

FELLOWSHIPPEXAM.COM

INITIATION ROADBLOCK.

Question paper.

Instructions to candidates

1. This book contains 10 short answer questions.
2. You have 1 hour to complete the exam.
3. Each 2 page question is designed to be completed in the same amount of time, irrespective of the number of marks assigned
4. Each 2 page question will be scaled to contribute equally to the examination outcome,
5. Answer in the space provided within this booklet.
6. Write in blue or black pen.
7. Where referenced refer to the supplementary clinical information booklet for clinical information.
8. Where a number of answers are requested only that number will be marked.

Question 1.

A 58 year old man presents to your department by ambulance from a construction site after being hit in the chest and face by a large concrete block swinging from a pulley. He has sustained no other injuries.

His vital signs on arrival are:

HR	115	/min
BP	99/66	mmHg
RR	28	/min
O2 sats	95%	6L via mask
GCS	7	

i. (4 marks)

Give 4 signs on chest examination that may indicate the possibility of a pneumothorax. (4 marks)

ii. (4 marks)

Question 2.

The patient's chest xray is taken just after arrival and is shown on page 2 of the supplementary information booklet. Give 2 major abnormalities from the film and the underlying diagnosis diagnosis.

Question 1.

iii. (2 marks)

After the patient's xray returns he suffers increasing respiratory distress, de-saturates and has a cardiac arrest. What two actions would you immediately undertake?

iv. (1 mark)

After your actions above the patient regains immediate output but remains hypotensive with a systolic BP of 78mmHg. What volume resuscitation will you administer to this patient?

v. (5 marks)

Give 5 endpoints you would use to judge the efficacy of your volume resuscitation.

Question 2.

A 35 year old motor bike rider is brought in by ambulance after a collision with a car. The ambulance report multiple injuries on scene. The accident occurred 500m from the entry to the hospital, so the ambulance have applied a c-collar, inserted an IVC and brought the patient to your department with no other interventions undertaken.

The patient's vital signs on arrival are:

HR	145	/min
BP	90/72	mmHg
RR	29	/min
O2 sats	98%	6L via mask
GCS	6	

i. (2 marks)

Which induction agent will you use to intubate this patient? Justify your choice.

**QUESTION 2 CONTINUES OVER THE
PAGE**

FELLOWSHIP EXAM.COM INITIATION ROADBLOCK.
EXAMINATION PAPER

ii (20 marks)

Using the table below, give 2 paralytic agents you would consider using, the dose of each agent, and two advantages and disadvantages of each.

AGENT	1.	2.
DOSE		
ADVANTAGES	1. 2.	1. 2.
DISADVANTAGES	1. 2.	1. 2.

Question 3.

A 19 year old man presents with the ambulance after being assaulted with a broken glass at a nightclub.

On arrival his vital signs are:

HR 105 /min
BP 99/62 /min
RR 16 /min
Sats 98% RA
T 36.3 °C

A clinical image of the patient's wound is shown on page 3 of the supplementary information booklet.

i. (10 marks)

Using the table below list five anatomic structures which may be injured, and give a clinical feature or complication for each that would indicate damage.

STRUCTURE	CLINICAL FEATURE

ii. (4 marks)

Is imaging appropriate in THIS patient and why?

iii. (4 marks)

List 2 important imaging studies that you could perform and the indication for each.

fellowshipexam.com

Question 4.

A 55 year old man presents 5 days after a colonoscopy with left iliac fossa pain. During his colonoscopy several polyps were removed, and significant diverticular disease was noted to the descending and sigmoid colon. He has a history of COPD, and uses nebulized bronchodilators at home.

His vital signs are:

HR	90	/min
BP	120/80	mmHg
RR	22	/min
Sats	98%	RA
T	38.2	°C

i.(3 marks)

A venous blood gas is taken by the resident, and results are shown on page 4 of the supplementary information booklet. What are the major acid-base disturbances present?

ii. (2 marks)

Provide 2 derived values to support your answer.

iii. (4 marks)

List 4 differentials for this patient's presentation.

Question 4.

iv. (4 marks)

A CT scan of the patient's abdomen is shown on page 5 of the supplementary clinical information booklet. What is the major abnormality and what diagnosis does it imply?

fellowshipexam.com

Question 5.

A 58 year old man presents with a history of dizziness and feeling lightheaded. He has a history of hypertension and osteoarthritis.

His vital signs are:

HR	77	/min
BP	115/70	mmHg
RR	17	/min
Sats	98%	RA
T	37.1	°C
GCS	15	

i. (4 marks)

His ECG is shown on page 6 of the supplementary clinical information booklet. List 3 abnormalities on the ECG and give your diagnosis

ii. (6 marks)

List 3 potential causes of these changes and give an example of each.

iii. (2 marks)

Give 3 pharmacologic therapies you could institute if this patient became bradycardic and hypotensive.

iv. (5 marks)

In the event of non responsiveness to drugs, describe your procedure for transthoracic pacing.

fellowshipexam.com

Question 6.

A 66 year old woman presents to the department with severe right upper quadrant pain of 36 hours duration. She has a prior history of biliary colic and is awaiting elective cholecystectomy.

Her vital signs are:

HR	102	/min
BP	99/59	mmHg
RR	27	/min
Sats	99%	RA
T	39.6	°C

Her UEC and LFT profile returns from the laboratory and is shown on page 7 of the supplementary clinical information booklet.

i. (3 marks)

What are the major abnormalities, and what do they suggest?

ii. (2 marks)

Your registrar has ordered a chest xray and the film is reproduced on page 8 of the supplementary clinical information booklet. What is the major abnormality and what is the likely diagnosis in view of the information you have so far gathered?

iii. (6 marks)

List 5 important management interventions you will institute

fellowshipexam.com

Question 7.

A 36 year old male presents to the emergency department with a suspected overdose of an unknown tablet 2 hours previously.

Her vital signs are:

HR	112	/min
BP	118/60	mmHg
RR	27	/min
Sats	100%	RA
T	39	°C

His ECG shows sinus rhythm.

i. (6 marks)

The patient's venous gas is reproduced on page 9 of the supplementary information booklet.

Describe and interpret the major abnormalities. Provide calculations where relevant to support your answers.

ii. (3 marks)

What active treatment apart from haemodialysis, would you commence on this patient?

Question 7.

iii. (4 marks)

Give 4 indications for haemodialysis in this patient.

iv. (4 marks)

Outline your criteria for medically clearing this patient for discharge.

1.

2.

3.

4.

Question 8.

A 15 month old girl is brought to your emergency department by her nanny with burns, only to the areas shown in the photograph on page 9 of the supplementary information booklet. The history given is that the toddler pulled a cup of hot coffee from a bench onto herself.

i. (6 marks)

Describe the burn.

ii. (5 marks)

Give 6 steps in your initial management of this patient.

iii. (5 marks)

This image shows a blank sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. A faint, diagonal watermark reading "vshipexam.com" is visible across the center of the page.

Question 9.

A 26 year old woman is brought in by ambulance following drinking an unknown quantity of domestic bleach as a suicide attempt. She denies taking any tablets. Her complaints are nausea and pain on swallowing.

HR	115	/min
BP	110/63	/min
RR	22	/min
Sats	99%	RA
T	38	°C

i. (5 marks)

List 5 features you would seek in history or examination to evaluate the severity of potential oesophageal burns.

ii. (6 marks)

List 6 investigations you would perform and the indication for each.

1.

2.

3.

4.

Question 9.

iii. (7 marks)

Comment on the role and use of the following in this patient.

Mouth rinse:

Activated charcoal:

Stomach aspiration:

Neutralising solution:

Intubation:

Broad spectrum Abx

Corticosteroids:

iv. (2 marks)

Briefly outline your discharge criteria for any patient presenting to the ED following corrosive ingestion.

Question 10.

A 78 year old woman presents after (?injury) with acute neck pain and difficulty moving her arms and legs. She has severe respiratory distress and is being bagged by the ambulance.

A decision is made to perform a rapid sequence intubation. Following induction and paralysis, the patient's airway obstructs and she becomes unable to be bagged. A view of the cords is unobtainable on laryngoscopy due to upper airway haematoma obstructing the view.

The patient has desaturated to 82% and you are not able to ventilate via bag valve mask.

i. (8 marks)

List 4 approaches you might take to ventilate the patient with either an advantage or disadvantage of each.

ii. (3 marks)

A CT scan of the patient's c-spine is taken and an image is shown on page 11 of the supplementary information booklet. Describe the major abnormalities.

iii. (3 marks)

List 3 clinically important complications of this injury.

iii. (3 marks)

The patient's CT scans (pelvis, abdomen, chest & head) show no other injuries. There are no long bone fractures evident on secondary survey.

The patient's vital signs on returning from CT are:

HR	41	/min
BP	72/42	mmHg
RR	16	/min (ventilated)
O2 sats	100%	FiO2 tube 40%

What is the diagnosis?

iv. (2 marks)

Give 2 interventions you will apply to treat this issue.

**END OF
EXAMINATION**

fellowshipexam.com