



THE HONG KONG COLLEGE OF ANAESTHESIOLOGISTS
FINAL FELLOWSHIP EXAMINATION (INTENSIVE CARE)
SHORT ANSWER PAPER

15 Questions

Monday 8th August 2016 (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. Discuss the pharmacology and use of colistin in the critically ill. (10 marks)
2. 45 year old male presents with shortness of breath and palpitations after a football match. At Accident and Emergency Department his blood pressure is 250/130 with a heart rate of 130/min. CXR is consistent with acute pulmonary oedema. Your working diagnosis is phaeochromocytoma.
 - (a) Outline your initial management (5 marks).
 - (b) What specific investigations would you consider (3 marks).
 - (c) Before definitive surgical intervention for this condition, how would you control his blood pressure (2 marks).
3. List ten (10) clinical manifestations, and associated electrolytes/elements involved in patients with refeeding syndrome. You may tabulate your answers. (10 marks)
4. What is tumor lysis syndrome? (1 mark)
How to diagnose it? (3 marks)
What are the predisposing factors? (2 marks)
Discuss the preventive measures. (4 marks)

5. Define contrast-induced nephropathy? (2 marks)
Explain in detail the approaches to prevent contrast-induced nephropathy? (8 marks)
6. Mr. X is a 35 year old gentlemen with unremarkable past health. He suffers from severe pneumonia and was admitted to ICU 3 days ago intubated. Today you find AFB smear positive in his sputum. Discuss your approach to this patient, including anti-TB treatment. (10 marks)
7. A 60 year old patient with known grade 4 larynx was intubated & put on mechanical ventilation for pneumonia for 7 days. Patient has been assessed and met your weaning criteria and passes the spontaneous breathing trial. Discuss the essential assessments and procedures to ensure a safe extubation. (10 marks)
8. What are the indications of hyperbaric oxygen (HBO) therapy in patients with acute carbon monoxide poisoning? (3 marks)
Discuss the preparations required for transferring patients for HBO therapy. (7 marks)
9. Discuss the specific methods in the prevention of Central line Associated Bloodstream Infection in intensive care unit. (10 marks)
10. Discuss the pathophysiology (2 marks) and clinical manifestations (3 marks) of acute digoxin overdose. List the specific pharmacological agents you may consider using and state one indication for each agent (5 marks).
11. Regarding the use of extracorporeal membrane oxygenation (ECMO) in severe ARDS.
 - (a) Discuss the ventilatory considerations (2 marks) and referral triggers (2 marks) prior to transferring a patient to an ECMO centre.
 - (b) List the clinical or physiological parameters that you would consider when initiating the different forms of ECMO (3 marks).
 - (c) List your contraindications (3 marks) for the use of ECMO in severe ARDS.
12. List eight (8) risk factors for complication of severe illness with H1N1 infection. (4 marks) Discuss the management of hypoxic respiratory failure due to H1N1 pneumonitis in ICU. (6 marks)
13. In a research project, someone has collected the ICU length of stay for 1,000 consecutive patients. Outline the various ways to present the information of these 1,000 observations in the research project report. (10 marks)
14. What are the factors contributing to the development of acute coagulopathy in a multi-trauma patient? (10 marks)
15. **Compare and contrast** the use of endotracheal aspirate, invasive bronchoscopic sampling and mini-bronchoalveolar lavage techniques to obtain respiratory tract specimens for microbiological workup in the setting of suspected ventilator-associated pneumonia. You may **tabulate** your answer. (10 marks)

End