

SA Statewide ACEM Fellowship Trial Exam July 2017

Short Answer Questions

PART 1. Questions 1 - 10

1 hour

DIRECTIONS TO CANDIDATE

1. Answer each question in the space provided in this question paper.
2. Do NOT write your name on this question paper
3. Enter your examination number in the space below and at the bottom of each page.
4. Cross out any errors completely.
5. No examination papers or materials to leave the room.

EXAM ID NUMBER:

Question 1

A 3-year-old boy presents to the Emergency Department with a forehead laceration (**see photo in props booklet**) after hitting his head on the corner of a coffee table. There are no other injuries.

- i. Fill in the table with three (3) different methods to close this wound. Give one advantage and one disadvantage of each method. (9 marks)

Method	Advantage	Disadvantage

- ii. Fill in the table with two (2) sedation options to close this wound in this patient. (4 marks)

Drug	Dose

- iii. The patient develops laryngospasm as a complication of the sedation. Outline your management steps for this patient. (5 marks)

Question 2.

A 65 year old man presents to your ED with acute painless loss of vision in his right eye. There has been no history of trauma or injury.

- i. Complete the table with 4 likely differential diagnoses, as well as a key feature of both the history and physical examination that would suggest each diagnosis (12 marks)

Diagnosis	History	Examination

Question 3

A 23 year old male presents to an urban district hospital in a private car after falling from a 1st floor balcony. He was at a party and admits to drinking heavily. He is complaining of isolated abdominal pain and had a positive FAST scan. He has some abdominal wall abrasions and superficial lacerations.

P 130
BP 80/60
Sats 91% on room air
RR 26
Temp 35.1

GCS 15
BSL 5.6

A CT abdomen is obtained and 2 key images are provided. **(see props booklet)**

- i. List the four (4) **MOST** abnormal findings seen on the CT images. (2 marks)

1. _____

2. _____

3. _____

4. _____

The patient has had a whole body CT (pan Scan) and there are no additional injuries detected. There is a 1 hour delay till the patient can receive definitive management of their injury.

- ii. List five (5) clinical goals you are aiming for pending definitive care and the management you will institute to achieve these (10 marks)

	Clinical goal	Management Provided
1		
2		
3		
4		
5		

- iii. List three (3) options that could be considered for ongoing definitive management of this type of injury, with brief rationale for each. (6 marks)

	Definitive Management	Rationale
1		
2		
3		

Question 4

A 40-year-old man with a past history of hypertension presents to your Emergency Department complaining of a gradual onset severe headache with associated drowsiness and vomiting. His initial nursing observations are:

BP : 240/140 mmHg

HR: 70 beats/min

RR 26 per minute

SpO₂ 94% room air

Temp 36.5 °C

GCS: 13 (E3 eyes opening to speech; V4 confused; M6 obeying commands)

Power 5/5 all 4 limbs and no facial asymmetry

- i. What is the most likely diagnosis in this patient? (1 mark)

- ii. List and justify three (3) immediate investigations required for this patient. (6 marks)

Investigation	Justification

iii. What would be your top five (5) management priorities for this patient? (5 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

Question 5

A 2 year old child is brought to ED by a concerned mother. The boy has been previously well, takes no medications, has no allergies and is now crying inconsolably, apparently in pain, looks pale and lethargic. Mother advises there have been several similar episodes in the last 24 hours.

You decide the child is not shocked and requires immediate analgesia.

- i. Name two drugs from different pharmacological classes, the dose and route(s) by which you would provide the analgesia to this boy. (2 marks)

1. _____

2. _____

As part of the clinical work up a plain abdominal x-ray (AXR) is performed. **(See props booklet.)**

- ii. Give three (3) significant positive and / or negative findings on this AXR. (3 marks)

1. _____

2. _____

3. _____

- iii. List the four (4) most common causes of bowel obstruction in children under 5 years of age.
(4 marks).

1. _____

2. _____

3. _____

4. _____

Question 6

A 28-year-old man presents to your emergency 12 days after returning from a trip to Indonesia with a febrile illness. After using “Dr Google” he is concerned he has malaria.

- i. Other than malaria, list four (4) differential causes for this man’s febrile illness. (4 marks)

1. _____

2. _____

3. _____

4. _____

- ii. State four (4) important features of the travel history that you would obtain in this case. (4 marks)

1. _____

2. _____

3. _____

4. _____

- iii. Specific to confirming the diagnosis of malaria, what diagnostic tests are available and what are important features of each. (4 marks)

Investigation	Important features

Question 7

A 65 year old gentleman presents to the emergency department with a three to four day history of SOB. He has a background of hypertension for which he is on an ACE inhibitor.

His observations recorded at triage are as follows:

Temperature	36.9	°C
BP	145/90	mmHg
HR	120-140	beats/min

You are shown his ECG. **(see props booklet).**

- i. Give a brief interpretation of this ECG (2 marks)

- ii. Suggest four (4) possible underlying causes for this ECG finding (4 marks)

1.

2.

3.

4.

- iii. What medication (including dose and route) would you choose to manage this patient ? (2 marks)

- iv. How would you risk stratify this patient? Please demonstrate with reference to the patient information that you have been given above. (2 marks)

Question 8

A 6 year old girl has been brought to your ED after she fell off the monkey bars while playing at school. She is complaining of pain in the forearm and elbow. Please refer to the X-ray images of the elbow joint provided (**see props booklet**) and answer the following:

- i. List four (4) relevant positive findings on the X-rays provided. (4 marks)

1.

2.

3.

4.

- ii. What is your diagnosis? (2 marks)

- iii. List three (3) acute complications of this type of injury. (3 marks)

1.

2.

3.

iv. List three (3) immediate management steps for this patient's presentation. (3 marks)

1.

2.

3.

Question 9

A 25 year old male presents with 6 hours of persistent painful penile erection.

- i. List 3 details in the history which may help differentiate the underlying cause of this man's priapism. (3 marks)

1. _____

2. _____

3. _____

He was given simple oral analgesia in the ED for his pain and distress, but is still in a fair amount of pain.

- ii. List two (2) other analgesic options (2 marks)

1. _____

2. _____

- iii. List four (4) specific treatment steps (in escalating fashion) you would employ to manage this patient (4 marks)

1. _____

2. _____

3. _____

4. _____

Question 10

You are the Emergency Medicine Consultant working in a rural emergency Department located in a busy tourist area.

Ambulance communications have just notified you of a crash on the highway approximately 25 km from your town. A tourist bus has rolled over after colliding with a petrol tanker. The tanker was engulfed in flames and the driver is deceased.

There are bystander reports of multiple casualties.

Emergency services are enroute to the scene.

It is 4pm on a Monday afternoon.

- i. List 2 key questions you need to ask during your communication with the Emergency Services? (2 marks)

1. _____

2. _____

- ii. The Major Incident in your region has now been upgraded to a Disaster. What are two important duties you must now perform? (2 marks)

1. _____

2. _____

