



Fellowship Practice Exam

February 2019 - Book 1

WRITTEN EXAMINATION SHORT ANSWER QUESTIONS

EXAMINATION TIME: 3 HOURS - 1 hour per booklet

Directions to Candidates

This booklet is one of three. It contains 9 questions. Allow 9 minutes for 3 page questions (1 and 9), and 6 minutes for 2 page questions (2 - 8). The entire booklet should take you 1 hour to complete.

1. Answer each question in the space provided in this question paper.
2. Do not write your name on this question paper.
3. Write your candidate number **on each page** in the space provided.
4. Cross out any errors completely.
5. Do not begin the exam until instructed to do so.
6. No examination papers or materials to leave the room.
7. Props are provided in a separate booklet.

Question 1 (17 marks)

You have been asked to deliver a teaching session to a group of final year medical students about paediatric life support.

a) Complete the table below by listing further details regarding each topic (7 marks)

Topic	Details
Basic Life Support compression-ventilation ratio	
Advanced Life Support compression-ventilation ratio	
Compression rate per minute	
Compression depth	
Adrenaline dose and timing / frequency	
Amiodarone dose and timing / frequency	
Defibrillator Energy Setting (J)	

Question 1 (continued)

b) State two (2) anatomical or physiological differences between paediatric and adult patients related to resuscitation for each of the following. (10 marks)

i) Airway (2 marks)

ii) Breathing (2 marks)

iii) Circulation (2 marks)

Question 1 (continued)

iv) **Disability (2 marks)**

v) **Exposure (2 marks)**

Question 2 (12 marks)

A 45 year old woman presents with sudden loss of hearing in her left ear. There is no history of trauma.

a) Apart from idiopathic sudden sensorineural hearing loss, list five (5) likely differential diagnoses for this patient. (5 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

Question 2 (continued)

b) Complete the following table with regard to the examination of a person with hearing loss. (6 marks)

Test	Brief description of test (2 marks)	Findings in conductive hearing loss (2 marks)	Findings in sensorineural hearing loss (2 marks)
Rinne			
Weber			

c) You decide the patient has idiopathic sudden sensorineural hearing loss. List one drug and dose that you would prescribe for this patient. (1mark)

Question 3 (12marks)

A 64-year-old woman presents with fever, sore throat and soft stridor. She looks unwell.

Vital signs:

Temperature	39.5	°C
HR	120	bpm
BP	108/70	mmHg
RR	28	bpm
O2 sats	95%	room air

You are concerned the patient might have epiglottitis.

a) List four (4) other likely infectious causes of stridor in this patient (4marks)

1. _____

2. _____

3. _____

4. _____

b) List four (4) most likely organisms to cause epiglottitis in this adult. (4 marks)

1. _____

2. _____

3. _____

4. _____

Question 3 (continued)

c) State four (4) immediate management priorities (4 marks)

1. _____

2. _____

3. _____

4. _____

Question 4 (12 marks)

An 18 month-old girl presents to the ED with vomiting and drowsiness. She is afebrile, with no focal neurology. Airway, breathing and circulation are stable, however, it is noted that a blood glucose is measured at 1.4 mmol/L.

Her weight is 13 kg.

a) List six (6) differential diagnosis for her condition. (6 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Question 4 (continued)

b) State six (6) management steps for this child. (6 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Question 5 (11 marks)

A 24 year old male with a history of Crohn's disease presents with severe abdominal pain and fever.

a) List two (2) pros and two (2) cons for the use of abdominal Xray as part of the assessment of this man's pain (2 marks)

Pros

1. _____

2. _____

Cons

1. _____

2. _____

Question 5 (continued)

His Abdominal Xray is shown in props booklet ; page 3 .

b) List two (2) abnormal findings shown on this Xray. (2 marks)

1. _____

2. _____

c) Having reviewed this Xray, state five (5) KEY management priorities whilst the patient is in the emergency department. (5 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

Question 6 (12 marks)

A 2 week old baby is brought to ED with a swollen scrotum. Complete the table below listing three (3) main differential diagnoses with two(2) key examination findings and key management step for each condition.

(12 marks)

Question 6 (continued)

Diagnosis (3 marks)	2 key examination findings (6 marks)	Key Management Step (3 marks)
	1. 2.	
	1. 2.	
	1. 2.	

Question 7 (12 marks) 6 minutes

A 30 year old woman with known Sickle Cell Anaemia has presented to your Emergency department after sudden onset of severe abdominal pain. Her observations are:

HR	120	bpm
BP	100/60	mmHg
RR	16	bpm
Sat	97%	room air
Temp	37.3	°C
GCS	15	

a) List four (4) acute severe complications of Sickle Cell Anaemia that this lady is likely to develop. (4marks)

1. _____
2. _____
3. _____
4. _____

b) List four (4) factors that would influence your decision to give this lady a blood transfusion on this occasion. (4 marks)

1. _____
2. _____
3. _____
4. _____

Question 7 (continued)

c) List four (4) factors that would influence your decision to administer intravenous morphine for her pain. (4 marks)

1. _____

2. _____

3. _____

4. _____

Question 8 (9 marks) 6 minutes

A 60 year old woman from home presents with epigastric and generalised abdominal pain for 24 hours. She has associated vomiting. A CT SCAN of the abdomen and pelvis is obtained.

A coronal scout image from CT abdomen and pelvis is obtained and shown in the props booklet ; page 4 .

a) What is the presumptive diagnosis? (1 mark)

b) List four (4) important features demonstrated in this image (4 marks)

1. _____

2. _____

3. _____

4. _____

Question 8 (continued)

c) State four (4) immediate management priorities including details of any treatments given. (4 marks)

1. _____

2. _____

3. _____

4. _____

Question 9 (18 marks)

Your Registrar has intubated a 75-year-old with a history of ischaemic heart disease and pulmonary hypertension who presented to the ED with an exacerbation of COPD.

The patient is currently:

Intubated

Apnoeic post induction being hand bagged with high pressures

O2 sats 80% on FIO2 100 %

HR 155 bmp irregular

BP 70/50 mmHg

In the three tables below, for each parameter, list three (3) interventions you would immediately perform with one (1) point of justification for your choice for this patient. (18 marks)

a)

	Airway Intervention	Justification
1		
2		
3		

Question 9 (continued)

b)

	Ventilation Intervention	Justification
1		
2		
3		

Question 9 (continued)

c)

	Circulation Intervention	Justification
1		
2		
3		