Printed Pages : 1 **Roll No.** | | | | | | | | | | | **MPH-202**

M. PHARMA.

THEORY EXAMINATION (SEM–II) 2016-17

ADVANCED BIOPHARMACEUTICS & PHARMACOKINETICS

Time : 3 Hours ***Max. Marks : 70***

Note : *Be precise in your answer. In case of numerical problem assume data wherever not provided.*

SECTION- A

1. Attempt all parts of this Section **7×2=14**

(a) What do you mean by BCS?

(b) Mention the factors affecting drug absorption.

(c) What is non-linear pharmacokinetics?

(d) Define relative and absolute bioavailability.

(e) Mention the significance of IVIVC in pharmacy.

(f) Write down the working principle of SAS pharmacokinetic software.

(g) Define 'pharmacogenomics'.

SECTION- B

2. Attempt any three parts of the following **3×7=21**

(a) Write down the effects of protein-binding interactions.

(b) Mention the problems of variable control in dissolution testing.

(c) Derive Michaelis-Menten equation.

(d) Write a brief note on generic substitution.

(e) State the role of genetic polymorphism

SECTION- C

3. Attempt all questions in this section. **5×7=35**

(a) Write a brief note on cytochrome P450-based drug interactions.

OR

Explain the mechanism of gastrointestinal absorption of suspension dosage form.

(b) Describe the various methods used for IVIVC.

OR

Write a brief note on alternative methods of dissolution testing of drugs.

(c) Describe two compartment model.

OR

Mention the significance of Michaelis-Menten equation.

(d) Elaborate the role of biopharmaceutical factors on drug bioavailability.

OR

Mention the significance of bioequivalence studies.

(e) How will you adjust dose in renal impairment?

OR

Write a brief note on renal and hepatic excretion of drugs.