



**The Hong Kong College of Anaesthesiologists  
Intermediate Fellowship Examination  
Written Paper in Pharmacology**

Friday, 22<sup>nd</sup> July 2011, 14:00 - 16:00 h

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

1. Briefly describe the factors that may influence the dose of etomidate required for induction of general anaesthesia.
2. Describe the factors that may shorten the duration of nondepolarising neuromuscular blocking agents.
3. Describe the effects of sevoflurane in the central nervous system?
4. Describe the statistical test that could be used to compare the body height of 5 men with 5 women scheduled for surgery. Justify your choice, discuss the limitation(s) of the test chosen.
5. Outline the pharmacology of midazolam and phenytoin with reference to the acute management of status epilepticus
6. Classify anti-platelet and anti-coagulant medications according to their mechanisms of action. Give examples for each class of drug.
7. Describe the antiarrhythmic mechanisms of action of digoxin and amiodarone. Outline the advantages and disadvantages of managing intraoperative new atrial fibrillation with each drug.
8. Describe the side effects of non-selective non-steroidal anti-inflammatory drugs in high risk patients undergoing major surgery. List the preventive measures to reduce these risks.
9. Describe the pharmacodynamic effects of desmopressin (a vasopressin analogue) with reference to its drug-receptor interaction.
10. Discuss the effects on cardiovascular and central nervous systems after an overdose of propranolol. Briefly describe the initial management.
11. Describe the cardiac effects of local anaesthetics. Why would lignocaine be considered as less cardiotoxic compared with bupivacaine?
12. Describe the adverse effects of tramadol, include in your answer the potential drug interactions.

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