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.

Scenario A

An anxious 12-year-old boy is scheduled for an above knee amputation for osteosarcoma of the lower left femur. He has had pain above his knee for 3 months and has commenced chemotherapy. He and his parents are anxious that his post-operative pain is minimised.

1. Outline the options for his post-operative pain management and what factors will influence your choice.

2. He has a regional anaesthesia infusion which gives excellent post-operative analgesia. You see him the next morning and he complains of tinnitus and a bad taste in his mouth. What is the significance of this? What other features should you look for? Describe your management.

3. Ten days after surgery he begins to experience intermittent sharp stabbing pain in the distal part of the amputated limb. The pain occurs once or twice a day, lasts for minutes and is severe. Describe your management.

Scenario B

A 35-year-old cyclist was hit by a car at high speed. On presentation to the Emergency Department, his systolic blood pressure is 70mmHg, pulse rate is 140/min, pulse oximetry shows poor wave form and Glasgow coma scale is 7/15.

4. Outline your initial management of this patient.

5. Discuss the possible causes of his decreased conscious state and the subsequent management.
6. The patient subsequently requires thoracotomy for a significant haemothorax. Discuss the problems associated with this procedure.

Scenario C

A 65-year-old man has history of unstable angina. Percutaneous coronary intervention was performed; a drug-eluting stent was put in the left anterior descending artery. Six weeks after the procedure, he complained of constipation and carcinoma of colon was diagnosed. He has been taking aspirin and clopidogrel since the procedure.

7. Outline your preoperative assessment and discuss the timing of surgery for this patient.

8. The BMI of this patient is 32 and the chief surgeon made a remark of “obese abdomen” in the medical note. The surgeon would like to know whether open surgery is “safer” for the patient as compared to laparoscopic surgery. Discuss your opinion.

9. The patient is now undergoing laparoscopic anterior resection. Thirty minutes into the operation, his arterial oxygen saturation drops to 90% and the airway pressure is increased. On auscultation, the chest is wheezy. Describe your action and discuss your differential diagnosis.

END