

Question Paper

Exam Date & Time: 19-Apr-2024 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

IV Year Pharm D/ I Pharm D Post Baccalaureate
University Examination April 2023

Clinical Pharmacokinetics and Pharmacotherapeutic Drug Monitoring [PPR 5.3T-S1]

Marks: 70

Duration: 180 mins.

A: Long Answer Questions

Answer all the questions.

Draw diagrams wherever necessary

- 1) Explain population pharmacokinetics with its definition, advantages, concept and its data analytical method and applications (10)
- 2) Explain the concept of Bayesian theory with examples in diagnosis and dosage adjustment scenarios (10)
- 3) Explain the mechanisms enzyme induction and inhibition (10)

B: Short Answer Questions

Answer all the questions.

- 4) Discuss the TDM of Carbamazepine and Digoxin (5)
- 5) Explain the protocol for TDM (5)
- 6) Explain IV to oral conversion methods with examples (5)
- 7) Explain the concept of PKPD correlation and mention about types of PKPD correlation (5)
- 8) Explain about genetic polymorphism of CYP2D6 and NAT2 enzymes (5)
- 9) Explain the dosage adjustment in paediatric patients (5)

C. Give Reasons for the Following

Answer all the questions.

- 10) TDM samples are generally collected in trough (2)
- 11) Antacids co-administration might result in drug interactions (2)
- 12) IV to oral conversion is contraindicated in certain patients (2)
- 13) Maintenance dose calculation needs the value of clearance (2)
- 14) Lithium dosing is related to hydration status of patients (2)

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