

#### HONG KONG COLLEGE OF ANAESTHESIOLOGISTS

# FINAL FELLOWSHIP EXAMINATION (INTENSIVE CARE) SHORT ANSWER PAPER

## 15 Questions

Monday 3<sup>rd</sup> August 2015 (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. List three (3) basic requirements of a humidifier used in mechanically ventilated patients (3 marks). How does the heat and moisture exchanger (HME) work (3 marks)? What are the advantages (2 marks) and disadvantages (2 marks) of the HME as a humidifier?
- 2. Discuss the management of necrotizing fasciitis (10 marks).
- 3. Write short notes on the clinical manifestations of acute organophosphate pesticide poisoning (3 marks) and its management (3 marks). Discuss the strategies for staff protection (4 marks).
- 4. Discuss the use of intravenous 8.4% sodium bicarbonate in tricyclic antidepressant overdose (10 marks).
- 5. Outline the management plan for a patient who has recurrent bleeding from a duodenal ulcer, which has failed to be controlled endoscopically (10 marks).

- 6. Compare and contrast the use of parametric verses non-parametric methods in statistical hypothesis testing (10 marks)?
- 7. For a patient with suspected viral myocarditis
  - a. List four (4) possible viral etiologies (2 marks).
  - b. Briefly outline how you would investigate this patient (5 marks)?
  - c. His condition deteriorates and develops cardiogenic shock. List three (3) interventions you would consider for short term circulatory support (3 marks)?
- 8. Describe your approach to enteral feeding intolerance in critically ill patients (10 marks).
- 9. Discuss the evidences supporting the use of prone ventilation in Acute Respiratory Distress Syndrome (6 marks) and list four (4) complications (2 marks) and four (4) contraindications (2 marks).
- 10. Checklists can be used to improve safety and quality in ICU, yet they are not always successful. Discuss the principles to follow for successful application of checklists (10 marks).
- 11. Write short notes on "leukostasis" (4 marks). How would you manage a patient with leukostasis (6 marks)?
- 12. Discuss the advantages and disadvantages of five (5) different methods which may be used in the diagnosis of vasospasm secondary to aneurysmal subarachnoid haemorrhage (10 marks).
- 13. A patient at her 38<sup>th</sup> week of gestation is admitted to your ICU due to acute respiratory failure. List four (4) differential diagnoses (2 marks). For each diagnosis, describe the distinguishing clinical features and investigations (8 marks). You may tabulate your answer.
- 14. Compare and contrast the pharmacology of dopamine and noradrenaline (5 marks). Describe their use in critically ill patients (5 marks).
- 15. List five (5) causes of hypotension during intermittent haemodialysis (5 marks) and outline its management (5 marks).

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