

SUPPLEMENTARY
MASTER OF PHARMACY (M. PHARM.) (CBCS-2019 COURSE)
M.Pharm. Sem-II PHARMACEUTICS :SUMMER- 2022
SUBJECT : ADVANCED BIOPHARMACEUTICS & PHARMACOKINETICS

Day : Friday

Time : 10:00 AM-01:00 PM

Date : 16-09-2022

S-20774-2022

Max. Marks : 75

N.B.:

- 1) Question 1 and 5 are compulsory. Out of remaining questions answer any **TWO** from each section.
 - 2) Figures to the **RIGHT** indicate **FULL** marks.
 - 3) Answer to both sections should be written in **SEPARATE** answer books.
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SECTION-I

- Q.1** Explain the different methods for studying drug uptake. (08)
- Q.2** Give an account of the compendial methods of dissolution testing. (15)
- Q.3** Explain in detail the different mechanisms of drug transport. (15)
- Q.4** Write notes on **ANY TWO** of the following: (15)
- a) Blood brain barrier
 - b) pH- partition hypothesis
 - c) Dosage form related factors affecting drug absorption.

SECTION -II

- Q.5** Explain the non-compartmental approach for obtaining the pharmacokinetic parameters. (07)
- Q.6** Compute the pharmacokinetic parameters K_E , K_a , t_{max} and C_{max} following extravascular administration of drug that follows one compartment model. (15)
- Q.7** What is absolute bioavailability and relative bioavailability? Give equations. Explain the pharmacokinetic and pharmacodynamics methods for measurement of bioavailability. (15)
- Q.8** Write notes on **ANY TWO** of the following: (15)
- a) Bioavailability testing of controlled release formulations
 - b) Physiological modelling
 - c) Clinical significance of drug – drug interactions

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