

**QP CODE: 212327**

**Reg. No:.....**

**Second Semester M. Pharm Degree Supplementary Examinations  
December 2023**

**M.Pharm (Pharmaceutics)**

**Paper II: Advanced Bio-Pharmaceutics and Pharmacokinetics (MPH 202T)  
(Common for 2017 and 2019 Scheme)**

**Time: 3 Hours**

**Total Marks: 75**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essays**

**(3x10=30)**

1. List and explain the various factors affecting drug absorption. Give examples.
2. How bioavailability and bioequivalence are assessed. Discuss.
3. Discuss the pharmacokinetics of one compartment model when drug is given orally.

**Short Notes**

**(9x5=45)**

4. Explain the application of pharmacokinetics and pharmacodynamics of biotechnology drugs.
5. Explain the non-linear pharmacokinetics. Explain with suitable graphs and examples.
6. List and explain the clinical significance of bioequivalence studies.
7. Discuss on Invitro Invivo Correlation and its importance.
8. Discuss the limitations of pH partition hypothesis.
9. Discuss on cytochrome P450 based drug interactions. Give examples.
10. With a neat, labelled diagram, explain the construction and working of rotating basket apparatus for dissolution testing of drug products.
11. Explain the biopharmaceutical classification system.
12. Explain on monoclonal antibodies for targeted drug delivery systems.

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