

Question 1 (12 marks)

A 7 year old male with autism spectrum disorder presents with a painful arm following a fall at school. He has been given oral analgesia.

Despite placing the patient in a low stimulus environment, he is becoming more agitated, and you are unable to assess or treat him.

- a) List five (5) non-pharmacological measures that can be used to reduce his agitation. (5 marks)

1.

2.

3.

4.

5.

- b) Non-pharmacologic interventions have failed. List five (5) factors that will influence your choice of pharmacological agent in this child. (5 marks)

1.

2.

3.

4.

5.

The patient is now calmer, and an X-ray has been performed. **See Prop Booklet page X.**

c) List two (2) positive findings on the elbow X-ray. (2 marks)

1.

2.

Prop



Question 2 (12 marks)

A 32 year old female presents to the emergency department with a 3 hour history of severe right lower abdominal pain. Examination is unremarkable other than tenderness in the right lower abdomen.

The urine β -hCG is negative.

- a) List two (2) circumstances where a false negative urine β -hCG may occur. (2 marks)

1.

2.

You are concerned about ovarian torsion.

- b) List four (4) risk factors for ovarian torsion. (4 marks)

1.

2.

3.

4.

You arrange a formal ultrasound.

- c) Other than absent arterial flow, list four (4) features on ultrasound that are suggestive of ovarian torsion. (4 marks)

1.

2.

3.

4.

- d) List two (2) reasons why there may be preserved arterial doppler flow on ultrasound in a patient who is later confirmed to have a torted ovary. (2 marks)

1.

2.

Question 3 (12 marks)

A 3 year old female presents with brief jerking of all limbs, which self-resolved. She has no medical history and is currently well, with no recent trauma or infective symptoms.

Her examination, vital signs and blood glucose are normal.

You consider whether this event may be a first seizure.

- a) Other than seizure, list three (3) seizure mimics that could account for this presentation. (3 marks)

1.

2.

3.

You ask her parents to describe in detail what they observed during the event.

- b) List six (6) features of the parents' description of the event that make a seizure the most likely cause. (6 marks)

1.

2.

3.

4.

5.

6.

Her neurological examination and investigations are normal.

The parents ask whether she is likely to have further seizures.

- c) List three (3) risk factors that increase the risk of recurrent seizures in this patient.
(3 marks)

1.

2.

3.

Question 4 (12 marks)

A 70 year old male is brought to your rural emergency department. He reports increasing weakness and difficulty getting out of bed this morning.

His medical history includes type 2 diabetes and chronic kidney disease.

The blood sugar level is 12.5 mmol/L.

His vital signs are:

HR	98 bpm
BP	170/100 mmHg
SaO ₂	95 % in room air
RR	24 /min
Temp	36.9 °C

The patient's ECG is provided. **See Prop Booklet page X.**

- a) State the most likely diagnosis for the ECG changes seen. (1 mark)

- b) List three (3) supporting features for this diagnosis on the ECG. (3 marks)

1.

2.

3.

- c) List four (4) important drugs (dose and route required) you would prescribe for this patient. (4 marks)

	Drug	Dose and route
1.		
2.		
3.		
4.		

This presentation was found to be due to medication non-adherence.

- d) List four (4) ways to reduce medication non-adherence in the elderly. (4 marks)

1.
2.
3.
4.

Prop



25 mm/sec 10 mm/mV Filters 40-150Hz