### HONG KONG COLLEGE OF ANAESTHESIOLOGISTS



## **DIPLOMA OF FELLOWSHIP**

# FINAL FELLOWSHIP (INTENSIVE CARE) SHORT ANSWER PAPER

### 15 Questions

Monday 19 August 2013 (9.00 am - 11:30 am)

### **NOTICE**

- (A) Write your answers in the books provided.
- (B) Please separate your answers into three groups:

Q1 to Q5

Q6 to Q10 and

Q11 to Q15

- (C) Start each answer on a new page and indicate the question number.
- (D) You may choose to answer the questions in any order but please make sure that they can be separated into the three groups as above, by starting on a new booklet as necessary.
- (E) It is not necessary to rewrite the question in your answer book.
- (F) You should answer each question in ten minutes or less.
- (G) The questions are worth equal marks.
- (H) Record your number on the cover of each book and hand in all books.

### ANSWER THE FOLLOWING

- **1.** Describe the mechanism of action of tranexamic acid and critically evaluate its role in the early management of trauma patients.
- **2.** Outline your management of a 28 years old lady who is at 30-weeks gestational pregnancy, admitted to your intensive unit for status asthmatics and respiratory failure.
- **3.** A 45 years old lady is admitted to your ICU with acute diffuse subarachnoid haemorrhage. She has been confirmed brain dead on clinical criteria. Her family volunteer for organ donation. Please outline your clinical management.
- **4.** You are about to start regional citrate anticoagulation for continuous renal replacement therapy.
  - 4-i. List three (3) conditions that may predispose patient to citrate toxicity (3 marks)
  - 4-ii. List three (3) biochemical manifestations of suspected citrate toxicity (3 marks)
  - 4-iii. Briefly outline your management of citrate toxicity (4 marks)

- **5.** Write short notes on the following strategies in trauma resuscitation
  - 5-i. Damage control surgery (2 marks)
  - 5-ii. Permissive hypotension (2 marks)
  - 5-iii. Management of coagulopathy (2 marks)
  - 5-iv. Role of transcathter embolisation (2 marks)
  - 5-v. Fluid choices in head injury (2 marks)
- **6.** What is the definition of "failure to wean"? (1 mark)

List six (6) specific causes contributing to failure to wean. (3 marks)

Described your approach in managing such a patient in your ICU. (6 marks)

- **7.** Write brief notes on Fat Embolism Syndrome.
- **8.** Write brief notes on the different methods of gastrointestinal (GI) decontamination techniques in drug overdose.
- 9. Discuss Remifentanil (5 marks), and briefly outline its role in ICU (5 marks)
- **10.** A 77 yr-old male with GOLD stage 4 COPD and multiple previous hospital admissions, was admitted to ICU for acute exacerbation of COPD. He remained ventilator dependent for 4 weeks, with severely limited chance of recovery. The consensus among intensivists was that his condition was terminal. **Describe how you would proceed** with End-of-life care in this patient?
- **11.** Discuss the advantages / disadvantages for choosing Transoesophageal Echocardiography (TEE) over Transthoracic (TTE) in the following conditions.
  - 11-i. Infective endocarditis (2.5 marks)
  - 11-ii. Aortic dissection (2.5 marks)
  - 11-iii. Post-operative cardiac surgical patients (2.5 marks)
  - 11-iv. Chest trauma (2.5 marks)
- **12.** Briefly outline how you would perform therapeutic hypothermia in patient with cardiac arrest due to ventricular fibrillation.
- **13.** Discuss intravenous (IV) thrombolysis in the management of acute ischaemic stroke.
- **14.** A patient failed to wake up after general anaesthesia following a laparoscopic cholecystectomy. Discuss the possible causes and your initial management.
- **15.** List your indications of VenoVenous (VV) Extracorporeal membrane oxygenation (ECMO) in an adult intensive care unit? (3 marks).

Briefly describe how are you going to set up such service in your hospital. (7 marks)