Instructions:

a. There are three pre-labelled answer books. Please make sure you answer the respective questions in the appropriate answer book.

b. Write your examination number on the cover of each answer book.

c. Answer ALL questions (nine questions). They are worth equal marks and you should spend approximately ten minutes for each question.

1. Discuss the rationale behind your choice of maintenance crystalloids for children.

2. A 67-year-old male is admitted for urgent craniotomy for drainage of a subdural haematoma following a fall. He is on warfarin for his prosthetic mitral valve. Discuss the perioperative management of his coagulation status.

3. Describe the anatomy of the thoracic paravertebral space. Describe how you would place a needle to perform a thoracic paravertebral block.

4. A 50-year-old man had a coronary stent put in four weeks ago and is currently taking aspirin and clopidogrel. His surgeon advised him to have an elective laparoscopic cholecystectomy for recurrent biliary colic. What are your considerations for the feasibility of surgery and the management of the antiplatelet therapy?

5. “Pressure regulated volume control ventilation is superior to volume controlled ventilation for patients undergoing laparoscopic surgery during general anaesthesia.” Discuss this statement.

6. You are asked to provide monitored anaesthesia care (MAC) for a 70-year-old lady, previously well, with symptomless jaundice for one month to undergo endoscopic retrograde cholangiopancreatography (ERCP). The surgeon told the family MAC is safer than general anaesthesia. Discuss the clinical advantages and disadvantages MAC vs. general anaesthesia in this patient.

7. Describe the intraoperative use of somatosensory evoked potentials (SSEP) during general anaesthesia for major spine surgery. List the effects of physiological and pharmacological factors that can affect SSEP during general anaesthesia.

8. List measures that can be taken to minimize occurrence of operating room fire in relation to the use of electrocautery.