Candidate number

SALHN/ASH Booklet 2
Questions

SAQ 10 (18 marks)

A 16 year old woman is brought to the emergency department by her parents who are concerned about her recent loss of weight. She is known to have an eating disorder and currently has a BMI of 15.

a. List nine (9) SIGNIFICANT complications of anorexia nervosa (9 marks)		

ate number
ate number

An arterial blood gas is performed on room air and the results are:			
рН	7.53	Cl	75
pCO2	51	Base Excess	25.3
Na	131	HCO3	48
K	2.2		
b. List thr	ree (3) SIGNIFICANT abnormalities s	hown (3 marks)
c. What would be the causes for the abnormalities (2 marks)			

Candidate number	
An ECG is performed (see prop booklet).	
d. List the SIGNIFICANT findings on the ECG (3 marks)	
e. List one (1) SIGNIFICANT arrhythmia this patient is at	risk of? (1 mark)

Candidate number	
------------------	--

SAQ 11 (16 marks)

An eight (8) year old boy presents with right thigh pain after falling two (2) meter out of a tree. Primary survey is unremarkable. He has obvious swelling of his right thigh, but no other apparent injuries. An XR reveals a mid-shaft femur fracture that is off-ended and significantly shortened.

As part of his management the senior registrar decides to perform a femoral nerve block with ultrasound guidance. They use 20ml of 0.75% Ropivacaine.

a. What is the MAXIMUM safe dose of ropivocaine for this child with an estimated weight of 30kg? (1 mark)

b. Outline the clinical features of local anaesthetic toxicity (6 marks)

Early symptoms	1	
	2	
Severe toxicity	1	
	2	
	3	
	4	

Candidate number

c. The patient shows signs of SEVERE toxicity. List five (5) treatment options AND your reason for that option (5 marks)

Treatment option	Reason

d.	List four (4) measures to improve safety of nerve blocks in your department (4 marks)

Candidate number	ar .
Candidate numbe	:1

SAQ 12 (12 marks)

A 4- year old boy presents to your emergency department with a 2 day history of a rash (see photos in prop booklet)

His vital signs are

- a. What is the MOST likely diagnosis? (1 mark)
- b. List two (2) characteristic features of this rash (2 marks)

c. List two (2) features on your assessment OTHER THAN fever which may support your diagnosis (2 marks)

d. List three (3) key features of the management of this child (3 marks)	
e. How can you confirm your suspected diagnosis? (1 mark)	
f. List three (3) possible complications of this disease (3 marks)	

Candidate number	
------------------	--

SAQ 13 (12 marks)

A 34-year old woman presents to the ED. She is complaining of sudden onset of shortness of breath. She is 32 weeks pregnant and G3P2. There are no other reported symptoms.

She is placed in a cubicle with cardiac monitoring.

Her vital signs are:

HR	120	bpm
ВР	145/95	mmHg
RR	28	/min
SpO2	93%	on room air
Temp	37.6	°C

a. A 12-lead ECG is performed (see prop booklet). List two (2) abnormal findings from this ECG (2 marks)

b. Your provisional diagnosis is pulmonary embolus. Please list one (1) "pro" AND one (1) "con" for each of the following tests (8 marks)

Test	Pros	Cons
D dimer		
Lower Limb Doppler US		
VQ scan		
CT pulmonary angiogram		

c. A CTPA is performed. Review the two axial slices from the scan (see prop booklet) and list one (1) abnormal finding from each image (2 marks)

	Abnormal finding	
Axial slice 1		
Axial slice 2		

Candidate number	
------------------	--

SAQ 14 (11 marks)

You are a newly appointed consultant working in a regional ED. You have had a patient interaction a few days ago which is concerning you.

You reviewed an elderly Aboriginal woman who presented with lethargy and shortness of breath. A work-up revealed severe renal impairment and a potassium of 7.2 mmol/L.

The patient spoke almost entirely in her first language with her 14-year-old granddaughter acting as an interpreter. You felt you gave a comprehensive explanation of the diagnosis, plan and need for admission. The patient appeared to understand, nodding occasionally and saying "yes".

Unfortunately, 30 minutes later her nurse reported that both the patient and her grand-daughter had walked out of the hospital shortly after you left the bedside.

a.	What are four (4) suggestions to help prevent a similar situation occurring in the future? (4 marks)

b.	List four (4) department-wide strategies you could implement to ensure culturally safe medical care is available? (4 marks)
c.	A culturally competent approach to health care requires specific skills, knowledge and attitudes. What are three (3) GENERAL principles of a culturally competent approach to health care that may help you to care for a similar patient? (3 marks)

Candidate number	•
------------------	---

SAQ 15 (12 marks)

A six (6) month old boy is brought to the emergency department by his mother with 48 hours of vomiting and diarrhoea. His weight is 8 kg.

He is alert on examination and his eyes are sunken, he has slightly dry mucous membranes and decreased skin turgor.

His vital signs are as follows:

Temp	36.5	°C
HR	140	bpm
RR	44	/min
SpO ₂	96%	on room air
BGL	4.5	mmol/L

Capillary refill time <2 seconds

You diagnose him with gastroenteritis.

a. What is his degree of dehydration? (1 mark)

Candidate number	
------------------	--

b. Complete the table below for THIS child (8 marks)

	Nasogastric rehydration	IV rehydration
Indication		
(2)		
(2 marks)		
Choice of		
rehydration		
fluid		
(2 marks)		
(Z IIIai K3)		
Rate of		
administration		
(ml/kg/hr)		
AND		
duration of therapy		
(4 marks)		

C.	List three (3) clinical signs that should be monitored during rehydration (3 marks)

Candidate number	
------------------	--

SAQ 16 (12 marks)

A 78 year old gentleman presents to your major metropolitan Emergency Department after slipping over whilst putting out the bins. X-Rays reveal a left sided sub-capital fractured neck of femur, however, fortunately there are no other injuries.

Your registrar decides to use an ultrasound guided femoral nerve block to help manage the patient's pain and asks for your help supervising.

a. Using the US image obtained (see prop booklet) name the numbered structures in the table below (3 marks)

Structure 1	
Structure 2	
Structure 3	

b. Which structure is most lateral? (1 mark)

				Candidate nur	nber	 	-

C.	List the steps involved in performing an ultrasound guided femoral nerve block (8 marks)

SAQ 17 (12 marks)

You are the consultant in a tertiary hospital ED. A 25 year old woman, G2P1 who is currently 20 weeks pregnant, attends the ED with a sore neck.

She discloses to the resident that she was strangled by her partner during an altercation earlier in the evening. The resident comes to you for advice.

a	Э.	What features of history OR examination would suggest her neck injury needs further investigation? (6 marks)

Candidate number	
------------------	--

After further assessment you decide the patient does NOT require specific investigation of her neck injury. She declines to stay in the ED for any further assessment as she was mainly worried about her neck.

b).	What are the important points to address prior to discharge of this patient? (6 marks)

Candidate number

SAQ 18 (9 marks)

You are a consultant working in a regional ED without speciality services or advanced imaging.

An elderly man is bought to your ED after a fall the day prior. His daughter reports he tripped over whilst walking, and landed chin-first on the ground. She reports he has had difficulty mobilising since the fall.

Your RMO has initially assessed the patient and X-rays of the C-spine is reported as showing 'degenerative changes'.

You are concerned about central cord syndrome.

a.	List the three (3) MOST COMMON findings on physical examination in this condition (3 marks)
b.	State your plan for safe disposition of this patient (3 marks)

C.	The daughter asks you what the prognosis for this condition is – what will you tell her? (1 mark)
d.	List two (2) other causes of central cord syndrome besides trauma? (2 marks)