BP 604 T. BIOPHARMACEUTICS AND PHARMACOKINETICS

UNIT 1: INTRODUCTION TO BIOPHARMACEUTICS, ABSORPTION, DISTRIBUTION.

1. Fick's law is used for study of

A. Dissolution Rate

B. Disintegration Rate

C. Dissociation Rate

D. Diffusion Rate

2. Which of the following is a not mechanism of drug absorption through GIT

A. Pore Transport

B. Active Transport

C. Endocytosis

D. Metastasis

3. Which of the following process is also called "cell drinking"?

A. Pinocytosis

B. Phagocytosis

C. Convective Transport

D. Active Transfer

4. The absorption of drugs like (quaternary ammonium compounds, sulphonic acid) are Explained By

A. Ion Pair Transport

B. Convective Transport

C. Active Transport

D. Facilitated Diffusion

5. The Initial distribution of drug into the tissue is determined chiefly by

A. Rate of Blood Flow to Tissue

B. Plasma Protein Binding Of Drug

C. Affinity for Tissue

D. Gastric Emptying Time

UNIT 2: ELIMINATION, BIOAVAILABILITY AND BIOEQUIVALENCE

1. Which route of drug administration shows 100% Bioavailability?

A. Oral

B. Intravenous

C. Rectal

D. Topical

2……is the ratio of the mean residence time to the absorption time

A. Absorption number

B. Dissolution number

C. Dose number

D. Intrinsic dissolution

3. USP Apparatus 5 is__

A. Flow-through- cell

B. paddle over disk

C. Cylinder

D. Paddle

4. Which of the following methods are used to determine Area Under curve?

A. Cut and weigh method

B. Trapezoidal method

C. Integration method

D. All of the above

UNIT 3: PHARMACOKINETICS

1. The concentration of drug in plasma above which toxic effects are precipitated is known as_

A. Maximum safe concentration

B. Minimum Effective Concentration

C. Intensity of Action

D. Duration of Action

2. When rate is independent of the reactant concentration, then it is called

A. Zero order reaction

B. Pseudo zero order reaction

C. First order reaction

D. Second order reaction

3. The unit of k for zero order reaction is

A. moles/litre/second

B. moles

C. moles/second

D. moles/litre

4. Which of the following is not a pharmacokinetic parameters that describe the plasma level time curve?

A. t_{max}

B. c_{max}

C. Area under Curve

D. Minimum Effective Concentration

5. The drug concentration between Minimum Effective Concentration and Maximum Safe Concentration is called_

A. Therapeutic range

B. Area under curve

C. Peak response

D. Pharmacological response

UNIT 4: NONLINEAR PHARMACOKINETICS

1. Non-linear pharmacokinetics is also known as……

A. dose dependent

B. enzyme capacity limited

C. saturation pharmacokinetics

D. All of the above

2. The characteristic of non-linear pharmacokinetics include……..

A. Area under the curve is proportional to the dose

B. Elimination half-life remains constant

C. Area under the curve is not proportional to the dose

D. Amount of drug excreted through remains constant

3. Which of following drug shows non-linearity in hepatic excretion?

A. Carbamazepine

B. Propranolol

C. Penicillin

D. Thiopental

4. Change in Pharmacokinetics parameters depends upon ……. of dose administered.

A. Size

B. Route

C. Both of free above

D. None of the above

5. Linear Pharmacokinetics is……

A. Dose dependent

B. Dose independent

C. Both of the above

D. None of the above