

NUR-641E Mid-Term Exam Study Guide

Note: Read the questions: the questions only have one answer **unless the question specifically states there is more than one correct answer.**

Understand what a prodrug is, and activation/inactivation by liver enzymes, and how it differs from active drugs.

The liver is the principal site of drug metabolism. Although metabolism typically inactivates drugs, some drug metabolites are pharmacologically active—sometimes even more so than the parent compound. An inactive or weakly active substance that has an active metabolite is called a prodrug, especially if designed to deliver the active moiety more effectively.

Know what Bioavailability (BA)

a term used in pharmacology and nutritional and environmental sciences. In pharmacology, it refers to the degree and rate at which an administered drug is absorbed by the body's circulatory system, the systemic circulation. Bioavailability is an essential measurement tool since it determines the correct dosage for non-intravenous administration of a drug availability means

Bioavailability. In pharmacology, bioavailability (BA or F) is a subcategory of absorption and is the fraction of an administered dose of unchanged drug that reaches the systemic circulation

Bioavailability is affected by chemical instability, solubility and first-pass metabolism

The first pass effect- is a phenomenon of drug metabolism whereby the concentration of a drug is greatly reduced before it reaches the systemic circulation. It is the fraction of drug lost during the process of absorption which is generally related to the liver and gut wall.

Bioequivalence does not affect bioavailability

Bioequivalence is the similarity of two drugs that share the same desired outcome for patients. Pharmaceutical equivalence means two drugs release the active ingredient into