1. Classify drug receptors. How are their structures related to their function? Give examples of each type.

2. What are the pharmacodynamic effects of blocking $\alpha$-adrenergic receptors?

3. What is an isomer? Classify the different types of isomers. What is the significance of isomerism in anaesthetic drugs?

4. What does the term statistical significance mean? What are type I and type II error? How would you decide how many patients to recruit to a study comparing two anti-emetic agents?

5. Compare and contrast the pharmacology of gelofusine and 5% albumin.

6. Discuss the advantages and disadvantages of intravenous, epidural, transdermal and oral administration of fentanyl for postoperative analgesia.

7. How could genetic factors influence the clinical response to drugs commonly used in anaesthesia?

8. Describe the factors that determine the speed of onset during inhalational induction of anaesthesia.

9. Outline the pharmacology of glycopyrrolate.

10. Compare and contrast the cerebrovascular effects of isoflurane, thiopentone and ketamine.

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

12. Discuss the advantages and disadvantages of the methods available for assessing neuromuscular block in the recovery room.

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