

**Third Year B.Pharm Degree Supplementary Examinations July 2018**

**PHARMACEUTICS - V**  
**(Biopharmaceutics and Pharmacokinetics)**  
**(2010 Scheme)**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

**Essays**

**(3x10=30)**

1. Explain pharmaceutical factors affecting drug absorption
2. Describe one compartment model for IV infusion of drugs
3. Discuss about criteria, advantages and disadvantages of urinary excretion data

**Short notes**

**(14x5=70)**

4. Significance of plasma drug concentration – time curve
5. Biopharmaceutical classification system of drugs
6. Any two factors affecting drug distribution
7. Differences between active transport and passive diffusion of drugs
8. Any two phase I biotransformation reactions
9. Dosage adjustment in the patients with renal failure
10. Define – C<sub>max</sub>, T<sub>max</sub>, V<sub>d</sub>, t<sub>1/2</sub>
11. Michaelis-Menten equation and its importance
12. Explain dissolution testing apparatus
13. Design of single dose bioequivalence study
14. In vitro – In vivo correlation
15. Importance of perfusion rate in drug distribution
16. Hepatic clearance
17. Endocytosis

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