Rajiv Gandhi University of Health Sciences, Karnataka
IV Year B.Pharm Degree Examination - JAN-2019

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

PHARMACY PRACTICE – II (RS-3)
a. Pharmacokinetics and Therapeutic Drug Monitoring

Q.P. CODE: 2623

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. Describe in detail about estimation of elimination kinetics of a drug by urinary excretion data.

2. Write a note on two-compartment open model after IV bolus administration.

3. Define protein binding of drugs. Discuss the kinetics involved in protein binding

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

4. Differentiate between clearance and extraction ratio. Describe the significance of hepatic clearance.
5. Describe AUC and its determination
6. Write a note on mono exponential decline
7. Physiological factors related to protein binding
8. Dosage adjustment in hepatic and renal impairment
9. What is dosage regimen? Write the principle underlying in dosage regimen design
10. Write a note on drug dosing in pediatrics.
11. TDM of Methotrexate

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

12. Write any two applications of TDM
13. Organization of TDM
14. Non-renal clearance
15. Advantages of compartment model
16. Name the factors affecting drug distribution
17. Concept of loading dose and its significance
18. Biological half life
19. Define pharmacokinetics
20. C_{max} and T_{max}
21. What is drug accumulation?

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