



**The Hong Kong College of Anaesthesiologists**  
**Final Fellowship Examinations**  
**Paper I – Clinical Scenario (1 - 6) & SAQ (7 - 12)**  
**17 August 2022 (Wednesday)**  
**09:00 – 11:00 hours**

**Instructions:**

- a. There are twelve pre-labelled answer books. Please make sure you answer the questions in the respective answer books.
- b. Write your candidate number on the cover of each answer book.
- c. Use ink or ball-point pen.
- d. There are 12 questions in this paper. Answer **ALL** questions. They are worth equal marks and you should spend approximately **ten minutes** for each question. For questions with multiple parts, allocation of marks is indicated in the brackets.
- e. Questions 1-3 are related to Scenario A, Questions 4-6 are related to Scenario B, Questions 7-12 are standalone short answer questions.

**Scenario A**

**A 72-year-old lady presents for Left Total Hip Arthroplasty at your Pre-Anaesthetic Clinic. She is 160 cm tall and weighs 95kg. She has had Non-insulin Dependent Diabetes Mellitus (NIDDM) for 10 years and is on Metformin 1g bd and Empagliflozin 25mg daily, a Sodium-glucose cotransporter-2 (SGLT2) inhibitor.**


- 1) List your anaesthetic concerns (30%) and in relation to her cardiovascular system, how will you assess her suitability for surgery (70%)?
- 2) How do you plan to manage her NIDDM in the perioperative period?
- 3) The procedure was performed under spinal anaesthesia. She still has residual motor blockade to both her lower limbs 6 hours after the procedure. List your differential diagnosis (40%) and describe how you would assess her (60%).

**Go to page 2 for Scenario B  
Questions 4-6**

## **Scenario B**

**A 55-year-old 50kg woman is scheduled for embolization and coiling of an anterior communicating artery aneurysm in the radiology suite. She presented with headache two weeks ago and her past health was unremarkable. You have performed a full preoperative assessment.**

- 4) What are your major considerations for this patient undergoing the interventional procedure (30%) and how would you address these concerns in your preoperative preparation (70%)?
- 5) During the embolization, the blood pressure suddenly goes up to 190/100mmHg. The neurosurgeon informs you there is significant extravasation of contrast and decides to proceed to emergency craniotomy for clot evacuation and surgical clipping. Outline your immediate management (50%) and your preparation for the transfer of this patient to the operating theatre (50%).
- 6) After opening of the dura, the blood pressure drops to 89/40 mmHg. There is significant bleeding of 3 liters of blood obscuring the surgical field. How would you manage the situation?



**Go to page 3 for  
Questions 7-12**

### Short Answer Questions

- 7) A 30-year-old female presents for laparoscopic excision of endometriosis at your day surgery. How would you assess her risk of postoperative nausea and vomiting (PONV) and how do you manage this?
- 8) Outline your perioperative anaesthetic concerns for children with obstructive sleep apnea undergoing tonsillectomy (70%)? List the risk factors in these patients for developing postoperative respiratory complications (30%)?
- 9) A 30-week gestation pregnant woman with moderate mitral stenosis goes into preterm labour. List 4 different classes of tocolytic therapy and their mechanism of actions (20%); Compare and contrast their uses in this patient (80%).
- 10) A 24-year-old lady with myasthenia gravis is assessed at your clinic for video-assisted thoracoscopic thymectomy.
- i) How do you evaluate her need for postoperative ventilatory support (30%)?
  - ii) What are the possible perioperative measures and techniques that could be employed to minimize postoperative respiratory complications (70%)?
- 11) What are the sources of drug error in anaesthesia practice (40%)?  
Suggest methods to minimize these errors in the operating theatre (60%).
- 12) A 20-year-old man has sustained an isolated penetrating eye injury requiring emergency surgery. He enjoys good past health and has fasted for 3 hours.  
What are the determinants of intraocular pressure (IOP) (40%)?  
How would you carry out general anaesthesia in this patient (60%)?

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