Code No: B134201 **R13** SET - 1

IV B. Pharmacy II Semester Regular Examinations, April/May - 2017
BIOPHARMACEUTICS AND PHARMACOKINETICS

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
2. Answering the question in **Part-A** is Compulsory
3. Answer any **THREE** Questions from **Part-B**

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PART –A

1.	a)	Define passive facilitated diffusion and give two examples of drugs absorbed by this mechanism.	(4M)
	b)	Write about proteins responsible for protein binding.	(3M)
	c)	Define volume of distribution and mention its significance.	(4M)
	d)	What are the limitations of using urine data for calculation of pharmacokinetics?	(3M)
	e)	Define clinical pharmacokinetics and mention their significance.	(4M)
	f)	Write the methods for calculation of area under the curve.	(4M)

PART –B

2.	a)	Write about pH partition theory and its limitations.	(6M)
	b)	Enumerate the influence of physico-chemical properties of drug on its absorption.	(10M)
3.	a)	Write about factors influencing the protein binding of drugs.	(8M)
	b)	Explain the process of drug distribution in the body.	(8M)
4.	a)	Explain Wagner-Nelson method.	(8M)
	b)	Write the applications of one compartment model.	(8M)
5.	a)	Explain sigma-minus method.	(10M)
	b)	Write the principle of method of residuals and mention its draw backs.	(6M)
6.	a)	Explain pharmacodynamic drug interactions with suitable examples.	(10M)
	b)	Write the approaches for dose adjustment in renal failure.	(6M)
7.	a)	Explain the measures for determination of bioavailability.	(8M)
	b)	Write the protocol for bioequivalence testing.	(8M)
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