Printed Pages: 01 **Sub Code: MPH 202**

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M. PHARM.
(SEM II) THEORY EXAMINATION 2017-18
ADVANCE BIOPHARMACEUTICS AND PHARMACOKINETICS

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

Note: 1. Attempt all Sections.

SECTION A

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

a. Define the term biopharmaceutics and pharmacokinetics.
b. What is cytochrome P450?
c. What do you understand by the term compartment?
d. Drugs having high plasma protein binding have low apparent volume of distribution. Explain.
e. What do you understand by the term 'compendial'?
f. What is pharmacogenomics?
g. W hat is extraction ratio?

SECTION B

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

a. What is the significance of the plasma level-time curve? How does the curve relate to the pharmacologic activity of a drug?
b. Explain comparative drug release kinetics of oral dosage forms.?
c. Discuss about SAS pharmacokinetic software.
d. Write a note on design and evaluation of Bioequivalence studies.
e. Discuss pharmacogenetics of drug metabolism.

SECTION C

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

(a) Write a detailed note on protein binding of drugs and explain how plasma protein binding of drugs affect drug distribution.
(b) Write a detailed note on pharmaceutical factors affecting drug absorption.

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

(a) Classify compartment models. Explain them with concepts and schematic representation.
(b) Discuss the applications of Pharmacokinetic models.

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

(a) Write a detailed note on drug transporters.
(b) Write a detailed note on drug targets.

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

(a) Discuss different methods to calculate Area under curve.
(b) Discuss clinical significance of bioequivalence studies.

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

(a) Explain genetic polymorphism in drug metabolism.
(b) Discuss the factor affecting on drug dissolution process.