

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



**The Hong Kong College of Anaesthesiologists**

**Final Fellowship Examinations**

**Paper II – Investigations**

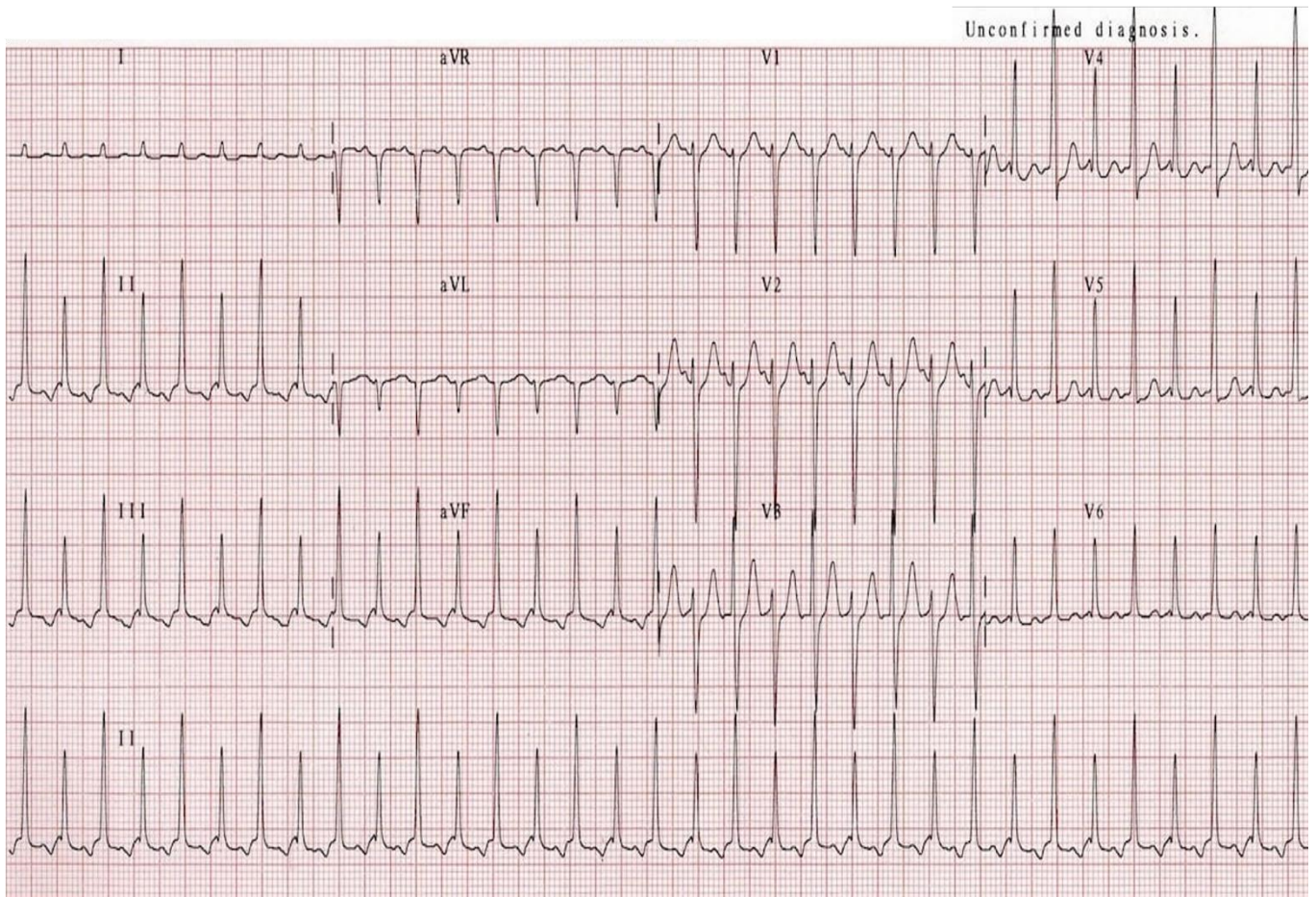
**17 March 2025 (Monday)**

**12:20 – 12:30 hours**

**Instructions:**

- a. This is a question-answer book. Please write your answers in the space provided.
- b. Write your candidate number on the first page of the answer book.
- c. Use ink or ball-point pen.
- d. There are 5 questions in this paper, each with multiple parts.
- e. Answer **ALL** questions.
- f. For questions with multiple parts, allocation of marks is indicated in the brackets.

**Question 1 (5 marks)**



**A. Name 4 ECG abnormalities. (4 marks)**

---

---

---

---

**B. Give one clinical condition that would present with this ECG pattern. (1 mark)**

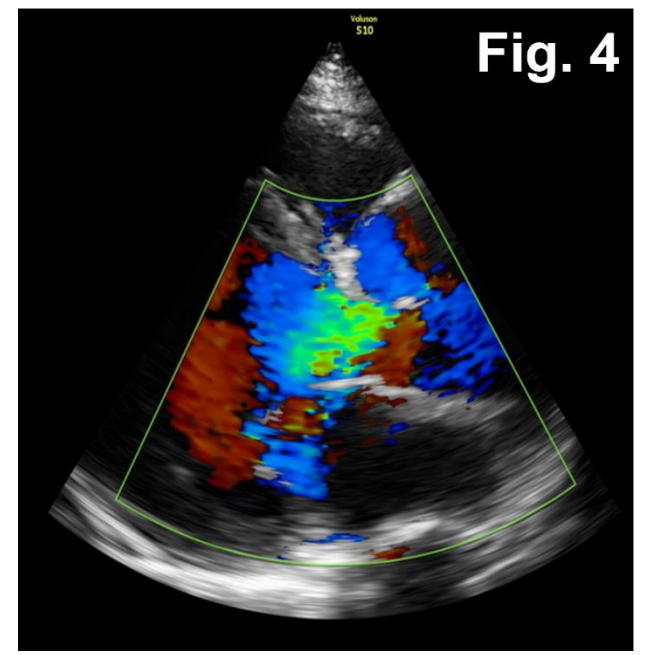
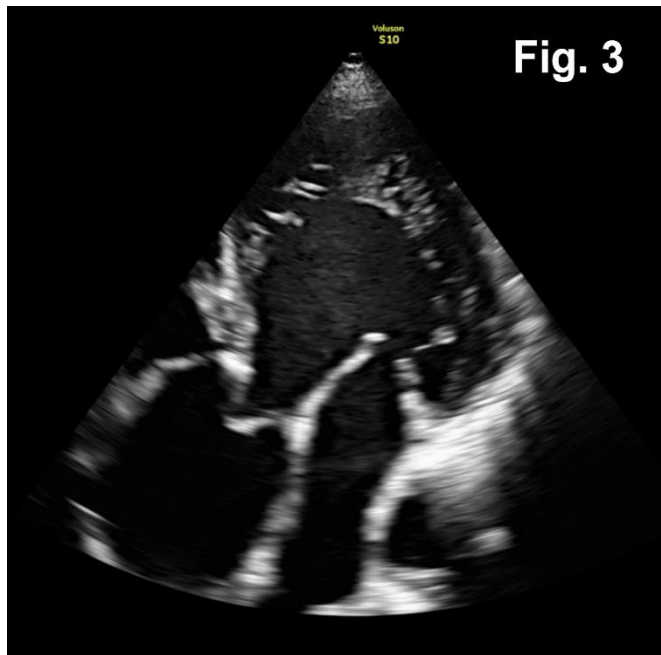
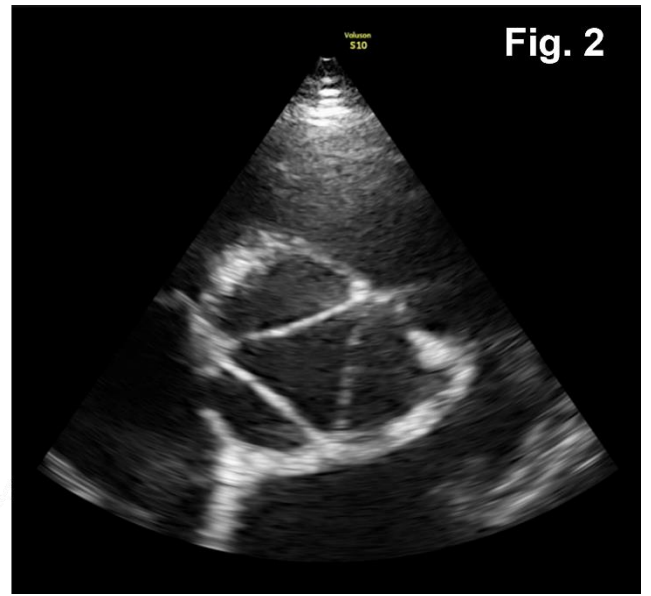
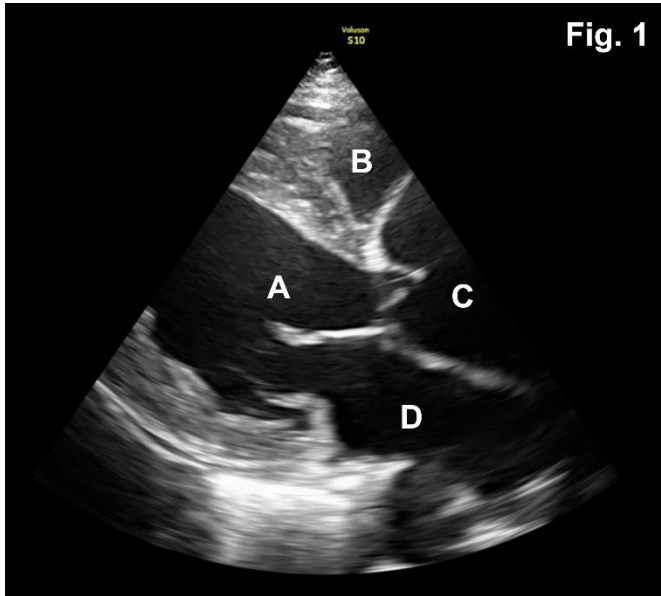
---

---

---

---

Question 2 (8 marks)



A. Name the structure of A, B, C and D of the echo view in Fig 1. (2 marks)

---

---

---

---

**B. Describe the Echo finding as showed in Fig 1 – 4. (3 marks)**

---

---

---

---

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

---

---

---

---

**D. Name other 2 echo features you will look for to determine the severity of the diagnosis.  
(2 marks)**

---

---

---

---

**Question 3 (8 marks)**

These are the biochemical results taken from a 48-year-old male, missing from an alcohol rehabilitation program and found in his home, comatose, by police, three days from the time he was last seen.

Parameter	Patient Value	Normal Adult Range
Sodium	126 mmol/L*	138 – 145
Potassium	3.5 mmol/L	3.5 – 5.0
Creatinine	250 µmol/L*	40 – 100
Urea	7.0 mmol/L	3.1 – 7.5
Bilirubin (total)	509 µmol/L *	2.0 – 22.0
Protein (total)	40 g/L*	65 – 85
Albumin	20 g/L*	38 – 48
Alkaline phosphatase (ALP)	153 IU/L*	40 – 100
Gamma glutamyl transferase (GGT)	459 IU/L*	0 – 50
Alanine aminotransferase (ALT)	336 IU/L*	0 – 45
Creatine kinase (CK)	400 IU/L*	30 – 180
Glucose	3.2 mmol/L*	3.5 – 4.6
Ammonia	342 µmol/L	0 – 50
Lactate	3.7 mmol/L*	0.6 – 2.4

**A. Comment, with explanation, on each of the biochemical abnormalities. (5 marks)**

---

---

---

---

---

**B. List three possible causes of his altered conscious state. (3 marks)**

---

---

---

---

**Question 4 (5 marks)**

**List five (5) likely causes for the following coagulation profile: (5 marks)**

<b>Test</b>	<b>Value</b>	<b>Normal Range</b>
PT*	35.4 sec	(12.0 – 15.0)
INR*	3.5	(0.8 – 1.1)
APTT*	>170.0 sec	(25.0 – 37.0)
FIBRINOGEN*	0.9 G/L	(2.20 – 4.30)

---

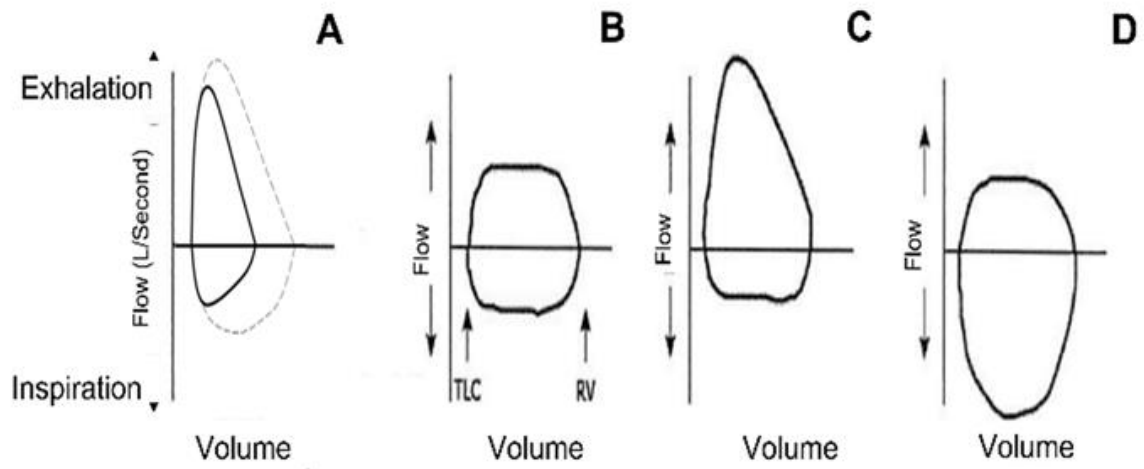
---

---

---

**Question 5 (4 marks)**

**Name the pathology and a clinical condition for the Flow-Volume Loops for A to D. (4 marks)**



---

---

---

---

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