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**P-MPH202-T** Seat No. _____

# Masters of Pharmacy (M. Pharm.) (Sem. II) (W.E.F. - 2017) (CBCS) Examination

**July – 2018**

## MPH202-T : Advance Biopharm. & Pharmacokinetics

Time : **3** Hours] [Total Marks : **75**

**1** Answer the following questions : **10×2=20**

(a) What do you mean by biowaivers ?

(b) Write the purpose of bioavailability studies.

(c) Write the method of estimation of $K_{max}$ and $V_{max}$.

(d) Give the clinical significance of bioequivalence studies.

(e) What do you mean by first order kinetics and its half-life.

(f) Write down the different types of pharmacokinetic models.

(g) What are monoclonal antibodies and oligonucleotides ?

(h) Explain the term compartment. What is its characteristics ?

(i) What do you mean by generic biologics (biosimilar drug products) ?

(j) Write down is the causes of nonlinearity ?

**2** Answer any two out of the following : **2×10=20**

(a) Explain the various factors affecting drug absorption.

(b) Write in detail about pharmacokinetic and pharmacodynamic drug interactions.

(c) Write a note one compartment open model drug disposition.

3 Answer any seven out of the following : **7×5=35**

(a) Write a note on Michaelis – Menten equation.

(b) Explain the factors affecting bioavailability of drug.

(c) Define pharmacokinetic model. Explain any one model in detail.

(d) Write a short note on *in-vitro in-vivo* correlation.

(e) Write a note on compendial methods of dissolution testing.

(f) Describe the mechanism of absorption of drug by active transport.

(g) Explain the cross over study design for bioequivalent study.

(h) Explain mechanisms of drug interactions.

(i) Write a short note on bioequivalence study designs.