

UNIT-II: Drug Elimination, Bioavailability and Bioequivalence

Elaborate on (10 Marks):

- Discuss the **method of measuring of bioavailability** [1].
- Discuss **different methods used in bioequivalence studies** [3].
- Discuss about **factors affecting drug metabolism** [4].
- Explain the **methods to enhance the dissolution rate and bioavailability of poorly soluble drugs** [6].
- Discuss the **elements of protocol for bioequivalence studies** [15].

Write Notes on (5 Marks):

- Explain the **clearance** [9].
 - "Method to enhance the bioavailability of poorly soluble drugs." [9].
 - **Bio equivalence studies** [6, 9].
 - Write a detail about the **phase II reaction of metabolism** [3].
 - **Factors affecting drug metabolism** [3].
 - **Factors affecting excretion of drug** [3].
 - **Determination of bioavailability** [3].
 - **Method enhances the dissolution rate** [10].
 - **Invitro and Invivo correlation** [10].
 - **Elimination** [10].
 - Explain the **Non renal routes of drug excretion of drugs** [6, 7].
 - **Methods of assessment of bioavailability** [6].
 - **Phase I metabolism** [7].
 - **Absolute and relative bioavailability** [7].
 - **Theories of drug dissolution** [11].
 - **First pass metabolism** [11].
 - Note on **tubular reabsorption** [11].
- ### **Short Answers on (2 Marks):**
- **Process of Biliary excretion of drug** [2].
 - **Biotransformation** [2].
 - **Dissolution** [2].
 - **Absolute bioavailability** [2, 11].

- **Renal clearance** [12-14].
- **First pass metabolism** [12].
- **Metabolism** [12].
- **Non renal route of drug excretion** [12].
- **Bioequivalence** [10, 11].
- **Bioavailability** [10, 11].
- What is **relative bioavailability** [13].
- Any **two phase II reactions** [13].
- **In-vitro-in-vivo correlations** [13].
- **Equate the rate of excretion** [11].
- Recall **Phase I and II reactions** [11].