Q.P. Code: 503326 Reg. No.:

Fifth Year Pharm D Degree Examinations June 2019

Clinical Pharmacokinetics and Pharmacotherapeutic Drug Monitoring

Time: 3 Hours Total Marks: 70

- Answer all questions
- Draw diagrams wherever necessary

Essays: (3x10=30)

- 1. Explain the process of extracorporeal removal of drugs.
- 2. Mention the process of adaptive dosing with feedback and describe the advantages of this method over conventional therapeutic drug monitoring
- 3. Explain direct and indirect link models for pharmacokinetic and pharmacodynamic correlation.

Short notes: (8x5=40)

- 4. Explain nonlinear mixed effect model for population pharmacokinetic data analysis
- 5. Explain dosage adjustment in renal failure.
- 6. Explain absorption interactions with examples
- 7. Explain TDM of lithium and theophylline.
- 8. Explain the genetic polymorphism in Drug Transport and Drug Targets.
- 9. Explain drug dosage adjustment in pediatric patients
- 10. Explain dosage regimen design
- 11. Explain the effects of enzyme induction and enzyme inhibition
