

QP CODE: 212327

Reg. No:.....

**Second Semester M. Pharm Degree Regular/Supplementary Examinations
November 2024**

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. Explain non-linear pharmacokinetics. Derive an expression for Michaelis Menten equation
2. Describe in detail about the methods of measurement of bioavailability
3. Explain the importance of in-vitro dissolution testing and types of dissolution testing

Short Notes

(9x5=45)

4. Discuss in detail about Bio pharmaceutics classification system
5. Explain pharmacokinetic and pharmacodynamic characteristics essential for a biotechnological drug
6. Explain about bioequivalence experimental study design protocol.
7. Explain the principle involved in modified release and targeted drug delivery system
8. Explain about the structure and physiology of gastrointestinal cell membrane
9. Discuss the pharmaceutical factors affecting drug absorption
10. Describe the cross over design to perform bioequivalence studies
11. Explain the compendial methods for determining dissolution
12. Discuss briefly about Oligonucleotides
