



Fellowship Practice Exam

August 2020 - Book 2

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 (10 and 18), and 6 minutes for 2 page questions (11 - 17). 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 10 (18 marks)

A 53-year-old man presents with acute shortness of breath on waking up. His past history includes hypertension and smoking. His current medications are candesartan/hydrochlorothiazide 16/12.5mg daily. He is placed on non-invasive ventilation but despite this, remains hypoxic. Current vital signs are:

SaO₂ 87% FiO₂ =60%
RR 32 per minute
HR 112 sinus tachycardia
BP 102/80 mmHg

- a) List and include the dosages of three (3) medications you would use in the RSI.
(6 marks)

	Medication	Dose
1		
2		
3		

Question 10 (continued)

b) Outline your intubation checklist in preparation for the RSI. (12 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

Question 11 (12 marks)

You are the on-duty consultant in a rural Emergency Department. A 66-year-old man is brought in by ambulance after a syncopal episode whilst eating dinner at a local restaurant. On initial examination, he is awake and alert but complaining of central chest discomfort. His observations are otherwise within normal limits.

His ECG is provided in **PROPS BOOKLET ; PAGE 6.**

a) State four (4) abnormalities on this ECG (4 marks)

1. _____

2. _____

3. _____

4. _____

b) What is the most likely primary pathology of the ECG and secondary complication? (2 marks).

Primary pathology_____

Complication_____

Question 11 (continued)

The emergency buzzer goes off whilst he is having a chest x-ray. He is brought back to a resuscitation cubicle and is now unresponsive.

His vital signs are now as follows:

BP 65/40 mmHg
HR 18 bpm
SAO₂ 90% with a poor trace
RR 10 per minute

Some of his initial blood investigation results are given below:

Sodium	142 mmol/L	(135-145)
Potassium	5.1 mmol/L	(3.5-5.2)
Urea	8.2 mmol/L	(2.7-7.8)
Creatinine	98 mmol/L	(45-90)
Glucose	6.8 mmol/L	(3.0-6.0)
High Sensitivity Troponin	18 ng/l	(< 14)

c) What is the likely cause of the sudden deterioration? (1 mark).

d) He has adequate intravenous access and all monitoring applied. Outline your immediate management priorities for this patient. (5 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

Question 12 (12 marks)

You are the duty consultant in a rural emergency department. A 30 year old male has been brought in by ambulance after a speed boat accident in a nearby river. He required brief cardiopulmonary resuscitation by the bystanders at the scene. His vital signs on arrival are:

HR	38	bpm
BP	90/60	mmHg
SPO2	90 %	6 L Face mask
RR	26	per minute
GCS	12	(E3, V3, M6)
Temp	30.1	°C

a) List four (4) predictors of poor outcome in drowning. (4 marks)

1. _____

2. _____

3. _____

4. _____

b) List, in order, the first four (4) steps you will take to re-warm this patient. (4 marks)

1. _____

2. _____

3. _____

4. _____

Question 12 (continued)

The patient's vital signs deteriorate. Currently his SpaO₂ is 88% on 6 L O₂ via a non-rebreather. He is combative. You decide to intubate.

b) List and justify four (4) modifications to your standard rapid sequence induction technique in this scenario. (4 marks)

	Modification to RSI	Justification
1		
2		
3		
4		

Question 13 (15 marks)

A 54-year-old man presents to your Tertiary level emergency department with severe right-sided abdominal pain. He has no allergies.

His vital signs are:

HR 110 bpm
BP 98/65 mmHg
RR 24 per minute
Temp 37.6 °C

A CT scan of his abdomen is performed, two slices are shown in **PROPS BOOKLET; PAGEs 7 and 8.**

a) List five (5) clinically relevant findings on his CT. (5 marks)

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

Question 13 (continued)

b) In the table below list four (4) interventions that you would arrange for this patient. For each intervention provide a rationale that justifies its use. Where listing medications, please ensure you provide dosage and route of administration. (4 marks)

	Intervention	Justification
1		
2		
3		
4		

Question 13 (continued)

You are about to provide clinical teaching for junior registrars and need to discuss the indications of various imaging modalities in generally managing the above condition.

c) State two (2) clinical indications for each of the following imaging modalities. (6 marks)

	Intervention	Justification
1	Plain Xray/KUB	1
		2
2	Ultrasound	1
		2
3	CT Scan	1
		2

Question 14 (12 marks)

You are the duty consultant in a Tertiary Emergency Department. A 72 year old man with body weight of 70Kg and height 180 cm, has been intubated in a rural ED for likely Covid lung infection. He requires retrieval to your Emergency Department.

- a) Prior to the arrival of the retrieval team, what phone advice would you give to the doctor in the rural department regarding ventilator settings in terms of protective lung ventilation in the setting of ARDS? (6 marks)

Ventilator settings (3 marks).

1. _____

2. _____

3. _____

Endpoints/goals (3 marks).

1. _____

2. _____

3. _____

Question 14 (continued)

b) Despite the above settings, the patient remains hypoxic. List three (3) measures you would advise to improve oxygenation with one rationale for each.

	Measures	Rationale
1		
2		
3		

Question 15 (12 Marks)

You are an Emergency Consultant working in a metropolitan adult ED on clinical support duties.

Your hospital's CEO has received a formal complaint from the family of a 58-year-old male who was seen in your ED three weeks earlier after presenting with chest pain. The patient died at home 3 days after being discharged from the ED.

The CEO has asked you to investigate the complaint and advise her on undertaking open disclosure with the family.

a) List three (3) likely causes of this patient's chest pain. (3 marks).

1. _____

2. _____

3. _____

b) Describe four (4) elements of open disclosure. (4 marks)

1. _____

2. _____

3. _____

4. _____

Question 15 (continued)

c) Describe five other actions you would take to manage the complaint. (5 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

Question 16 (14 marks)

A 15 year old girl with a known eating disorder is referred to your Emergency Department with a significant and sustained deterioration in her condition over the past month.

a) What is the formula to calculate body mass index? (1 mark)

b) List five (5) features on physical examination that would confirm your decision for hospital admission. (5 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

Question 16 (continued)

c) List four (4) investigations that you would perform and the abnormalities you may expect to see in a patient with a medically unstable eating disorder. (4 marks)

	investigation	Abnormality
1		
2		
3		
4		

Question 16 (continued)

d) In adolescents admitted with an eating disorder, list two (2) clinical features and two (2) investigation findings that would support a diagnosis of refeeding syndrome. (2 marks)

	Clinical feature	Investigation finding
1		
2		

Question 17 (12 marks)

A 43-year-old woman presents with intermittent dizziness and feeling “not quite right” in the last 3 days.

Her vital signs are:

HR 110 bpm
 BP 98/60 mmHg
 SPO2 92 % RA
 RR 24 per minute
 Temp 37.9 °C

- a) List four (4) differential diagnoses for this patient that you could potentially find using bedside ultrasound. For each diagnosis, list a specific finding on ultrasound that confirms the diagnosis. (8 marks)

	DDx	Bed side USS findings
1		
2		
3		
4		

Question 17 (continued)

b) List two (2) pros and two (2) cons regarding the utility of ultrasound in this patient. (4 marks)

Pros

1. _____

2. _____

Cons

1. _____

2. _____

Question 18 (11 marks)

You are the duty consultant in charge at a Tertiary Emergency Department. A 65 year old male with a Past Medical History of chronic liver disease has presented vomiting fresh blood over the past few hours. He has come via private transport and has had no care prior to your review. His vital signs on arrival are:

HR 90 bpm
BP 90/60 mmHg
SPO2 95 % RA
Temp 36.9 °C
GCS Awake and oriented.

He is oriented to time and place.

a) List three (3) immediate treatment steps in the first 10 minutes. (3 marks)

1. _____

2. _____

3. _____

4. _____

During your initial management steps, the patient becomes confused after a large haematemesis with fresh blood. His vital signs are now:

HR 100 bpm
BP 40/40 mmHg

Question 18 (continued)

b) State four (4) management priorities at this time. (4 marks)

1. _____

2. _____

3. _____

4. _____

c) List three (3) specific treatments you would commence. If pharmacological give dose and route. (3 marks)

1. _____

2. _____

3. _____