



Fellowship Practice Exam

February 2019 - Book 3

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 (19 and 27), and 6 minutes for 2 page questions (20 - 26). 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 19 (12marks)

A 50-year-old male with a background of chronic pancreatitis presents with several days of nausea and vomiting. His temperature is 38.9°C.

His venous blood gas is shown in **Props Booklet; page 9**.

a) Derive three (3) calculations using the shown results to assist in your interpretation.
(3 marks)

1. _____

2. _____

3. _____

Question 19 (continued)

b) Provide a unifying explanation for these results. (3 marks)

1. _____

2. _____

3. _____

Question 19 (continued)

c) State six (6) steps in your management plan. (6 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Question 20 (12 marks)

A 65 year old male with past medical history of AF and HTN is brought to your tertiary Emergency department by ambulance after a collapse. Below are his vital signs on arrival :

HR	130	bpm
BP	70/40	mmHg
RR	32	bpm
Sat	95%	2L NP
Temp	37.9	°C
GCS	13	(E4V4M5)

a) State three (3) important bedside ultrasound steps that will aid in assessment of his shock, with one rationale for each. (3 marks)

1. Step: _____

Rationale: _____

2. Step: _____

Rationale: _____

3. Step: _____

Rationale: _____

Question 20 (continued)

Your assessment reveals the cause of his shock is obstructive.

b) State Three (3) possible differential diagnoses with one major abnormality you expect to see in his bed side thoracic ultrasound and one (1) immediate intervention that is required for each? (9 marks)

	Diagnosis	Ultrasound finding	Intervention
1			
2			
3			

Question 21 (11 marks)

A 21 year old female G2P1, at 40 weeks gestation is brought to your rural Emergency Department after a high speed MVA. She was an unrestrained front seat passenger in a car that struck a wall. On arrival she is complaining of lower abdominal cramps as well as a painful, deformed right ankle.

Her Vital signs:

HR	100	bpm
BP	110/70	mmHg
RR	26	bpm
Sat	96%	RA
Temp	35.8	°C
GCS	15	and no C-spine tenderness

- a) Complete the table below stating four (4) important management priorities for this patient with one (1) specific intervention for each (8 marks).

	Management Priority	Intervention
1		
2		
3		
4		

Question 21 (Continued)

a) Apart from trauma, list three (3) other leading causes of maternal death in pregnancy ? (3 marks)

1. _____

2. _____

3. _____

Question 22 (11 marks)

You are checking Xray results from the weekend and come across the following Xray taken from a 34-year-old woman who presented to your Emergency Department after dropping a heavy metal container on her left foot. Review of her notes reveal she had a swollen foot and was unable to weightbear.

Her Xray is shown in **PROPS BOOKLET; page 9.**

a) List two (2) abnormal findings on her Xray. (2 marks)

1. _____

2. _____

b) What is the diagnosis based on these findings? (1 mark)

Question 22 (continued)

c) List two (2) acute complications of this injury. (2 marks)

1. _____

2. _____

According to her notes, the patient was diagnosed with a “sprain” by one of your junior registrars over the weekend and was discharged with simple analgesia. State the six (6) next steps you would take in managing this situation. (6 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Question 23 (15 marks)

A 3 year old toddler has had a submersion injury. He was found in the water with an unknown downtime and an initial rhythm of asystole. CPR was performed for 7 minutes. You are retrieving the child by helicopter with a paramedic from a small rural medical centre. The child is intubated and ventilated.

a) List your three (3) broad goals of management. (3marks)

1. _____

2. _____

3. _____

Question 23 (continued)

b) Complete the table below showing what organ systems need to be managed prior and during transport and what measure you will take to manage them. (12 marks)

	ORGAN SYSTEM (4 marks)	MEASURES TO MANAGE ORGAN INJURY (8 marks)
1		a) b)
2		a) b)
3		a) b)
4		a) b)

Question 24 (9 marks) 6 minutes

You are managing a 70 year old man with drowsiness. He has a history of type II diabetes. His weight is 50kg.

His venous blood gas is shown in **Props Booklet; page 11.**

a) Derive three (3) calculations using the shown results to assist in your interpretation. (3 marks)

1. _____

2. _____

3. _____

Question 24 (continued)

b) What is the likely diagnosis? (1 mark)

c) State five (5) management priorities in this patient. (5 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

Question 25 (12 marks)

A 22 year old woman presents to your emergency department with shortness of breath. She is 34 weeks pregnant. She is G1P0 and has no relevant past history. She has not sought any antenatal care to date.

List six (6) LIKELY specific diagnoses for which Point of Care Ultrasound may be used to investigate the cause of her shortness of breath. For each diagnosis, list one (1) expected positive finding on Ultrasound that would support each specific diagnosis. (12 marks)

Question 25 (continued)

	Specific diagnosis (6 marks)	Positive finding that would support the diagnosis (6 marks)
1		
2		
3		
4		
5		
6		

Question 26 (12 marks)

A 50 yo female who works at McDonalds presents to your ED with one week of bloody diarrhoea. She returned from overseas 2 days ago. Her current examination shows:

GCS	15
BP	105/75 mmHg
HR	90 bpm
Temperature	37.5 °C
RR	16 bpm
O2 Saturation	99% room air

a) Other than Salmonella Typhi, list five (5) possible causes of her diarrhoea. (5 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

Question 26 (continued)

You are concerned she has Salmonella Typhi. List four (4) symptoms or signs that support this diagnosis. (4 marks)

1. _____

2. _____

3. _____

4. _____

c) State your management priorities for this patient. (3 marks)

1. _____

2. _____

3. _____

Question 27 (16 marks)

A 68 year old woman is brought to your Emergency Department after a collapse at home when walking to the bathroom.

Her ECG on arrival is shown in **Props Booklet; page 12.**

a) List four (4) abnormal findings on this ECG. (4 marks)

1. _____

2. _____

3. _____

4. _____

b) List three (3) key features on examination that you would seek given your ECG findings. (3 marks)

1. _____

2. _____

3. _____

Question 27 (continued)

c) List three (3) possible findings on this lady's bedside echo. (3 marks)

1. _____

2. _____

3. _____

Question 27 (continued)

You decide to use this ECG as an aid in a teaching session about SYNCOPE for your registrars.

d) List six ECG features that are NOT on this ECG that you would teach your registrars to look for.
(6 marks)

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____