Rajiv Gandhi University of Health Sciences, Karnataka
V Year Pharma-D Post Baccalaureate Degree Examination – Jan 2014

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 in detail any two methods of determining population pharmacokinetic data.
2. Define pharmacokinetic drug interactions with examples. Add a note on effect of enzyme induction and enzyme inhibition on drug interactions.
3. Explain with suitable examples how the dose and elimination half life of a drug influence the duration of activity.

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

4. Explain briefly hemodialysis.
5. Explain the methods of determining creatinine clearance.
6. Discuss the following – conversion of IV dose to oral dose.
7. Describe genetic polymorphism in CYP2D6 and 2C9 isozymes.
8. Enumerate and explain the variable factors in individualizing drug dosage regimen.
9. Define TDM. Discuss the indications for TDM of drugs.
10. Explain the principle of drug dosing in elderly.
11. Explain pharmacokinetic-pharmacodynamic correlations in drug therapy.

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

12. Briefly explain drug dosing in obese patients.
13. Calculate the creatinine clearance for a 30 year old female patient with a serum creatinine value of 0.8mg/dl. The patient is 5 ft 1 inch tall & weighs 69kgs.
14. Write the different methods for calculating child dose.
15. Define pharmacogenetics.
16. What are hepatic metabolic markers, give examples with their normal values?
17. Write the protocol for TDM of a drug.
18. Why is TDM necessary for digoxin?
19. Explain the method of peritoneal dialysis.
20. Enumerate the factors influencing dialyzability of drugs.
21. Define intrinsic clearance of drugs. Explain its significance.

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