

Candidate No: _____



The Hong Kong College of Anaesthesiologists

Final Fellowship Examinations

Paper II – Investigations

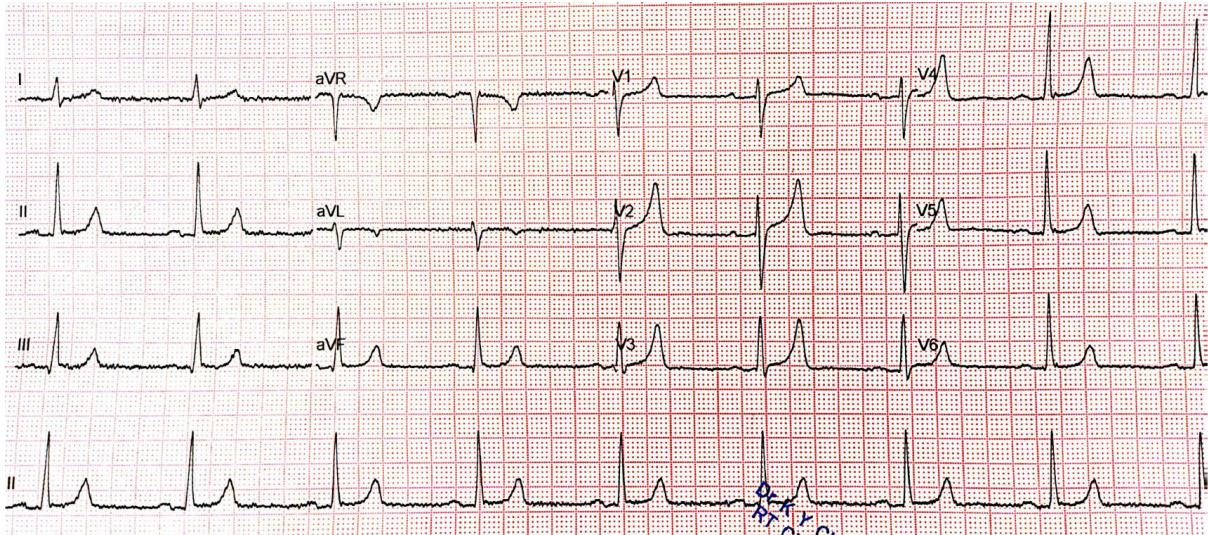
11 August 2025 (Monday)

12:20 – 12:30 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 5 questions in this paper, each with multiple parts.
- Answer **ALL** questions.
- For questions with multiple parts, allocation of marks is indicated in the brackets.

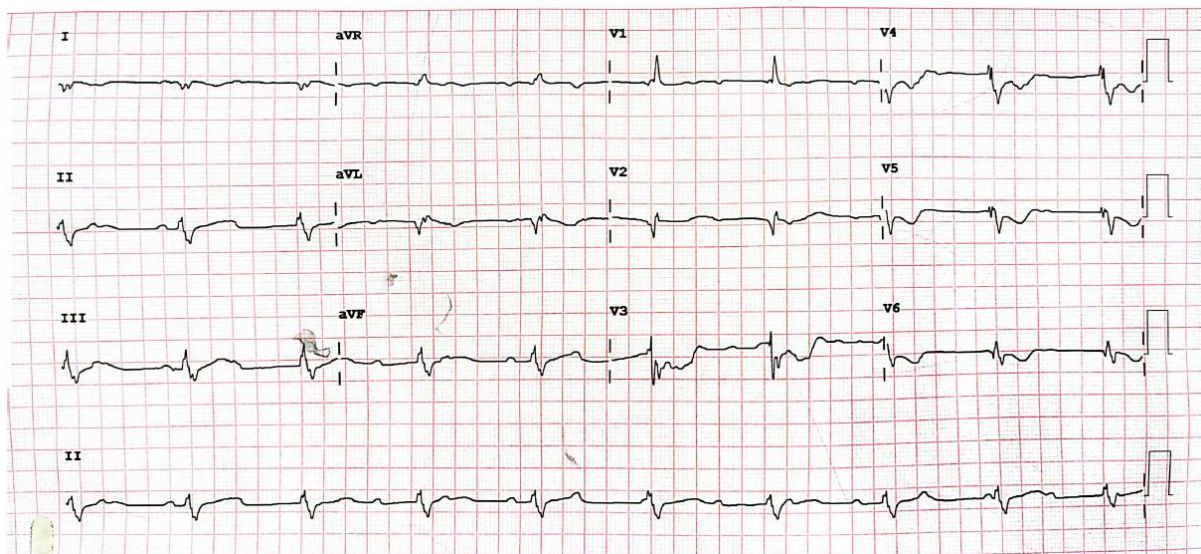
Question 1 (4 marks)



A. What are the ECG abnormalities? (2 marks)

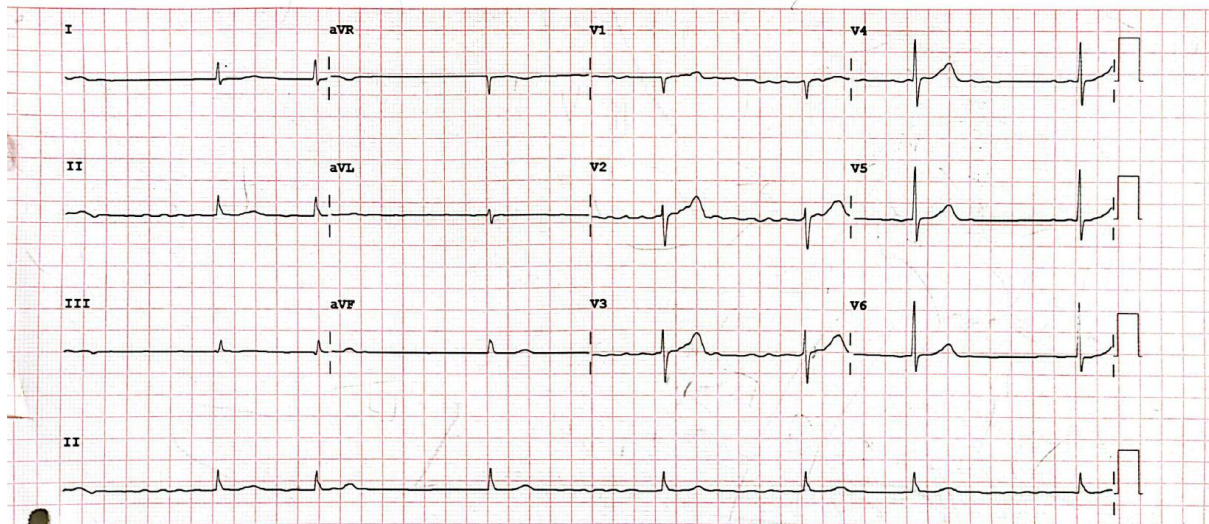
B. What is the diagnosis? (2 marks)

Question 2 (3 marks)



What are the ECG abnormalities? (3 marks)

Question 3 (3 marks)



What are the ECG abnormalities? (3 marks)

Question 4 (5 marks)

A 65-year-old lady was admitted because of generalised malaise, postural dizziness and a fall which caused her a neck of femur fracture. On examination, she was found to have bitemporal hemianopia. You saw her hormone profile in your pre-anaesthetic assessment as follows:

Test	Result	Reference
fT3	2.82	3.00 - 5.70 pmol/L
fT4	8.1	9.5 - 18.1 pmol/L
TSH	0.32	0.35 - 3.80 mIU/L
LH	9.0	Follicular phase 2.1 - 10.9 IU/L Luteal phase 1.2 - 12.9 IU/L Mid-cycle 19.2 - 103.0 IU/L
FSH (IU/L)	4.2	Follicular phase 3.9 - 8.8 IU/L Luteal phase 1.8 - 5.2 IU/L Mid-cycle 4.5 - 22.5 IU/L
Estradiol	56	Follicle Phase 99 - 448 pmol/L Luteal phase 180 - 1068 pmol/L Mid-cycle 349 - 1589 pmol/L
Prolactin	286	71 - 566 mIU/L
Cortisol (at 9am)	< 22	

A. What is the diagnosis? (3 marks)

B. What should be the pharmacological treatment before proceeding to surgery for her fracture? (2 marks)

Question 5 (5 marks)

A 65-year-old man is booked for an emergency insertion of an external ventricular device for intracranial pressure monitoring. He sustained a fall two days ago with a CT scan showing a bilateral frontal haemorrhage. His GCS dropped from 14/15 to 10/15, with two episodes of vomiting. He was recently diagnosed with an anxiety disorder and started on SSRI two months ago. The following are his blood test results. His tongue mucosa is dry, with decreased skin turgor.

	00:00	02:00	04:00	06:00
Serum Sodium (mmol/L)	120			119
Serum Potassium (mmol/L)	4.1			3.8
Serum Urea (mmol/L)	6.4			5.9
Serum Creatinine (mmol/L)	60			60
Serum Osmolality (mmol/kg)	267			253
Urine Sodium (mmol/L)	145			165
Urine Osmolality (mmol/Kg)	819			922
Urine output (ml) (ml per hour)	120	150	150	200

A. What is the most likely diagnosis? (2 marks)

B. What is the pathophysiological mechanism of the diagnosis? (2 marks)

C. What pharmacological treatment should be initiated? (1 mark)

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