diagnoses of neonatal collapse other than sepsis. (3 marks)
	(1)
	(2)
	(3)
h	What ampinis the resource of the second seco
3.	What empiric therapy would you commence? Be specific. (3 marks)
Λ	List 6 investigations you would order. (3 marks)
4.	(i)
	(ii)
	(iii)
	(iv)
	(v)
	(vi)

QUESTION 13 (12 MARKS)

A 33-year-old man presents following a single punch knocking him to the ground. He had a GCS of 7 on arrival and has been intubated prior to CT scan.

He has returned to the ED following CT of his brain and cervical spine.

CT of the cervical spine is normal and he has no other injuries.

His current observations are pulse 60/min and BP 155/85 mmHg. His pupils are equal and reactive.

A single image from his brain CT is attached:

See image on page 13 in separate book

1. Describe 3 abnormalities on the CT image. (2 marks)

(1)	 	
(2)	 	
(3) _	 	

The neurosurgical team is en route to hospital and the patient will be going to the operating theatre in approximately 1 hour.

2. Assuming his clinical status remain unchanged, describe **8** treatments and their therapeutic target which should be performed in the ED prior to transferring this patient to theatre (8 marks)

	Treatment	Therapeutic Target
1		
2		
3		
4		
5		
6		
7		
8		

30 minutes later his left pupil becomes fixed and dilated. His pulse rate is 50/min and his BP 160/100

- 3. Describe **two** additional treatments, with dosage where relevant, that you would immediately institute. (2 marks)
 - (1) _____
 - (2) _____

QUESTION 14 (9 MARKS)

A 30-year-old Nepalese man presents with fever and confusion. He is noted to have dullness to percussion on his right lung base. His CxR is attached:

See image on page 14 in separate book

You do a pleural tap.

1. List five investigations you would order on the pleural fluid and justify your responses. (4 marks)

Investigation	Justification

- 2. List 2 biochemical features that differentiate a transudate from an exudate. (2 marks)
 - (1) _____
 - (2) _____

3. Name **3** common causes of transudates and **3** common causes of exudates that cause pleural effusions. (3 marks)

Transudate	Exudate

QUESTION 15 (10 MARKS)

A 10-year-old boy presents to the Emergency department with abdominal pain.

1. What clinical features of the history and examination make a diagnosis of appendicitis more likely? (4 marks)

After history and physical examination, you decide the most likely diagnosis is appendicitis but want to exclude other causes of abdominal pain in children.

2. List four tests and the diagnosis they would exclude in the table below. (4 marks)

Diagnosis

After referral to the Surgical registrar on call you are asked to keep the child nil by mouth.

3. Please prescribe maintenance fluid in the table below for the next 12 hours. Assume only 1000ml bags of intravenous fluid are available. (2 marks)

Date	Route	Fluid type	Additive and dose	Total volume	Rate (ml/hr)

QUESTION 16 (13 MARKS)

A 25-year-old gym owner presents to ED with a left lower leg injury after being tackled at football training. Impact was lateral with the opponent landing on him. He has intense pain and swelling of the lower leg. There is no disruption of skin. The initial X rays are provided.

See images or	pages	<u>s 15 – 20 ir</u>	n sej	parate	book

1. List the abnormalities evident on the images. (5 marks)

1. What are the potential acute complications with this injury? (2 marks)

2. List 3 methods of providing analgesia in this case. (3 marks)

(1)	
(2)	
(-)	
(3)	
(5)	

3. List 3 methods of assessing for tissue compartment syndrome. (3	marks)
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(1)	 	
(2)	 	
(3)	 	

QUESTION 17 (12 MARKS)

A 4-year-old boy is brought in to the Emergency Department by his concerned parents. He has been unwell with a fever for 6 days. He has a diffusely erythematous pharynx and a unilateral 3cm cervical lymph node on the right.

See images on pages 21 & 22 in separate book	*See	images	on pag	es 21	& 22	in sei	oarate	book*	
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1. What is the most likely diagnosis? (1 mark)

2. Give 4 differential diagnosis. (2 marks)

(1)	 	
(2)		
(-)		
(2)		
(3)	 	
(4)	 	

3. Outline the typical features of this condition. (4 marks)

4. List 2 potential complications. (2 marks)

Cardiac complication	
Non-cardiac complication	

5. Outline your management? (4 marks)

~END OF PART 2~