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Total No. of Pages : 01

Total No. of Questions : 07

M.Sc. (Clinical Research) EL-II (2018 Batch) (Sem.-1)

PHARMACOKINETICS

Subject Code : MSCR-114-18

Paper ID : [75614]

Time : 2 Hrs.

Max. Marks : 35

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A** is **COMPULSORY** consisting of **FIVE** questions carrying **ONE** marks each.
2. **SECTION-B** contains **THREE** questions carrying **FIVE** marks each and students have to attempt any **TWO** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

SECTION-A

- Q1 a) What is facilitated drug transport?
b) What is meant by apparent V_d ?
c) Define bioequivalence.
d) What is K_a and K_e and their units?
e) Mention the equation for calculating half-life.

SECTION-B

- Q2 Enumerate the mechanisms of drug absorption. Briefly discuss the active process of drug absorption.
- Q3 What is meant by "first order kinetics"? Derive equations to explain plasma drug concentration after IV administration following one compartment model.
- Q4 Differentiate between relative and absolute bioavailability.

SECTION-C

- Q5 Which categories of drugs are exempted from bioequivalence testing and why?
- Q6 What are Phase-I and Phase-II reactions? Give suitable examples for each.
- Q7 Enumerate the barriers for drug absorption and discuss the factors related to physiological processes.