

Candidate No: \_\_\_\_\_



## The Hong Kong College of Anaesthesiologists

### Final Fellowship Examinations

#### Paper II – Investigations (1-6)

17 August 2022 (Wednesday)

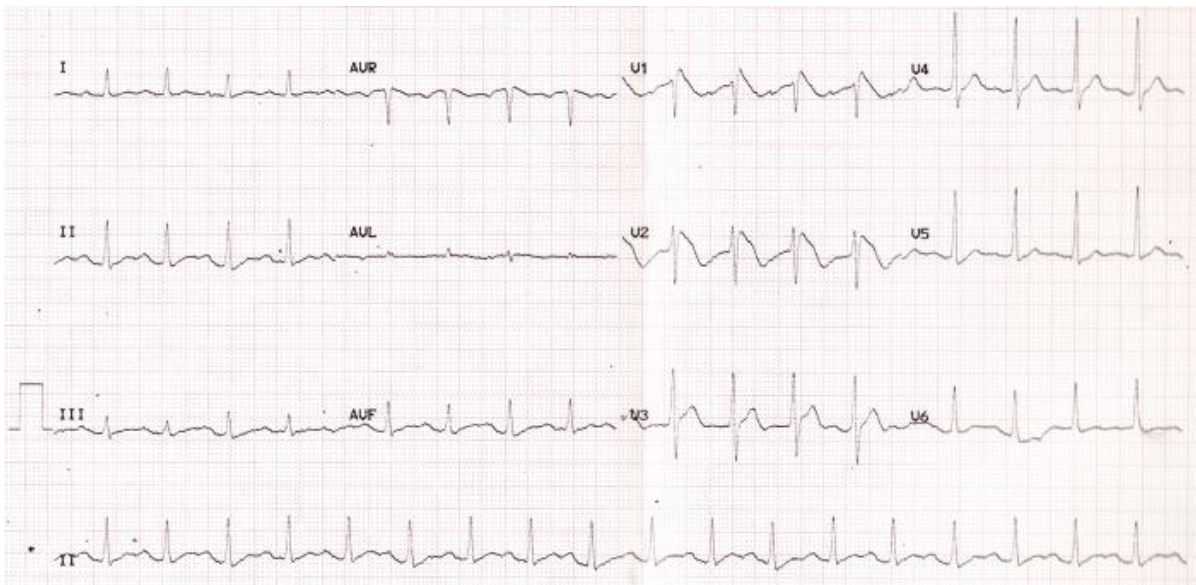
12:30 – 12:40 hours

#### Instructions:

- This is a question-answer book. Please write your answers in the space provided.
- Write your candidate number on the first page of the answer book.
- Use ink or ball-point pen.
- There are 6 questions in this paper, each with multiple parts.
- Answer **ALL** questions. They are worth equal marks.
- For questions with multiple parts, allocation of marks is indicated in the brackets.

#### Question 1 (3 marks)

In the preanaesthetic clinic, you review the following ECG of a 40-year-old man who had one previous episode of syncope.



List 2 ECG abnormalities. (2 marks)

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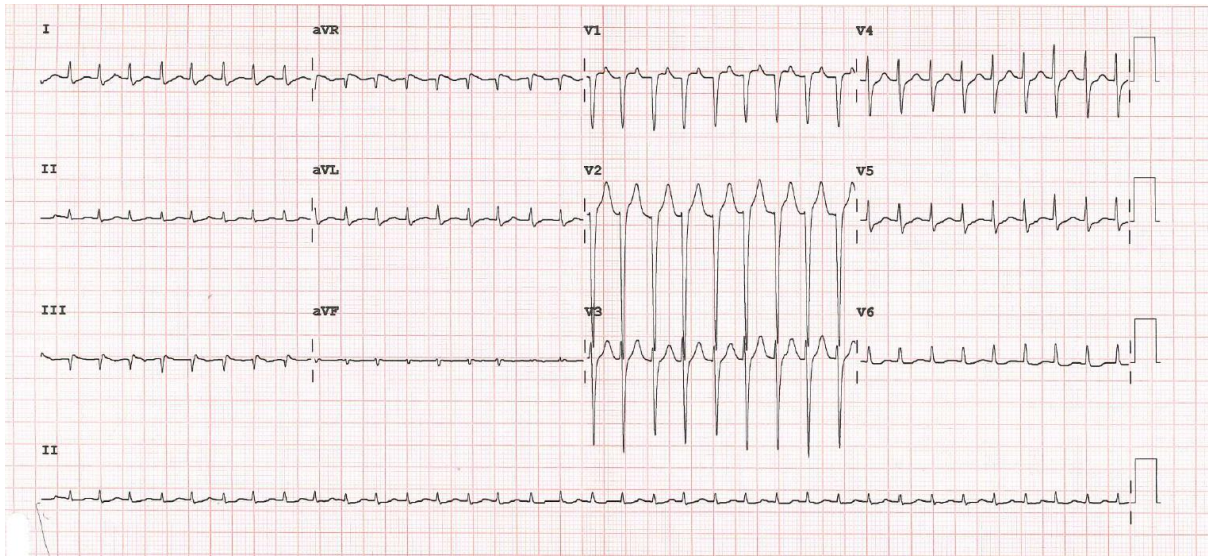
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What is the diagnosis? (1 mark)

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**Question 2 (3 marks)**

In the recovery room, a 65-year-old man is noted to have tachycardia. The following is his 12-lead ECG,



List 2 ECG abnormalities. **(2 marks)**

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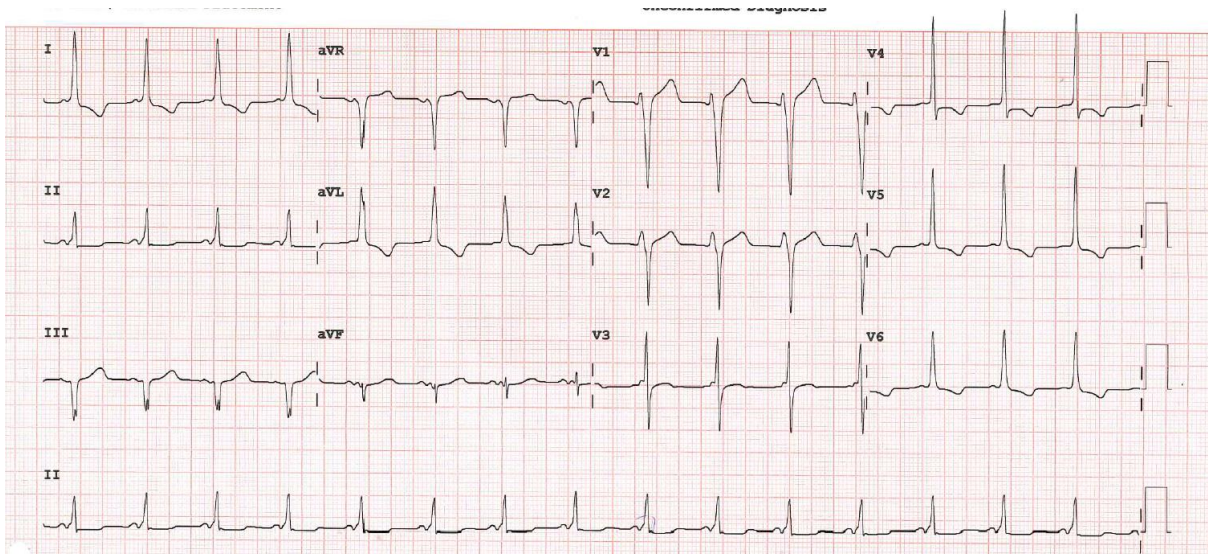
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What is the first line medication for the above ECG changes? **(1 mark)**

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**Question 3 (5 marks)**

In the preanaesthetic clinic, you review the following ECG of a 30-year-old man who had one previous episode of palpitation.



List the ECG abnormalities. **(4 marks)**

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What is the diagnosis? **(1 mark)**

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**Question 4 (4 marks)**

A 65-year-old woman with anxiety disorder is brought to the hospital for a fractured left humerus after a fall with other symptoms of dizziness, vomiting and confusion for one day. She is not dehydrated nor oedematous with normal looking tongue mucosa and skin turgor. You find the following investigation results when you are assessing her in the pre-anaesthetic assessment before her emergency surgery,

Parameters	Values	Normal range
Sodium	115 mmol/L	134-143
Potassium	4.2 mmol/L	3.5-5.0
Urea	2.2 mmol/L	3.1-8.1
Creatinine	43 µmol/L	50-90
Serum osmolarity	264 mOsm/Kg	275-295
Urine sodium	<20 mmol/L	
Urine osmolality	67 mmol/Kg	

Describe the abnormalities. **(1 mark)**

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What is the likely cause of her symptoms? **(1 mark)**

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How will you manage this patient before surgery? **(2 marks)**

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**Question 5 (6 marks)**

You are performing a preoperative assessment of a 45-year-old woman scheduled for an emergency diagnostic laparoscopy +/- drainage of her right tubo-ovarian abscess. She was admitted to the hospital for fever and right sided abdominal pain. Transvaginal and transabdominal ultrasound found a right adnexal tubular cystic structure. She is in sinus tachycardia with heart rate of 140/min, high fever of temperature 39 degree Celsius and a painless diffuse goitre with smooth surface. The following is her thyroid function test,

Parameters	Values	Normal range
Serum TSH	<0.01 mIU/L	0.27-4.20
Serum free T4	82.7pmol/L	12.0-22.0
Thyroid-stimulating hormone receptor antibody (TSHR-Ab)	Positive	

What is the current thyroid status? **(1 mark)**

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What is the underlying thyroid disease? **(1 mark)**

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How will you manage her after your preoperative assessment? **(4 marks)**

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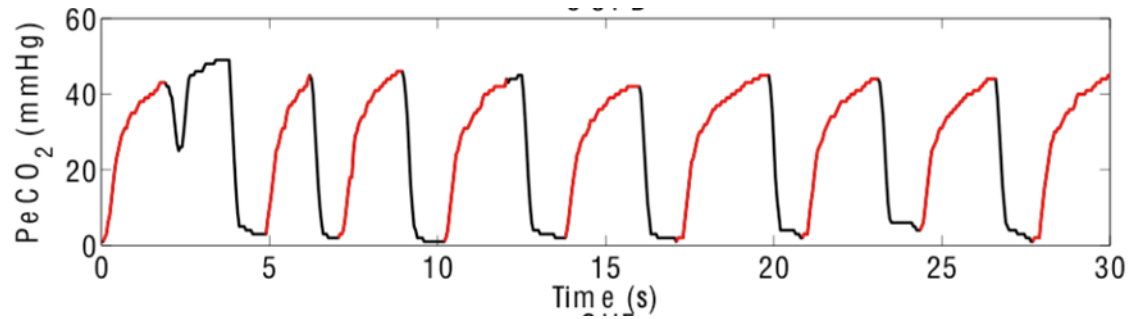
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**Question 6 (3 marks)**

A 25-year-old woman was found comatose and subsequently intubated. The following is her capnography after intubation.



Please name three possible causes (pathological or non-pathological) for the above capnography. **(3 marks)**

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----- End of Paper -----