## Batch 2019/20 Pharmacology Tutorial Pharmacokinetics

Date 15.02.2023 (Wednesday) Time 10.15 a.m. – 12.15 p.m.

<u>Groups</u>	Venue	<u>Lecturer</u>
M/19/126 – M/19/190	Pharmacology Auditorium	Dr. UD
M/19/191 – M/19/239 M/19/FQ/1 - M/19/FQ/9 M/18/050 M/18/150	Psychiatry Tute Room 1	Dr. SF
M/18/FQ/4, M/18/FQ/5		
M/19/001 – M/19/063	<b>Psychiatry Tute Room 2</b>	Dr. TS
M/19/064 – M/19/125	<b>Community Medicine Tute Room</b>	Dr. YI

## 2019/20 Batch Pharmacology Tutorial Pharmacokinetics 15.02.2023 – 10.15 a.m. 12.15 p.m.

- 1. Explain the basis for the following clinical situations.
  - 1.1 A patient taking oral theophylline for bronchial asthma presents with cardiac arrhythmias and seizures following treatment with erythromycin for a respiratory tract infections.
  - 1.2 A patient on long term phenytoin therapy for epilepsy presents with ataxia, tremor and confusion following a recent dose increment.
  - 1.3 A patient with salicylate poisoning is treated with intravenous bicarbonate.
  - 1.4 Probenecid is given to enhance the effect of penicillin
  - 1.5 The anticonvulsive effect of diazepam when given in status epilepticus lasts about 20 minutes despite its longer plasma half-life of about 24-50 hours.
  - 1.6 When isoniazid is administered in equal dosage to a group of patients with tuberculosis, some of them developed sensory polyneuropathy.
- 2. Draw the concentration-time curves for the following dosing regimens.
  - 2.1 Single IV bolus injection
  - 2.2 Single-dose oral administration
  - 2.3 Continuous IV infusion
  - 2.4 Intermittent IV bolus injection
  - 2.5 Intermittent oral administration of immediate-release formulation
  - 2.6 Intermittent oral administration of modified-release formulation