Sub Code: RPH734

Paper Id: 150722 Roll No:

BPHARM

(SEM VII) THEORY EXAMINATION 2019-20

PHARMACEUTICS-IX (BIOPHARMACEUTICS & PHARMACOKINETICS)

Time: 3 Hours ***Total Marks: 70***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. 2 x 7 = 14

a.	Write significance of protein binding.
b.	What do you mean by drug disposition?
c.	Define perfusion rate& half-life.
d.	Highlight the significance of bioequivalence studies.
e.	What do you mean by compartment kinetics?
f.	Define rate and order of reaction.
g.	Differentiate between volume of distribution and apparent volume of distribution.

SECTION B

2. Attempt any *three* of the following: 7 x 3 = 21

a.	What is drug absorption? Explain various theories to drug dissolution.
b.	Differentiate between the bioavailability and bioequivalence. Explain various method used to measurement of bioavailability.
c.	Explain various physiological barriers present in body which affect the process of drug distribution.
d.	Explain pH portion hypothesis with their limitation.
e.	Discuss various factors affecting drug distribution.

SECTION C

3. Attempt any *one* part of the following: 7 x 1 = 7

(a)	Enlist various factors affecting drug absorption. Discuss patient related factor affecting the drug absorption in detail.
(b)	Explain various mechanism of drug absorption.

4. Attempt any *one* part of the following: 7 x 1 = 7

(a)	Discuss significance of plasma drug concentration measurement.
(b)	Discuss Wagner nelson method for determination of absorption rate constant.

5. Attempt any *one* part of the following: 7 x 1 = 7

(a)	What is the plasma drug concentration time profile? Discuss pharmacokinetics and pharmacokinetics parameters.
(b)	Explain the concept of dosage adjustment in patient with renal failure with suitable examples.

6. Attempt any *one* part of the following: 7 x 1 = 7

(a)	Write a note on multi-compartment models.
(b)	Describe determination of pharmacokinetic parameters related to plasma after drug administration by I.V bolus.

7. Attempt any *one* part of the following: 7 x 1 = 7

(a)	Discuss *In vitro- In vivo* correlation (IVIVC)
(b)	Write a detailed note on regulatory requirements for conduction of bioequivalence studies.

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