ANSWER ALL QUESTIONS  (each question is worth equal marks)

1. Outline the adverse effects of non-selective NSAIDs. What improvements have the selective COX-2 inhibitors made to these effects.

2. Compare and contrast remifentanil with fentanyl.

3. Compare and contrast the cerebral vascular effects of isoflurane and propofol.

4. Compare and contrast the pharmacology of sodium nitroprusside and glycercyl nitrate.

5. Describe briefly the non-hypnotic effects of ketamine.

6. Outline the disposition of bupivacaine administered into the lumbar epidural space.

7. Outline the factors that determine the onset of neuromuscular block. Compare suxamethonium with rocuronium with regard to this.

8. Dolasetron in a new anti-emetic drug. Describe how you would devise a clinical trial to determine the efficacy of this drug as an anti-emetic in the post-operative period.

9. Outline the pharmacology and clinical uses of mannitol.

10. Describe the extrahepatic metabolism of drugs relevant to anaesthesia.

11. Illustrate with examples how different classes of drugs could alter gastric pH.

12. Outline the factors affecting the uptake of volatile anaesthetic agents.

END OF PAPER