

Chair's Report - Final Examination 2021.1

General Comments

This report summarises the areas examined in the 2021.1 Final Examination and is designed to be a useful tool for upcoming exam candidates, Supervisors of Training and other senior colleagues who assist trainees with exam preparation.

Candidates should be aware that whilst the exam is not held at the absolute end of their training, the **standard expected across all aspects of the exam** is that of someone ready to commence independent specialist practice; functionally it is an **exit exam**.

As **all aspects of the curriculum** are examinable, trainees are advised their best chance of success is to sit the exam when their clinical experience matches their theoretical knowledge. All sections of the exam are referenced to the curriculum so candidates are advised to be familiar with all aspects of the curriculum.

The assessment is inclusive of all four sections of the examination: multiple-choice question paper, short answer question paper, medical viva examination and anaesthetic viva examination. In order to cover the breadth of the curriculum, content is spread over all sections. In each examination sitting, it is variable what content is covered in each section of the final examination. For this reason, all sections are undertaken in the same examination sitting.

For candidates presenting for the 2021.1 examination, the contribution from the medical viva component was modified and contributed 6% rather than the usual 12%.

The mark allocation for the examination for this examination is shown below:

Section	FANZCA	Vivas only
MCQ	20	
SAQ	20	
Medical vivas	6	6 (11%)
Anaesthesia vivas	48	48 (89%)
TOTAL	94 (100%)	54 (100%)

The pass rates for candidates presenting for the Final Fellowship in March/ May 2021 are presented below:

Category		MCQ	SAQ	Medical Clinical	Anaes VIVA	Overall
ANZCA Trainees	No. Sat	196	196	196	176	196
	No. Passed	134	121	171	162	160
	Pass rate	68.4%	61.7%	87%	92%	81.6%
SIMG - No Written	No. Sat			15	15	15
	No. Passed			12	7	7
	Pass rate			80%	46.7%	46.7%
TOTAL	No. Sat	196	196	211	191	211
	No. Passed	134	121	183	169	167
	Pass rate	68.4%	61.7%	86.7%	88.5%	79.1%

Medical Viva Examination -pass rate 86.7%

In 2021, the medical viva component of the Final Examination has been redesigned to test the ability of a candidate to identify and assess the severity and stability of a specified medical condition without the involvement of a volunteer patient.

The format of the medical viva component now consists of two vivas of fifteen minutes duration with an additional two minutes reading time for the stem. At least one viva will be focused on the cardiovascular or respiratory system. Other systems that could be examined may include, renal, gastroenterological, neurological, rheumatological or multisystem disorders.

The stem for the viva will include the patient's age, gender, upcoming surgery and the relevant system or disease process. A full list of medications and the opening viva question will also be included in the stem.

The medical viva is set in the context of the preadmission clinic and includes aspects of perioperative management. Candidates are expected to demonstrate an understanding of medical conditions and their impact on anaesthesia and surgery. Routine anaesthetic assessment (e.g. airway assessment) is not included in the medical viva.

Criteria for assessment include

- the ability to elicit a focused, relevant history with information provided by the examiner for the specified medical condition particularly with regards to severity of the disease.
- the ability to demonstrate an understanding and interpretation of the expected physical signs in the context of the specified medical condition.
- the ability to integrate this information to form a diagnosis, assess the functional status of the patient and to grade the severity of the disease process..
- the interpretation and integration of several investigations to stratify disease severity in the context of the scenario.
- an understanding of the relevant medications and their management as well as optimisation in the perioperative period.

Candidates who did well in this exam demonstrated a good knowledge of the pathophysiology of the medical conditions and interpreted and integrated the investigations well.

Candidates who scored poorly had difficulty assimilating the given information and interpreting routine investigations such as ECGs, chest X-rays and respiratory function tests. Optimisation of medical conditions preoperatively was not covered well by a proportion of candidates.

In summary, in order to prepare for the medical vivas, candidates are encouraged to continue assessing and examining patients, particularly in the preadmission clinics. They should continue to ensure they have sufficient knowledge around a range of medical conditions and practise interpreting a range of investigations.

The new format of the medical viva examinations was introduced for the first time during the 2021.1 sitting of the final examination.

In the days following the examination it was brought to our attention that the design of the viva rooms had been a concern to some candidates and examiners, whereby they believed there was an impact to their performance due to the physical space design of the viva areas.

The Final Examination Subcommittee reviewed this feedback and examined the interaction and results from all centres to determine whether any were candidates disadvantaged.

The analysis of results demonstrated a definite correlation between having a scheduled 'bye' before viva 1 and improved performance. There was no correlation between 'bye' position and viva 2. This was consistent with what we expected given the layout of the booths, the position of the bye areas and the nature of the two vivas.

The Final Examination Subcommittee decided that in the interests of equity and fairness, viva 1 was excluded from the marking system. Viva 2 was retained.

These are the stems for the two vivas from this exam.

VIVA 1

You are in the pre-anaesthetic assessment clinic.

A surgeon has referred a 60-year-old man with a history of ischaemic heart disease and hypertension for a trans-urethral resection of the prostate (TURP).

The surgeon has noticed a systolic murmur and would like your opinion.

Medications

Verapamil	180 mg
Telmisartan	40 mg
Aspirin	100 mg
Clopidogrel	75 mg
Rosuvastatin	20 mg
Spironolactone	12.5 mg

What would you consider are the three most likely diagnoses related to the murmur and how would you differentiate between these?

VIVA 2

A 30 year-old man with cystic fibrosis presents to the anaesthetic pre-assessment clinic for assessment prior to an elective laparoscopic cholecystectomy.

Medications

Cholecalciferol	1.25 mg, monthly
Vitabdeck	2 tabs, daily
Nebulised tobramycin	300 mg, bd
Nebulised pulmozyme	2.5 mg, mane
Nebulised hypertonic saline	5 mL, daily
Azithromycin	500 mg, x3/week
Creon Forte	15/day, daily
Ensure Plus	1 bottle tds
Alendronate	70 mg, weekly
Omeprazole	20 mg, daily
Seretide	125/25 2 puffs, bd
Novorapid insulin	2-3 units
Salbutamol	2-6 puffs, PRN
Ferrous fumarate	200 mg, daily
Calogen	30 mL bd

What are the specific features of history and examination that would allow you to assess the severity and stability of his respiratory disease?

Multiple-Choice Question Examination - pass rate 68.4%

The Final Examination Subcommittee decided in late 2019 to release the stems of the multiple-choice questions for each sitting commencing from 2020.1. It is hoped that these stems will assist candidates in their preparation for this section of the examination. Examiners are well aware of the many 'black banks' which are accessed by candidates as part of their exam preparation. It is apparent that in recent years not all candidates have access to several of these banks, with some banks only being shared amongst local candidate groups. Publishing MCQ stems in the examination report will go some way to minimising the inequitable access to question banks.

Each question is of the 'one best answer' type. No marks are deducted for incorrect answers. Most MCQ have five answer options. In the 2020.1 paper MCQs with four answer options were introduced.

2021.1 MCQ stems

The optimal position, under ultrasound guidance, to place a catheter tip to provide continuous erector spinae plane block for post-thoracotomy analgesia is

A structure that is NOT clamped during a Pringle manoeuvre is the

The muscle or muscle group with the greatest sensitivity to the action of non-depolarising neuromuscular blocking agents is/are the

The most common cause of mortality in children with diabetic ketoacidosis is

The intubating dose of atracurium in a patient with post-polio syndrome should be

In the morbidly obese the induction dose of propofol should be calculated based on

All of the following conditions are associated with acromegaly EXCEPT

The composition of blood returned to the patient from intraoperative cell salvage shows

When performing a brachial plexus block at the level of the axilla, the structure indicated by the arrow is the (ultrasound image shown)

Severe obstructive sleep apnoea in a 6-year-old child is confirmed if during polysomnography the apnoea/hypopnea index (AHI) is greater than or equal to

Predictors of successful awake extubation after volatile anaesthesia in infants include

Major international guidelines recommend maintaining the core body temperature between 32°C and 36°C in comatose patients after

A man presents with a fractured tibia. He has increasing pain in his leg, loss of sensation on the plantar surface of his foot and weakness of toe flexion. This is most consistent with a compartment syndrome of the leg in the

The coagulopathy that can result from intrahepatic cholestasis of pregnancy is due to

The best patient position to evaluate the gastric contents with ultrasound is

A 50-year-old man is seen prior to his hip revision surgery. His blood results are (FBE and Iron Studies shown). The most likely diagnosis is

Of the following, allergy based on cross reaction to penicillin sensitivity is most likely with

In maternal cardiac arrest the most common arrhythmia is

You are performing a regional block for analgesia following knee surgery. You have an ultrasound probe scanning the anterior mid-thigh. The muscle indicated by the arrow in the ultrasound image below is the

The recommended antibiotic prophylaxis for insertion of an intrauterine device is

The independent predictors for severe bone cement implantation syndrome (BCIS) in cemented hemiarthroplasty for hip fracture do NOT include

The 12 lead ECG shown is most consistent with acute total occlusion of the

A 45-year-old man has poor oxygenation in the post-anaesthesia care unit after a low anterior resection. His chest x-ray is below. The most likely diagnosis is

According to National Audit Project (NAP) 5, the incidence of awareness during general anaesthesia using a non-relaxant technique with a volatile agent is

The drug which has the LEAST impact on somatosensory evoked potentials (SSEPs) monitored in a 15-year-old patient undergoing scoliosis surgery is

Toxicity of methylene blue is likely to be seen after single bolus dose (in mg/kg) greater than

A woman is having a potentially curative primary breast cancer resection. Compared with a sevoflurane and opioid technique, using a regional anaesthesia-analgesia technique with paravertebral block and a propofol infusion will result in

A normal 75 kg term parturient may be expected to have a total blood volume of

A patient undergoing robotic prostatectomy with controlled mandatory volume ventilation has the following measurements: (plateau pressure, PEEP, autoPEEP, peak pressure, tidal volume given) The static compliance is

A 30-year-old professional athlete who underwent a knee arthroscopy under general anaesthesia becomes tachycardic in the recovery room. His non-invasive systolic blood pressure is 90 mmHg. A 12-lead ECG is obtained. The most appropriate therapy is

A patient requiring an elective joint replacement has had a recent stroke. The minimum time to wait after the stroke before proceeding with surgery is

The direct physiological effects of electroconvulsive therapy include

A man is brought into hospital after a motor vehicle accident 45 minutes ago. His chest x-ray is shown. This is most consistent with a left-sided

A common electrolyte disturbance following the administration of ferric carboxymaltose is

Globe perforation during eye block is more common in myopic eyes because

A five-year-old child weighing 25 kg is to be strictly nil by mouth overnight following a laparotomy. The most appropriate fluid prescription is

A four-year-old boy with a history of waddling gait, larger than normal calves and frequent falls receives a spontaneously breathing volatile-based anaesthetic with sevoflurane. One hour into the case he develops peaked T waves and then the end-tidal CO₂ begins to rise. The most appropriate immediate treatment is to

The substance that should be avoided in a patient with history of anaphylaxis to MMR vaccine is

A patient with a history of hereditary angioedema requires an appendectomy for acute appendicitis. The most effective therapy for the prevention of an acute attack in the perioperative period is

Sensory innervation of the cornea is by the

Local anaesthetic-induced myotoxicity is most likely to be associated with

The minimum microshock current required to elicit ventricular fibrillation is

You give a dose of intravenous indocyanine green to facilitate videoangiography during cerebral aneurysm surgery. The displayed pulse oximetry (SpO₂) and cerebral oxygen tissue saturation (SctO₂) changes you expect to see are

Non-anaesthetist practitioners wishing to provide procedural sedation should have training in sedation and/or anaesthesia for a minimum of

Of the following classes of medication for diabetes mellitus, the most likely to cause hypoglycaemia in the fasted patient are the

A 25-year-old ASA I patient develops ongoing seizures five minutes after receiving a brachial plexus block with ropivacaine. Of the following, the most suitable initial intravenous treatment is

A 50 year old man has the following pulmonary function test result. The most consistent diagnosis is

The nerve labelled with the arrow in the diagram is the (diagram of a nerve plexus shown)

You have been asked to anaesthetise a patient with a history of severe depression which has been well controlled on moclobemide. The most appropriate medications in combination with propofol are

Infection control management of patients with carbapenemase-producing Enterobacteriaceae (CPE) infection should include all of the following EXCEPT

Blocking the sciatic nerve results in loss of function of all of the following EXCEPT

Benztropine ameliorates the side effects of drugs that antagonize

You are anaesthetising a 35-year-old woman undergoing a laparoscopic appendectomy. She uses a levonorgestrel-releasing intrauterine device (Mirena®) for contraception and you have used sugammadex for reversal of neuromuscular blockade at the end of the procedure. Your postoperative advice to her regarding contraception should state that

You are resuscitating a 60 kg man in cardiac arrest secondary to severe hyperkalaemia. You decide to give intravenous sodium bicarbonate. Australian and New Zealand resuscitation guidelines state the initial dose of 8.4% sodium bicarbonate should be

Regarding healthcare research, the SQUIRE guidelines describe

A 30-year-old woman is administered an anaesthetic for a laparoscopic cholecystectomy for acute cholecystitis. She is breastfeeding her six-week-old infant. During anaesthesia she receives the following drugs: propofol, fentanyl, sevoflurane, rocuronium, oxycodone, parecoxib, ondansetron, sugammadex and cefuroxime. The best advice regarding breastfeeding after anaesthesia is to

The most common cause of postoperative visual loss after spinal surgery is

A baby is brought to the emergency department three days after a term home birth. It has not been feeding well and has had few wet nappies. The child is grey in appearance and femoral pulses are difficult to palpate. You note an enlarged liver and marked tachycardia. Pulse oximetry reveals saturations of 75% despite oxygen being administered. You suspect a duct-dependent circulation. The best initial management is

A patient with a history of restless leg syndrome is experiencing significant agitation in the post-anaesthesia care unit. After excluding other precipitating causes, the best treatment of the agitation in this patient is

During trauma resuscitation in adults, contraindications to blind nasogastric tube insertion include all of the following EXCEPT

Cardiovascular effects of hyperthyroidism include

Effective pharmacotherapy options to support smoking cessation in the perioperative period include all of the following EXCEPT

The main advantage of using norepinephrine (noradrenaline) over phenylephrine for the prevention of hypotension as a result of spinal anaesthesia for elective caesarean section is

The atmospheric lifetime of nitrous oxide (in years) is approximately

The risk of a perioperative respiratory adverse event in a child is least likely to be increased by

In elderly patients without diabetes mellitus the use of aspirin in primary prevention of disease

You are involved in the care of a two-year-old child who has ingested a button battery in the last four hours. You would consider giving

The most likely cause of hip adduction in a patient undergoing transurethral resection of a bladder tumour is

In critically ill patients undergoing mechanical ventilation, energy dense enteral nutrition (1.5 kcal/mL/kg) compared to routine (1 kcal/mL/kg) enteral feeding provides

Chronic recreational use of nitrous oxide may lead to

Risk factors for chronic postsurgical pain do NOT include

A drug which is likely to slow the heart rate in a patient with a heart transplant is

The following is an image from a focussed cardiac ultrasound in a patient with dyspnoea presenting for thoracic surgery. The diagnosis is

Once a unit of fresh packed red blood cells has been removed from controlled refrigeration the transfusion should be completed within

The abnormality shown in this image is LEAST likely to be caused by an injury to the (image of a patient's back shown)

When commencing treatment of proximal deep vein thrombosis or pulmonary embolus, factor Xa inhibitors (apixaban, rivaroxaban) are preferred to dabigatran or warfarin because they do not require

A neonate born by emergency caesarean section is limp, pale, has a weak grimace and weak cry, and a heart rate of 60 beats per minute. The Apgar Score is

Of the following, the LEAST likely cause of high anion gap metabolic acidosis is

A patient presents with a serum sodium of 110 mmol/L. A feature NOT consistent with a diagnosis of syndrome of inappropriate antidiuretic hormone (SIADH) is

A patient with C6 tetraplegia is undergoing removal of bladder stones under general anaesthesia. The blood pressure rises to 166/88 mmHg. The appropriate response is to

A 26-year-old man is brought into the Emergency Department four hours after an accidental chemical exposure during crop spraying. His clinical signs include bradycardia, vomiting, diarrhoea, coughing, miosis and weakness. A drug which is NOT recommended during his resuscitation and treatment is

A 30-year-old previously healthy woman is four days post-caesarean section. You are asked to see her to manage her abdominal pain. Over the last two days she has had increasing abdominal pain, increasing abdominal distension, tachycardia and nausea. An abdominal x-ray shows a caecal diameter of 9 cm. After excluding mechanical obstruction, an appropriate management option is

The following ECG is consistent with

A 40-year-old man suffers a hydrofluoric acid burn to 60% of his total body surface area in an industrial accident. An expected electrolyte disturbance is

The lung ultrasound finding most consistent with atelectasis is three or more

If group A RhD negative fresh frozen plasma is not available for use in an A RhD positive patient, of the following your next best choice should be

Perioperative overheating is most likely to cause worsening of symptoms of

A transhiatal oesophagectomy is performed via a

A 69-year-old woman has a recent onset of dyspnoea and undergoes a right heart catheterisation, with results displayed below. Her pulmonary capillary wedge pressure is 10 mmHg. The most likely diagnosis is

The modified Aldrete scoring system uses all of the following EXCEPT

A woman with preeclampsia presents with a blood pressure of 150/100 mmHg. An appropriate first line treatment to reduce the blood pressure is

The ANZCA Choosing Wisely recommendations advise avoiding all of the following EXCEPT

A 55-year-old man with no past history of ischaemic heart disease is three days post-total hip replacement surgery. He has an episode of chest pain characteristic of angina which began at rest and lasted thirty minutes before resolving fully. There are no ECG changes. Six hours later there is a troponin rise above the 99th percentile upper reference limit. The diagnosis is

Consideration for same-day discharge in an ex-premature infant after orchidopexy for undescended testis would be suitable at a minimum postmenstrual age of

The implementation of comprehensive multidisciplinary geriatric assessments in the peri-operative period has been shown to

The advantage of the Mapleson E circuit in paediatric anaesthesia is due to its

A 30-year-old woman, gravida 2, parity 1, undergoes an elective lower segment caesarean section for breech presentation. The international consensus statement on the use of uterotonic agents recommends that the first line uterotonic management is

An 84-year-old woman with dementia presents for surgery for a breast lump. She lives in a care facility and is accompanied by the nurse manager from the facility and her son. Neither have a written legal authority to act on her behalf. Regarding consent for her surgery

The apical four-chamber view of a transthoracic echocardiogram below shows

A man who had successful treatment of a germ cell tumour 10 years ago presents for laparoscopic appendectomy. Your intraoperative management should consider

A 100 kg 32-year-old male presents two hours after suffering a 30% total body surface area electrical burn. He has had no resuscitation fluids. The infusion rate of isotonic crystalloid resuscitation fluid required for this man for the next six hours is

Intraoperative lung protective ventilation strategies include all of the following EXCEPT

An ECG abnormality which is NOT usually associated with severe anorexia nervosa is

Of the following, the lifestyle modification that is least effective in reducing essential hypertension is

A 25-year-old man suffers a 30% total body surface area burn. A cardiovascular physiological change expected within the first 24 hours is

Hepcidin production is inhibited in response to

The function of the bottle labelled 'D' in the diagram below is to protect against the consequences of (diagram of chest drain bottles)

The domains described in the Edmonton Frail Scale do NOT include

Unsupported ventilation in a non-anaesthetised patient with long-standing tetraplegia is improved when

The breast does NOT receive sensory innervation from the

A respiratory effect of high flow nasal oxygen therapy is

A condition or therapy that is NOT a contraindication to hyperbaric oxygen therapy is

In patients without other co-morbidities, bariatric weight loss surgery is indicated when the body mass index (kg/m²) is greater than

The image below shows a normal central venous pressure (CVP) trace on the left. The CVP trace shown on the right is most consistent with

Of the following, the device that delivers the greatest flow when using 'Level 1® Fast Flow Fluid Warmer' rapid fluid infuser system is a (list of intravascular catheters)

The most reliable clinical indicator of opioid-induced ventilatory impairment (OIVI) is decreased

A patient had prolonged surgery with a laryngeal mask airway in situ. The following day she reports a problem with her tongue. You examine her and see the following when she protrudes her tongue: The most likely cause of the abnormality is

A 10-year-old boy (weight 30 kg) has a displaced distal forearm fracture that requires manipulation and application of plaster. The volume of 0.5% lidocaine (lignocaine) that should be used for intravenous regional anaesthesia (Bier block) is

Local anaesthetic systemic toxicity does NOT manifest as

A patient has bipolar disorder and is on long term lithium therapy. An analgesic which should be avoided is

According to the ANZCA 'Guideline on infection control in anaesthesia', skin preparation prior to central neuraxial blockade should be performed using

The following muscles of the larynx are all innervated by the recurrent laryngeal nerve, EXCEPT

A patient who usually takes oral morphine 50 mg bd develops a bowel obstruction and experiences withdrawal symptoms. They may be described as having

The risk of major bleeding in patients taking direct oral anticoagulants (DOACs) is NOT significantly increased by commencing administration of

The most common cause of cor pulmonale is

The management of a patient who has experienced a cardiac arrest within 10 days of cardiac surgery should NOT routinely include

A third heart sound at the apex may be heard with

A patient presents for endovascular clot retrieval after experiencing a right hemisensory loss and right homonymous hemianopia. The vessel most likely occluded is the left

A 45-year-old man has the following results on his blood biochemistry testing (Liver function tests shown). The most likely diagnosis is

In cardiac surgery, volatile-based anaesthesia compared to total intravenous anaesthesia

Suxamethonium may be safely given to patients with

A patient has numbness and weakness in her hand postoperatively. You are trying to distinguish between an ulnar nerve lesion and a C8-T1 radiculopathy. You can diagnose a C8-T1 radiculopathy if she has weakness

The recommended cleaning protocol for a laryngoscope handle which has been used but which has no visible soiling is

Considering emergency front-of-neck airway access, the major blood vessel that is most likely to lie anterior to the trachea above the sternal notch is the

Of the following, the incidence of venous air embolism is considered highest for
In the treatment of persistent mucosal bleeding in patients with von Willebrand disease type 3, desmopressin (DDAVP) is

The equipment shown in the picture is a (airway device shown)

High-risk transthoracic echocardiogram findings associated with aortic dissection include all of the following EXCEPT

A 48 year old male is day two post-laparoscopic high anterior resection. He has used 42 mg of intravenous morphine in the past 24 hours. You wish to start him on oral tapentadol immediate release. The most appropriate equianalgesic dosage would be

A patient with a purely metabolic acidosis has a serum bicarbonate of 14 mmol/L and a lactate of 3.8 mmol/L. The expected PaCO₂ is

The part of the lung that is typically divided into superior, medial, anterior, lateral and posterior segments is the

Short-Answer Question Examination – pass rate 61.7%

The Short Answer Question (SAQ) examination is designed to challenge and test the candidate's ability to apply their knowledge to clinical or workplace situations in a systematic and prioritised way.

This report is primarily written to assist future candidates in their preparation for the SAQ paper and therefore places emphasis on some of the recurrent themes and errors seen in answers that do not attract sufficient marks to meet the minimum standard criteria to achieve a pass mark.

Candidates are reminded to read the questions carefully during the reading time allocated at the beginning of the examination and again when they commence answering each question. Marks are only awarded for answering the question that has been asked. Time is wasted by writing information that is not required and will not contribute to the overall mark awarded.

Answers that contain correct information are marked down when the answer is poorly structured, especially when information is poorly prioritised.

Answers containing information that is incorrect will be marked down notwithstanding they may contain adequate correct information. It is therefore crucial to consider carefully what is written in response to a question.

There remains a tendency for some candidates to use non-specific or non-defined terms without further explanation or context. When used in this way these terms do not attract marks and can on occasion result in marking down of an answer. Some examples of these terms are 'cardio-stable anaesthesia', 'good pain relief', 'effective analgesia', 'multimodal analgesia', 'gentle induction', 'post-op ICU'.

The failure by some candidates to act on key words in the question remains problematic. To emphasise the importance of these words and to clarify their meanings, the following is a list of key words with their generally accepted meanings.

COMPARE	Look for similarities
CONTRAST	Set in opposition
DEFINE	Give the precise meaning of
DESCRIBE	Give a detailed account of
DISCUSS	Write about a topic in detail, taking into account different issues or ideas
EVALUATE	Make an appraisal of the worth of something
EXPLAIN	Make plain, interpret, account for
ILLUSTRATE	Make clear by concrete examples (or use a diagram to clarify)
INTERPRET	Explain what something means
JUSTIFY	Show adequate grounds for decisions
LIST	Catalogue by groups or classes with minimal explanation
OUTLINE	Give the main features or general principles
RELATE	Show how things are connected to and affect each other

Some questions have more than one part to them and a (%) will be seen written next to each part. The purpose of this (%) is to indicate a time allocation that the examiners suggest candidates apply to each part of the question. It does not necessarily reflect mark allocation for those parts. The whole answer to the question is assessed when awarding the final mark for the question.

Candidates are encouraged to read through previous examination reports and practice answering past questions under examination conditions.

Illegible handwriting remains an issue for some candidates. Candidates are urged to use a black or dark blue pen rather than light blue. This results in improved images following scanning and online transmission to the examiners.

There is a tendency for some candidates to use abbreviations which cannot be deciphered by the examiners. Candidates are encouraged to use only recognised abbreviations or use abbreviations after having written the phrase or word out in longhand in a previous sentence.

Question 1

Outline the anatomy relevant to performing a brachial plexus block using the axillary approach. (70%)

Describe the limitations of this block when used for upper limb surgery. (30%)

Pass rate **58.2%**

This pass rate represented an improvement on a previous examination in 2020 where two anatomy questions were answered very poorly.

There remain a disappointing number of candidates who are unable to demonstrate adequate knowledge of applied anatomy, in this case that required to perform a brachial plexus block using the axillary approach. Brachial plexus block is regarded as core material for the Final Examination.

It should again be emphasised that it is important to use terms such as anterior, posterior, lateral, inferior, and superior when describing anatomical relations. The use of terms such as nearby, close to, runs with, adjacent to, *without* any further explanation is too imprecise to convey an adequate understanding of the anatomical relations being described.

Question 2

Explain your strategies to minimise the risk of hypoxia during induction, maintenance and emergence from anaesthesia in a morbidly obese patient undergoing a laparoscopic total hysterectomy.

Pass rate **72.4%**

Overall, this question was handled well and it appears candidates are familiar with managing morbidly obese patients having this or similar procedures.

An answer was required to contain appropriate strategies for each of induction, maintenance and emergence, **and** consideration of the intraoperative/procedural impacts on the patient, namely the pneumoperitoneum and steep head-down position)

Answers scoring higher marks were those that included how the chosen strategies would help address the issues rendering the obese patient at increased risk of hypoxia.

High flow nasal oxygen therapy featured in many answers and could well have a role in managing this patient at various stages. However, its use led some candidates to describe providing 'apnoeic oxygenation' during phases where the patient was breathing or being mask ventilated. It should also be remembered that during preoxygenation its use results in an inability to measure end-tidal oxygen concentration (ETO₂), and so aiming for a specific ETO₂ is not feasible.

The tendency for some candidates to present general statements without any further explanation has been highlighted in previous exam reports. Examples in this question included 'modified rapid sequence induction' and 'lung protection ventilation strategy'.

Question 3

In a large clinical trial, patients were randomised into two groups to study the impact of bispectral index (BIS™) monitoring on the incidence of awareness.

The table below shows the results.

Groups	Sample size, n	Cases of awareness, n
BIS-guided	1250	2
Routine care	1250	11

Data analysis found that the statistical difference in the incidence of awareness had a p value of 0.022.

The study reported that BIS-guided anaesthesia reduced the risk of awareness by 82% (95% confidence interval 17-98%) with an odds ratio of 0.2 and a number needed to treat of 140.

Define the following terms and explain their meaning in relation to this study:

- p value
- risk reduction
- confidence interval
- odds ratio
- number needed to treat

Pass rate **85.2%**

A well answered question on common statistical terms and how they relate to the presented study.

Risk reduction and odds ratio proved the trickier terms to correctly define and relate to the study. Number needed to treat (NNT) was generally defined correctly but frequently not then explained in relation to the study.

Question 4

A 24-year-old woman requires urgent manual removal of placenta due to ongoing bleeding following a vaginal delivery (estimated blood loss 1500ml).

Outline your initial management prior to her arrival in theatre. (50%)

Discuss the options available for managing persistent uterine atony in theatre. (50%)

Pass rate **69.4%**

A common clinical scenario and a straightforward question which was answered to the examiners' satisfaction in the majority of cases.

An answer was required to demonstrate:

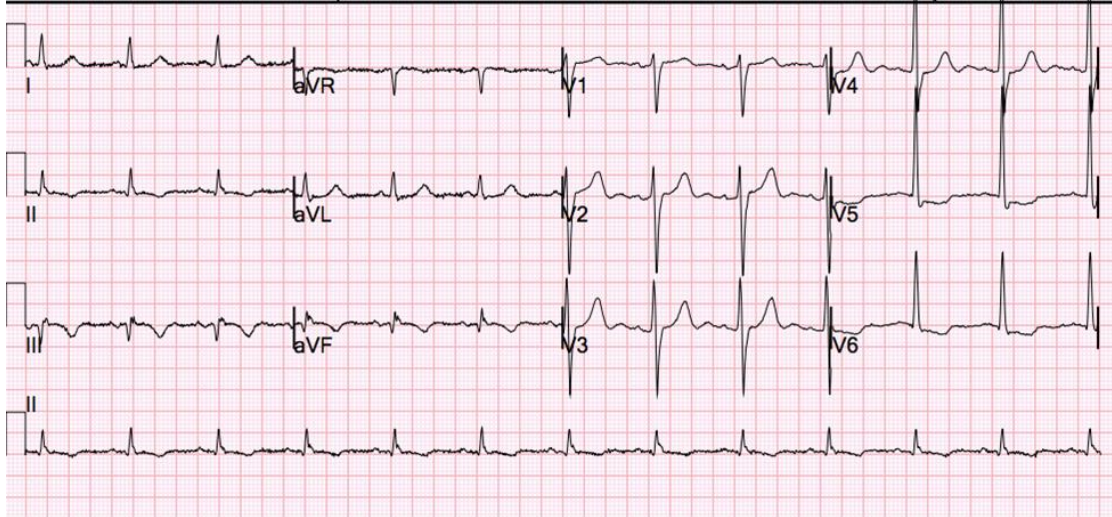
- a sensible management approach recognising the severe post-partum haemorrhage (PPH) and urgency
- detailed knowledge of oxytocin administration and other uterotonic agents
- knowledge of the surgical options available
- a stepwise escalation of strategies to address uterine tone

Candidates who performed poorly in this question did so for a variety of reasons including not answering the question that was asked, using vague and imprecise statements, and omitting drug dosing, side effects and contraindications.

Question 5

This is the standard 12-lead electrocardiogram (ECG) of a 56-year-old man in the post-anaesthesia care unit (PACU) two hours after an emergency laparotomy for bowel obstruction.

He is complaining of shortness of breath, abdominal pain and has a blood pressure of 160/110mmHg.



He has a history of hypertension controlled with atenolol and hydrochlorothiazide. The preoperative ECG is missing. The anaesthetic assessment only notes that it showed sinus rhythm.

Considering all the clinical information, interpret this ECG and outline the appropriate management of this patient in PACU.

Pass rate **66.8%**

This PACU clinical scenario question was reasonably well answered.

As a minimum the candidate was required to:

- correctly identify myocardial ischaemia and the territory affected
- Provide analgesia
- Ensure adequate oxygen saturation/oxygenation
- organise appropriate investigations including haemoglobin and troponin
- seek cardiology advice
- institute or consider therapies (for example: glyceryl trinitrate (GTN), antiplatelet therapy, beta-blocker, clonidine)

Good answers addressed the specific scenario presented. For example, discussion of blood pressure management, acknowledging that the patient was currently hypertensive, allowed a more comprehensive and nuanced approach to treatment and goals.

Candidates scoring less well tended to provide generic non-specific answers that didn't address the patient and situation in question.

ECG interpretation was difficult for some candidates with several candidates identifying correct features of the ECG but failing to attach the significance or the meaning of these changes in this patient.

One reason for candidates scoring poorly was suggesting thrombolysis for this post laparotomy patient without any discussion of the potential drawbacks of this approach or without the need to involve the surgeons in this decision making. This was considered a safety issue by the examiners and was marked accordingly.

Question 6

You will be anaesthetising a 63-year-old man with severe Parkinson's disease who is booked for an inguinal hernia repair.

Discuss the issues that are relevant to providing perioperative care for this patient.

Pass rate **54.6%**

Questions concerning the perioperative care of patients with a range of medical conditions appear regularly on the SAQ paper.

These questions lend themselves to a simple preoperative, intraoperative, and postoperative framework.

As a minimum an answer was required to:

- demonstrate an understanding of the clinical features of severe Parkinson's Disease
- discuss the importance of continuing with usual medications and avoiding dopamine antagonists
- discuss and justify the proposed postoperative care

Most candidates knew some of the features of Parkinson's disease, but many could not put this into the context of perioperative care.

While all candidates associated severe Parkinson's Disease with cognitive changes, many failed to mention other clinical features of severe Parkinson's Disease such as autonomic instability and aspiration risk. There was also some confusion around Parkinson's medication and drug interactions or this was not mentioned at all.

Some of the poorer answers only provided general information about anaesthesia in the frail elderly and did not cover the specific issues related to severe Parkinson's Disease.

Of note is that a significant number of candidates made no or minimal reference to the postoperative care of this patient.

Good answers provided a comprehensive preoperative assessment, discussed the pros and cons of different anaesthetic techniques, and had a good plan for postoperative care, including nausea and vomiting management and a return to oral Parkinson's medication.

Question 7

Your department has exceeded its drug budget for the last financial year.

You have been asked to develop a departmental policy document for the rational use of sugammadex.

Discuss the issues to be considered.

Pass rate **27.6%**

This question had a poor pass rate due to many candidates focussing heavily on the process of policy development while omitting some of the specifics when it came to the rational use of sugammadex by a Department of Anaesthesia.

The clinical and economic justifications of sugammadex use required discussion.

Many answers included poorly thought-out indications for the rational use of sugammadex.

Question 8

A patient takes a 60mg slow-release morphine tablet twice daily for chronic low back pain. They have been appropriately investigated and there is no surgically treatable pathology.

In relation to this patient

List the risks of long-term opioid therapy. (30%)

Justify the appropriate treatment of chronic low back pain. (70%)

Pass rate **85.7%**

This question was answered well with the better answers critically appraising (rather than simply listing) the various approaches and treatment options in managing chronic low back pain in relation to this patient.

A huge volume of opioid medication is used in the community for non-malignant pain – mostly unnecessarily and ineffectually – leading to the ‘opioid crisis’ and significant harm to patients. Many of these prescriptions start in hospital and are continued upon discharge.

Chronic back pain is common and should not be treated with opioids. Anaesthetists should be able to explain ‘Why?’ opioids are harmful and what the alternative therapies are.

Question 9

Evaluate the equipment available for the delivery of oxygen to postoperative patients on a general surgical ward.

Pass rate **86.2%**

This topic is core knowledge for anaesthetists and was answered to the examiners’ satisfaction by most candidates.

The setting of postoperative patients in a general surgical ward pointed candidates to identify the devices in common use in ward settings which then required their evaluation.

Nasal prongs, Simple oxygen mask (Hudson), non-rebreather mask, venturi mask and high flow nasal prongs were the devices described, along with resuscitation equipment.

CPAP and BiPAP was often mentioned which is arguably beyond the scope of a general ward.

Better candidates differentiated between variable and fixed delivery devices, correctly identified flow rates and the fraction of inspired oxygen (FiO₂) of the various devices and discussed the issue of rebreathing.

The non-rebreather mask was most often omitted in answers and the venturi mask the least well understood.

Question 10

List the signs of malignant hyperthermia. (30%)

Outline the immediate management of a patient where malignant hyperthermia is suspected. (70%)

Pass rate **67.3%**

A rare anaesthetic emergency where the early recognition and the correct immediate management can save lives. All practicing anaesthetists should be across the signs and immediate management of malignant hyperthermia.

Candidates are referred to <http://malignanthyperthermia.org.au> for further reading and are encouraged to familiarise themselves with their own institutions' Malignant Hyperthermia Box locations and contents.

Question 11

Discuss the issues relevant to the perioperative care of a seven-year-old child with Down Syndrome who has sustained a supracondylar fracture of the humerus.

Pass rate **64.3%**

The majority of candidates handled this question satisfactorily.

An answer was required to include:

- the potential for airway problems, cervical spine pathology, cardiac pathology, and behaviour/cooperation issues that can present in a child with Down Syndrome.
- a discussion around the urgency of the surgery.

Question 12

A patient presents on the day of surgery with a blood pressure of 180/110mmHg.

Justify your decision to proceed with or postpone surgery for this patient.

Pass rate **25.5%**

This question was handled poorly with relatively few candidates scoring well.

It is a real-life and not uncommon scenario, particularly with older patients.

Previous recommendations regarding hypertension advised cancelling or postponing most elective surgery, whether hypertension was untreated, poorly controlled, or even with early-stage hypertension.

More recent evidence has changed that approach and now recommendations are that surgery should not be deferred solely on blood pressure value.

Candidates were required to demonstrate some appreciation of the current evidence and show adequate grounds for their decision, with a decision making process that took into account patient and surgical factors.

Many answers lacked any form of justification of a decision.

Of note less than half of the candidates mentioned secondary causes of hypertension.

It was common to see lists of abbreviations of various cardiac or cardiovascular diseases (e.g. AMI?, ?CVA, AS, PHT) with no further explanation.

Many answers contained general statements without further explanation. These included 'could consider postponing', 'elective v emergency', 'may need to continue with surgery', 'surgery type'.

'Justify' questions require candidates to 'show adequate grounds for their decisions' and this was key to satisfactorily answering this question.

Question 13

A 77-year-old patient is admitted to hospital with a fractured neck of femur requiring total hip arthroplasty. Physical examination on admission reveals signs of congestive cardiac failure.

Outline how congestive cardiac failure influences the perioperative risk for this patient. (30%)

Discuss how the finding of congestive cardiac failure influences your perioperative management of this patient. (70%)

Pass rate **84.2%**

This is another common clinical scenario facing anaesthetists every day and the question was handled well.

As a minimum an answer was required to demonstrate:

- an appreciation that congestive cardiac failure is an independent risk factor for mortality
- a requirement for assessment of the severity and the cause of the congestive cardiac failure
- that the timing of surgery must be balanced against optimisation of the patient

The examiners again noted a tendency to use unexplained or unintelligible acronyms and abbreviations. This made marking difficult, and at times meant marks could not be awarded due to the lack of clarity of certain statements.

Question 14

Discuss the options for anticoagulation management in the perioperative period for a patient taking warfarin for atrial fibrillation who requires a laparotomy for ischaemic bowel.

Pass rate **53.6%**

An answer required discussion of the following:

- a patient specific considered plan for each of the pre/intra/postoperative periods
- risk of bleeding versus embolic risk
- a method of Warfarin reversal for urgent surgery
- re-establishing anticoagulation in a nil by mouth patient

Some of the reasons for low marks being awarded were as follows:

- generic answers with no clinical context and insufficient detail
- not demonstrating an understanding of the clinical urgency of a laparotomy for ischaemic bowel
- only focusing on a risk assessment for the reversal of anticoagulation in atrial fibrillation
- focusing on bridging strategies up to surgery without discussing the urgent reversal of warfarin
- having a preoperative management plan but lacking any or sufficient detail in the intraoperative and postoperative management plan.

Question 15

Evaluate the use of **five** (5) of the following additives that may be combined with local anaesthetics for neural blockade.

adrenaline
clonidine

dexamethasone
glucose
hyaluronidase
midazolam
morphine
neostigmine
sodium bicarbonate

Pass rate **67.3%**

A reasonable pass rate was achieved for this question although there were few high marks.

Many candidates answered the question by listing the advantages and disadvantages of each additive. These statements more often than not provided correct information, but with little or no evaluation of the additives high marks were impossible to achieve.

Candidates are referred to the list of key words and their meanings at the beginning of the SAQ report:

EVALUATE - Make an appraisal of the worth of something.

Anaesthesia Vivas - pass rate 88.5%

The anaesthesia viva examination is the component of the exam where several areas of specialist level practice can be tested in eight complex and evolving scenarios. Several key areas are tested:

1. Application of safe clinical practice,
2. Demonstration of sound clinical judgment
3. Plan and prioritise clinical actions
4. Demonstrate an ability to adapt to changing clinical scenarios, and
5. Be able to justify your clinical decisions.
6. Demonstrate situational awareness and the ability to work in and lead team environments

As a final exit examination, candidates are expected to demonstrate consultant-level thinking and communication.

Vivas were constructed and vetted within the Court of Examiners over an extended period. This allows the determination of a consensus as to what constitutes a **minimum level of competence** needed to pass each viva. This is consistent with what we would expect of an independent specialist anaesthetist.

It is paramount that candidates demonstrate **safe clinical practice**. Some clinical situations in the viva scenarios are designed to test a candidate's ability to make appropriate decisions in a **safe** manner. Decisions deemed unsafe practice prevent a candidate from passing the viva .

This also applies to what is considered to be core knowledge expected of a specialist anaesthetist, e.g. ACLS algorithms. Candidates are expected to perform at an exceptional level in such core areas.

Communication during the viva is another fundamental skill - not just communicating your clinical decisions during the viva, but also moving through the viva at a pace which will allow the candidate to maximise the full coverage of all areas of the viva.

Whilst it is not critical to have completed the whole of the available viva in order to pass, a candidate who is very slow to move forward will have limited time available to achieve marks.

Better performing candidates will give clear structured answers. Their answers will be organised, even in the face of a complex problem, demonstrating their ability to prioritise the main issues involved.

They will also demonstrate consultant-level decision making, which is based on sound clinical and evidentiary principles.

Below are the stems for all sixteen vivas. As well as providing the introductory stems, the key areas covered to pass each viva have also been included.

This information can be used by candidates in their exam preparation as an example of the skills required to successfully pass the viva examination.

The Court noted a number of recurring themes in candidates who performed suboptimally in these vivas. They included:

1. Failure to address clinical information highlighted in the viva stem
2. Overdosage of induction agents based on the clinical scenario
3. Poor management of AF with haemodynamic compromise
4. Poor assessment and management of heart block with and without symptoms
5. Poor planning in describing management of patients with multiple competing medical problems

The viva front pages, a brief synopsis of the areas covered and the relevant pass marks are included below.

VIVA 1

A 47-year-old male is brought into the emergency department of a tertiary hospital where you are the anaesthetist on call.

He has sustained abdominal gunshot wounds about 2 hours ago with only minor revealed bleeding obvious. He is diaphoretic and agitated requiring restraint. Your help is required to assist keeping him still enough for larger bore intravenous access (he currently has a 20 gauge cannula) and CT angiogram. He is believed to have recently used methamphetamine.

BP 100/56
HR 70bpm
SaO2 96%

He has a background of illicit drug use and a known methamphetamine induced cardiomyopathy (ejection fraction 20-30% on recent echocardiogram). He has extremely poor dentition ("Meth Mouth").

Medications:

telmisartan	40mg daily
carvedilol	25mg (slow release) daily
frusemide (furosemide)	20mg daily

How would you assess his volume status for anaesthetic intervention prior to imaging?

Areas Covered:

1. **Assessment of shocked patient in context of beta blockade and heart failure**
2. **Management to secure airway and transfer to CT scanner**
3. **Laparotomy with hypotension : heart failure vs haemorrhage**

Pass Rate 71%

VIVA 2

You are called to the Emergency Department at 12pm to assess a 75-year-old female with an acute anterior cerebral circulation ischaemic stroke. She has facial paresis, arm weakness and abnormal speech.

Her past history includes atrial fibrillation, type 2 diabetes and hypertension.

Her medications are:

irbesartan	150 mg daily
dabigatran	150 mg bd
dapagliflozin	10 mg daily

The onset of symptoms was 2 hours prior to admission. Her GCS is 15 and she is compliant with instructions. She has been scheduled for urgent clot retrieval.

What will you do when you arrive in the Emergency Department?

Areas Covered:

- 1. Preoperative evaluation and plan.**
- 2. Sedation v GA. Difficult arterial line insertion. Management intraoperatively to improve outcome : Temp / BSL / coags**
- 3. Leg pain in recovery – puncture site dissection – Diagnosis and Management**

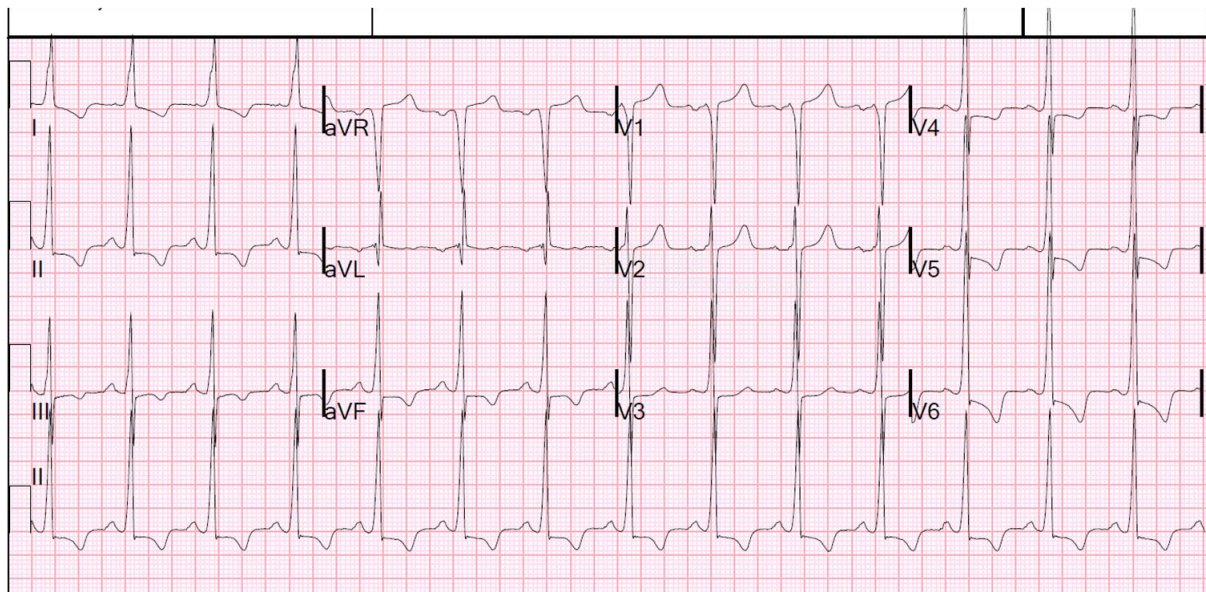
Pass Rate 88%

VIVA 3

You are midway through an ENT list at a large metropolitan private hospital.

The nurse in the admissions unit brings in an ECG for you to review, along with a GP Health Summary.

The patient is scheduled for balloon dilatation of subglottic stenosis later on the list.



Interpret the ECG.

Areas Covered:

- 1. Assessment, plan for management**
- 2. Management of rapid desaturation during balloon dilations**
- 3. Management of rapid AF with hypotension and desaturation**

Pass Rate 60%

VIVA 4

You are a consultant anaesthetist at a metropolitan tertiary hospital. On the day's emergency list is an 82-year-old man for the debridement of his right forefoot.

He is a current inpatient having been admitted from home, unwell with sepsis, the previous day.

From the intern admission note you see that he has a significant past medical history including:

Hypertension

CCF – medically managed

Chronic renal impairment – eGFR 42 mL/min/1.73m²

Aortic stenosis managed by TAVI in 2019 and complicated by CVA with mild residual dysphasia

Dual antiplatelet therapy

Progressive dementia – still lives at home with support from his family and aged care service providers who visit daily

You go to the ward to pre-operatively assess him.

He is the patriarch of a large family and his son (who has medical power of attorney) is in attendance.

How would you assess his peri-operative risk of both morbidity and mortality?

Areas Covered:

- 1. Assessment and management leading to conduct of Peripheral Nerve Blockade**
- 2. Management of major nerve block in an uncooperative unwell patient**
- 3. Postoperative decreased movement in leg – diagnosis and management - CVA**

Pass Rate 89%

VIVA 5

A 55-year-old male has been added to your general surgical list for the laparoscopic insertion of a peritoneal dialysis catheter.

Their past medical history is of end stage renal failure, chronic obstructive pulmonary disease and hypertension.

His medications include:

amlodipine	10 mg po daily
frusemide	120 mg po mane
fluticasone/salmeterol inhaler	two doses bd

He has had worsening shortness of breath on exertion over the past month. He tells you that at his last consultation with his respiratory physician he was told that he has “high blood pressure in his lungs”.

How will you assess the severity of this patient’s recently diagnosed pulmonary hypertension?

Areas Covered:

- 1. Assessment and management plan**
- 2. Management of high airway pressure after induction**
- 3. Development of Right Heart Failure and shock - management options**

Pass Rate 90%

VIVA 6

You are reviewing a child in the pre-anaesthetic clinic of a tertiary paediatric centre.

He is a 20 kg 23-month-old boy with moderate global developmental delay and seizure activity on EEG. You are booked to anaesthetise him for an MRI brain scan the following day.

Describe your approach to the assessment of this child.

Areas Covered:

- 1. Assess, recognise weight issue, plan for management**
- 2. Failed IV access, management of mild hypoxia**
- 3. Laryngospasm post airway removal and management**

Pass Rate 83%

VIVA 7

You are called to the emergency room of a level 1 trauma centre as part of a trauma team call.

A convoy of 15 motorcyclists was struck by a truck. There was a fire at the scene and 2 people have died on site. Your centre is receiving 3 patients. You are assigned as the airway doctor for 1 of the patients arriving by road ambulance.

Additional information provided by paramedics:

He is a 48-year-old male, weight 123 kg and height around 174 cm. He was wearing an open-faced helmet, removed at the scene. He has a partially singed beard with bruising and swelling of his midface. He is vocalising with no obvious stridor or hoarseness.

What are your specific airway concerns?

Areas Covered:

- 1. Identify concerns with patient and assess**
- 2. Management of airway / intubation with maxillary fractures and potential airway burn**
- 3. Extubation plan post procedure. Missing tooth noted - management**

Pass Rate 83%

VIVA 8

You have been asked to put in an epidural in a G1 P0 woman who has presented in spontaneous labour at 38 weeks' gestation. She has a normal body habitus. She has no significant past medical history.

Her antenatal history is unremarkable other than stable gestational thrombocytopaenia.

An FBE was performed at 36 weeks gestation.

		Reference Range
Hb	129 g/L	(115–165)
WCC	$11 \times 10^9 /L$	(4–11)
Plt	$88 \times 10^9 /L$	(150–400)

When you enter the room, she is in obvious pain and states "Just put the epidural in!"

How will you assess this patient for an epidural?

Areas Covered:

1. Labour epidural - insertion and management
2. Progression to very urgent LUSCS with patchy blockade
3. Neonatal resuscitation

Pass Rate 85%

VIVA 9

A 28-year-old female, 39/40 pregnant, presents to a tertiary referral hospital in early labour post induction for fetal macrosomia.

Her history is significant for morbid obesity (BMI 44) and labile severe asthma.

You have been consulted for a labour epidural.

What information would you clarify prior to obtaining consent?

Areas Covered:

1. Consent, failed block, non-neuraxial management
2. Anaesthesia for urgent LUSCS . Bronchospasm
3. Management of headache Day 1 - PDPH

Pass Rate 88%

VIVA 10

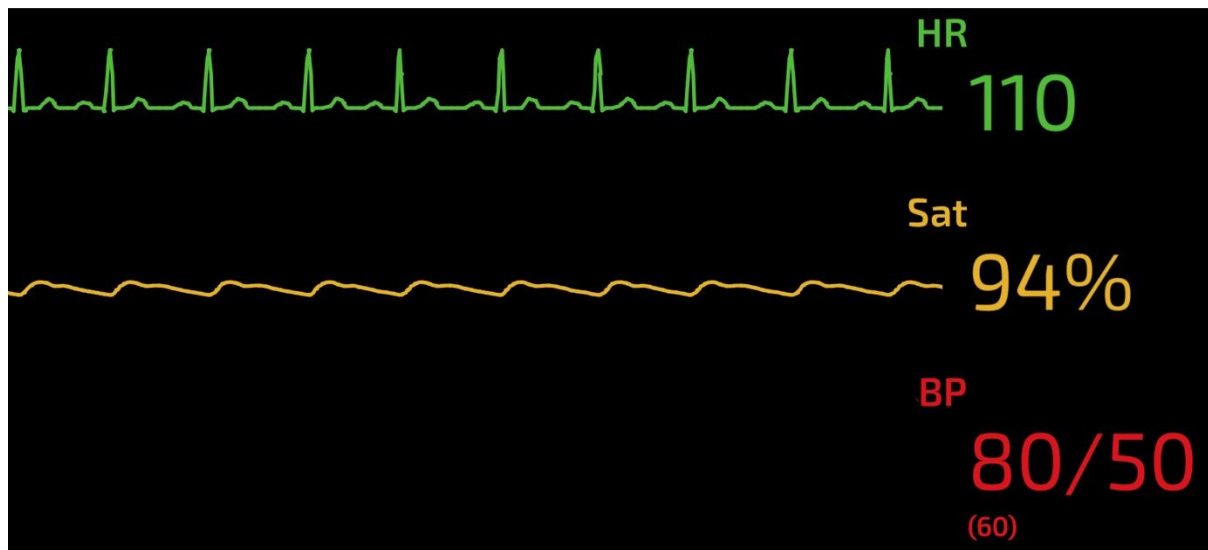
You are the duty anaesthetist for your cardiovascular theatres.

You are called to the cardiac catheter lab recovery where they have a hypotensive patient following coronary angiography.

The medical emergency team (MET) have been called. The patient is a 55-year-old 85 kg male. He has no allergies or anaesthetic issues. He has a new presentation of heart failure and is being assessed for coronary artery disease.

His pre procedure echocardiogram showed a mildly dilated left ventricle with moderate dysfunction and an ejection fraction of 40%. On entering the recovery room you notice a number of people around the patient with more arriving.

The monitor shows:



What will you do?

Areas covered:

1. Management including differential diagnosis: hypovolaemia and poor LV function
2. Urgent management in hybrid theatre. Induction dosage for GA
3. Decompensation post stenting. Ddx and management of cardiogenic shock

Pass Rate 76%

VIVA 11

You are the day time anaesthetist on for trauma calls at a major trauma hospital.

You have been asked to attend a trauma call in the Emergency Department for a 68-year-old woman after a motor vehicle accident earlier today.

The patient was driving on the highway and her car crashed into a tree. She has a past history of hypertension, previous TIA and previous DVT.

Currently she is alert and talking with a GCS of 15. Her BP is 130/80, HR 110bpm and SO₂ 95% on 6L via Hudson mask.

This is her Chest X-ray on admission:



What are your concerns?

Areas Covered:

- 1. Discuss concerns and provide analgesia for injuries.**
- 2. Hypotension post block insertion. DDX of causes. ECG changes – blunt cardiac injury**
- 3. Median nerve compromise and ORIF radius required. Decision and management**

Pass Rate 79%

VIVA 12

You are doing an ECT list at a private stand-alone facility.

Your 2nd patient of the morning is a 55-year-old male having his first ECT titration for schizophrenia with bipolar disorder.

He has a history of hypertension, hypercholesterolaemia, and is a current smoker.

His medications are as follows:

amlodipine
lithium
olanzapine
rosuvastain

Discuss your preoperative approach to this patient?

Areas Covered:

- 1. Preop assessment re suitability**
- 2. Plan for titration ECT – develops short run of VT – management**
- 3. Chest pain and agitation in PACU – Myocardial Infarction - management**

Pass Rate 70%

VIVA 13

It is 0700 hrs and you are the anaesthetist rostered to a morning ENT list in a tertiary referral hospital.

The first case is a three-year-old boy for tonsillectomy. The referral states he has attention deficit hyperactivity disorder (ADHD), asthma and had bilateral grommets inserted one year previously. He presents with his mother.

His current medications are:

dexamphetamine
clonidine
budesonide
salbutamol

What are the key features of your assessment?

Areas Covered:

- 1. Assess and manage prior behavioural issue**
- 2. Management of high airway pressure after induction**
- 3. Recovery room delirium – assess and manage**

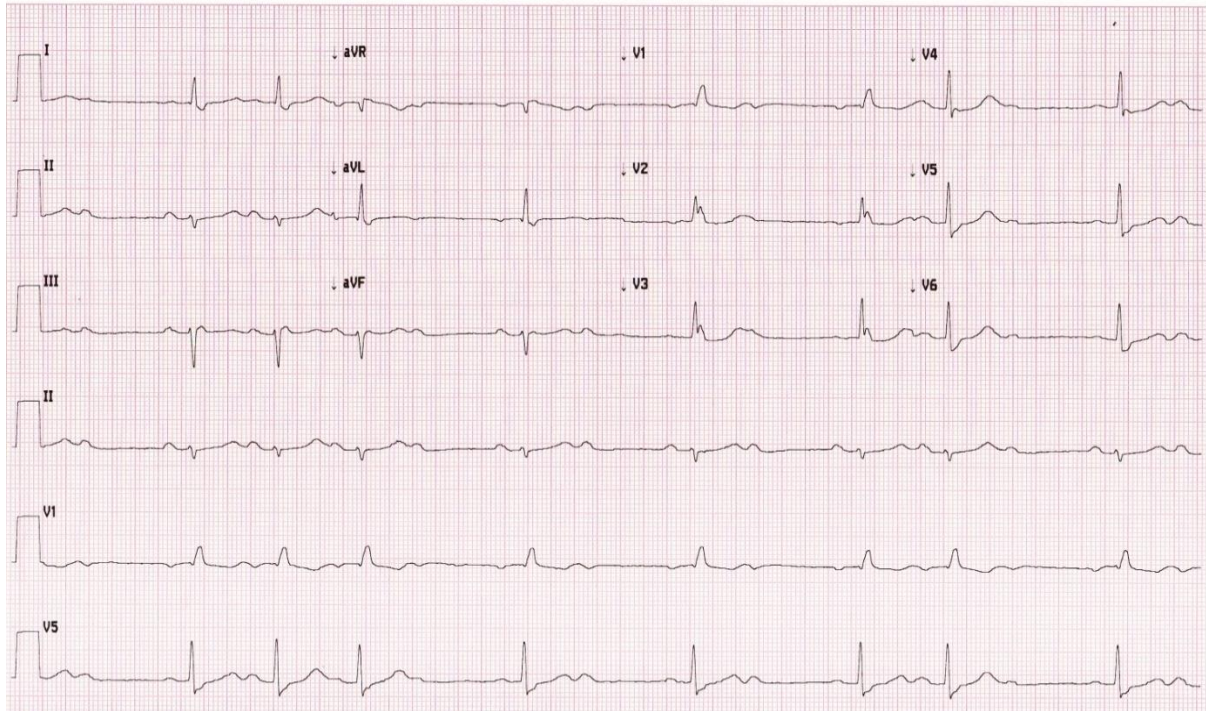
Pass Rate 84%

VIVA 14

A 65-year-old female with long standing laryngeal papillomatosis, presents for laser ablation.

She has dyspnoea and hoarseness that has worsened significantly in the last month. She is on no medications.

Below is her preoperative ECG:



Describe this ECG.

Areas covered:

1. **Assess, recognize Mobitz II block, management plan**
2. **Anaesthetic management and discussion of technique**
3. **Bradycardia progressing to Complete Heart Block - Management**

Pass Rate 62%

VIVA 15

You are in pre-assessment clinic reviewing a 68-year-old female.

She is booked for bilateral total knee joint replacement surgery.

Her initial details and medications have been documented by the clinic nurse:

Height	162 cm
Weight	100 kg
Body Mass Index	38.1 kg/m ²

Medications:

insulin via pump	
fentanyl patch	12 µg/hr TD q72hrly
pregabalin	150 mg PO BD
paracetamol	667 mg PO TDS
quinapril/hydrochlorothiazide	10 mg/12.5 mg PO daily
atorvastatin	40 mg PO daily
aspirin	100 mg PO daily (stopped by surgeon 2 days ago)
clopidogrel	75 mg PO daily (stopped by surgeon 2 days ago)
pantoprazole	40 mg PO daily

Allergies:

penicillin (rash)

Given this information, what medical problems are indicated that you will need to assess further?

Areas Covered:

- 1. Assess and discuss especially suitability for bilateral TKR**
- 2. Unilateral knee chosen. Plan for management. Femoral catheter on wrong side**
- 3. Severe pain postoperatively despite regional. PCA instituted. Sedation and management**

Pass Rate 89%

VIVA 16

As the duty anaesthetist receiving emergency bookings, you take a phone call from the ENT registrar, who is in the Emergency Department with a 26-year-old man requiring urgent surgical drainage of a suspected peritonsillar abscess.

The registrar reports that the patient is very distressed, refuses to lie flat and cannot open his mouth more than 1.5cm.

Outline your initial management, assessment and concerns for anaesthesia.

Areas Covered:

- 1. Assessment of airway and discussion of options**
- 2. Management of intubation**
- 3. Post extubation bleed with aspiration. Reintubation management.**

Pass Rate 91%