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

A 26-year-old man is a known habitual cocaine user. He fell from 3rd floor to the ground. His Glasgow Coma Score upon arrival at the Accident & Emergency Department (AED) was 10, SpO2 on non-rebreathing mask was 90%, blood pressure 110/78 mmHg with a heart rate of 128/min. You are called to the AED to manage this patient.

1) Outline your initial assessment and management of this patient.

2) Investigations reviews ruptured spleen and liver, the patient is taken to the operating room for emergency laparotomy. Outline your perioperative management.

3) Intraoperative blood loss has reached 4 litres and there is generalized oozing. State the possible causes, and describe your management.

Scenario B

A 70-year-old male ex-smoker with a history of hypertension, ischaemic heart disease and chronic obstructive pulmonary disease presents with a 5.8 cm infrarenal abdominal aortic aneurysm. He is scheduled for endovascular aortic repair (EVAR) in the angiographic suite. He has previously undergone a 3 vessel coronary artery by-pass grafting and is on acetylsalicylic acid 160 mg/day. During preoperative visit, the patient is concerned about contrast-induced nephropathy.

4) Discuss the options of anaesthesia for this patient.

5) What is contrast-induced nephropathy (10%)? How would you assess the risk of contrast-induced nephropathy in this patient (45%)? How would you minimize the risks of contrast-induced nephropathy in this patient (45%)?

6) After the procedure in the recovery room, the patient is noted to be paraplegic and spinal cord ischaemia is suspected. Describe the pathogenesis of spinal cord ischaemia in this patient (50%) and how this complication may be prevented and treated (50%).
Scenario C

A 50-year-old woman with a solitary phaeochromocytoma presents for laparoscopic adrenalectomy. Her past medical history is unremarkable.

7) Describe your preoperative assessment and management.

8) How would you anaesthetize this patient?

9) Intraoperatively the patient abruptly becomes hypotensive. Describe your management.

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