Rajiv Gandhi University of Health Sciences, Karnataka

V Year Pharma-D Post Baccalaureate Degree Examination – Feb / Mar 2012

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

CLINICAL PHARMACOKINETICS & THERAPEUTIC DRUG MONITORING

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. Explain Bayesian theory and its applications with suitable examples
2. Define TDM, enumerate the indications for TDM. Explain the TDM of ciclosporin
3   Discuss the following : - (A) Conversion of IV dose to oral dose (B) Protocol for TDM study of an anticonvulsant drug

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

4. Explain drug interaction with respect to enzyme induction & inhibition
5. Describe genetic polymorphism in CYP2D6 and 2C9 isozymes
6. Enumerate and explain the variable factors in individualizing drug dosage regimen
7. Define and discuss the applications of nomograms
8. Explain the effect of hepatic diseases on pharmacokinetics of drugs
9. Explain the methods of determining creatinine clearance
10. Discuss the relationship between elimination half life and duration of activity of drugs
11. Extracorporeal removal of drug, explain

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

12. Explain the importance of inhibition of biliary excretion
13. What is intrinsic clearance of drugs
14. Write the significance of p – glycoprotein
15. Write briefly on different methods of designing dosage regimens
16. Enumerate the factors affecting dialyzability of drugs
17. Write the significance of pharmacokinetic-pharmacodynamic correlation
18. Define pharmacogenetics
19. Give four examples of drug interactions affecting absorption process
20. Give any two methods of calculating child drug dose
21. List different liver enzymes and their significance

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