Scenario A
35-year-old pregnant lady at 32th week of pregnancy presented for Caesarean section under general anaesthesia.
She was diagnosed to have cerebellar arteriovenous malformation (AVM) at 16th week of pregnancy. At 28th week, there was bleeding from AVM rupture which was managed conservatively. She is planned for early endovascular embolization after the delivery.

1. How are you going to prepare this patient for the Caesarean section?
2. Describe how you would conduct your anaesthesia.
3. The surgery finished in one hour but patient failed to wake up. What are the causes and how are you going to approach to this problem?

Scenario B
A 3-month-old baby girl of body weight 7 kg requires a third ventriculostomy and ventriculo-peritoneal shunt for management of hydrocephalus.

4. Define hydrocephalus and list the possible causes (70%). How are you going to assess this child (30%)?
5. Describe how you would anaesthetise this child and explain how the post-operative care should be delivered including your plan for pain relief.
6. Six months later the same patient presents as an emergency with a suspected blocked shunt. What features in the patient’s assessment would be of importance (50%) and how is it going to affect your anaesthesia (50%)?

Scenario C
A 45-year-old 70 kg man with 20 years history of ankylosing spondylitis presents to the preoperative clinic 2 weeks prior to a left total hip replacement.
He has severe limitation of spine mobility with minimal cervical spine movement. He is currently taking ibuprofen, tramadol and famotidine.

7. Describe your preoperative assessment.
8. Discuss your plan for anaesthesia (60%) including your plan for postoperative pain control (40%).
9. During cementing of the femoral prosthesis you notice a sudden drop of the patient’s blood pressure to 70/45mmHg. What is your differential diagnosis (50%)? Describe how you would manage this situation (50%).