



## The Hong Kong College of Anaesthesiologists

### Intermediate Fellowship Examination

#### Written Paper in Pharmacology

Friday, 19 February 2010, 14:00 - 16:00 h

The questions carry equal marks. Answer **ALL** questions

1. Outline the effects of desflurane on the respiratory system.
2. A patient develops hypertension and myocardial ischemia during a laparotomy under relaxant general anaesthesia. Compare and contrast the pharmacology of metoprolol and glyceryl trinitrate for the management of this problem. (Assume that there is adequate anaesthesia and analgesia)
3. Classify diuretics with respect to their mechanisms of action and give example in each class.
4. Classify antidepressants. Outline the interactions between antidepressants and drugs that are commonly used during the perioperative period.
5. Briefly outline what is adequate recovery from non depolarizing neuromuscular blockade to minimize post-operative complications. Outline the role and utility of clinical and electronic monitoring in assessing adequate recovery from non-depolarizing neuromuscular blockade.
6. Outline the potential role (including dosage), mechanism/s of action and adverse effects of adrenaline, vasopressin, amiodarone and sodium bicarbonate in the management of ventricular fibrillation.
7. Outline the principles of management of oral drug poisoning with particular reference to the various means of drug manipulation. Illustrate your answer with examples.
8. Outline the differences in pharmacokinetics between neonates and adults? (include a brief outline of neonatal pharmacokinetics of inhalational anaesthetic agents).
9. Explain the factors that influence systemic absorption of local anaesthetic.
10. Describe briefly the non-hypnotic effects of etomidate.
11. Describe the effects of epidural morphine.
12. Define type I and type II statistical errors. Explain their implications and relative importance. Describe ways in which the chances of them occurring can be minimized in a clinical trial.

\*\*\*\*\* END OF PAPER \*\*\*\*\*