Code No. 4277

# FACULTY OF PHARMACY

## Pharm. D (6 YDC) V-Year (Main) Examination, July 2017

**Subject : Clinical Pharmacokinetics and Pharmacotherapeutic Drug Monitoring**

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

***Note: Answer all questions from Part - A and answer any five questions from Part-B.***

**PART – A (10 x 2 = 20 Marks)**

1 What is the role of pharmacist in clinical pharmacokinetics?
2 Write the significance of population pharmacokinetics.
3 What are the major considerations in TDM?
4 What are the main factors that influence drug design in renal disease?
5 Why is creatinine clearance difficult to predict? Explain.
6 Define pharmacogenetics and write its applications.
7 Write the TDM fo carhamadepine.
8 What are the pharmacokinetic considerations in designing a dosage regime?
9 Write a note on pharmacokinetic drug – drug interactions with suitable examples.
10 Write any one method dosage conversion from I.V. to oral dosing.

**PART – B (5 x 10 = 50 Marks)**

11 Explain TDM drugs used in cardiovascular and seizure disorders.

12 (a) Explain different dosage adjustment for uremic patients.
(b) Write a note on effect of hepatic disease on pharmacokinetics.

13 Explain briefly Bayesian theory and analysis of population pharmacokinetic data.

14 Explain the role of cytochrome p-450 isoenzyme in genetic polymorphism in drug metabolism.

15 Explain the drug dosing in elderly, pediatrics and obese patients.

16 Describe inhibition and induction of drug metabolism.

17 Explain measurement of glomerular filtration rate and creatinine clearance.

18 Explain how TDM will affect individualization of drug dosage Regime.

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