



Fellowship Practice Exam

November 2017 - 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.

Candidate number _____

Question 19 (16 marks)

An intubated 2 year old child in respiratory failure from severe pneumonitis is waiting transfer to the paediatric ICU. He is ventilated in a pressure control mode.

After a period of relative stability the child becomes acutely hypoxic with elevated airway pressures.

a) List five (5) potential causes for this deterioration: (5 marks)

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

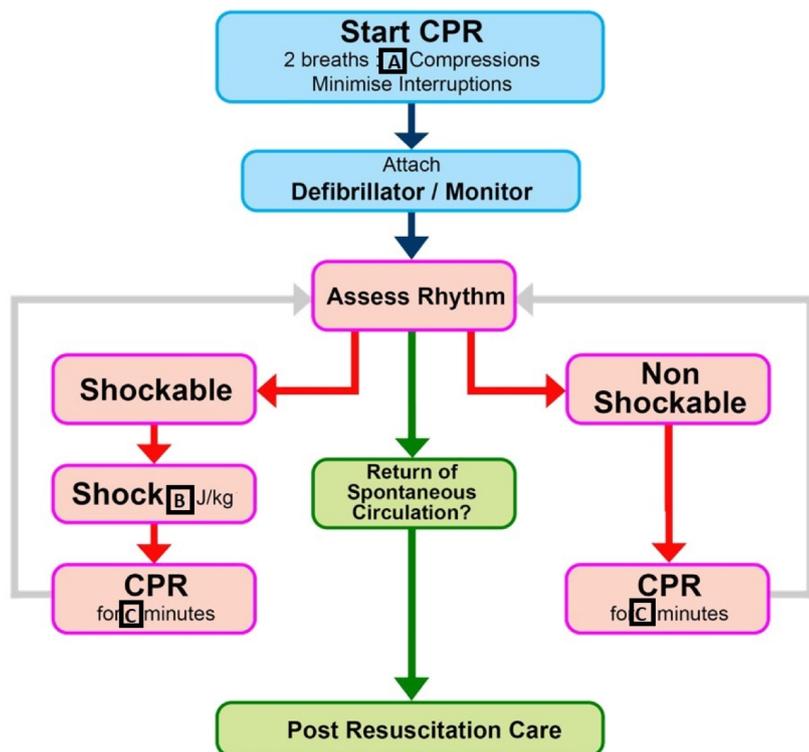
b) State your three (3) most immediate management priorities: (3 marks)

1. _____
2. _____
3. _____

Question 19 (continued)

c) The child has a PEA arrest and you commence cardiopulmonary resuscitation. Fill in the missing information (boxes A-H) on the Infant and Children ALS flowchart below: (8 marks)

Advanced Life Support for Infants and Children



During CPR
 Airway adjuncts (LMA / ETT)
 Oxygen
 Waveform capnography
 IV / IO access
 Plan actions before interrupting compressions

Drugs

Shockable
 * Adrenaline D mcg/kg after E shock (then every loop)
 * Amiodarone F mg/kg after G shocks

Non Shockable
 * Adrenaline D mcg/kg immediately (then every H loop)

Consider and Correct
 Hypoxia
 Hypovolaemia
 Hyper / hypokalaemia / metabolic disorders
 Hypothermia / hyperthermia
 Tension pneumothorax
 Tamponade
 Toxins
 Thrombosis (pulmonary / coronary)

Post Resuscitation Care
 Re-evaluate ABCDE
 12 lead ECG
 Treat precipitating causes
 Re-evaluate oxygenation and ventilation
 Targeted Temperature Management



January 2016



A) _____ B) _____

C) _____ D) _____

E) _____ F) _____

G) _____ H) _____

Question 20 (12 marks)

A 6 year old girl is brought to the emergency department by her concerned parents. She is unwell and complaining of a painful right eye. Her temperature is 38 deg celsius and Her left eye region is normal.

Her photo is shown in **PROPS BOOKLET ; page 12.**

a) List four (4) examination findings you will look for, which would suggest a major complication. (4 marks)

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

b) List three (3) key investigations for this child. State one (1) justification for use in this child. (6 marks)

	Investigation	Justification
1		
2		
3		

Question 20 (continued)

c) List two (2) options for antibiotic treatment, include dose and route (2 mark)

1. _____

2. _____

Question 21 (12 marks)

A 50 year old female presents to your Emergency department with Right upper quadrant pain.
He has been previously healthy and on no regular medications
Her vital signs are:

BP	90/50	mmHg
HR	120	bpm
Temp	38.9	deg Celcius
RR	24	/bpm
O2 sat	98%	RA

She is allergic to penicillin.

His LFTs are:

Bilirubin total	24	Umol/L	(2 - 24)
ALP	550	IU/L	(30 - 110)
GGT	480	IU/L	< 60
ALT	100	IU/L	< 55
Albumin	20	g/L	(34 - 48)

a) What is your diagnosis ? (1 marks)

b) State four (4) historical features that can help you determine the cause of her abnormalities. (4 marks)

1. _____

2. _____

3. _____

4. _____

Question 21 (continued)

c) State four (4) sonographic findings to confirm your diagnosis? (4 marks)

1. _____

2. _____

3. _____

4. _____

d) What is the 'Gold Standard' imaging test for above diagnosis? (1 mark)

e) List two (2) cons for stated 'Gold Standard' test.(2 marks)

Question 22 (12 marks)

A 7 yo boy presents with a non-blanching purpuric rash and abdominal pain. He appears well and is afebrile. You are concerned about HSP (Henoch-Schonlein Purpura)

a) List two (2) **other** features of the typical HSP rash. (2 marks)

1. _____

2. _____

His abdomen is soft and non-tender. Urine dipstick shows microscopic haematuria.

b) List four (4) other examination findings that may be associated with HSP and are important in deciding treatment.(4 marks)

1. _____

2. _____

3. _____

4. _____

You establish the likely diagnosis of HSP and request FBE and UECs.

c) State and explain one (1) feature on **FBE** that would exclude the diagnosis of HSP?(1 mark)

Question 22 (continued)

FBE is normal and UEC shows :

Na	140	mmol/L	(135 - 145)
K	4.2	mmol/L	(3.5 - 5)
Bicarbonate	22	mmol/L	(22 - 28)
Urea	8	mmol/L	(3 - 8)
Creatinine	108	umol/L	(50 - 100)

The patient is deemed safe for discharge after assessment and discussion with the paediatric inpatient team.

d) State five (5) important and specific elements of treatment and follow up required for this patient.

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

Question 23 (12 marks)

Your mixed Emergency Department has a high “did not wait” rate in comparison to adult presentations.

a) List four (4) potential reasons for this difference (4 marks).

1. _____

2. _____

3. _____

4. _____

b) State four (4) steps you would take to address this issue (4 marks)

1. _____

2. _____

3. _____

4. _____

Question 23 (continued)

c) List four (4) specific interventions you could consider to improve paediatric experience through your emergency department.(4 marks)

1. _____

2. _____

3. _____

4. _____

Question 24 (12 marks)

It is Friday 1600 hrs and You are the consultant in charge of emergency department in a tertiary hospital. You have been notified that a truck carrying **Chlorine Gas** has rolled over in one of the busiest motorways close to your hospital. Initial ambulance communication suggests that at least Thirty (30) bystanders, including 4 children may be affected.

a) State two (2) specific preparations that you would you make for this particular exposure (2 Marks)

1. _____

2. _____

b) List four (4) steps in preparing your department prior their arrival. (4 marks)

1. _____

2. _____

3. _____

4. _____

Question 24 (continued)

c) List Three (3) signs or symptoms of chlorine exposure that you would look for. (3 marks)

1. _____

2. _____

3. _____

You have been asked to review the current guidelines for Disaster management in your department,
d) State Three (3) important steps for this review process (3 marks)

1. _____

2. _____

3. _____

Question 25 (10 marks)

You department statistics show that 50% of patients who are eventually found to have a Primary Psychiatric disorder are being seen initially by an Emergency Department Doctor. One solution suggested is a direct Mental Health referral from triage for patients that appear to have a Mental Health problem to allow more appropriate initial review.

a) List Four (4) criteria for a patient to be transferred directly to psychiatric services (4 marks)

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

b) You institute a psychiatric triage reference card. List two (2) points that distinguish category one psychiatric patients from lower triage categories. (2 Marks)

1. _____
2. _____

Question 25 (continued)

c) In order to identify patients with delirium in the initial nursing assessment you plan to introduce the Confusion Assessment Method. State the four (4) clinical features that are used in this Method to rapidly identify delirium. (4 marks)

1. _____

2. _____

3. _____

4. _____

Question 26 (12 marks)

A 32 year-old male smoker is BIBA to the Emergency Department of a tertiary hospital following a fire at his metal cleaning and reclaiming shop. He has a fluctuating level of consciousness. His current examination shows:

GCS	13	(E4 M5 V4)
BP	88/55	mmHg
HR	130	bpm
Temperature	36.5	deg Celsius
RR	10	bpm
O2 Saturation	96%	on O2 6 L/minute via face mask

He has no evidence of airway compromise, burns or other significant injury.

The venous blood gas is taken and is available in **PROPS BOOKLET; PAGE 13**.

a) List three (3) important abnormalities. State One significance for each abnormality (6 marks)

1. _____

2. _____

3. _____

Question 26 (continued)

b) Provide two (2) calculations that will assist your diagnostic process. State how each calculation will contribute to the diagnosis (4 marks)

1. _____

2. _____

c) List the two (2) most clinically important differential diagnoses. (2 marks)

1. _____

2. _____

Question 27 (19 marks)

A 6 year-old boy is brought in to your Emergency Department by his parents after a fall onto his outstretched hand with hyperextension at the elbow.

The child's X-rays are shown in **PROPS BOOKLET; PAGE 14**.

a) State three (3) abnormalities in his X-rays. (2 marks)

1. _____

2. _____

3. _____

a) List one (1) classification method for the type of injury that is depicted, which view the method is based on and of which bone. (3 mark).

Classification _____

View _____

Bone _____

Question 27 (continued)

b) List the three (3) classification types of this injury and state a short description for each (6 marks)

	Class	Description
1		
2		
3		

c) List four (4) indications for urgent orthopaedic referral in this injury. (4 marks)

1. _____

2. _____

3. _____

4. _____

Question 27 (continued)

d) List four (4) potential complications of this injury. (4 marks)

1. _____

2. _____

3. _____

4. _____