



# The Hong Kong College of Anaesthesiologists

## Final Fellowship Examination Paper I

Friday 18<sup>th</sup> March 2005  
09:00 - 10:30 hrs

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Instructions:

- There are three pre-labelled answer books. Please make sure you answer the respective questions in the appropriate answer book.
  - Write your examination number on the cover of each answer book.
  - Answer **ALL** questions (nine questions). They are worth equal marks and you should spend approximately ten minutes for each question.
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### Scenario A

**A 25-year-old man has been knocked unconscious in a head-on collision. On admission he was confused (GCS 13) but deteriorated (GCS 8) and was intubated and ventilated. An urgent CT scan showed a sub-dural haematoma with diffuse brain injury and intracerebral contusions. He has no other injuries and the cervical spine is clear. He requires surgery for evacuation of the sub-dural haematoma.**

- Describe the anaesthetic considerations relevant to his management.
- An intracranial pressure (ICP) monitor shows an ICP of 35 mmHg. A CT scan shows a tight brain, small ventricles and no clot. What immediate checks and management should be instituted?
- The patient develops fixed dilated pupils. Describe the conditions and tests that would confirm brain stem death and specify which cranial nerves are tested.

### Scenario B

**You are the specialist anaesthetist working in a tertiary hospital. Your department has to provide anaesthetic service for electroconvulsive therapy (ECT) twice a week at a psychiatric hospital which is 10 minutes away from your hospital.**

- What is your choice of anaesthetic agents for ECT? Justify your choice.

**You are consulted for an 'urgent' ECT for a 60-year-old male with major depression and suicidal ideation. The patient has stable angina for 2 years with medical therapy and a functional status of New York Heart Association (NYHA) Class II. His medications include Metoprolol, Aspirin and Fluoxetine (Prozac).**

- Discuss your assessment and preparation of this patient before ECT.

6. Outline your anaesthetic management plan for the above patient undergoing ECT.

### Scenario C

**A 35-year-old primigravida has known aortic stenosis with an aortic area of 1.4 cm<sup>2</sup>. At 34<sup>th</sup> week of pregnancy, she tolerates walking up three flights of stairs. You are consulted to assess this patient.**

7. Outline your assessment of the severity of her aortic stenosis at the consultation.

**Following consultation among her obstetrician, cardiologist and anaesthetist, an elective vaginal delivery was arranged at 39<sup>th</sup> week of pregnancy under controlled circumstances. At 38<sup>th</sup> week of pregnancy, she goes into spontaneous labour.**

8. Discuss the options of analgesia for her labour pain

**Epidural analgesia was initiated when the cervix was 3 cm dilated. Unfortunately, she collapses 4 hours after initiation of the regional blockade when labour has progressed to 5 cm cervical dilatation. Electrocardiogram shows ventricular fibrillation.**

9. Briefly describe how you would perform cardiopulmonary resuscitation in this patient.

**END**