



COLLEGE OF INTENSIVE CARE MEDICINE OF AUSTRALIA AND NEW ZEALAND

SECOND PART EXAMINATION

EXAM REPORT

March / May 2026

This report is prepared to provide candidates, tutors, and Supervisors of Training (SoTs) with information regarding the assessment of candidates' performance in the CICM Second Part General ("SP") Examination. This report is for use as an educational resource and includes a guide as to expected content of the answers for the written section. Trainees/SIMGs should discuss the report with their supervisors and educators so that they may prepare appropriately for future examinations. Trainees/SIMGs should not rely solely on writing practice answers to previous exam questions for exam preparation and should first establish a strong knowledge base from clinical learning and studying relevant texts, journals, and on-line resources.

The exam consists of a written section and an oral section. The written section includes two papers, comprised of 15 short answer questions each. The pass mark for the written section is derived by the Angoff method and for this sitting was set at 52.01%. The oral section consists of eight interactive Vivas and two separate clinical hot cases. The Vivas were completed in Sydney over two consecutive days (Thursday 21 and Friday 22 May 2026), and the hot cases were completed in Sydney (Wednesday 20 May 2026).

The tables below provide an overall statistical analysis as well as information regarding performance in the individual sections. A comparison of data from the six previous exams is provided.

In all sections of the exam, the candidate must demonstrate performance consistent with that of a trainee who is ready to enter the transition year of the CICM training program, by demonstrating they have the ability for safe, effective, independent practice as a transitional fellow. Candidates who do not meet this level are advised to postpone their exam attempt.

Overall Performance	2026.1	2025.2	2025.1	2024.2	2024.1	2023.2	2023.1
Presenting for written (Including SIMG)	71	83	62	108	76	81	66
Carrying a written pass or exempted from a previous attempt	12	17	13	17	20	11	8
SIMG written exempt	4	2	1	3	4	2	2
Total number presenting (written + carry + SIMG)	87	102	77	128	100	94	76
Invited to orals (passed written section)	47	45	41	53	45	47	24
Total number invited to the oral section	65	64	56	70	65	58	32

Analysis of Performance in Individual Sections	2026.1	2025.2	2025.1	2024.2	2024.1	2023.2	2023.1
Successful in the written section	47/72	45/83	41/62	53/108	45/76	47/81	24/66
	65%	54%	66%	49%	59%	58%	36%
Successful in the Hot case section	39/63	37/64	35/56	43/70	31/65	32/58	18/32
	62%	58%	63%	61%	48%	55%*	56%
Successful in <u>both</u> Hot cases	25/63	24/64	24/56	24/70	17/65	17/58	13/32
	40%	38%	43%	34%	26%	29%	41%
Successful in the Viva section	40/63	50/64	46/56	51/70	53/65	48/58	27/32
	63%	78%	82%	73%	82%	83%	84%

Sectional Pass Rates	2026.1			2025.2		2025.1		2024.2		2024.1		2023.2	
Hot cases	Pass rate	Highest individual mark		Pass rate	Highest individual mark	Pass rate	Highest individual mark	Pass rate	Highest individual mark	Pass rate	Highest individual mark	Pass rate	Highest individual mark
Hot case 1	62%	90%		55%	90%	57%	90%	60%	85%	48%	90%	53%	83%
Hot case 2	60%	85%		61%	90%	66%	90%	49%	80%	51%	80%	53%	85%
Vivas**			Vivas*										
Procedure Viva 1	60%	95%	Viva 1	73%	93%	77%	83%	64%	88%	77%	90%	76%	85%
Viva 2	43%	80%	Viva 2	67%	88%	73%	80%	50%	68%	74%	90%	67%	79%
Viva 3	78%	90%	Radiology Viva 3	61%	88%	36%	69%	67%	80%	54%	70%	48%	76%
Radiology Viva 4	59%	75%	Procedure Viva 4	45%	80%	75%	85%	49%	93%	71%	90%	74%	88%
Viva 5	57%	75%	Viva 5	67%	83%	80%	95%	73%	90%	62%	85%	76%	90%
Viva 6	62%	80%	Viva 6	80%	83%	70%	77.5%	81%	93%	58%	97%	79%	91%
Viva 7	73%	93%	Viva 7	53%	95%	57%	90%	46%	75%	85%	94%	83%	79%
Communication Viva 8	57%	100%	Comms Viva 8	67%	93%	70%	100%	67%	91%	72%	83%	53%	85%

*Vivas 1, 2, 3 and 4 were examined on Thursday and Vivas 5, 6, 7 and 8 were examined on Friday.

**Procedure and Radiology stations were re-ordered 2026.1.2

KEY: Radiology Viva Procedure Viva

Oral Section Pass Rates	2026.1	2025.2	2025.1	2024.2	2024.1	2023.2	2023.1
Candidates who passed the written section and passed the overall exam	34/47	33/47	30/41	39/53	37/45	34/47	17/24
	72%	70%	73%	74%	82%	72%	71%
All candidates invited to oral section and passed the overall exam (written + carry + SIMG)	40/63	43/64	43/56	46/70	50/65	40/58	23/32
	63%	67%	77%	66%	77%	69%	72%

EXAMINERS' COMMENTS

Written Paper

65% of the Second Part examination candidates who sat the May 2026 written section were invited to the oral section. Candidates who did not qualify for an invitation did so for one or more of the following reasons:

- Insufficient knowledge of the topic in question
- Insufficient detail and/or depth of the answer
- Poorly structured answer
- Inadequate reference to supportive evidence where relevant
- Failure to answer the question asked
- Omission of all or part of the question

Candidates that failed questions most often gave insufficiently detailed answers that were not at the level expected of a transitional fellow. Candidates often gave generic “proforma” answers that did not deal with the specific issues or scenario outlined in the question.

Candidates were advised to read the questions carefully and thoroughly and ensure they answer the specific questions asked and address all parts of each question. Examiners commented that candidates had not appeared to consider the mark distribution in some multi-part questions, spending too little time on the more important sections. Candidates were reminded to make sure their writing was legible and to avoid using non-standard abbreviations. Candidates were also reminded that professional conduct was being assessed throughout the exam process and that inappropriate comments written on the answer paper are not acceptable.

The examination report was then referenced to the syllabus to aid the candidate in directing their study more effectively. A selection of marking rubrics to complement the SAQ discussion have been published to guide trainees, SOTs, and educational advisors in the requirements of the assessment process and the standard of written content expected of the transitional fellow.

Candidates were strongly encouraged to consider feedback and advice from SOTs and educational advisors when considering the appropriate time for them to attempt the Second Part Examination.

Content Coverage and weighting of the SP syllabus

The CICM [T-18.1](#) (2025) document details the Second Part Examination construction, content and weighting of the SP syllabus. The aim of this resource is to ensure all CICM SP examination sittings are fair, consistent and aligned with the syllabus.

The T-18 document applies for all Second Part examination sittings commencing 2025, however the written paper has followed the principles outlined in T-18 (2025) for the past four SP examination sittings as the syllabus was developed and released for the 2024 sittings.

The Knowledge of the syllabus coverage and weighting will help candidates, tutors and SOTs understand the scope of the examination, act as an educational resource, and focus their preparation efforts accordingly.

Coverage of the Syllabus Domains of Content

The Second Part examination written section will cover >65-70% of the syllabus domains per sitting.

	2026.1	2025.2	2025.1	2024.2
Syllabus domain coverage	74%	70%	74%	74%

Levels of Understanding

L2 Conditions and topics will comprise no more than 30% of the written paper in total (90 marks out of 300 marks) and L2 conditions and topics will not form the primary focus of individual Vivas.

Levels of understanding	2026.1	2025.2	2025.1	2024.2
Level 1	83%	87%	82%	92%
Level 2	17%	13%	18%	8%

Categories of the SAQs

SAQs will examine candidates at different cognitive levels e.g., ability to recall, understand, apply, analyse and evaluate knowledge based on Blooms taxonomy.

Categories of SAQs	2026.1 - SAQ totals	2025.2 – SAQ totals	2025.1 - SAQ totals	2024.2 - SAQ totals
Clinical Dx/Assessment	12	9	8	9
Clinical Management	10	12	10	9
Interpretation of Investigations	4	4	4	5
Evaluations of Evidence	1	2	2	3
Professional behaviour	1	0	2	1
Equipment/Procedure	2	2	5	3

Distribution of the written examination 2026.2

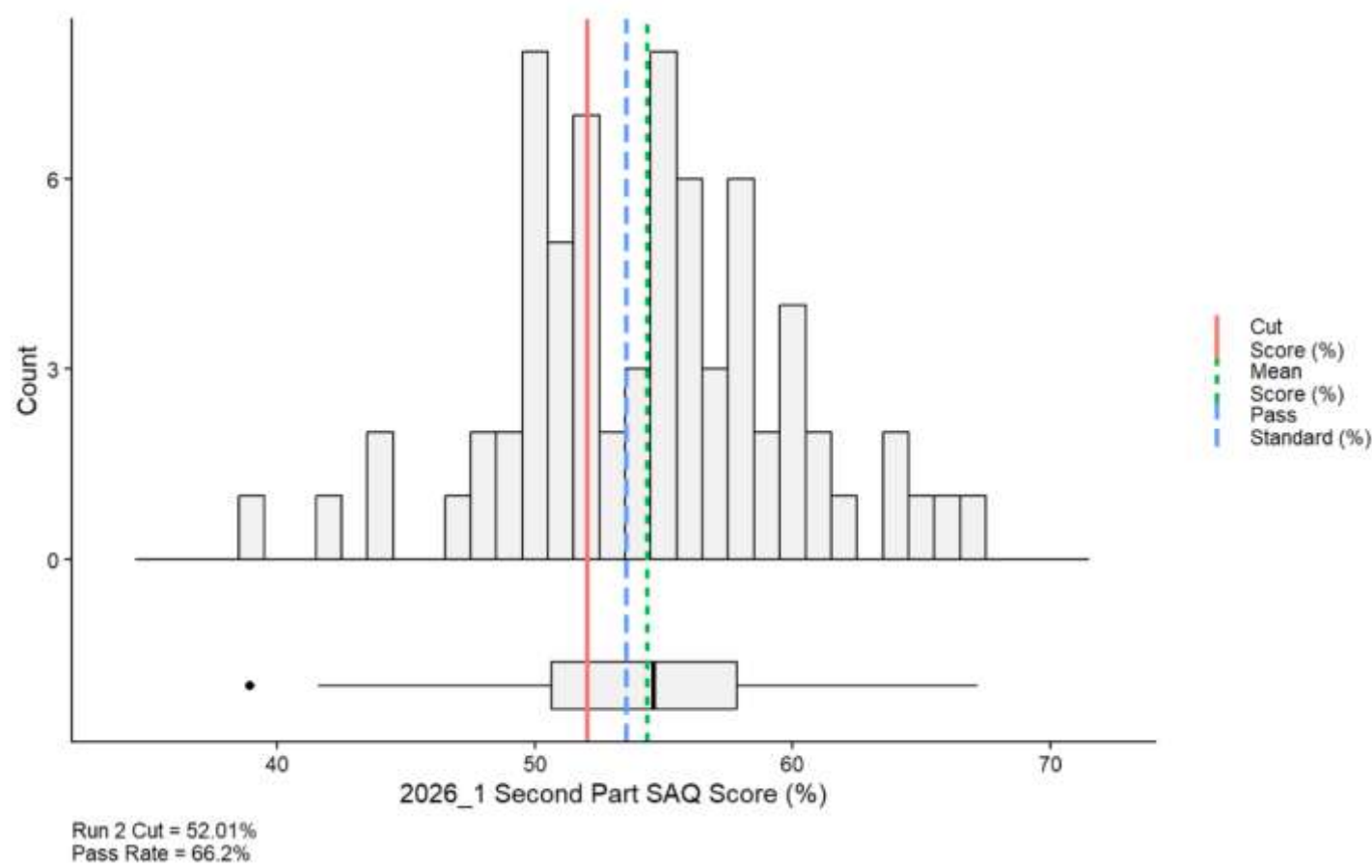


Figure 1: Distribution Plot of Second Part SAQ Exam Raw Scores

SECOND PART WRITTEN EXAMINATION

- a) Write your answers in the blue books provided. **Each** question should be answered in a separate booklet. Please **DO NOT** write two short answer questions in the same booklet.
- b) Start each answer on a **new booklet** and indicate the **question number**. It is not necessary to rewrite the question in your answer book.
- c) You should aim to answer each question in **ten** minutes.
- d) **All** questions are worth ten marks each in total.
- e) Record your **candidate number** and each **question number** on the cover of each book, page, and hand in all booklets.

GLOSSARY OF TERMS

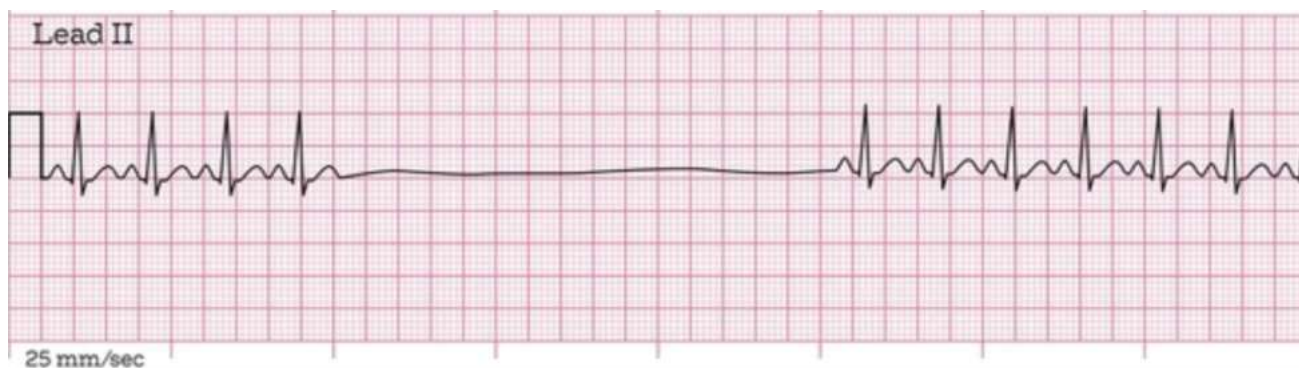
Assessment:	Generic term that implies determining an underlying diagnosis, encompassing; history, clinical examination, and relevant investigations.
Compare and contrast:	Provide a description of similarities and differences. You may tabulate your answer.
Critically evaluate:	Provide and explain the evidence available relating to a topic.
Define:	Provide the meaning of a requested topic
Discuss:	Explain the underlying key principles. Where appropriate, this may include controversies and/or advantages and disadvantages.
Explain:	Make plain or known in detail.
Illustrate:	Make clear by using specific example(s) or a diagram to demonstrate.
Interpret:	Provide the meaning of the given data/information.
Justify:	Provide a rationale to support your stated position. Where relevant give evidence.
List:	Provide a series of items or points, in bullet or numbered format
Management:	Generic term that implies determining an overall management plan, encompassing; resuscitation, definitive treatment, initial and ongoing monitoring with supportive treatment.
Outline:	Provide an organised overview of the important points.
Summarise:	Condense relevant information into a systematic arrangement or classification.

NOTE

Where laboratory values are provided, abnormal values are marked with an asterisk (*)

Question 1

An 82-year-old patient is referred for management with the following ECG:



- a) Outline your assessment of the patient including your rationale for the investigations (6 marks)
- b) Discuss the specific management options of the arrhythmia in the first 24 hours if the patient becomes unstable (4 marks)

Syllabus topic/section:

2.1.4 Cardiovascular Intensive Care (L1)

Discussion:

The better performing candidates provided depth and detail to their assessment for a sinus arrest. For example, listing "medications", without being specific as to *which* medications, as a potential cause of the arrhythmia is insufficient. The better candidates nominated specific medications such as calcium channel blockers, beta blockers or digoxin toxicity and searched for specific risk factors in the history and investigations.

Candidates should be mindful of the glossary of terms as many candidates missed out marks in part b) by outlining resuscitation steps instead of a) *DISCUSSION* of the options available including advantages and disadvantages. These include nomination of pacing in all its forms (e.g., transvenous, transcutaneous etc.) and pharmacological options. Examples include but are not limited to atropine, adrenaline, isoprenaline, and antidotes to specific toxidromes that might cause this arrhythmia.

Angoff score for this SAQ	5.5
Highest candidate score achieved	8.5
Angoff pass rate	43.7%

Question 2

Compare and contrast viral encephalitis and autoimmune encephalitis under the following headings:

- a) Common causes (2 marks)
- b) History (3 marks)
- c) Cerebrospinal fluid analysis (3 marks)
- d) Specific treatment of the encephalitis (2 marks)

Syllabus topic/section:

2.1.3 Sepsis and Infections (L1),
2.1.8 Neurological Intensive care (L1),
2.1.10 Immunological and Rheumatological Intensive Care (L2)

Discussion:

Overall, this was well answered by the majority of candidates. Errors included some candidates describing post-infective encephalitis or conditions related to autoimmune disease instead of autoimmune encephalitis, which did not attract marks. Candidates who performed well noted clearly the differences and similarities between the two conditions' clinical features. The sections on CSF analysis and treatment were completed well by the majority of candidates. Examiners noted that the use of a table format for this 'compare and contrast' question was useful for many candidates.

Angoff score for this SAQ	5.1
Highest candidate score achieved	8.75
Angoff pass rate	83.1%

Question 3

Your ICU's Standardised Mortality Ratio (SMR) over the last 12 months has been noted to be above the 95% confidence interval (CI) for comparable ICUs in the National database.

a) Outline the limitations of SMR (3 marks)

b) Outline your approach to investigating a high SMR (7 marks)

Syllabus topic/section:

2.1 Medical Expert (2.1.1 structure and process, 2.1.2 Decision making - L1)

2.3 Leader & manager (2.3.1 Intensive Care administration – L1)

Discussion:

Most candidates were able to give possible reasons for an observed increased mortality. Candidates who did not score well in general tended to overlook validation of data or checking accuracy measures (quality/coding integrity, etc.) in interpreting the SMR signal. Providing a definition of the SMR in this question did not attract marks, as this was not part of the question asked.

Candidates who scored well in this question displayed a good understanding of model limitations, the impact of data quality and case-mix on SMR and its limitations as an outcome measure of ICU quality of care.

Candidates were encouraged to work on developing structured answers. Higher scoring candidates answered in a structured fashion and included clinical governance and quality assurance processes in their responses.

Angoff score for this SAQ	4.75
Highest candidate score achieved	7
Angoff pass rate	50.7%

The rubric is provided to aid candidates' future study.

Domain	Below standard	At standard	Above standard
a) (3 marks)	Absent or limited details in the answer Or fails to adequately outline – just provides an unstructured list (0-1.0 marks)	Can demonstrate some understanding of the limitations Outline covers most of the limitations Includes at least: • Case-mix & model limitations • Data quality issues (1.5-2.0 marks)	At standard PLUS: Well-structured answer with <u>all 4 categories</u> of limitations mentioned and outlined (2.5-3.0 marks)
b) (7 marks)	Absent or limited details in the answer Or fails to adequately outline – just provides an unstructured list (0-3.5 marks)	Can demonstrate some understanding of how to go about investigating. Outlines a reasonable approach Outline includes at least: • Validation of the signal • Data integrity & coding review • Subgroup analysis aspects (4.0-5.5 marks)	At Standard PLUS: Demonstrates a well-structured answer i.e. (identification followed by response) including addressing Clinical governance aspects. (6.0-7.0 marks)

Question 4

A 28-year-old patient presents to a regional hospital after hours, following a penetrating gunshot wound (GSW) to the left anterior chest at the 4th intercostal space.

Admission observations

BP 100/54 mmHg

HR 110/min SR

Oxygen saturations of 93% on 4L/min nasal prong oxygen

- a) Based on the anatomical location of the GSW, list the critical injuries you would be concerned about.
(2 marks)
- b) While awaiting transfer for surgical exploration, the patient becomes critically hypotensive. Outline your assessment to determine the potential causes of hypotension in this patient.
(8 marks)

Syllabus topic/section:

2.2.13 Trauma Intensive Care: Topic severe and/or multiple trauma (L1)

2.1.4 Cardiovascular Intensive Care: Condition shock (L1)

Discussion:

Most candidates provided an appropriate list of the major critical injuries including major vessels (pulmonary artery/aorta), left ventricle, and left lung.

Candidates frequently outlined the history and examination features of assessment appropriately. However, only a few provided sufficient details to differentiate the major types of shock, and some candidates answered the question as a management question or as an ATLS assessment and hence failed to score the marks allocated.

Candidates that scored higher marks listed the different causes of shock as subheadings and underneath provided the details, or used the assessment headings (history, examination and investigations) to structure their information. For example, tamponade with an outline of the clinical findings and need for an ECHO to look for effusion and signs of tamponade. Candidates who scored less well either misread the question and didn't provide an assessment or listed the causes without information to help differentiate between them.

Angoff score for this SAQ	5.95
Highest candidate score achieved	8.5
Angoff pass rate	46.5%

The rubric is provided to aid candidates' future study.

	Below standard	At standard	Above standard
a) (2 marks)	Does not include one or more of left lung, pulmonary artery or heart (LV or pericardium) as likely injuries 0-0.5 marks	Identifies injuries to the left lung, pulmonary artery, heart (LV and pericardium) are most likely to be of concern 1 mark	at standard PLUS considers deeper or lower structures that might be injured especially if ricochets 1.5-2 marks
b) (8 marks)	Does not include both examination and investigation features for the causes of shock Does not include one or more of the 3 major causes of shock listed in at standard Provides an examination that is superficial or incomplete No marks for CT or extensive history given the urgency around clinical instability 0-3.5 marks	Considers the 3 major causes of shock in this scenario and provides an assessment that includes appropriate features on examination and the relevant Ix that should be included Must include: -Haemorrhagic -Cardiac (tamponade) -Tension pneumothorax 4-5 marks	at standard PLUS Provides more detail to the Ex that demonstrates a good understanding of how to differentiate between the causes identified Considers other causes of shock that might be relevant above 3 listed in at standard Includes details of the expected findings from the various investigations to help differentiate between the causes 5.5-8 marks

Question 5

- a) List **five** causes of an Addisonian crisis (2.5 marks)
- b) List **five** laboratory abnormalities of an Addisonian crisis (2.5 marks)
- c) Outline the principles of management of an Addisonian crisis (5 marks)

Syllabus topic/section:

2.1.9: Endocrine Intensive Care, Adrenocortical insufficiency (L1)

Discussion:

Characteristics of higher-scoring answers included a specific and prescriptive approach to resuscitation and steroid repletion, and documenting the need to assess for, and treat, the underlying cause. Marks were not awarded for naming metabolic acidosis without qualifying it further as a normal anion gap metabolic acidosis.

Angoff score for this SAQ	5.65
Highest candidate score achieved	9.25
Angoff pass rate	91.5%

Question 6

Draw and label the pressure – time waveform of the following modes of ventilation:
For each mode, explain the potential effects on the oxygenation and CO₂ clearance.

- a) Volume control ventilation (VCV) (3 marks)
- b) Pressure control ventilation (PCV) (3 marks)
- c) Airway pressure release ventilation (APRV) (4 marks)

Syllabus topic/section:

2.1.5 Respiratory Intensive Care, (L1)

Discussion:

Candidates 'At standard' commonly drew the correct pressure time waveforms for the three modes of ventilation listed, with the appropriate labelling – including units and correct numerical scale for the X and Y axis. Higher scoring candidates also indicated on the waveforms the important characteristics for each of the modes, for example plateau pressure, peak pressure, and timing. Candidates awarded high marks with the APRV trace included P high for >4 s and P low for a short period. They included spontaneous ventilation during P high during APRV.

Candidates scoring well explained the effect of each mode on oxygenation and ventilation. They described the effects directly related to the modes of ventilation rather than general strategies to increase oxygenation or alter CO₂ clearance. For example, during VC ventilation, CO₂ clearance is reliable and predictable (given TV and RR are set, unless the pressure alarm is exceeded). CO₂ clearance will not vary with lung resistance and compliance changes in VCV. However, during pressure control ventilation, compliance and resistance changes will have a direct effect on CO₂ clearance, hence CO₂ clearance is more difficult to predict.

Given the shape of the pressure time loop of PC ventilation, compared to VCV, the mean airway pressure is likely higher which may improve oxygenation by increasing time for alveolar recruitment. As the mean airway pressure is very high with APRV, oxygenation maybe further increased. Leak compensation, which will affect oxygenation is poorly tolerated in VCV but PCV has an increased ability to compensate for circuit leak.

Ventilation is core knowledge, and candidates are advised that this topic occurs regularly on the written paper.

Angoff score for this SAQ	4.3
Highest candidate score achieved	7.75
Angoff pass rate	29.6%

Question 7

A 43-year-old previously well patient presents to the Emergency Department with 36 hours of intractable nausea, vomiting, diarrhoea, and diffuse crampy abdominal pain. Initial GCS is 15, however the patient becomes progressively drowsy and hypotensive during admission. Serum paracetamol was below the detectable threshold and there is no history of regular paracetamol intake.

Laboratory investigations at admission and 12 hours post admission are given below.

Parameter	Patient value at admission	Patient value 12 hours post admission.	Adult normal range
FiO2	0.21	0.45	
pH	7.34*	7.29*	7.35 – 7.45
pO2	72 mmHg (kPa)	76 mmHg (kPa)	
pCO2	40 mmHg (kPa)	35 mmHg (kPa)	35.0 – 45.0 (4.6 – 6.0)
SpO2	98 %	96 %	
Bicarbonate	22 mmol/L	18 mmol/L*	22.0 – 26.0
Base Excess	-4 mmol/L*	-	-2.0 – +2.0
Lactate	1.6 mmol/L	2.8 mmol/L*	0.5 – 1.6
Sodium	136 mmol/L	145 mmol/L	135 – 145
Potassium	4.7 mmol/L	5.0 mmol/L	3.5 – 5.0
Chloride	100 mmol/L	113 mmol/L*	95 – 105
Glucose	7.3 mmol/L*	4.0 mmol/L	3.5 – 6.0
Parameter	Patient value at admission	Patient value 12 hrs post admission	Adult normal range
Urea	9.5 mmol/L*	7.0 mmol/L	3.0 – 8.0
Creatinine	115 µmol/L*	200 µmol/L*	45 – 90
Magnesium	0.75 mmol/L	-	0.75 – 0.95
Albumin	37 g/L	-	35 – 50
Protein	84 g/L*	-	60 – 80
Total bilirubin	36 µmol/L*	35.4 µmol/L*	< 26
Aspartate transferase (AST)	5,251 U/L*	13,622 U/L*	< 35
Alanine transferase (ALT)	6,236 U/L*	15,535 U/L*	< 35
Alkaline phosphatase (ALP)	76 U/L	70 U/L	30 – 110
Glutamyl transferase (GGT)	45 U/L*	86 U/L*	< 40
Ionised calcium	0.8 mmol/L*	1.1 mmol/L	1.10 – 1.35
Calcium corrected	1.77 mmol/L	-	2.12 – 2.62
Phosphate	0.62 mmol/L*	-	0.8 – 1.5
Creatinine Kinase	229 U/L*	713 U/L*	55 – 170
LDH	3397 U/L*	4000 U/L*	120–250
CRP	6.5 mg/L*	12 mg/L*	<5
Ammonia	36 µmol/L	78 µmol/L*	<50

Parameter	Patient value	Patient value 12 hours post admission	Adult normal range
INR	1.8*	2.9*	0.9 – 1.3
APTT	40 sec*	40 sec*	27.0 – 38.5

- a) Explain the pattern of liver injury demonstrated by the progression of laboratory values. (2 marks)
- b) List **four** differential diagnoses for this clinical scenario. (2 marks)
- c) Outline your specific management of the liver injury. Include management of common complications of the liver injury in your answer. (6 marks)

Syllabus topic/section:

2.1.6 Gastrointestinal Intensive Care (L1)

Discussion:

The laboratory pattern demonstrated hyperacute liver failure. Many candidates listed the abnormalities rather than synthesizing the information and providing differential diagnoses. When listing differential diagnoses to improve marks, list sufficiently diagnoses across broad categories. Several candidates listed diagnoses with the same etiology category and limited their marks (e.g. Only nominating different infective etiologies or only listing different mechanisms causing ischaemic insult).

The management question did not reward details regarding generic resuscitation that would apply to any critically ill patient; answers describing specific management were rewarded. Better answers qualified the interventions with specific information outlined, rather than simply listing interventions, especially where indications may vary from standard (e.g. many candidates stated they would intubate the patient without providing the rationale, a better answer would be to intubate early as likely rapid deterioration and for neuroprotection).

Angoff score for this SAQ	5.8
Highest candidate score achieved	8.75
Angoff pass rate	73.2%

Question 8

Compare and contrast the management of cardiac arrest (not in the setting of trauma) in the following age groups:

- a) 2-year-old child (5 marks)
- b) 50-year-old adult (5 marks)

Syllabus topic/section:

2.1.4 Cardiovascular Intensive care L1 cardiac arrest
2.1.17 Pediatrics L2 cardiac arrest

Discussion:

This question looked at cardiac arrest management in adults and children and is an important and essential topic. Most candidates could provide some basic core concepts, but some candidates could provide only quite superficial answers.

Good answers were able to provide elements of both the adult and pediatric cardiac arrest algorithms, highlighting differences in aspects such as airway/breathing management, compression: ventilation ratios and drug (including IV fluid) & defibrillation dosing. Superior answers managed to provide a significant level of detail. However, answers that did not score as well omitted detail on the differences in potential causes of cardiac arrest, and lack of mention/detail around differing logistical factors between the 2 groups.

Suggestions for improvement include improving knowledge of APLS and resuscitation and refreshing knowledge on some common differences in etiology of cardiac arrest between the 2 groups.

Angoff score for this SAQ	5.35
Highest candidate score achieved	7.5
Angoff pass rate	28.2%

The rubric is provided to aid the candidate's future study

	Below standard	At standard	Above standard
Compare and contrast the management of cardiac arrest in the following:	superficial or limited answer AND/OR Incorrect or no mention of CPR Ratio AND/OR important omission of CPR Ratio, Drugs (or doses), defibrillation energy, CPR techniques and list of causes (4Hs and 4Ts)	Includes the following expected inclusions Correct CPR ratios Adrenaline dosing Fluid bolus dose Airway management differences Defibrillation energy requirements And/or Includes some of the added considerations summarised in below additional detail	At standard PLUS Includes most of expected inclusions Correct CPR ratios, Adrenaline dosing , Fluid bolus dose , Airway management differences , Defibrillation energy requirements, CPR technique differences, iv access issues and List of causes (4 Hs and Ts) AND/OR Includes most of the added considerations summarised below additional detail
a) 2-year-old (5 marks)		a) 2.5 -3.5 marks	a) 4-5 marks
b) 50-year-old (5 marks)	Omission of the added considerations summarised in below additional detail a) 0-2 marks b) 0-2 marks	b) 2.5-3.5 marks	b) 4-5 Marks

Question 9

Regarding superior vena caval obstruction (SVC-O):

- a) Summarise the potential complications. In your answer, include challenges SVC-O might cause during the ICU stay (7 marks)
- b) Outline the specific management options and supportive care required for the SVC-O (3 marks)

Syllabus topic/section:

2.1.4 Cardiovascular Intensive Care: Condition Vena cava obstruction syndromes (L2)

Discussion:

- a) Candidates generally had a good structure to the question and were able to provide a summary of the complications with respect to monitoring, vascular access and haemodynamics. Candidates who scored less well often provided general complications rather than those that are specifically related to SVC-O or minimal detail around the complications they listed.
- b) Whilst this part of the question was worth less marks, some candidates misread the question and only provided specific management options (e.g. stenting or thrombectomy) and did not include aspects of supportive care (e.g. head up positioning, minimizing of intra thoracic pressure, fluid resus).

Angoff score for this SAQ	5.1
Highest candidate score achieved	9.5
Angoff pass rate	67.6%

Question 10

With respect to the acute phase of 'short bowel syndrome' (SBS):

- a) Define SBS (2 marks)
- b) Outline the nutritional and metabolic consequences of SBS (4 marks)
- c) Outline the management principles in ICU (4 marks)

Syllabus topic/section:

2.1.6: Gastrointestinal Intensive Care, Malnutrition; Enteral and Parenteral Nutrition (L1)

Discussion:

Candidates who scored higher in this 'sub-section' type question were able to provide specific responses to the questions in each section. Although generic answers scored some marks, these were not enough to pass the question. A transitional fellow level management approach, which included specific and general management principles (including involving a multidisciplinary team), were more successful.

Angoff score for this SAQ	4.65
Highest candidate score achieved	6
Angoff pass rate	28.2%

The rubric is provided to aid the candidate's future study.

	Below standard	At standard	Above standard
Definition (2 Mark)	Unable to mention correct residual length in adult or non-specific definition. (0 marks)	Demonstrates and understanding of concept of minimum residual length in adult (1 mark)	At standard PLUS Mentions Correct numerical value of minimal residual length (180-200cm) – Reduced absorptive area as the main pathology for a proper definition (2 marks)
Nutritional and metabolic consequences (4 marks)	Unable to describe pathophysiological effects of commonly excised bowel segments. Or Generally non-specific answer. (0-1.5 mark)	Able to describe common pathophysiological effects of excised bowel segments. Must include electrolytes and water/fluid loss. (2 -3 marks)	At standard PLUS Able to describe the majority of specific bowel segments (jejunum, ileum, colon) and related effects on absorption. (3.5 - 4 marks)
Management (4 marks)	Non specific answer not addressing need for monitoring fluid and electrolyte requirements. (0 – 1.5 marks)	Demonstrates a safe approach to Mx Must include appropriate replacement of fluids and electrolytes and 2. TPN till/if enteral feeds can be safely introduced. (2-3 marks)	At Standard PLUS some extra points e.g. 1. Mentions multidisciplinary management 2. Use of Octreotide for large losses 3. Acid suppression for gastric hypersecretion. (3.5 -4 marks)

Question 11

A 48-year-old patient is admitted to the intensive care unit with severe community acquired pneumonia. Initial empiric antimicrobial therapy consists of intravenous piperacillin-tazobactam 4.5g by intermittent infusion every 6 hours and azithromycin 500mg intravenously once daily.

a) Outline the factors that would necessitate escalation of antimicrobials in this situation. In your answer, explain any proposed antimicrobial changes you would make (6 marks)

The patient's clinical condition stabilises after 48 hours without the need for antimicrobial escalation.

b) Justify an appropriate plan for de-escalation and discontinuation of antimicrobials in this patient (4 marks)

Syllabus topic/ section:

2.1.3. Sepsis and Infections. L1 Topic: Antimicrobial use in ICU.

Discussion:

This question sought to examine management of a pragmatic and common set of questions intensivists face. Most candidates gave a broad range of reasons for considering escalation of antimicrobials. Better candidates were able to describe how these factors might influence their prescribing. Attention to the wording of the stem makes clear that more than a list is required.

For the section on de-escalation and cessation of antimicrobials, many candidates lost marks by not adequately addressing both domains. Examples of incorrect answers include allergy and renal dysfunction as reasons not to escalate; changing the diagnosis of CAP, then providing management; providing a long list of rare causes of CAP but missing the reasons to escalate.

Learning points:

1. Familiarity with the glossary is a strong foundation for approaching any SAQ.
2. Generic answers do not attract marks.

Angoff score for this SAQ	5.35
Highest candidate score achieved	8
Angoff pass rate	71.8%

Question 12

Compare and contrast locked-in-syndrome and persistent post coma unresponsiveness (previously known as persistent vegetative state) under the following headings:

- a) Aetiology (2 marks)
- b) Clinical features and prognosis (6 marks)
- c) Relevant investigation findings (2 marks)

Syllabus topic/section:

2.1.8 Neurological Intensive Care, L1 Topics: Disorders of consciousness

Discussion:

This question highlighted a need for precise knowledge regarding the potential outcomes of a severe neurological insult. These outcomes have specific and differentiating clinical features. Several answers struggled to separate the diagnostic criteria for each condition, with some responses inadvertently mixing in elements of brain death. Having a clear grasp of these distinct neurological entities is vital as you transition into independent ICU practice, especially when discussing prognosis and goals of care with families.

Tips for improving answer structure:

- Use Comparison Tables: For questions asking you to differentiate similar conditions, a table with clear headings (e.g., Pathophysiology, Cognition, Motor Function, EEG) prevents overlapping descriptions.
- Lead with Clear Definitions: Avoid vague descriptions; start your response with a concise, formal definition of each entity before expanding into the clinical features.
- Highlight Key Differences: Explicitly state what a condition is *not* (e.g., noting that cortical function is entirely preserved in locked-in syndrome) to show the examiner you understand the boundaries between states

Angoff score for this SAQ	5.4
Highest candidate score achieved	8.25
Angoff pass rate	40.8%

Question 13

A 47-year-old patient presents with acute confusion.

The patient has a past medical history of haemorrhagic stroke requiring insertion of a ventriculoperitoneal shunt six months previously.

a) List **four** potential shunt-related complications which could be causing the patients acute presentation
(2 marks)

b) Outline your assessment of this patient to differentiate between the possible causes you have listed
(8 marks)

Syllabus topic/section:

2.1.18 Perioperative issues in Intensive Care (L1)

Discussion:

Most candidates performed well on this question, demonstrating a good understanding of ventriculoperitoneal shunt complications.

High scoring candidates successfully outlined a targeted history, examination and investigation plan to clearly differentiate between the key shunt complications including shunt obstruction and infection.

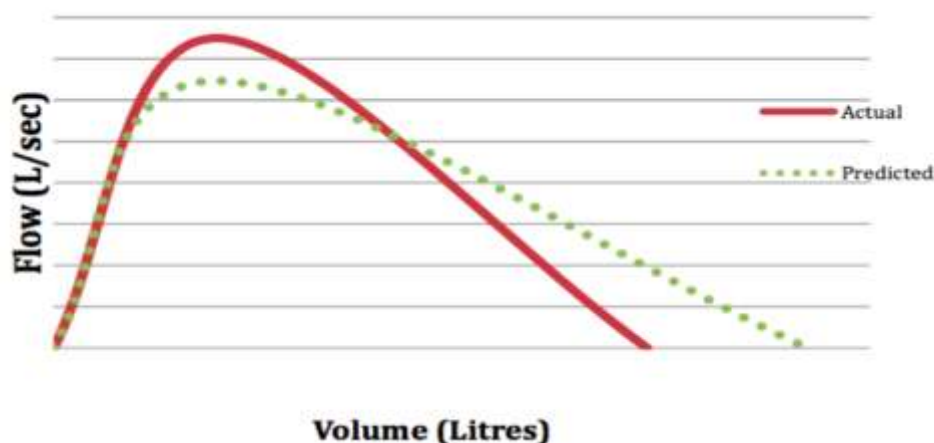
Weaker responses failed to link clinical findings to specific differentials, instead of offering non-specific causes of confusion or generic blood tests. A critical pitfall was failing to recognise the risks of modes of CSF sampling. Several candidates suggested a lumbar puncture without mentioning risks in the context of raised ICP. Several candidates lost marks by treating the "outline" question as a "list" question. Providing a superficial list of terms rather than a summary of important points prevented candidates from gaining full credit.

Angoff score for this SAQ	5.25
Highest candidate score achieved	7.25
Angoff pass rate	74.6%

Question 14.1

A 52-year-old patient with systemic lupus erythematosus (SLE) and worsening dyspnoea on exertion presents with the following respiratory function tests:

Test	Actual	Predicted
FEV1	1.96 litres	2.66 litres
FVC	2.52 litres	3.11 litres
FEV1/FVC	78%	85%
PEF	7.50 L/sec	6.47 L/sec
FRC	2.18 litres	2.77 litres
RV	1.08 litres	1.84 litres
TLC	3.64 litres	5.17 litres
DLco	10.4 ml/min/mmHg	24.7 ml/min/mmHg
KCO (DICO/VA)	2.85 ml/min/mmHg	4.77 1/min/mmHg



- Describe and explain the results of the respiratory function tests (4 marks)
- List **one** possible diagnosis for the respiratory function tests (1 mark)

Question 14.2

You are asked to review a 44-year-old patient who is a known epileptic following a prolonged generalized tonic-clonic convulsion. The patient is intubated and ventilated. Arterial blood gas analysis is as follows:

Test	Value	Normal Range
FiO2	0.5	
pH	7.15*	7.35 – 7.45
pCO2	35 mmHg (4.6 kPa)	35 – 45 (4.6 – 6)
pO2	105 mmHg (14 kPa)*	75 – 98 (10 – 13)
HCO3	10.3 mmol/L*	22 – 26

- Explain the abnormalities on the blood gas (3 marks)
- List the most likely cause of the abnormalities (2 marks)

Syllabus topic/section:

2.1.5 Respiratory Intensive Care (L1)

2.1.7 Renal Intensive Care (L1)

Discussion:

Most candidates performed well on this question overall. While many struggled with 14.1, they generally achieved better results in 14.2, enabling them to reach an overall standard level of marks.

14.1 Many candidates demonstrated deficits in knowledge when they interpreted the respiratory function tests as showing an obstructive picture or mixed picture (but giving the diagnosis of fibrosis/ ILD in part 14.1b. Marks were not awarded for just listing the findings (low TLC, RV etc.) without interpreting and providing an explanation for the abnormal findings. Candidates were 'Above standard' if they also provided pathophysiology for respiratory function tests and relate the findings to the patient's clinical context.

14.2 Straightforward acid-base question which majority of candidates performed well

Angoff score for this SAQ	6.75
Highest candidate score achieved	9.25
Angoff pass rate	66.2%

Question 15

A vascular access catheter has been placed in a patient for elective dialysis.

It is suspected, after suturing the line, that the catheter has been placed in the carotid artery. There is no evidence of airway obstruction.

- a) Outline your approach to confirm the malposition of the catheter (3 marks)
- b) Outline your management of the mispositioned catheter (3 marks)
- c) Outline the processes you would take to reduce the risk of similar events in the future (4 marks)

Syllabus topic/section:

2.1.19 Intensive Care procedures (L1)

Discussion:

Malposition of a vascular access catheter is a complication that transition year fellows are expected to assess and manage, from both clinically and from a safety-and-quality perspective. Most candidates had sufficient knowledge to answer the question. Markers noted that parts (a) assessment and (b) management were generally better answered than the section on prevention of recurrence (c).

Candidates whose answers attracted higher marks provided a structure within the different sections, including:

- a) both clinical (bedside) and radiological approaches to confirm the catheter position
- b) a safe approach to management including the recognition and management of complications (e.g. stroke, bleeding, haematoma) as well as strategies for catheter removal
- c) a focus on education and quality improvement processes to reduce the risk of similar events.

Answers that didn't reach the required standard often lacked structure and therefore omitted significant information; or in the case of part c) did not address the full breadth of the question. Answers could have been improved by including a greater level of detail in part a), for example outlining what useful information would be gained by performing a CT angiogram in this context; and/or including a bedside assessment for pulsatility in the line; in part b) outlining specific catheter management options as well as mentioning complications and c) giving an accurate outline of the incident review and quality improvement process specific to this situation: a generic list of audit cycle processes was not sufficient, information needed to be tailored to the scenario given in the question. Another acceptable approach would have been to consider the procedure, proceduralist, unit, family and documentation.

Angoff score for this SAQ	5.75
Highest candidate score achieved	9.5
Angoff pass rate	59.2%

Question 16

A 72-year-old patient with a previous thoracic aortic graft develops fever, rising inflammatory markers, and new haemodynamic instability.

- a) List the key investigations and justify how they would help confirm aortic graft infection (4 marks)
- b) Outline a prioritised management plan assuming aortic graft infection is confirmed (6 marks)

Syllabus topic/section:

2.1.3 Sepsis and Infections (L1)

2.1.18 Peri-operative Issues in Intensive Care (L1)

Discussion:

Part a) is a list and justify question and thus a reasonable explanation for choosing an investigation was expected. Higher-scoring candidates selected investigations specifically aimed at confirming graft infection and provided clear justification for their choices. Non-specific investigations (e.g., CRP or markers of poor end-organ perfusion) did not attract marks, and candidates who failed to explain the clinical reasoning behind their investigation choices were not rewarded. Candidates who mentioned diagnostic challenges as part of their justification for investigations associated with graft infection scored higher marks. By displaying this knowledge, these candidates were able to demonstrate a transitional fellow level justification of key investigation decisions and the appropriateness of inclusion.

Part b) In the management part of this question, candidates who scored well had a nuanced approach to definitive management in a high-risk situation. The candidates needed to include in their answer - sepsis resuscitation directed towards cause, appropriate antimicrobial regime (with justification), multidisciplinary consultation and definitive surgical management. Detailed surgical descriptions such as timing of surgery, graft removal, antibiotic impregnated grafts and temporising endovascular stent were rewarded.

Tips for improvement:

- 1) Focus on glossary terms – if you have been asked to justify your choice of investigation /intervention you need to provide a rationale to support your stated position.
- 2) Contextualise to the given clinical scenario- this is a grave clinical problem that is life threatening. Mentioning challenges (pros and cons) of management strategies would attract marks.

Angoff score for this SAQ	5.55
Highest candidate score achieved	8.75
Angoff pass rate	45.1%

Question 17

A 10-day-old infant presents to a regional emergency department with a 24-hour history of poor feeding and tachypnoea. The infant is unrousable on presentation.

- a) List the key investigations and justify how they would help confirm aortic graft infection (4 marks)
- b) Outline a prioritised management plan assuming aortic graft infection is confirmed (6 marks)

Syllabus topic/section:

2.1.17 Paediatrics; (L2)

2.1.4 Cardiovascular Intensive Care — congenital heart disease (L2)

Discussion:

This question was handled well by many candidates, particularly where answers were structured around likely neonatal differentials and discriminating cardiac assessment findings. Higher-scoring candidates listed likely non-cardiac diagnoses relevant to a sick 10-day-old neonate, such as sepsis, inborn error of metabolism, non-accidental injury, necrotizing enterocolitis or intussusception. The rubric rewarded clinically prioritized neonatal diagnoses, while vague, unlikely or adult-focused differentials were less likely to attract marks.

For part b), stronger answers used an organized assessment covering history, examination and relevant investigations. Features suggesting a cardiac cause included presentation in the first two weeks of life, poor feeding, tachypnoea, cyanosis not responding to oxygen, shock out of proportion to respiratory findings, weak or absent femoral pulses, hepatomegaly, murmurs or a gallop rhythm. Additional marks were gained for appropriate use and interpretation of pre- and post-ductal saturations, four-limb blood pressure, lactate, CXR, ECG and echocardiography.

Learning point: Candidates should prioritize likely neonatal differentials and then use assessment findings to actively discriminate cardiac from non-cardiac causes, rather than providing a generic list of neonatal illness features.

Angoff score for this SAQ	6.1
Highest candidate score achieved	9.5
Angoff pass rate	81.7%

Question 18

A patient day 5 after mechanical mitral valve replacement remains dependent on temporary epicardial pacing.

- a) List six risk factors for requiring a new permanent pacemaker after cardiac surgery (3 marks)
- b) Outline the clinical considerations in planning for potential permanent pacing in this patient (7 marks)

Syllabus topic/section:

2.1.19 Intensive Care Procedures (L1)

2.1.18 Peri-operative Issues in Intensive Care (L1)

Discussion:

Part a) was generally answered well. The successful candidates addressed the risk factors for PPM post cardiac surgery, as opposed to PPM in general. Some candidates discussed indications for different types of PPM, and whilst this displayed good knowledge, it could not be awarded marks as it was not asked in the question.

Whilst a 'list' question does not always mandate a classification system, candidates could approach the list with patient factors (age), preoperative factors (preop arrhythmias) and surgical factors (CPB time, type of surgery) to help structure their answers.

For part b) a key concept was the balance between allowing sufficient time post-surgery and the likelihood of recovery vs the adequacy of the current pacing system. The adequacy of the current pacing system would have needed to address a pacing check, pacing thresholds to signal likely failure of the pacing box, and an assessment of the underlying rhythm. As this part of the question was worth 7 marks, focus adequate time on this part of the question to maximize your time-per-mark efficiency.

Angoff score for this SAQ	5.2
Highest candidate score achieved	8.75
Angoff pass rate	53.5%

The rubric is provided to aid candidate's future study

	Below standard	At standard	Above standard
a) (3 marks)	0.5 for each correct item Note: item provided by candidate that is not on suggested content in "notes for examiners" but is deemed relevant may be awarded marks by Examiner pair after consultation.		
b) (7 marks)	Superficial approach; fails to demonstrate understanding of perioperative temporary epicardial pacing (0-3 marks)	Considerations include approach to timing, risk and benefit of early PPM vs allowing time for recovery of native rhythm (3.5-4 marks)	At standard PLUS Mature approach covering main points, contextualised to patient (4.5-7 marks)

Question 19

Outline the features on history that would suggest a high risk for each of the following complications after a hepatic resection/partial hepatectomy.

- a) Post-operative bleeding (6 marks)
- b) Acute kidney injury (2 marks)
- c) Delirium (2 marks)

Syllabus topic/section:

2.1.18: Perioperative Issues in Intensive Care. Abdominal surgery: including esophagectomy, partial hepatectomy and pancreatectomy (e.g., Whipple's procedure) (L1)

Discussion:

Many candidates were able to provide some key features for each question. However, candidates who were able to provide broad, well-organised answers that prioritized the issues most relevant to hepatic resection for each question scored more marks. Those candidates who wrote generic answers for all three parts and did not describe perioperative issues in the context of liver resections scored less marks.

For example, in c) candidates who named specific risk factors for this patient including hepatic ischaemic reperfusion injury, intraoperative instability and intra-abdominal hypertension were rewarded.

Angoff score for this SAQ	4.8
Highest candidate score achieved	6.5
Angoff pass rate	53.5%

Question 20

A 69-year-old patient is admitted to hospital with pneumonia. They have a history of bipolar affective disorder treated with lithium for over 25 years. Lithium was ceased on admission.

On day 5 of hospital admission, they become increasingly agitated and are referred to ICU.

Investigations

Test	Result	Reference range
Serum sodium	160 mmol/L*	135–145
Serum osmolality	332 mOsm/kg*	275–295
Serum potassium	4.0 mmol/L	3.5–5.0
Serum phosphate	0.45 mmol/L*	0.8–1.5
Serum urea	10.4 mmol/L*	2.5–7.8
Serum creatinine	148 µmol/L*	60–110
Serum lithium	0.3 mmol/L*	0.6–1.2
Serum calcium (corrected)	2.75 mmol/L*	2.15–2.60
Urine output	3.6 L in preceding 24 hours	—
Fluid balance (preceding 24 h)	–1.9 L	—
Urine osmolality	240 mOsm/kg	50–1200
Urine sodium	24 mmol/L	—

a) Explain the abnormalities and state the most likely diagnosis (5 marks)

b) Outline your management of the electrolyte abnormalities (5 marks)

Syllabus topic/section:

2.1.14. Environmental Injuries and Toxicology. Condition: Poisoning and drug intoxication (L1)

Discussion:

In part a) successful candidates were able to explain the abnormalities by linking the pathophysiology of lithium-induced nephrogenic diabetes insipidus to the laboratory results (e.g. serum hypernatremia with hyperosmolality - polyuria with impaired renal concentrating ability resulting in hypernatremia). Very good answers extended this to mentioning lithium-induced ADH resistance at the renal tubular level, and/or explaining the Ca and PO₄ levels with respect to Li-induced hyperparathyroidism.

For part b), at standard answers required a clear description of controlled free water replacement with appropriate targets for Na reduction; a plan for electrolyte replacement; and correct pharmacologic management of polyuria in nephrogenic DI. Calculations for estimating free water requirement were not required to reach the standard, but many candidates included it, and this added to their marks. The most concerning error made by candidates in part (b) was rapid administration of large volumes of 5% dextrose, without recognition that this would reduce serum Na acutely and risk cerebral oedema. This, along with relative ineffectiveness of DDAVP, is the crucial difference between management of central DI in the severely brain-injured or brain-dead patient, and nephrogenic DI.

Learning points:

1. When asked for the most likely diagnosis, candidates are reminded to provide only one, rather than a list of differentials.
2. Candidates are advised to revise the topic to improve their understanding, given it is an important problem for intensivists to understand and manage correctly.

Angoff score for this SAQ	5.25
Highest candidate score achieved	8
Angoff pass rate	54.9%

4

Question 21

A 60-year-old patient has known idiopathic interstitial lung disease (ILD). They have undergone an emergency laparotomy for sigmoid perforation.

a) Outline your assessment to establish the baseline severity of the patient's lung disease (6 marks)

a) Assuming this patient has severe ILD, provide and justify your initial ventilator settings on arrival to ICU (4 marks)

Syllabus topic/section:

2.1.5 Respiratory Intensive Care. L1 Condition: Interstitial Lung Disease.

Discussion:

Part a): Most candidates structured the answer well using the framework of history, examination and investigation. Being specific on details supporting a diagnosis of severity achieved an at standard answer. .

History: current symptoms and progression of disease over time are important aspects of history in this question. Candidates are encouraged to provide a structured history: e.g. functional history, hospitalization history, indicators of severe disease etc. Comments such as 'look at physician notes' do not attract marks without justification. Candidates should include the information that is being looked for and nominate why this is important to show understanding

Examination: Many candidates did not provide simple information such as auscultatory findings. Unhelpful phrases such as 'respiratory auscultation, sats and respiratory rate' were used - these are not examination findings, useful in assessment, they are examination tasks. and therefore do not attract marks.

Candidates are reminded to be accurate in what they list as examination findings, e.g. listing all signs of left heart failure when talking about right heart failure.

Investigations: A simple list of investigations is not awarded marks. It is essential to provide justification of these investigations by including the expected results of such investigations, e.g. the specific features on a CT, or the expected findings on a respiratory function test.

Part b): It was essential to articulate the underlying pathophysiology clearly. The best answers included this as part of the opening statement. Many candidates confused ARDS with ILD and quoted ARDS trials and terminology in their answers. Ventilator settings needed to be comprehensive and specific to ventilation of severe ILD and followed by a justification. Candidates gained less marks if they did not include a consideration of ventilator alarm parameters to safely facilitate a ventilatory strategy.

Learning points:

1. A structured answer with relevant points as detailed above attracts marks.
2. Generally, justification does not need listing of research articles; providing sound physiological/pathological knowledge should be sufficient to reach the standard (there is not much ICU ventilatory research in severe ILD).

Angoff score for this SAQ	5.15
Highest candidate score achieved	7.5
Angoff pass rate	19.7%

The rubric is provided to aid candidate's future study.

	Below standard	At standard	Above standard
a) Assessment of severity of ILD (6 marks)	Incorrect symptoms or signs AND/OR Omit consideration of progression or functional status AND/OR Incorrect investigative findings AND/ OR omission of both CT and Pulmonary Function Tests 0-2.5 marks	Includes outline with relevant points for each of history, examination and investigations. History should include symptoms and functional status AND Investigations must include CT OR Pulmonary Function Tests findings 3-4.5 marks	At Standard PLUS Minimal omissions of symptoms on history and signs on examination AND Detailed outline of investigations including radiology and pulmonary function tests findings AND/OR Quantify pulmonary function tests 5-6 marks
b) Initial ventilatory settings (4 marks)	Listing settings without rationale or justification relevant to RILI AND/OR Omission of key mandatory ventilation parameters AND/OR Setting unsafe parameters and no justification of why or how it would be monitored 0-1.5 marks	Outline mandatory ventilatory mode with physiological rationale and alarm caution/parameters AND Settings should include: lower TV, higher RR, generally lower PEEP and rationale for these settings in RILI 2-3 marks	At standard PLUS Consideration of I:E ratio, PS, minimal benefit of recruitment and relating it back to what is normal for patients with RILI. AND/OR Quantify safe ventilatory parameters to set 3.5-4 marks

Question 22

- a) Outline the potential complications in a patient with snake bite who presents with signs of envenomation (5 marks)
- b) Outline the specific management of an envenomated patient (5 marks)

Syllabus topic/section:

2.1.14 Environmental Injuries and Toxicology in ICU, L1 Conditions: Envenomation

Discussion:

While this question was generally well answered, responses frequently lacked necessary detail regarding pressure immobilisation bandages, specific antivenom administration, and management of complications arising from the toxidrome. High-scoring answers clearly identified specific complications—such as neurotoxicity (especially descending paralysis), Venom-Induced Consumption Coagulopathy (VICC), and rhabdomyolysis—while providing precise details on antivenom dosing and complication management. A key area of weakness was a general lack of distinction between VICC and Disseminated Intravascular Coagulation (DIC).

Tips for improving answer structure:

- Structure answers by organ-system/toxidrome: When outlining complications, use a structured system-by-system approach (e.g., Neurological/Paralysis, Hematological/VICC, Renal/Rhabdomyolysis) to ensure no major toxicities are missed.
- Consider comparison checklists: Practice differentiating closely related concepts (like VICC vs. DIC) by explicitly comparing factor depletion, clinical bleeding risk, and typical recovery times.

Angoff score for this SAQ	5.35
Highest candidate score achieved	7.75
Angoff pass rate	54.9%

Question 23

Regarding the determination of death in the context of organ donation:

- a) Outline the process for neurological determination of death (6 marks)
- b) Outline the process for circulatory determination of death (4 marks)

Syllabus topic/section:

2.1.15 Organ and Tissue Donation in Intensive Care

Discussion:

The “ANZICS Statement on death and organ donation” is a cornerstone document of Australian and New Zealand intensive care practice. Despite its core importance, candidate performance on this question was disappointing. Passing marks required a summary of important points across both neurological determination of death (NDD) and circulatory determination of death (DCD). Missing vital components of this core guideline made it difficult to score marks.

Candidates who performed below standard in this section consistently failed to mention the role of radiology when clinical testing was impossible to confirm brain death. Weaker responses completely omitted the basic criteria for patient eligibility for DCD. Furthermore, most candidates failed to specify the warm ischaemic time and the donation timing criteria required to achieve an above standard mark.

Candidates must know the core ANZICS guidelines thoroughly. Candidates are also advised to read the question carefully and practice delivering high-yield, specific details using concise phrases.

Angoff score for this SAQ	5.8
Highest candidate score achieved	7.75
Angoff pass rate	38%

Question 24

A 52-year-old patient presents with acute dyspnoea and presyncope.

Observations are as follows:

BP 88/50mmHg

HR 120bpm

SaO₂ 94% on 8L O₂

Pulmonary embolism (PE) is confirmed on CT Pulmonary Angiogram. The patient has no significant medical history.

- a) Outline the pathophysiology of haemodynamic collapse in acute PE (3 marks)
- b) Outline and justify your approach to PE risk-stratification in this patient (3 marks)
- c) Discuss the immediate management priorities, including options for specific (4 marks)

Syllabus topic/section:

2.1.5 Respiration Intensive Care: Pulmonary Embolism (L1)

Discussion:

Part a): Candidates who were at standard for this section were able to describe relatively straightforward pathophysiology of pulmonary artery clot and its effects on RV afterload increase, RV dilatation, decreased LV filling due to interventricular dependence, leading to decreased cardiac output. Candidates were successful if they also mentioned related RV ischemia and acute pulmonary hypertension and its effects on the right ventricle leading to the hemodynamic collapse.

Part b): candidates who said patients were at high risk without any reference to prior treatments or other markers of severity such as troponin, BNP, echo, CTPA findings were less successful. The successful candidate detailed findings on echo and CT suggestive of right ventricular failure, recognized the severity of disease with failure of resuscitation measures (response to fluids).

Part c): Candidates are reminded to pay attention to the glossary, with 'discuss' requiring a degree of explanation around the topic or options. Some answers lacked some basic requirements such as initial resuscitative measures or the need for ongoing therapeutic anticoagulation. Therefore, candidates who failed to mention resuscitation of this patient scored less marks. Those candidates who considered other options such as suction embolectomy associated with thrombolysis and discussed advantages and disadvantages of these options were rewarded accordingly.

Angoff score for this SAQ	5.2
Highest candidate score achieved	7.75
Angoff pass rate	42.3%

Question 25

A 32-year-old patient has been admitted from the emergency department with a traumatic spinal cord transection at the level of C6.

Outline the pathophysiology and clinical consequences of this injury on the following:

- a) Respiratory function (6 marks)
- b) Autonomic function (4 marks)

Syllabus topic/section:

2.1.13 Trauma Intensive Care- Spinal Trauma (L1)

Discussion:

Candidates whose answers resulted in higher marks were able to accurately outline the pathophysiology of a C6 complete spinal cord transection, based on sound understanding of the relevant anatomy. The most successful answers linked pathophysiology to the corresponding clinical consequences.

In part a) this included an accurate description of the muscle groups involved, and detailed outline of the relevant clinical consequences e.g. cough, bronchial hyperreactivity, effect on FRC.

In part b), many candidates included only autonomic dysreflexia, omitting other aspects of autonomic function such as acute neurogenic shock, gastric acid secretion, bladder and bowel function and temperature control. Candidates who scored more highly in this section tended to consider time-dependent changes as the injury moved from the acute to the chronic stages and even included a timeline for these changes.

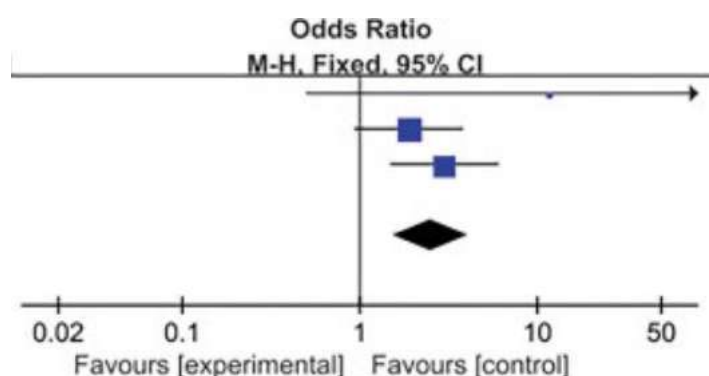
Common errors included not reading the question properly and focusing on management rather than pathophysiology/clinical consequences; some candidates gave incorrect innervation for the diaphragm. In general, candidates are encouraged to consider the potential anatomic / physiologic basis for various clinical presentations in the ICU.

Angoff score for this SAQ	4.85
Highest candidate score achieved	9
Angoff pass rate	46.5%

Question 26

A systematic review of the literature was undertaken on the use of aminoglycosides and the association with intensive care unit acquired weakness (ICUAW).

Study or Subgroup	With ICUAW Events	Total	Without ICUAW Events	Total	Weight	Odds Ratio M-H, Fixed, 95% CI
Amaya-Villar 2005	2	9	0	17	1.3%	11.67 [0.50, 273.50]
Anastasopoulos 2011	20	40	52	150	54.2%	1.88 [0.93, 3.81]
Nanas 2008	28	44	52	141	44.5%	3.00 [1.48, 6.05]
Total (95% CI)		93		308	100.0%	2.51 [1.54, 4.08]
Total events	50		104			



Heterogeneity: $\chi^2 = 1.79$, $df = 2$ ($P = 0.41$); $I^2 = 0\%$

Test for overall effect: $Z = 3.71$ ($P = 0.0002$)

a) With respect to the above forest plot explain the meaning of:

- i) the horizontal lines (1 mark)
- ii) the position of the square (1 mark)
- iii) the size of the square (1 mark)

b) Outline the advantages and limitations of forest plots

..... (4 marks)

c) Provide an interpretation of the data and justify your answer

(3 marks)

Syllabus topic/section:

2.5 Scholar and Educator

Discussion:

Part a): Candidates are encouraged to pay close attention to the use of key glossary terms when answering questions. Part a) required the candidates to “explain the meaning” and thus higher marks were awarded to candidates who not only correctly identified and defined the components of the forest plot but also explained their significance and interpretation within the context of the study. For example, for the horizontal lines, a higher-scoring response would explain that these represent the confidence intervals (usually 95% confidence intervals) around the effect estimate for each individual study and mention that if a confidence interval crosses the line of no effect (e.g. an odds ratio or relative risk of 1), the result is not statistically significant. Providing both the identification and interpretation of forest plot components demonstrates a deeper understanding and aligns more closely with the expectations of the marking rubric.

Part b): When a question asks for multiple items (for example, both “advantages” and “limitations”), candidates should ensure they provide more than one relevant point in each category where appropriate. This helps

demonstrate the breadth of understanding required to meet the "at standard" criteria outlined in the marking rubric.

Part c): Many candidates demonstrated a good understanding of the concepts of Forest Plot; however, some experienced difficulty interpreting the direction of the association presented in the systematic review. The accompanying data table provided clear information regarding the direction of the association. Candidates are encouraged to carefully distinguish between concepts such as association and risk, as well as correlation and causation, as these terms have distinct meanings and implications.

Angoff score for this SAQ	4.75
Highest candidate score achieved	8.25
Angoff pass rate	67.6%

Question 27

- a) Outline the clinical presentation (including the timeline) of amniotic fluid embolism (4 marks)
- b) Outline assessment of a patient with suspected amniotic fluid embolism. In your answer, include the challenges in confirming the diagnosis (6 marks)

Syllabus topic/section:

2.1.12 Obstetric Intensive Care — L1 amniotic fluid embolism

Discussion: This question tested recognition of amniotic fluid embolism as a rapid and potentially catastrophic obstetric emergency. Stronger answers described the timeline clearly, including sudden onset around membrane rupture, labour, delivery or the early postpartum period, followed by dyspnea, hypoxia or cyanosis, cardiovascular collapse, hypotension or PEA, and then DIC with massive hemorrhage and uterine atony. The rubric rewarded answers that recognized rapid progression over minutes rather than slow or non-specific deterioration.

In part B, successful candidates recognised that AFE is a clinical diagnosis of exclusion and can mimic other obstetric emergencies. Useful supportive findings included marked hypoxemia on ABG, coagulopathy with low fibrinogen, pulmonary oedema on CXR and right or left ventricular dysfunction on echocardiography. Answers could be improved by explicitly distinguishing AFE from pulmonary embolism, septic shock, anaphylaxis, and myocardial infarction, rather than giving a generic approach to obstetric collapse.

Learning point: Candidates should learn the key pattern of amniotic fluid embolism: sudden hypoxia, cardiovascular collapse and coagulopathy in the peripartum period, while recognising that it remains a clinical diagnosis of exclusion.

Angoff score for this SAQ	5.15
Highest candidate score achieved	8.5
Angoff pass rate	42.3%

Question 28

A 56-year-old patient presents with one-month history of weight loss and shortness of breath.

The results of the blood tests are as follows:

Parameter	Value	Normal Range
Haemoglobin	128 g/L*	135 – 180
White Cell Count	6.1 x 10 ⁹ /L	4.0 – 11.0
Platelets	35 x 10⁹/L*	150 – 400
Prothrombin time	23.3 sec*	12.0 – 16.5
INR	2.0*	0.9 – 1.3
APTT	45.7 sec*	27.0 – 38.5
Fibrinogen	0.7 g/L*	2.0 – 4.0
Total Protein	39 g/L*	60 – 80
Albumin	24 g/L*	35 - 50
Total Bilirubin	215 µmol/L*	< 20
ALT	202 U/L*	< 40
ALP	243 U/L*	30 – 110
GGT	394 U/L*	< 60
Ferritin	120000 µg/L*	30 - 620
Iron	15 µmol/L	9 – 30
Transferrin	13 µmol/L*	23 – 43
Transferrin saturation	58%*	14 – 45

a) Give the diagnosis indicated by these results

(2 marks)

b) Give **three** possible underlying causes

(1.5 marks)

Question 28.2

A 52-year-old patient presents with bruising and a retroperitoneal haematoma five weeks after starting warfarin for a proximal deep vein thrombosis (DVT) with a target international normalised ratio (INR) of 2.5.

The investigations are as follows:

Parameter	Patient Value	Normal Adult Range
Haemoglobin	122 q/L*	135 - 180
White Cell Count	10.1 x 10 ⁹ /L	4.0 - 11.0
Platelets	298 x 10 ⁹ /L	150 - 400
Prothrombin time	29.3 sec*	12.0 - 16.5
International normalised ratio	2.3*	0.9 - 1.3
Activated partial thromboplastin time	117.0 sec*	27.0 - 38.5
Fibrinogen	3.9 a/L	2.0 - 4.0

a) List the likely underlying cause for this coagulation profile

(2 marks)

b) List **one** test you could do to confirm this

(1.5 marks)

Question 28.3

A 49-year-old patient presents with confusion. The results of the blood tests are as follows:

Parameter	Patient Value	Normal Adult Range
Haemoglobin	86 q/L*	135 - 180
White Cell Count	11.2 x 10 ⁹ /L*	4.0 - 11.0
Platelets	23 x 10 ⁹ /L*	150 - 400
Prothrombin time	14.0 sec	12.0 - 16.5
Activated partial thromboplastin time	35.0 sec	27.0 - 38.5
Fibrinogen	2.1 q/L	2.0 - 4.0
Thrombin time	14.0 sec*	11.5 - 13.5
Urea	12.1 mmol/L*	3.0 - 8.0
Creatinine	356 µmol/L*	45 - 90
Lactate dehydrogenase	2342 U/L*	140 - 280

a) List **one** likely diagnosis

(1 mark)

b) Give **four** additional investigations to support your diagnosis

(2 marks)

Syllabus topic/section:

2.1.11 Hematological and Oncological Intensive Care (L1 and L2)

Discussion:

Candidates were rewarded by correctly identifying an HLH diagnosis along with causes, a factor deficiency of VIII, IX and XII requiring mixing studies, and for identifying wither TTP, HUS, SLE or MAHA.

Angoff score for this SAQ	7.05
Highest candidate score achieved	9.75
Angoff pass rate	36.6%

The rubric is provided to aid candidate's future study

28.1 Information to assist the examiner while marking / RUBRIC	
a) Give the Diagnosis (2 marks)	2 marks for hemophagocytic lymphohistiocytosis (HLH)
b) Give <u>three</u> possible underlying causes (1.5 marks)	0.5 mark for any three of the following Viral infection e.g. EBV, HSV, HINI influenza Lymphoma Malignancy Immune deficiency states Rheumatological disorders Other infection – bacterial and fungal less likely

28.2. information to assist the examiner while marking /RUBRIC	
a) List the cause of the coagulation profile (2 marks)	Caused by factor deficiency (1 mark) Correct naming of the deficiencies: VIII, IX, XII (1 mark - if partially named please reduce to 0.5)
b) Give a test to confirm this (1.5 marks)	Mixing study (pt plasma mixed with normal plasma 1:1 should show correction of APTT if factor levels)

28.3 information to assist the examiner while marking /RUBRIC	
a) List one diagnosis (1 mark)	One mark for one of the following: • TTP • HUS • SLE
b) Give four additional investigations (2 marks)	0.5 marks each for any other following: • ADAMTS13 (TTP) • Positive Shiga toxin / Entero-haemorrhagic E coli test (HUS) • ANA / anti-dsDNA (SLE) • Blood film • Reticulocyte count • Haptoglobins

Question 29

A patient is being admitted post-operatively following coronary artery bypass surgery. You are attending the post-operative handover.

- a. List the key information related to the anaesthetic and the operation you would want to know (4 marks)
- b. For each item on the list explain the relevance to the patient management during the post-operative ICU admission (6 marks)

Syllabus topic/section:

2.1.18 Peri-operative Issues in Intensive care (L1)

2.2 Communicator and collaborator (L1)

Discussion:

Candidates that did well in this question generally tabulated their answers with the information in one column and the relevance to management in the other. This allowed them to ensure they had a systematic approach to handover and included the pertinent points for both anaesthetic and surgical information.

High scoring candidates considered the relevance to management in more detail for example articulating that knowing the grafts allowed them to look for territory specific ECG changes or understanding if the pericardium or pleura were open, allowed recognition of specific post op complications like tamponade or effusion/pneumothorax.

Angoff score for this SAQ	4.95
Highest candidate score achieved	9.25
Angoff pass rate	56.3%

Question 30

An intubated patient was admitted to the ICU following a self-harm attempt by hanging:

- a) List **six** potential complications, other than cardiac arrest or death (3 marks)
- b) Discuss the different radiological modalities in the evaluation of this patient on ICU admission (7 marks)

Syllabus topic/section:

2.1.13 Trauma Intensive Care; 2.1.20 Radiology in Intensive Care

Discussion: This question discriminated well between candidates who listed investigations and those who linked imaging choices to the suspected injuries and the patient's clinical context. Candidates who scored well in part A listed specific complications of hanging rather than broad terms such as "brain injury." Relevant complications included hypoxic-ischaemic brain injury, cerebral oedema, seizures, aspiration, pulmonary oedema or ARDS, airway or laryngeal injury, cervical spine injury, carotid or vertebral artery injury, rhabdomyolysis and dysrhythmias.

Part B asked candidates to discuss radiological modalities. Answers in this section were often less effective when they used generic imaging phrases, with limited explanation of the advantages and disadvantages of each modality. Stronger answers discussed CT brain, CT cervical spine and CT angiography of the neck in relation to the injuries being sought, as well as the risks of transferring an intubated critically ill patient. Additional credit was given for considering CXR and MRI, including their timing, limitations and role in identifying pulmonary complications, hypoxic-ischaemic injury, ligamentous injury or spinal cord injury. Candidates are reminded that "discuss" requires more than listing investigations; the answer should explain why each modality is useful and where its advantages and limitations lie.

Learning point: Candidates should follow the directions of the glossary of terms. In a "discuss" question, provide advantages and disadvantages and link each imaging modality to the specific injury being sought and include its limitations, as a "discuss" question requires more than listing investigations.

Angoff score for this SAQ	4.85
Highest candidate score achieved	7
Angoff pass rate	40.8%

The rubric is provided to aid candidate's future study.

	Below standard	At standard	Above standard
a) List six complications (3 marks)	0.5 mark for each correct item to a total of 3 marks		
b) Discuss the different radiological modalities (7 marks)	Failure to discuss in any detail ANY of CT neck/angio/brain or recognition of likely abnormalities being diagnosed or excluded. Failure to identify risk/benefit of imaging 0-3 marks	Adequate discussion of indications for ALL of CT modalities, CT-angio neck, CT brain including basic injuries/abnormalities being detected Risk/benefit of imaging considered as per a DISCUSS 3.5-5.5 marks	At standard PLUS Details for both CXR and MRI including indications/timing/risk-benefit And /Or A detailed discussion of potential abnormalities, And/or Consideration of risk/benefit in critically ill/intubated patient 6-7 marks

The report continues on the next page.

SECOND PART ORAL EXAMINATION

CLINICAL “HOT CASES” SECTION

EXAMINERS’ COMMENTS

The hot cases run for twenty minutes with an additional two minutes at the start of each case for the candidate to be given both a verbal and a written introduction to the case in question. This is to give candidates more opportunity to take in the relevant information and to plan a focused approach to examination of the patient.

The following comments are a guide to the expected standard for performance in the hot cases:

- Candidates should demonstrate professional behaviour, treating the patient with consideration and respect.
- Candidates should directly address and answer the question presented in the introduction to the hot case
- Candidates should interpret and synthesise information as opposed to just describing the clinical findings.
- Candidates need to seek information relevant to the clinical case in question.
- Candidates should be able to provide a sensible differential diagnosis and appropriate management plan. A definitive diagnosis is not always expected and, in some cases, may yet to be determined.
- Candidates should not rely on a template answer or key phrases but answer questions in the context of the clinical case in question.
- Candidates must be able to describe, with justification, their own practice for specific management issues.

Candidates who performed well in the hot cases, as in previous exams, were able to demonstrate the following:

- A professional approach showing respect and consideration for the patient
- Competent, efficient, and structured examination technique and able to appropriately adapt the examination to suit the clinical case in question
- Seeking of information relevant to the case
- Appropriate interpretation and synthesis of their findings
- Presentation of their conclusions in a concise and systematic fashion, addressing the issue in question
- Listing of a differential diagnosis that is relevant to the clinical case in question
- Appropriate interpretation of relevant investigations
- Discussion of management issues in a mature fashion, displaying confident and competent decision-making
- An appreciation of the complexities and key issues of the case
- Overall performance at the expected level (transitional fellow)

Candidates who did not perform at the acceptable standard did so for reasons including the following:

- Missing or misinterpreting key clinical signs or confabulating signs on examination
- Failure to perform a focused examination relevant to the case in question
- Incomplete or poor technique for examination of a system
- Causing pain, distress or potential harm to a patient due to rough technique or an inconsiderate examination
- Poor synthesis of findings with limited differential diagnosis, sometimes compounded by missed key clinical signs on examination

- Poor interpretation of imaging and data
- Failure to demonstrate understanding of the key issues relevant to the case in question and a lack of insight into the problems
- Inability to construct an appropriate management plan for the case in question
- Hesitancy and/or uncertainty in stating a management plan
- The need for significant prompting during the discussion with knowledge gaps
- Limited time for discussion as a consequence of taking too long to present the clinical findings or to interpret basic data
- Inability to convey the impression that they could safely take charge of the unit

It is apparent that some candidates are very nervous, and this may adversely affect their exam performance. Candidates badly affected by nerves may benefit from sessions with a performance psychologist, drama coach, public speaking coach or similar.

Candidates are advised that they should not attempt the Second Part Examination until they can confidently examine patients, present the relevant clinical findings, synthesise all the information and discuss management issues at the appropriate level, **which is a trainee who is ready to enter the transition year of the CICM training program, by demonstrating they have the ability for safe, effective, independent practice as a transitional fellow.** Candidates who have not yet attained this level of experience are strongly encouraged to defer their attempt at the exam. Candidates should practice hot cases from the commencement of their exam preparation. To this end, candidates are encouraged to do the following in their daily clinical practice as preparation for the hot cases:

- Seek the opportunity to take charge of the unit and be responsible for management decisions.
- Practice examination of individual systems.
- Treat every case to be assessed at work as a hot case, i.e., pose a relevant question (e.g., 'Why is this patient not progressing?' 'What is the cause of the new fever?' 'Is this patient ready for extubation?'), perform a focused exam and then present your findings to a colleague.

SUMMARY OF CLINICAL "HOT CASES"

The clinical 'hot cases' require candidates to assess patients currently in the ICU, regarding answering specific questions around clinical assessment, including diagnosis, relevant investigations, and aspects of management. Five examples of clinical 'hot case' questions from this examination sitting are given below.

- *A 64-year-old male is Day 7 ICU after presenting with a STEMI with OOHCA, a LAD stent and had a failed extubation 2 days ago. He has no significant background history. He is currently intubated and lightly sedated. Describe how you would manage his next extubation.*
- *A 47-year-old male is Day 3 ICU. He presented to ICU following a MET call of hypotension with diarrhea. His background medical history is significant for ALL (relapsed). He is currently intubated and ventilated with vasopressor support. Please examine for causes of shock.*
- *A 46-year-old female is day 2 ICU. She presented to ICU after an elective CABG complicated by 20 minutes of cardiac arrest. She returned to OT for exploration and VA ECMO. She has a background history of IHD. She is currently sedated and ventilated on VA ECMO and has significant hemodynamic supports. Please assess to formulate a plan for weaning her cardiovascular support.*
- *A 52-year-old female is Day 11 ICU. Transferred after a 3-week admission in a peripheral hospital with severe acute pancreatitis. She has a background history significant for recurrent pancreatitis, hypercholesterolemia, anxiety, and depression. She is currently tracheostomized and mechanically*

ventilated. She is isolated for VRE and had a relook laparotomy yesterday. Please examiner her and discuss her current major clinical issues.

- *A 55-year-old male is Day 2 ICU after presenting with hypoxic respiratory failure and Influenza A positive. He has a significant background medical history of Type 1 diabetes. He is currently intubated and ventilated. Please examiner to identify strategies to optimise his respiratory status.*

The clinical hot cases were examined at CICM accredited Intensive Care Units in Sydney, Wednesday May 20, 2026.

The report continues on the next page.

VIVAS

The overall pass rate for the Vivas was 63% compared with 65% for the written paper and 62% for the hot cases. Failure to pass a Viva was often due to knowledge gaps, poorly structured answers, and an inability to give the rationale for their responses. As in the discussion for the hot cases, candidates should not rely solely on generic statements, key-phrases, and template answers, and, instead, tailor their responses to the specifics of the question and be able to justify and expand their response.

Candidates are encouraged to practice Viva techniques and to discuss patient management, including the rationale for their decisions, with senior colleagues. As with the hot cases, candidates who are very nervous or have poor technique may benefit from training with a performance coach.

VIVA STEMS *over page*

Day 1: Thursday May 21 May 2026

Viva 1 – Procedure Station

Question:

This Viva will assess your knowledge around temporary epicardial pacing and will include the use of a pacing simulator. You will see a continuous ECG on a monitor for a simulated patient, and you will be given a temporary pacing box (see image). The changes you make on the pacing box will be reflected on the monitor. A 65-year-old has been admitted to ICU intubated after undergoing aortic valve replacement and coronary artery bypass grafting. The patient is invasively ventilated and is paced using temporary epicardial pacing (with both atrial and ventricular wires). You have been asked to review them for bradycardia not requiring haemodynamic support.

The ECG is below:



Describe the rhythm abnormality and demonstrate how you will manage it



Syllabus topic/section:

L1 Intensive Care Procedures: cardiac pacing
L1 Peri-operative Issues in Intensive Care: cardiac surgery

Viva summary:

Procedure Viva: Explored the interpretation of ECG. Candidates were asked to show familiarity with the use of a temporary pacing box and demonstrate safe management of the arrhythmia. Modes of pacing and factors influencing ventricular capture threshold. A demonstration of Ventricular sensitivity and related clinical scenarios.

Candidates did well if they:

- Had familiarity with the device and hands on experience with pacing and were able to demonstrate this
- Able to demonstrate sensitivity checking of the device

Candidates achieved less marks if they:

- Unfamiliar with epicardial pacing
- A poor understanding of the procedure
- Unable to accurately identify pacing issues on rhythm strips

Maximum Score	9.5
Percentage Passed	60%

Day 1: Thursday May 21 May 2026
VIVA 2

Question:

A 35yr old previously healthy patient returns from South-East Asia with a 5-day history of fever, headache, joint pains & malaise. They are admitted to ICU with increasing confusion, lactic acidosis & hypotension requiring a metaraminol infusion. **Outline your differential diagnoses**

Syllabus topic/section:

L1 Sepsis & infections: Rarer Infections with specific ICU considerations; cerebral malaria

Viva summary:

Assessment and management of the febrile returned traveller with MODS. An exploration of general and travel specific differential diagnosis. An understanding of the clinical course of malaria and principles of management. Management of the deteriorating malaria patient with common complications.

Candidates did well if they:

- Were specific to both travel related AND general differentials
- Had a detailed travel assessment related to the differentials
- Were comfortable with the knowledge of tropical diseases and differential diagnoses.
- Were familiar with the content of malaria treatment

Candidates achieved less marks if they:

- Had generic / non-specific answers unrelated to the case
- Could not state and details on travel related history
- Where unable to relate exam or investigation findings to specific disease s
- Were unaware of significant malaria complications (e.g. hypoglycemia) and broad treatment principles

Maximum Score	8
Percentage Passed	43%

Day 1: Thursday May 21 May 2026

Viva 3

Question:

A 58-year-old underwent an aortic valve and arch replacement and CABG x 3.

On arrival in ICU:

- Core temperature: 34 °C
- Heart rate: 88 bpm, paced
- Blood pressure: 85/60 mmHg
 - Adrenaline 6 µg/min (0.1 ug/kg/min)
 - Noradrenaline 12 µg/min (0.2 ug/kg/min)
- Central venous pressure: 20 mmHg
- Lactate 4.2 mmol/L

How would you assess the patient to determine the underlying cause of hypotension?

Syllabus topic/section:

L1 Peri-operative topics: Cardiac surgery

L1 Cardiovascular Intensive Care: valvular heart disease, haemodynamic monitoring; shock

Viva summary:

Postoperative assessment and management of the hypotensive cardiothoracic patient. an exploration of common causes of hypotension including LVOT obstruction, and SAM, bleeding and RVF. Exploration of the competing priorities in a mixed shock state and approach to clinical resolution.

Candidates did well if they:

- Synthesized information and had a structured approach
- Had a broad differential relating to the stem
- Referenced treatment / investigations back to the described patient
- Recognized conflicting treatment priorities, e.g. RVF, LVOT obstruction and bleeding management
- Resolved competing interests in the management of mixed shock
- Described what they WOULD do and displayed decision making.

Candidates achieved less marks if they:

- Gave generic answers not specific to the causes of shock in the CTS patient in relationship to volume, RV dysfunction, and myocardial stunning
- Described theoretical treatment with no practical considerations
- Described multiple treatment strategies without making a decision or nominating a way forward to treat the patient
- Unable to prioritise or articulate specific clinical goals of treatment.

Maximum Score	9
Percentage Passed	78%

A copy of the viva 3 marking template is provided on the following pages to aid the candidates future

study.

1. How would you assess the patient to determine the underlying cause of hypotension? (2 marks)

PROMPT – If candidate discusses management: <i>"We will discuss treatment shortly. Can we focus initially on how you would assess the patient please"</i>			
PROMPT – if candidate gives detailed explanation of pacemaker check: <i>"I acknowledge that you have done a pacemaker check."</i>			
	Below standard	At standard	Above standard
General Assessment (Resuscitation/Complications)	Either non-structured approach to assessment OR failure to consider key issues as outlined in "at standard" OR discusses generic aspects of patient assessment.	Systematic approach (not necessarily <i>this</i> system, but including most of): HISTORY: check anaesthetic and surgical handover including TOE findings EXAMINATION: signs of shock (cardiac vs vasoplegic), assess drain output INVESTIGATIONS: CXR and blood results, esp coags, consider TOE	At standard, plus: Demonstrates familiarity with post- cardiac surgical management Indicates the possibility of less common problems, such as LVOT obstruction and graft failure Discusses role of TOE and PAC data
2 marks	0 – 0.5 marks	1.0 -1.5 marks	2 marks

2. Post-operative TOE shows severe left ventricular hypertrophy and systolic anterior movement of the mitral valve. Explain how this information will affect your resuscitation? (3 marks)

PROMPT - If management is generic cardiogenic shock management: <i>"Can I please remind you, the echo showed severe SAM and LVH. How would your resuscitation differ in this setting?"</i>			
Prompt – If incomplete management: <i>"What are other management principles?"</i>			
Probe – to explore decision making re: management principles given <i>"What is your reasoning behind this decision?"</i>			
	Below standard	At standard	Above standard
Haemodynamic management	Shows limited understanding of the significance of SAM and gives incomplete or unsafe haemodynamic management. OR Provides an unsafe/incoherent explanation or management plan (e.g. escalating inotropy, reducing afterload) OR Requires extensive prompting	Identifies SAM/dynamic LVOT obstruction and gives the main management principles: • Reduce inotropy, • Reduce chronotropy, • Increase preload, • Increase afterload, • Avoid vasodilators. Some prompting permitted.	At standard AND Gives a targeted, well-reasoned haemodynamic plan linked to the physiology and clinical context. E.g. explains how reducing inotropy and increasing afterload reduce LVOT obstruction and improve forward flow.
3 marks	0 – 1 marks	1.5 – 2 marks	2.5 - 3 marks

3. The drain output is 150ml/h for 2 hours. Outline how you will manage this issue in this patient? (2 marks)

PROMPT – If too much time spent talking about medical management of coagulopathy: “You’ve mentioned normalisation of volume and coag. factors, how will you proceed if the patient deteriorates?”			
PROMPT – If too generic: “You’ve mentioned coagulopathy correction/surgical intervention, can you expand on this”			
PROMPT – If doesn’t acknowledge SAM “What are the specific haemodynamic challenges in managing the bleeding in this case?”			
	Below standard	At standard	Above standard
Management of bleeding	Generic management of post op bleeding, without relevance to post op cardiac surgical patients (e.g. heparin, tranexamic acid infusion) OR Unsafe management	Identification of primary problem and risk to <u>this</u> patient Includes: - Comprehensive discussion of managing medical bleeding - Surgical review	At standard AND Mentions the challenges of SAM in a bleeding patient. (without prompting)
2 marks	0 – 0.5 marks	1.0 – 1.5 marks	2.0 marks

4. The bleeding has settled. 24 hours later a trans-oesophageal echo shows severe right ventricular dysfunction. What are the most likely causes for this patient. (1 mark)

PROMPT: If generic discussion of RV dysfunction “What are the causes of RV dysfunction in this patient”			
	Below standard	At standard	Above standard
Likely causes RV failure	Generic list not contextualized to this patient	Structured AND Answers in context to this patient	As at standard AND Considers time course into list of causes (eg. Protamine not relevant at 24h) OR Considers RCA occlusion
1 mark	0 marks	0.5 marks	1.0 mark

5. Discuss your key priorities for managing this patient's right ventricular (RV) failure (2 marks)

PROMPT If generic discussion about fluid balance or use of milrinone ‘Given this patient’s echo findings, what may be the unintended consequences of your treatment plan’			
	Below standard	At standard	Above standard
Management of RV failure	Generic list, not contextualized to this patient	Structured AND Discussed most of the following priorities: - Optimise RV Preload - Reduce RV Afterload (PVR) - Optimise RV Contractility - Maintain Coronary Perfusion - Rhythm management - Exclude RCA ischaemia - Mechanical Support	At standard AND Discussion of competing priorities in hemodynamic management (RV failure and LVOT obstruction) fluid Mx, Milrinone issue
2 marks	0 – 0.5 marks	1.0 – 1.5 marks	2.0 marks

FINAL MARK:

Day 1: Thursday May 21 May 2026

Viva 4

Question:

Please enter the room to begin the radiology Viva

Syllabus topic/section:

L1 Radiological investigations: CT, CXR

L1 Perioperative topics:

cardiac surgery, thoracic surgery, abdominal surgery and neurosurgery

L1 Respiratory Intensive Care: acute respiratory distress syndrome (ARDS), bronchopleural fistula

Viva Summary:

6 images CXRx3, 1x CT and CTA trauma, 1x CT abdomen, 1x CT brain.

Candidates did well if they:

- Looked at the whole scan methodically, scrolling to all sections and examining all organs separately (particularly in CT scans)
- Answered the stem question and were able to state the clinical significance
- Described findings anatomically and used radiology terms.

Candidates achieved less marks if they:

- Rushed and did not examine each slice
- Were not systematic
- Did not correlate to the stem and interpret clinically
- Did not scan through the FULL image
- Spent too much time talking about lines/hardware and not abnormal pathology.

Maximum Score	7.5
Percentage Passed	59%

The rubric is provided to aid candidate's future study.

IMAGE 1		Below standard	At standard	Above standard
CXR: Ongoing respiratory failure, worsening lung compliance. VV ECMO, respiratory failure, left pleural collection Expected answer <u>Hardware:</u> ECMO cannulae right internal jugular and femoral – appropriate positions ECMO cannulae positions consistent with VV ECMO ETT – at carina L Subclavian CVL - tip not in optimal position, however likely safe to use Enteral tube with tip not visible but well below diaphragm <u>Pathology:</u> Bilateral infiltrates Air bronchograms Veiling density left side Rim of confluent opacity with no lung markings left side Cavitations x 2 in right lower zone <u>Clinical reasoning:</u> Air bronchograms and lack of volume loss suggest consolidation as pathology Left veiling density and peripheral rim opacity suggests fluid collection, likely moderate to large ETT position at risk of RUL occlusion – benefit from re-position Cavities in right lower zone raise possibility of necrotizing pneumonia/cavity forming organisms	Findings 7 marks	Inability to identify most of relevant findings as per “at standard” response And/or Significant errors in description of findings And/or Incorrectly states absent pathology 0 – 3 marks	Must identify most of the following: Bilateral infiltrates Air bronchograms Left veiling density/rim of opacification ETT with tip almost at carina (“too low”) ECMO cannulae appropriate position Left subclavian CVL with tip position “not optimal” 3.5 – 5.0 marks	At standard PLUS some of: Possible fluid tracking in fissure R Possible cavitation x 2 in right lower zone Additional comment on ECMO cannulae likely VV ECMO 5.5 – 7.0 marks
	Clinical reasoning 3 marks	Unable to relate the image findings to the clinical context 0 - 1 marks	Able to report the images in the context of the clinical scenario (some prompting allowed) Discusses collection or effusion as cause for left dominant opacification and rim Correlates infiltrates, air bronchograms, and lack of volume loss as likely consolidation consistent with likely infective process Identifies ETT may occlude RUL and needs repositioning Prompt: How do you interpret these findings in the clinical context? (if not already mentioned) 1.5 - 2 marks	At standard without prompting PLUS advanced interpretation such as: - Connecting multiple findings - Proactively suggests clinical implications of findings May include: • Discusses size of pleural collection - likely moderate to large • May discuss confirmation of pleural collection with USS • May discuss potential for drainage • May discuss pros and cons of CT scan to quantify fluid, nature, cavities • May discuss difficulty in excluding fluid contribution to pulmonary opacities 2.5 – 3.0 marks
				Total: / 10 marks

IMAGE 2		Below standard	At standard	Above standard
CT: Trauma Post MVA, ongoing shock. Expected answer CT Aortogram (CT Angio) <u>Hardware:</u> Mainly important negatives here: Not intubated No upper body central venous access visible No enteral tubes <u>Pathology:</u> Large para-aortic collection/haematoma mid thorax to below diaphragm Disruption aorta lower thoracic level Bilateral pleural collections – contiguous with mediastinal collection/haematoma Right pleural collection heterogenous Left lower lobe collapse/consolidation Right lung compressed by pleural collection Distended stomach, fluid filled Spine: T11/12 fractures (NB not bony windows) Left paraspinal muscle and tissue oedema <u>Clinical reasoning:</u> Aortic disruption with mediastinal and pleural haematomas – likely high velocity injury Potential for other significant injuries including spine/brain/limbs/myocardial contusions Right pleural collection heterogenous consistent with ongoing bleeding Left lower lobe consistent with possible aspiration or ALI High risk aspiration given no ETT and no NG tube and distended stomach Will need input from multiple disciplines (CT, IR, vascular, spinal)	Findings 12 marks	Inability to identify most of relevant findings as per “at standard” response And/or Significant errors in description of findings And/or Incorrectly states absent pathology 0 – 5.5 marks	Should identify most of the following: <u>Hardware:</u> Not intubated No enteral tubes <u>Pathology:</u> Large para-aortic collection/haematoma mid thorax to below diaphragm Disruption aorta lower thoracic level Bilateral pleural collections – contiguous with mediastinal collection/haematoma Right pleural collection heterogenous Left lower lobe collapse/consolidation Distended stomach, fluid filled Prompt: Where do you think the bleeding is originating? (If mentions bleeding but not location) 6 – 10 marks	At standard PLUS some of: No upper body central venous access visible Right lung compressed by pleural collection Spine: T11/12 fractures (NB not bony windows) Left paraspinal muscle and tissue oedema 10.5 - 12 marks
	Clinical reasoning 8 marks	Unable to relate the image findings to the clinical context: Does not demonstrate understanding of urgency for management 0– 3.5 marks	Able to report the images in the context of the clinical scenario (some prompting allowed) Significant traumatic injury with likely ongoing haemorrhage May mention some of: Possible aspiration High risk aspiration High risk for other injuries Prompt: What are your clinical concerns based on these findings? 4 - 6 marks	At standard without prompting PLUS advanced interpretation such as - commenting on relevance of absent findings - connecting multiple findings - Proactively suggesting clinical implications of findings Realises that high potential for other injuries High risk for aspiration Need multidisciplinary input 6.5 - 8 marks
				Total: / 20 marks

IMAGE 3 CXR: Post MVA difficult to ventilate.		Below standard	At standard	Above standard
Expected answer <u>Hardware:</u> Left ICC, position satisfactory, no kinks Right ICC ETT with bronchial blocker CVL NGT Packing material RUQ Laparotomy staples <u>Pathology:</u> Left lung collapse Large left pneumothorax (despite ICC) Right lung extensive infiltrates consistent with contusions R apical ICC	Findings 5 marks	Inability to identify most of relevant findings as per "at standard" response And/or Only identifies hardware And/or Incorrectly states absent pathology 0 – 2 marks	Must identify most of the following: Left pneumothorax (large) Left lung collapse Right lung infiltrates Left ICC well positioned (no obvious kinks, holes in chest) ETT, CVL, NGT Bronchial blocker (does not need to be identified as blocker) Right ICC Packing RUQ Laparotomy staples 2.5 – 3.5 marks	At standard PLUS some of: Right scapula fracture Able to recognise bronchial blocker Interprets position of NGT and CVL in context (CVL relative volume loss on L or film rotation, NGT deep ? post pyloric) 4 - 5 marks
Clinical reasoning and interpretation: The most striking finding (and the major component of the difficulty ventilating) is the persistent left sided pneumothorax despite well positioned ICCs . Concern for ongoing air leak ? disruption to airway. There is a L sided bronchial blocker in place but this may not be effective. The R sided contusions may also contribute to difficulty ventilating but less so. There has also been (likely damage control) surgery to the upper abdomen.	Clinical reasoning 5 marks	Unable to relate the image findings to the clinical context 0 - 2 marks	Able to report the images in the context of the clinical scenario with most likely interpretation (some prompting allowed): Left lung – concern for blockage of ICC or ongoing air leak (bronchopleural disruption) Right lung infiltrates likely contusions Prompt: What findings on this x-ray may be contributing to the ventilation difficulties? 2.5 – 3.5 marks	At standard without prompting PLUS advanced interpretation such as • Comments on relevance of absent findings • Articulates a sensible thought process about why the L pneumothorax persists despite adequately positioned ICC • Recognises bronchial blocker and interprets in clinical context – might not be adequately functioning • Proactively suggesting clinical implications of findings 4 - 5 marks
				Total: / 10 marks

IMAGE 4		Below standard	At standard	Above standard
CT (Mesenteric ischaemia)				
Expected answer Hardware: Pathology: Pneumoperitoneum – large volume Small bowel dilatation Pneumatosis intestinalis – small bowel and portal venous gas (small amount) Gastric dilatation Fluid filled oesophagus Ascites Consolidation bilateral lung bases Liver cirrhosis Aortoiliac atherosclerosis – extensive Cholelithiasis Bowel wall thickening/oedema terminal ileum/right colon	Findings 14 marks	Inability to identify most of relevant findings as per “at standard” response Incorrectly states absent pathology 0 – 6.5 marks	Must identify most of the following: Pneumoperitoneum – large volume Small bowel dilatation Pneumatosis intestinalis – small bowel and portal venous gas (small amount) Gastric dilatation Ascites Consolidation bilateral lung bases Liver cirrhosis Cholelithiasis Bowel wall thickening/oedema terminal ileum/right colon Prompt: What is the most likely cause of the perforation? (If identifies perf but not mesenteric isch) Prompt: What features suggest mesenteric ischaemia? (if candidate mentions it without justifying the features) 7 - 12 marks	At standard without prompting, majority of findings, may mention: Aortoiliac atherosclerosis – extensive Portal venous gas (subtle) Fluid filled oesophagus Comments on significant negative findings - No major arterial occlusion - No collections 12.5 - 14 marks
Clinical reasoning: Features consistent with mesenteric ischaemia and viscus perforation – pneumatosis and pneumoperitoneum Cholelithiasis – no features of acute cholecystitis or biliary dilatation Atherosclerosis risk factor for mesenteric ischaemia	Clinical reasoning 6 marks	Unable to relate the image findings to the clinical context 0-2.5 marks	Able to report the images in the context of the clinical scenario (some prompting allowed) Perforated viscus Mesenteric ischaemia Risk aspiration – need gastric decompression Surgical emergency Prompt: What immediate management issues arise from this scan? (If candidate does not mention clinical implication) 3-4.5 marks	At standard without prompting PLUS advanced interpretation such as • commenting on relevance of absent findings • connecting multiple findings • Proactively suggesting clinical implications of findings - Pneumatosis and portal venous gas ominous signs - Risk of septic shock, perforation related contamination 5-6 marks
				Total: / 20 marks

IMAGE 5 CT Brain (Trauma)		Below standard	At standard	Above standard
Expected answer <u>Pathology:</u> Left acute subdural haematoma Left extradural haematoma Midline shift 13mm Effacement left lateral ventricle Subfalcine herniation Prominent right temporal horn/early obstructive hydrocephalus Basal cisterns effaced Left traumatic subarachnoid haemorrhage parietal and temporal lobes Diffuse oedema left side, loss G/W differentiation Right parietal and occipital haematoma scalp Left frontal and temporal haematoma scalp <u>Clinical reasoning:</u> Severe TBI Prognosis guarded+++ Heterogenous density of SDH, indicates active bleeding Cerebral oedema Contre coup injuries Needs urgent Neurosurgical consult	Findings 15 marks	Inability to identify most of relevant findings as per "at standard" response Incorrectly states absent pathology Fails to mention hydrocephalus 0 – 7 marks	Must identify most of the following: Left acute subdural haematoma Left extradural haematoma Midline shift 13mm Prominent right temporal horn/early obstructive hydrocephalus Left traumatic subarachnoid haemorrhage parietal and temporal lobes Diffuse oedema left side, loss G/W differentiation Right parietal and occipital haematoma scalp Left frontal and temporal haematoma scalp Prompt: Can you identify the anatomical location of the haemorrhage(s)? 7.5 - 12 marks	At standard without prompting PLUS advanced interpretation such as: Identification of some of the following: Subfalcine herniation Basal cisterns effaced Effacement left lateral ventricle Negative findings: Looks for fractures, not bony windows, but would expect to see (Fracture present) 12.5 - 15 marks
	Clinical reasoning 5 marks	Unable to relate the image findings to the clinical context 0 - 2 marks	Able to report the images and interpret in the context of the most likely clinical scenario (some prompting allowed) States severe TBI Prognosis guarded Need for neurosurgical consult Prompt: What is the prognostic significance of these injuries? 2.5 – 3.5 marks	At standard without prompting PLUS advanced interpretation such as • States severe TBI • Concerned for hydrocephalus • States need for neurosurgical consult – consider ICP monitoring +/- EVD? • Poor prognostic signs mentioned 4- 5 marks
	Total: / 20 marks			

IMAGE 6 CXR (Oesophageal perforation)		Below standard	At standard	Above standard
Expected answer <u>Pathology:</u> Subcutaneous emphysema neck Pneumomediastinum Bilateral pleural effusions/collections Atelectasis/consolidation bilateral Increased interstitial lung markings No pneumothorax No mediastinal widening <u>Clinical reasoning:</u> Findings concerning for oesophageal perforation "Boerhaave syndrome" - Gas in mediastinum and subcutaneous - Gas distribution - tracking to neck - Inflammatory pleural effusions – reactive or due to aspiration - Atelectasis	Findings 5 marks	Inability to identify most of relevant findings as per "at standard" response Incorrectly states absent pathology 0 – 2 marks	Must identify most of the following: Subcutaneous emphysema Bilateral pleural effusion Bilateral atelectasis/consolidation Pneumomediastinum 2.5 – 3.5 marks	At standard without prompting PLUS advanced interpretation such as: Negative findings - No pneumothorax - No mediastinal widening - No subcutaneous emphysema in thorax - Not intubated 4 - 5 marks
	Clinical reasoning 5 marks	Unable to relate the image findings to the clinical context 0 - 2 marks	Able to correlate presentation and findings and report the images in the context of the most likely clinical scenario (some prompting allowed) Oesophageal perforation/Boerhaave syndrome Prompt: How do you interpret these findings in the clinical context? 2.5 – 3.5 marks	At standard without prompting PLUS advanced interpretation such as • commenting on relevance of absent findings – no gas in thorax, consistent with oesophageal source subcutaneous air rather than pulmonary • connecting multiple findings • outlines potential causes for pleural effusions 4 - 5 marks
	Total: / 10 marks			

APPROACH, STRUCTURE AND TECHNIQUE	Below standard	At standard	Above standard
Applies to performance over whole of Viva			
Approach and technique (10 marks)	Unstructured approach Or significant prompting 0 – 4.5 marks	Systematic approach Familiarity with images Minor prompting allowed 5 - 7 marks	At standard PLUS Comprehensive systematic approach Minimal prompting required 7.5 - 10 marks
	Total / 10		

A copy of the Viva 4 marking template is provided on the following pages.

IMAGE 1		Below standard	At standard	Above standard
CXR: Ongoing respiratory failure, worsening lung compliance. VV ECMO, respiratory failure, left pleural collection				
Expected answer <u>Hardware:</u> ECMO cannulae right internal jugular and femoral – appropriate positions ECMO cannulae positions consistent with VV ECMO ETT – at carina L Subclavian CVL - tip not in optimal position, however likely safe to use Enteral tube with tip not visible but well below diaphragm	Findings 7 marks	Inability to identify most of relevant findings as per “at standard” response And/or Significant errors in description of findings And/or Incorrectly states absent pathology 0 – 3 marks	Must identify most of the following: Bilateral infiltrates Air bronchograms Left veiling density/rim of opacification ETT with tip almost at carina (“too low”) ECMO cannulae appropriate position Left subclavian CVL with tip position “not optimal” 3.5 – 5.0 marks	At standard PLUS some of: Possible fluid tracking in fissure R Possible cavitation x 2 in right lower zone Additional comment on ECMO cannulae likely VV ECMO 5.5 – 7.0 marks
<u>Pathology:</u> Bilateral infiltrates Air bronchograms Veiling density left side Rim of confluent opacity with no lung markings left side Cavitations x 2 in right lower zone <u>Clinical reasoning:</u> Air bronchograms and lack of volume loss suggest consolidation as pathology Left veiling density and peripheral rim opacity suggests fluid collection, likely moderate to large ETT position at risk of RUL occlusion – benefit from re-position Cavities in right lower zone raise possibility of necrotizing pneumonia/cavity forming organisms	Clinical reasoning 3 marks	Unable to relate the image findings to the clinical context 0 - 1 marks	Able to report the images in the context of the clinical scenario (some prompting allowed) Discusses collection or effusion as cause for left dominant opacification and rim Correlates infiltrates, air bronchograms, and lack of volume loss as likely consolidation consistent with likely infective process Identifies ETT may occlude RUL and needs repositioning Prompt: How do you interpret these findings in the clinical context? (if not already mentioned) 1.5 - 2 marks	At standard without prompting PLUS advanced interpretation such as: - Connecting multiple findings - Proactively suggests clinical implications of findings May include: - Discusses size of pleural collection - likely moderate to large - May discuss confirmation of pleural collection with USS - May discuss potential for drainage - May discuss pros and cons of CT scan to quantify fluid, nature, cavities - May discuss difficulty in excluding fluid contribution to pulmonary opacities 2.5 – 3.0 marks
Total: / 10 marks				

IMAGE 2		Below standard	At standard	Above standard
CT: Trauma Post MVA, ongoing shock.				
Expected answer CT Aortogram (CT Angio) <u>Hardware:</u> Mainly important negatives here: Not intubated No upper body central venous access visible No enteral tubes <u>Pathology:</u> Large para-aortic collection/haematoma mid thorax to below diaphragm Disruption aorta lower thoracic level Bilateral pleural collections – contiguous with mediastinal collection/haematoma Right pleural collection heterogenous Left lower lobe collapse/consolidation Right lung compressed by pleural collection Distended stomach, fluid filled Spine: T11/12 fractures (NB not bony windows) Left paraspinal muscle and tissue oedema	Findings 12 marks	Inability to identify most of relevant findings as per “at standard” response And/or Significant errors in description of findings And/or Incorrectly states absent pathology	Should identify most of the following: <u>Hardware:</u> Not intubated No enteral tubes <u>Pathology:</u> Large para-aortic collection/haematoma mid thorax to below diaphragm Disruption aorta lower thoracic level Bilateral pleural collections – contiguous with mediastinal collection/haematoma Right pleural collection heterogenous Left lower lobe collapse/consolidation Distended stomach, fluid filled Prompt: Where do you think the bleeding is originating? (If mentions bleeding but not location)	At standard PLUS some of: No upper body central venous access visible Right lung compressed by pleural collection Spine: T11/12 fractures (NB not bony windows) Left paraspinal muscle and tissue oedema
<u>Clinical reasoning:</u> Aortic disruption with mediastinal and pleural haematomas – likely high velocity injury Potential for other significant injuries including spine/brain/limbs/myocardial contusions Right pleural collection heterogenous consistent with ongoing bleeding Left lower lobe consistent with possible aspiration or ALI High risk aspiration given no ETT and no NG tube and distended stomach Will need input from multiple disciplines (CT, IR, vascular, spinal)	Clinical reasoning 8 marks	Unable to relate the image findings to the clinical context: Does not demonstrate understanding of urgency for management	Able to report the images in the context of the clinical scenario (some prompting allowed) Significant traumatic injury with likely ongoing haemorrhage May mention some of: Possible aspiration High risk aspiration High risk for other injuries Prompt: What are your clinical concerns based on these findings?	At standard without prompting PLUS advanced interpretation such as - commenting on relevance of absent findings - connecting multiple findings - Proactively suggesting clinical implications of findings Realises that high potential for other injuries High risk for aspiration Need multidisciplinary input
		0 – 5.5 marks	6 – 10 marks	10.5 - 12 marks
		0– 3.5 marks	4 - 6 marks	6.5 - 8 marks
				Total: / 20 marks

IMAGE 3		Below standard	At standard	Above standard
CXR: Post MVA difficult to ventilate.				
Expected answer <u>Hardware:</u> Left ICC, position satisfactory, no kinks Right ICC ETT with bronchial blocker CVL NGT Packing material RUQ Laparotomy staples <u>Pathology:</u> Left lung collapse Large left pneumothorax (despite ICC) Right lung extensive infiltrates consistent with contusions R apical ICC Clinical reasoning and interpretation: The most striking finding (and the major component of the difficulty ventilating) is the persistent left sided pneumothorax despite well positioned ICCs . Concern for ongoing air leak ? disruption to airway. There is a L sided bronchial blocker in place but this may not be effective. The R sided contusions may also contribute to difficulty ventilating but less so. There has also been (likely damage control) surgery to the upper abdomen.	Findings 5 marks	Inability to identify most of relevant findings as per “at standard” response And/or Only identifies hardware And/or Incorrectly states absent pathology 0 – 2 marks	Must identify most of the following: Left pneumothorax (large) Left lung collapse Right lung infiltrates Left ICC well positioned (no obvious kinks, holes in chest) ETT, CVL, NGT Bronchial blocker (does not need to be identified as blocker) Right ICC Packing RUQ Laparotomy staples 2.5 – 3.5 marks	At standard PLUS some of: Right scapula fracture Able to recognise bronchial blocker Interprets position of NGT and CVL in context (CVL relative volume loss on L or film rotation, NGT deep ? post pyloric) 4 - 5 marks
	Clinical reasoning 5 marks	Unable to relate the image findings to the clinical context 0 - 2 marks	Able to report the images in the context of the clinical scenario with most likely interpretation (some prompting allowed): Left lung – concern for blockage of ICC or ongoing air leak (bronchopleural disruption) Right lung infiltrates likely contusions Prompt: What findings on this x-ray may be contributing to the ventilation difficulties? 2.5 – 3.5 marks	At standard without prompting PLUS advanced interpretation such as • Comments on relevance of absent findings • Articulates a sensible thought process about why the L pneumothorax persists despite adequately positioned ICC • Recognises bronchial blocker and interprets in clinical context – might not be adequately functioning • Proactively suggesting clinical implications of findings 4 - 5 marks
	Total: / 10 marks			

IMAGE 4		Below standard	At standard	Above standard
CT (Mesenteric ischaemia)				
Expected answer Hardware: Pathology: Pneumoperitoneum – large volume Small bowel dilatation Pneumatosis intestinalis – small bowel and portal venous gas (small amount) Gastric dilatation Fluid filled oesophagus Ascites Consolidation bilateral lung bases Liver cirrhosis Aortoiliac atherosclerosis – extensive Cholelithiasis Bowel wall thickening/oedema terminal ileum/right colon Clinical reasoning: Features consistent with mesenteric ischaemia and viscus perforation – pneumatosis and pneumoperitoneum Cholelithiasis – no features of acute cholecystitis or biliary dilatation Atherosclerosis risk factor for mesenteric ischaemia	Findings 14 marks	Inability to identify most of relevant findings as per “at standard” response Incorrectly states absent pathology 0 – 6.5 marks	Must identify most of the following: Pneumoperitoneum – large volume Small bowel dilatation Pneumatosis intestinalis – small bowel and portal venous gas (small amount) Gastric dilatation Ascites Consolidation bilateral lung bases Liver cirrhosis Cholelithiasis Bowel wall thickening/oedema terminal ileum/right colon Prompt: What is the most likely cause of the perforation? (If identifies perf but not mesenteric isch) Prompt: What features suggest mesenteric ischaemia? (if candidate mentions it without justifying the features) 7 - 12 marks	At standard without prompting, majority of findings, may mention: Aortoiliac atherosclerosis – extensive Portal venous gas (subtle) Fluid filled oesophagus Comments on significant negative findings - No major arterial occlusion - No collections 12.5 - 14 marks
	Clinical reasoning 6 marks	Unable to relate the image findings to the clinical context 0-2.5 marks	Able to report the images in the context of the clinical scenario (some prompting allowed) Perforated viscus Mesenteric ischaemia Risk aspiration – need gastric decompression Surgical emergency Prompt: What immediate management issues arise from this scan? (If candidate does not mention clinical implication) 3-4.5 marks	At standard without prompting PLUS advanced interpretation such as • commenting on relevance of absent findings • connecting multiple findings • Proactively suggesting clinical implications of findings - Pneumatosis and portal venous gas ominous signs - Risk of septic shock, perforation related contamination 5-6 marks
				Total: / 20 marks

IMAGE 5		Below standard	At standard	Above standard
CT Brain (Trauma)				
Expected answer <u>Pathology:</u> Left acute subdural haematoma Left extradural haematoma Midline shift 13mm Effacement left lateral ventricle Subfalcine herniation Prominent right temporal horn/early obstructive hydrocephalus Basal cisterns effaced Left traumatic subarachnoid haemorrhage parietal and temporal lobes Diffuse oedema left side, loss G/W differentiation Right parietal and occipital haematoma scalp Left frontal and temporal haematoma scalp <u>Clinical reasoning:</u> Severe TBI Prognosis guarded+++ Heterogenous density of SDH, indicates active bleeding Cerebral oedema Contre coup injuries Needs urgent Neurosurgical consult	Findings 15 marks	Inability to identify most of relevant findings as per “at standard” response Incorrectly states absent pathology Fails to mention hydrocephalus 0 – 7 marks	Must identify most of the following: Left acute subdural haematoma Left extradural haematoma Midline shift 13mm Prominent right temporal horn/early obstructive hydrocephalus Left traumatic subarachnoid haemorrhage parietal and temporal lobes Diffuse oedema left side, loss G/W differentiation Right parietal and occipital haematoma scalp Left frontal and temporal haematoma scalp Prompt: Can you identify the anatomical location of the haemorrhage(s)? 7.5 - 12 marks	At standard without prompting PLUS advanced interpretation such as: Identification of some of the following: Subfalcine herniation Basal cisterns effaced Effacement left lateral ventricle Negative findings: Looks for fractures, not bony windows, but would expect to see (Fracture present) 12.5 - 15 marks
	Clinical reasoning 5 marks	Unable to relate the image findings to the clinical context 0 - 2 marks	Able to report the images and interpret in the context of the most likely clinical scenario (some prompting allowed) States severe TBI Prognosis guarded Need for neurosurgical consult Prompt: What is the prognostic significance of these injuries? 2.5 – 3.5 marks	At standard without prompting PLUS advanced interpretation such as • States severe TBI • Concerned for hydrocephalus • States need for neurosurgical consult – consider ICP monitoring +/- EVD? • Poor prognostic signs mentioned 4- 5 marks
	Total: / 20 marks			

IMAGE 6		Below standard	At standard	Above standard
CXR (Oesophageal perforation)				
Expected answer <u>Pathology:</u> Subcutaneous emphysema neck Pneumomediastinum Bilateral pleural effusions/collections Atelectasis/consolidation bilateral Increased interstitial lung markings No pneumothorax No mediastinal widening <u>Clinical reasoning:</u> Findings concerning for oesophageal perforation "Boerhaave syndrome" - Gas in mediastinum and subcutaneous - Gas distribution - tracking to neck - Inflammatory pleural effusions – reactive or due to aspiration - Atelectasis	Findings 5 marks	Inability to identify most of relevant findings as per "at standard" response Incorrectly states absent pathology 0 – 2 marks	Must identify most of the following: Subcutaneous emphysema Bilateral pleural effusion Bilateral atelectasis/consolidation Pneumomediastinum 2.5 – 3.5 marks	At standard without prompting PLUS advanced interpretation such as: Negative findings - No pneumothorax - No mediastinal widening - No subcutaneous emphysema in thorax - Not intubated 4 - 5 marks
	Clinical reasoning 5 marks	Unable to relate the image findings to the clinical context 0 - 2 marks	Able to correlate presentation and findings and report the images in the context of the most likely clinical scenario (some prompting allowed) Oesophageal perforation/Boerhaave syndrome Prompt: How do you interpret these findings in the clinical context? 2.5 – 3.5 marks	At standard without prompting PLUS advanced interpretation such as • commenting on relevance of absent findings – no gas in thorax, consistent with oesophageal source subcutaneous air rather than pulmonary • connecting multiple findings • outlines potential causes for pleural effusions 4 - 5 marks
	Total: / 10 marks			

APPROACH, STRUCTURE AND TECHNIQUE Applies to performance over whole of viva	Below standard	At standard	Above standard
Approach and technique (10 marks)	Unstructured approach Or significant prompting 0 – 4.5 marks	Systematic approach Familiarity with images Minor prompting allowed 5 - 7 marks	At standard PLUS Comprehensive systematic approach Minimal prompting required 7.5 - 10 marks
	Total / 10		

FINAL SCORES		
Image	Max score	Score
1. CXR 3 (ECMO VV Pleural collection)	10	
2. CT 1 (MVA. Aortic disruption, ongoing bleed)	20	
3. CXR 2 (Post MVA. Pneumothorax, ICC in situ)	10	
4. CT 2 (Mesenteric ischaemia)	20	
5. CT 3 (Brain post trauma)	20	
6. CXR 4 (Oesophageal perforation)	10	
Approach, structure and technique	10	
Total score	100	/100 = /10

Day 2: Friday May 22 May 2026

Viva 5

Question:

You are the ICU consultant in a regional hospital and have been asked to review a 46-year-old who presented via ED with suspected thyroid storm

Background history of Graves' disease, treated with carbimazole and propranolol.

The patient is agitated, and diaphoretic, temperature is 39.5°C.

Current observations, with high flow nasal prong oxygen (FiO₂ 0.6, flow 50L/min):

Heart rate 170/min in atrial fibrillation

Blood pressure 85/50 mmHg

SpO₂ 93%

Arterial blood	Patient	Reference
pH	7.23	7.35-7.45
HCO ₃ ⁻	15.1 mmol/L*	<u>22-26</u>
Troponin	230 mmol/L	0-40
Lactate	5.2 mmol/L *	0.5-1.6

Outline factors that may have precipitated a thyroid storm in this patient

Syllabus topic/section:

L1 Endocrine Intensive Care; acute thyroid crises

L1 Cardiovascular intensive care: shock, mechanical supports: ECMO

Viva Summary:

Candidates were asked to demonstrate knowledge of factors precipitating thyroid storm. Outlining the management priorities, including refractory management strategies including indications for referral to an ECMO centre.

Candidates did well if they:

- Structured their resuscitation clearly and explained the rationale for their choices
- If they could reconcile the competing issues of hypotension and tachycardia in the setting of thyrotoxicosis
- Could justify and defend the choice of management of AF with RVR and cardiogenic shock explaining the advantages and disadvantages of each choice
- Understood the tiered management of a thyroid storm
- Recognised the patient instability and the early need for intubation
- Recognised a mixed shock state and understood the cardiac differential

Candidates achieved less marks if they:

- Were disorganised in their approach to resus
- Did not recognise the contributors to shock
- Did not display a clear understanding of pathophysiology of organ dysfunction in thyroid storm

Maximum Score	7.5
Percentage Passed	57%

Day 2: Friday May 22 May 2026
Viva 6

Question:

A 54-year-old patient is day 21 in ICU with alcohol-related acute severe pancreatitis. They have undergone an open pancreatic necrosectomy after multiple percutaneous interventions.
The patient has an **open abdomen** with a negative-pressure abdominal dressing (VAC dressing).

Outline the postoperative management priorities in the first 24 hours

Syllabus topic/section:

- L1 Peri-operative topics: abdominal surgery
- L1 Respiratory Intensive Care Medicine: mechanical ventilatory support
- L1 Gastro-intestinal intensive care; malnutrition (assessment)

Viva summary:

The Viva explored ICU priorities in the open abdomen in a pancreatectomy patient. Candidates were asked to display mastery of nutritional issues related to this patient. Diagnostic and management problems of fever, ventilation challenges and prognostication

Candidates did well if they:

- Related the questions to the stem and considered the patient circumstances of an open abdomen and the effects of that on their management choices, e.g., fluids, opioid use, complications
- Prioritized their answers in regard to ICU support and complications after surgery resulting in an open abdomen
- Fever in a complex abdominal patient with possible abdominal sepsis
- Had a safe approach to nutrition and high airway pressure management taking control of the situation
- Had clear recognition of challenges for a long-term ICU patient and factors impacting the prognosis.

Candidates achieved less marks if they:

- Had a generic response to questions without clearly applying their knowledge to the described situation
- Had a limited approach to diagnostic processes in assessment of the ventilation challenges.
- Source control in Sepsis management with missing for some answers
- Many candidates missed increasing intrabdominal pressure as a reason for increased airway pressure

Maximum Score	8
Percentage Passed	62%

Day 2: Friday May 22 May 2026
Viva 7

Question:

You are asked to review a patient in ED with confusion, agitation and tachypnoea in context of intoxication with an unknown agent.

Their background history consists of depression, type 2 diabetes, and ethanol dependence.

The pathology results:

pH	6.95*	(7.35 – 7.45)
pCO ₂	26	(35-45)
HCO ₃	5 mmol/L*	(22-29)
Lactate	21 mmol/L*	(< 2)
Na	145 mmol/L	(135 – 145)
Cl	110 mmol/L	(96 – 110)
K	6.1 mmol/L*	(3.5 – 5.5)
Cr	182 µmol/L*	(45 – 90)
Urea	10 mmol/L*	(2.5 – 7.5)
BSL	5	(4.0-10.0)
Ethanol	< 2 mmol/L	(<2mmol/L)

Outline your assessment of this patient to determine the likely cause(s) of their intoxication

Syllabus topic/section:

L1 Environmental Injuries and Toxicology in ICU: poisoning and drug intoxication

L1 Respiratory Intensive Care: airway management

L1 Intensive Care Procedures: intubation

Viva Summary:

Assessment and management of the toxicology patient with an unknown agent. Lactic acidosis causes in the toxicology patient. Intubation of the physiologically unstable acidemia patient. Confirmation of Ethylene glycol poisoning with exploration of specific management and issues relating to dialysis. Safe discharge of the toxicology patient from the ICU

Candidates did well if they:

- Appropriately showed competence in assessment of a toxicology patient
- Correctly appreciated the seriousness of the acidemia and prioritized this in their response
- Attributed the appropriate level of importance to choice of dialysis mode and could justify their decision.
- Thought broadly about the handover of care during the stepdown of a complex medical patient with psychosocial disadvantages
- Safe and specific airway management, identifying challenges and resolving them
- MDT approach with relevant stakeholders during discharge discussion.

Candidates achieved less marks if they:

- Could not establish in their own mind the reasons for doing dialysis in toxicology patients, especially in small molecule toxicity
- Did not display knowledge of lactic acidemia or complications of ethylene glycol in this setting
- Unaware of the significant risks posed by acidemia on intubation
- Did not have a good structure to prepare for the physiologically difficult airway
- Did not appreciate the psycho-social and medical nuances of discharging a toxicology patient.

Maximum Score	9.25
Percentage Passed	73%

Day 2: Friday May 22 May 2026
Viva 8

Question:

You are the transitional fellow (TY) looking after Peter.

Peter is a 60-year-old man who was admitted through the emergency department (ED) overnight. He aspirated during dinner at home with a new carer. On arrival to ED he was hypoxic and combative, leading to intubation. It is subsequently revealed that Peter has early-onset dementia which is rapidly progressive.

Peter remains intubated/ventilated with improving ventilation requirements (FiO2 reduced to 0.5). His lungs have cleared up with suctioning; he is sedated and has no other organ dysfunction.

Peter's partner (Chris) arrived this morning to see him. Chris became very distressed on entry to Peter's bed space muttering "this isn't him" and "What have I done?".

The bedside nurse has escorted Chris to an interview room and has asked you to speak to Chris.

Syllabus topic/section:

L1 Communication and collaboration in Intensive Care: family/whānau meetings

Viva Summary:

Communication Viva: Explanation of critically ill issues to a family member

Candidates did well if they:

- Asked intelligent exploratory questions about the critically ill patient and gained an accurate idea of functional status.
- Listened to the patient relative actively and showed understanding and reflection
- Explored concerns instead of ignoring them or glossing over them
- Provided an empathic plan
- Displayed curiosity when faced with challenge or emotion instead of defending a position

Candidates achieved less marks if they:

- Had their own agenda and did not allow relative time to align with information causing the relative to feel "rushed"
- Interrupted the relative or did not allow them to speak and express concerns
- Forced the discussion when the relative was still processing new information

Maximum Score	10
Percentage Passed	57%