

**VINAYAKA MISSION'S RESEARCH FOUNDATION
(DEEMED TO BE UNIVERSITY), SALEM**

**M.PHARM. DEGREE EXAMINATION – July 2019
Second Semester**

BRANCH: PHARMACY PRACTICE

**CLINICAL PHARMACOKINETICS AND THERAPEUTIC DRUG
MONITORING**

Time : Three hours

Maximum: 75 marks

**(Draw neat labeled diagrams wherever necessary
your answer should be specific to the questions asked)**

SECTION –A

I. Answer any **THREE** questions: **(3 x 15 = 45)**

1. Define clearance and write in detail about renal and non renal clearance
2. Write the indications and protocol for Therapeutic Drug Monitoring (TDM). Discuss the TDM of digoxin used in the cardiovascular disease.
3. Discuss in detail about drug dosing in paediatrics.
4. Define pharmacogenetics. Discuss in detail about genetic polymorphism in drug transport and drug targets.

SECTION –B

II. Answer any **THREE** questions: **(3 x 10 = 30)**

5. Write a note on drug dosing in the pregnancy and lactation.
6. Discuss in detail about pharmacokinetic drug interactions with examples.
7. What is Non Linier Mixed Effects Modeling (NLMEM)? Write in detail about base model and model validation
8. Write the types and general pharmacokinetics and pharmacodynamics issues of IV to Oral dosing conversion.
