



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

**Friday, 22 July 2016, 14:00 - 16:00**

The questions carry equal marks. Answer **ALL** questions. For questions with multiple parts, allocation of marks is indicated in the brackets.

1. Outline the factors, with examples, that determine the speed of onset of neuromuscular blocking agents.
2. Outline the mechanisms of action of inotropes. Illustrate your answers with examples.
3. Describe the role of blood in the metabolism of drugs used in anaesthesia. Include examples of drugs in your answer.
4. Outline the factors that determine recovery (offset of action) after ceasing a drug infusion. Give appropriate examples in anaesthesia.
5. Discuss the cardiovascular effects of desflurane.
6. Compare and contrast the pharmacology of ephedrine and phenylephrine.
7. Define power in the context of statistical tests. How would you determine the sample size for a clinical trial using the concept of power?
8. Write short notes on the pharmacology of naloxone (60%). Discuss the role of selective peripheral opioid antagonist in the perioperative patient management (40%).
9. Describe the potential toxic effects associate with the use of local anaesthetics.
10. Describe the pharmacology of dabigatran (50%). In patients having surgery, describe methods to reverse the pharmacological effects of dabigatran (50%).
11. Compare and contrast the pharmacology of ranitidine and sodium citrate used in patients at risk of acid aspiration.
12. Compare and contrast the effects of propofol and ketamine on the central nervous system.

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