

# Question Paper

Exam Date & Time: 16-May-2023 (02:00 PM - 05:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal Academy of Higher Education, Manipal MPharm Theory End-Semester Examinations.

**Clinical Pharmacokinetics and Therapeutic Drug Monitoring [PPR-MPP203T -S3]**

**Marks: 75**

**Duration: 180 mins.**

### SECTION - A

**Answer all the questions.**

Answer the following (10 marks x 5 = 50 marks)

- 1) Explain about (i) the conversion of IV to oral dosing and (ii) the factors influencing drug elimination (10)
- 2) Explain the mechanisms of enzyme induction and inhibition (10)
- 3) Explain the fundamentals of population pharmacokinetic model and describe the process of building covariate models (10)
- 4) Explain in detail various methods of Pharmacokinetic and Pharmacodynamic correlation (10)
- 5) Explain TDM of Vancomycin, Gentamycin and Meropenem (10)

### SECTION - B

**Answer all the questions.**

Answer the following (5 marks x 5 = 25 marks)

- 6) Describe compartment models and their applications (5)
- 7) Describe Bayesian theory and explain its application with one example (5)
- 8) Enlist the differences between traditional and population pharmacokinetics (5)
- 9) Explain the impact of hepatic failure on ADME of drugs and approach for dosage adjustment in hepatic failure (5)
- 10) Describe in detail about the protocol for TDM (5)

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