P.D 5.3

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V/VI PHARM - D DEGREE EXAMINATIONS, JULY - 2022

Fifth Year

CLINICAL PHARMACOKINETICS & PHARMACOTHERAPEUTIC DRUG MONITORING

Time : **Three Hours** Maximum : **70** Marks

Answer any FIVE Questions. **5x14 = 70 M**

All Questions carry equal marks

1. Write short notes on
   a) Conversion of intravenous to oral dosing.
   b) Determination of dose and dosing intervals.
2. What is therapeutic drug monitoring ? Add a note on TDM of Psychiatric drugs and Immunosuppressants.
3. a) Write in detail about inhibition and induction of Drug metabolism.
   b) Write in detail about inhibition of Biliary excretion.
4. a) Write in detail about individualization of drug dosage regimen based on Genetic, age, weight, disease, interacting drugs.
   b) Add a note on protocol for TDM.
5. a) Write in detail about measurement of Glomerular filtration rate & creatinine clearance.
   b) Add a note on General approach for dosage adjustment in Renal disease.
6. a) Enumerate the various methods of analyzing population pharmacokinetic data.
   b) Discuss the importance of Bayesian theory and its applications.
7. Explain the polymorphism in cytochrome isoenzymes and Drug targets.

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V/VI Pharma.D (Regular) DEGREE EXAMINATIONS, April-2018

5th year

Pharma-D

CLINICAL PHARMACOKINETICS & PHARMACOTHERAPEUTIC DRUG MONITORING

Time: Three Hours **Maximum marks:70**

Answer any FIVE questions.

All questions carry equal marks. **5X14=70M**

1. a) What are the pharmacokinetic and pharmacodynamic changes that happen when drugs are given to elderly patients? How should the closing and prescribing be altered keeping these changes in view?

   b) Explain the points involved in converting a patient from intravenous dosing to oral dosing.

2. Explain with the help of examples, Pharmacokinetic drug interactions.

3. a) Explain the effect of the following on the pharmacokinetic variables of drugs: disease, hepatic impairment, renal impairment.

   b) Write a note on the absorption, distribution, metabolism and elimination of lidocaine.

4. a) Write notes on blood urea nitrogen, serum creatinine concentration, creatinine clearance and urine protein.

   b) Explain how you will develop a dosage regimen for drugs to be used in patients with uremia.

5. Explain the three types of parameters that are used to characterize the pharmacokinetic disposition of a drug in a patient population. Add a note on the Bayesian approach to therapeutic drug monitoring.

6. Write a note on cytochrome P-450 isoenzymes. Explain how genetic polymorphism affects metabolism of drugs.

7. Write short notes on

   a) Nomogram

   b) Clinical pharmacokinetics of theophylline

   c) Dialysis.

8. Write short notes on

   a) Obesity

   b) Clinical pharmacokinetics of phenytoin

   c) Volume of distribution

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V/VI Pharma.D (Regular) DEGREE EXAMINATIONS, JUNE-2017

(Examination at the end of Fifth year)

Paper-III-CLINICAL PHARMACOKINETICS AND PHARMACOTHERAPEUTIC DRUG MONITORING

Time: Three Hours **Maximum marks:70**

Answer any FIVE questions.

All questions carry equal marks. **5X14=70M**

1. Explain about the clinical significance of Clearance and Volume of distribution of drugs?
2. What is an ideal dosage regimen? How the dose size and dosing frequency is calculated in a normal and obese person?
3. Write about the following
   a) Drug interactions due to altered drug absorption.
   b) Enzyme induction
4. What are the Objectives of TDM? Discuss about the TDM of Phenytoin and Cyclosporin?
5. What is the influence of renal dysfunction on various pharmacokinetic parameters? Add a note on dialysis?
6. What are the advantages with population pharmacokinetics? Explain about non parametric Bayesian analysis?
7. Explain the role of genetic polymorphism in drug metabolism with suitable examples?
8. Write about the following?
   a) Biliary excretion of drugs
   b) Types of IV to PO conversions

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V/VI Pharm.D (Regular) DEGREE EXAMINATIONS, JULY-2016

(Examination at the end of Fifth year)

Paper-III CLINICAL PHARMACOKINETICS AND PHARMACOTHERAPEUTIC DRUG MONITORING

Time: Three Hours **Maximum marks:70**

Answer any FIVE questions.

All questions carry equal marks.

1. Explain about the clinical significance of Protein binding and Bioavailability of drugs?
2. What is an ideal dosage regimen? How the dose size and dosing frequency is calculated in a normal and elderly person?
3. Write about the following?
   a. Drug interactions due to altered drug excretion
   b. Enzyme inhibition
4. What are the indications for TDM? Discuss about the TDM of Lithium and Digoxin?
5. What is the influence of hepatic dysfunction on various pharmacokinetic parameters? Add a note on Hepatic clearance of drugs?
6. What is population pharmacokinetics? Explain about parametric Bayesian analysis?
7. Explain the role of genetic polymorphism in drug transport and action with suitable examples.
8. Write about the following
   a. Cytochrome P-450 isoenzymes b. Glomerular Filteration Rate.