Rajiv Gandhi University of Health Sciences, Karnataka

V Year Pharm-D (II Year Pharm D Post Baccalaureate) Degree Examination – NOVEMBER 2015

Time: Three Hours **Max. Marks: 70 Marks**

CLINICAL PHARMACOKINETICS & THERAPEUTIC DRUG MONITORING (RS)

Q.P. CODE: 2876

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any two) **2 x 10 = 20 Marks**

1. List various indications for TDM. Explain the necessity and process of TDM in patients receiving digoxin and phenytoin.
2. a) Discuss the pharmacokinetic / pharmacodynamic correlation in drug therapy.
   b) Explain the role of adaptive method in population pharmacokinetics.
3. Explain the process and clinical significance of conversion from intravenous to oral dosing.

SHORT ESSAYS (Answer any six) **6 x 5 = 30 Marks**

4. Explain the role of nomograms and tabulations in designing dosage regimen.
5. Discuss the factors influencing drug dosing in pediatric patients.
6. Describe the role of cytochrome P-450 Isoenzymes in drug interactions. Add a note with suitable examples and their clinical significance.
7. Discuss analysis of population pharmacokinetic data.
8. Describe the role of genetic polymorphism in drug targets.
9. Define pharmacogenetics and with sutiable examples and discuss inhibition of biliary excretions.
10. Explain the methods of determining creatinine clearance.
11. Write a note on individualization of drug dosage regimen.

SHORT ANSWERS **10 x 2 = 20 Marks**

12. Add a note on BEER's criteria for drugs to be used in geriatric patients.
13. Importance of loading dose and elimination half life in finding drug dosing intervals.
14. Significance of clinical pharmacokinetics
15. Drug dosage regimen in hepatic disorders
16. Enumerate the mechanism of drug interactions between rifampicin and oral contraceptives.
17. Drug dosing in obese patients
18. Hepatic clearance
19. Drug dosing in dialysis patients
20. With suitable examples, enumerate drug dosing in genetic dependent fast acetylators.
21. Extracorporeal removal of drugs

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