The questions carry equal marks. Answer ALL questions.

1. How does warfarin produce its effects? Briefly outline the pharmacological strategies available to reverse the effects of warfarin, including the advantages and disadvantages of these strategies.

2. Briefly describe the causes for prolonged neuromuscular blockade after a single dose of succinylcholine.

3. Outline the adverse effects of beta blockers.

4. *Question withdrawn.*

5. Compare and contrast the use of ephedrine and phenylephrine as a vasopressor in treating hypotension after spinal anesthesia for Cesarean section.

6. With the use of the 2x2 table, explain the four statistical terms: (1) Risk; (2) Risk ratio; (3) Absolute Risk Reduction; and (4) Number-Needed- to -treat. (Each part worth equal marks).

7. Discuss, with examples, how the physical properties of volatile anaesthetic agents affect their pharmacokinetic and pharmacodynamics profiles.

8. Discuss the pharmacokinetic concepts of (1) elimination half time; (2) context sensitive half time; and (3) mean residence time. (Each part worth equal marks)

9. Write short notes on the pharmacology of methadone.

10. Outline the pharmacodynamic properties of ketamine. List the situations in anaesthesia and intensive care medicine where these properties may be useful.

11. *Question withdrawn.*

12. Classify, with examples, the commonly used intravenous colloid solutions. What are the advantages and disadvantages of using colloid solutions as plasma volume expanders?

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