What is the mechanism of action of selective serotonin reuptake inhibitors (SSRIs) in the treatment of depression?

Explain the difference between competitive and non-competitive inhibitors in enzyme kinetics with examples from pharmacology.

## **SKELETAL SYSTEM**

## **Assignment questions**

Discuss the pharmacokinetic properties of commonly used local anesthetics and their clinical implications.

How does the renin-angiotensin-aldosterone system (RAAS) contribute to the pharmacological management of hypertension?

Describe the mechanism of action and therapeutic uses of beta-blockers in cardiovascular medicine.

Compare and contrast the pharmacological properties of NSAIDs (non-steroidal anti-inflammatory drugs) and acetaminophen (paracetamol) in terms of their mechanisms of action, adverse effects, and clinical indications.

Explain the concept of drug-drug interactions in pharmacology and provide examples of clinically significant interactions.

Discuss the pharmacological mechanisms underlying opioid analgesics and the management of opioid-induced adverse effects.

Describe the mechanism of action and therapeutic applications of proton pump inhibitors (PPIs) in the treatment of gastrointestinal disorders.

What are the pharmacological principles underlying the use of anticoagulants in preventing and treating thromboembolic disorders?