

## **Paper I**

There are twelve questions in this paper to be completed in 150 minutes  
Answer **ALL** questions.

They are worth equal marks and you should spend approximately **twelve minutes** for each question.

For questions with multiple parts, allocation of marks is indicated in the brackets.

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 30- year-old parturient, at 38 weeks gestation of her first pregnancy (gravida 1, para 0), experienced spontaneous onset of contractions. Her pregnancy was unremarkable. An epidural was requested for labour analgesia. A gush of cerebrospinal fluid was evident upon insertion of the Tuohy needle, indicating accidental dural puncture.**

- 1. Discuss the strategies for further anaesthetic management in this patient.**
- 2. The patient complained of severe headache on the following day of delivery. List the differential diagnosis of postpartum headache (30%). What are the pathophysiology and characteristics of the post dural puncture headache (70%)?**
- 3. Discuss the treatment options of post-dural puncture headache for this patient.**

### **Scenario B**

**You were asked to see an 86-year-old man in the preoperative assessment clinic. He was scheduled for extended right hepatectomy for the treatment of hepatocellular carcinoma. He was a chronic smoker and was known to have diabetes mellitus, currently taking oral hypoglycaemic agents. He had a minor stroke two years ago with good recovery and he was able to manage his daily living activities independently.**

- 4. Outline your preoperative assessment for this patient.**
- 5. Describe your anaesthetic management to minimize perioperative acute kidney injury in this patient.**
- 6. During the operation, the blood pressure drops from 120/85 to 60/40mmHg with a pulse rate of 96 beats/min. How would you manage this situation?**

- 7. Describe the measures required to prevent airway fire during surgical tracheostomy (60%) and outline your management in the event of airway fire (40%).**
- 8. Outline the significance and management of preoperative anaemia.**
- 9. List the possible causes of delayed emergence from general anaesthesia (50%). Outline the initial approach to a patient with delayed emergence (50%).**
- 10. List the possible causes and pathophysiology of postoperative visual loss after prone positioning for posterior spinal fusion (50%). Outline the measures to reduce the incidence of this complication (50%).**
- 11. A 2-year-old boy with intussusception was going to have laparotomy and bowel resection. He was otherwise healthy and was born full-term. Discuss the pitfalls and difficulties of classic rapid sequence induction in this patient.**
- 12. Describe the indications of transnasal humidified rapid insufflation ventilatory exchange (THRIVE) in contemporary anesthesia and critical care.**