



Fellowship Practice Exam

May 2018 - 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 (18 marks)

A 57 year old male presents to your Emergency Department by ambulance. The ambulance officers state that he has a past history of COPD and asthma. He has been a smoker for 40 years and continues to smoke. The ambulance officers found him to be severely short of breath and have been treating him with continuous oxygen continuous nebulised salbutamol en route.

The ambulance reports the following most recent observations:

BP	160/80	mmHg
HR	140	bpm
RR	40	bpm
O2 Sat	86%	on high flow oxygen
GCS	15	

a) State six (6) factors that you would consider in deciding if this man needs intubation. (6 marks)

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

Question 1 (continued)

An ABG is taken and shown in **PROPS booklet; page 3**.

b) State your interpretation of this ABG in this clinical setting. Include four (4) points in your answer. (4 marks)

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

c) Would you intubate him on the basis of these gases? (1 mark)

d) State three (3) justification for your decision. (3 marks)

1. _____
2. _____
3. _____

Question 1 (continued)

e) If the patient were to progress to intubation, what pattern of ventilation would you initiate? State four (4) points in your answer. (4 marks)

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

Question 2 (9 marks)

A 32 year old male presents to your emergency department with shortness of breath. He is previously well and has never smoked.

A CXR is taken and shown in **PROPS booklet; page 4**.

a) State three (3) significant findings on this X-ray. (3 marks)

1. _____

2. _____

3. _____

b) List three (3) LIKELY diagnoses for these changes in this patient. (3 marks)

1. _____

2. _____

3. _____

Question 2 (continued)

c) List three (3) MOST USEFUL investigations, that can be initiated in the emergency department, to assist in confirmation of the diagnosis. (3 marks)

1. _____

2. _____

3. _____

Question 3 (14 marks)

A 30-year-old man presents to your emergency department with altered mental state, severe leg pain and swelling. You suspect rhabdomyolysis.

a) Give four (4) categories of cause of rhabdomyolysis, with an example from each category (8 marks):

Category of cause (4 marks)	Example (4 marks)

b) List the two (2) MOST life threatening potential complications of rhabdomyolysis. (2 marks)

1. _____

2. _____

Question 3 (continued)

c) Give the two MOST IMPORTANT specific emergency department treatments of rhabdomyolysis and their clinical aims/end points (4 marks)

1. _____

2. _____

Question 4 (12 marks)

A 34 year old women whom is 10 weeks pregnant (G4P3) presents to the Emergency department with nausea and vomiting.

a) Other than hyperemesis gravidarum, list four (4) differential diagnosis. (4 marks)

1. _____

2. _____

3. _____

4. _____

b) List three (3) investigations you would order for this patient with one rationale for each. (6 marks)

	Investigation	Justification
1		
2		
3		

Question 4 (continued)

You diagnose hyperemesis gravidarum and prescribe IV fluids and metaclopramide, then escalate to ondansetron.

c) List one (1) other pharmacological and one (1) non-pharmalogical treatment for this condition. (2 marks)

1. _____

2. _____

Question 5 (13 marks)

An 80 year old female is brought in to the Emergency department from home by her family. She has a past history of mild hypertension controlled with an angiotensin receptor blocker. She has no allergies. She was last seen the previous day when she seemed lethargic.

Her vital signs on arrival:

BP	80/50	mmHg
HR	60	bpm
Temp	32	°C
O2 Sat	80%	40% FiO2
GCS	10	E3V2M5, PEARL 4mm and no focal signs

a) List four (4) differential diagnoses. (4 marks)

1. _____

2. _____

3. _____

4. _____

b) List four (4) investigations you would request. (4 marks)

5. _____

6. _____

7. _____

8. _____

Question 5 (continued)

c) Outline five (5) steps in her management. (5 marks)

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

Question 6 (12 marks)

You are the consultant in charge of a tertiary Emergency department. A local community hospital (1 hour away) calls you for advice on the care of a 12 day old male infant with a fever. His vital signs are:

HR	185	bpm
Temp	39	°C
O2 Sat	98%	RA
capillary refill 3 seconds		

a) State three (3) priorities of his care. (3 marks)

1. _____
2. _____
3. _____

b) List five (5) important investigations you would consider for this patient. (5 marks)

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

Question 6 (continued)

c) The local team caring for the child are unable to gain IV access. What is your advise to them? (2 marks)

1. _____

2. _____

IV access is now gained. The child appears mottled and has a BSL of 2.2.

d) State two (2) specific immediate management priorities. (2 marks)

1. _____

2. _____

Question 7 (13 marks)

A 21 year old previously well male, is brought in to your Emergency department by his friends after landing on his right side on a tree stump after a trail bike jump (~ 40 km/h).

His vital signs are :

HR	130	bpm
BP	85/50	mmHg
RR	32	bpm
O2Sat	95%	6 L hudson mask
Temp	35.8	°C
GCS	15	(no reported LOC)

Your registrar has examined the patient and reports to you his initial extended FAST (eFAST) exam is negative. you are concerned and repeat the eFAST.

The eFAST image is shown in **PROPS booklet; page 5.**

a) List two (2) abnormalities/signs, on this view with one (1) significance for each. (4 marks)

	Abnormality	Significance
1		
2		

b) State three (3) important points you would emphasise to your registrar to increase eFAST sensitivity. (3 marks)

1. _____

2. _____

3. _____

Question 7 (continued)

c) State two (2) most likely findings on his chest/lung ultrasound, Subcostal (Cardiac) view and portable CXR. (6 marks)

Chest/Lung USS:

1. _____

2. _____

eFAST subcostal (Cardiac) view:

1. _____

2. _____

Portable CXR:

1. _____

2. _____

Question 8 (12 marks)

You are working in an urban district hospital. A young man has been brought in by private transport with severe blood loss from a stab wound to the arm. You have commenced resuscitation including massive transfusion. He has been intubated and ventilated. Haemorrhage control is difficult. There is a major trauma centre 30 minutes away.

a) State four (4) important factors that would influence your decision to transfer the patient rather than have them managed at your hospital. (4 marks).

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

A decision is made to transfer the patient to the trauma centre.

b) Name, age and mechanism of injury are provided in the handover. List four (4) other critical clinical details that you would include in your handover to the receiving hospital. (4 marks)

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

Question 8 (continued)

You escort the patient in the ambulance and they die during the transfer.

c) State four (4) important management steps that you will complete. (4 marks)

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

Question 9 (18 marks)

A 73 year old man presents via ambulance with 3 days of severe abdominal pain. He has a history of IHD, NIDDM, hypercholesterolaemia and early onset dementia. He usually lives with his wife at home as his primary carer. According to his wife, he has not experienced any symptoms other than abdominal pain.

His current medications: metformin and coloxyl.

His observations on arrival are:

BP	80/40	mmHg
HR	130	bpm
RR	26	bpm
Sats	93%	high flow oxygen
GCS	13	(E2, V3, M3)

ABG are drawn soon after arrival and shown in **PROPS booklet; page 6.**

a) State three (3) calculations that would help you to interpret these results. (3 marks)

Derived value 1:

Derived value 2:

Derived value 3:

Question 9 (continued)

b) List four (4) pieces of information that these results provide you for this patient. (4 marks)

1. _____

2. _____

3. _____

4. _____

b) Other than mesenteric ischaemia, list four (4) LIKELY diagnostic causes of the lactate result for this patient. (4 marks)

1. _____

2. _____

3. _____

4. _____

Question 9 (continued)

c) What is the value of CT scanning for the investigation of possible mesenteric ischaemia for this patient? State three (3) points in your answer. (3 marks)

1. _____
2. _____
3. _____

His wife declines any further active treatment and requests that the patient be palliated.

d) What information needs to be obtained prior to conforming to this request? State two (2) points in your answer. (2 marks)

1. _____
2. _____

e) Other than analgesics and antiemetics, list two (2) medications that may be useful for symptom control for this patient. (2 marks)

1. _____
2. _____