Rajiv Gandhi University of Health Sciences, Karnataka

V Year Pharm-D (II Year Pharm D Post Baccalaureate) Degree Examination - MAY 2016

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)

 $2 \times 10 = 20 \text{ Marks}$

- 1. Discuss the role and clinical significance of genetic polymorphism in drug transports and drug targets with suitable examples.
- 2. a) Explain the general approach for dosage adjustment in renal diseases.
 - b) List various formulas for measurement of glomerular filtration rate.
- 3. a) Define Bayesian theory.
 - b) Explain the necessity and process of TDM in patients receiving cyclosporin and carbamazepine.

SHORT ESSAYS (Answer any six)

 $6 \times 5 = 30 \text{ Marks}$

- 4. Explain the various pharmacokinetic drug interactions with suitable examples.
- 5. Discuss the protocol for TDM of a drug.
- 6. Explain in detail determination of dose and dosing interval of a drug.
- 7. Enumerate the factors involved in dosing of drugs in pediatric and obese patients.
- 8. Discuss the process of extracorporeal removal of drugs.
- 9. Explain dosing with feedback.
- 10. Discuss the pharmacokinetic / pharmacodynamic correlation in drug therapy.
- 11. Explain individualization of drug dosage regimen in accordance with patient age and co-existing diseases.

SHORT ANSWERS $10 \times 2 = 20 \text{ Marks}$

- 12. Enumerate the factors influencing dialyzability of drugs.
- 13. Importance of clinical pharmacokinetics
- 14. Add a note on START and STOP criteria for drugs to be used in geriatric patients.
- 15. List four pharmacodynamic drug interactions along with their mechanism and clinical significance.
- 16. Explain the process of conversion of ciprofloxacin from IV to oral dose in adults.
- 17. Define pharmacogenetics.
- 18. Inhibition of biliary excretion
- 19. Define intrinsic clearance of drugs with its clinical significance.
- 20. Define narrow therapeutic index with suitable examples.
- 21. Dosage adjustment in uremic patients with suitable examples.
