(BIOPHARMACEUTICS & PHARMACOKINETICS) BP604 T

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IMPORTANT QUESTIONS

1. Describe the various theories of drug dissolution.
2. What are various physicochemical properties of drug substance affecting GI absorption?
3. Explain how the plasma protein binding influences the distribution of drug in the body.
4. Discuss Wagner and Nelson method of absorption. What are its advantages and disadvantages?
5. Write short notes on flip-flop method.
6. Describe in brief, how the components of GI fluid affect the drug absorption.
7. Write about zero order and first order absorption rate constant.
8. Draw plasma-drug concentration time profiles for a single dose extravascular and intravascular administered drug, explain the different phases of profiles and correlate the profile with onset, intensity and duration of pharmacological response.
9. How the plasma protein binding does is influence apparent volume of distribution?
10. Define apparent volume of distribution. Give its significance. Explain the calculation of volume of distribution (Vd) for one compartment model.
11. Drive various pharmacokinetics parameters for a drug administered by rapid I. V. Injection, using one compartment model.
12. What is clinical pharmacokinetics? Explain its role in determination of dose and dosing frequency.
13. Explain giving suitable examples how drug-drug interactions affect the bioavailability of drugs.
14. How will you monitor the drug administration with safety in renal impaired patients?
15. Write a note on drug-drug interactions influencing bioavailability.
16. How will you affect dosage adjustment in hepatic failure?
17. Discuss the criteria for dosage adjustment based on creatinine clearance in patient with renal failure.
18. What is ADME-drug interaction? Explain its effect on intestinal absorption and transport system.
19. Give details of the protocol to obtain urinary excretion data to determine bioavailability. What is their analogy with parameters of plasma level studies?
20. Describe the various methods aimed at enhancing bioavailability of drug from its dosage form.
21. Discuss the criteria for establishing a bioequivalence requirement.
22. What is AUC? How is it calculated? How bioequivalence studies are performed?
23. What are the regulatory requirements for conducting bioequivalence studies?
24. Describe the method used to determine extent and rate of absorption of oral dosage form using urinary excretion data.
25. Give the procedure to be followed for determination of bioavailability of multiple dose formulation.