

QP CODE: 213327

Reg. No:.....

**Second Semester M. Pharm Degree Regular/Supplementary Examinations
October 2023
M.Pharm (Pharmaceutics)**

**Paper III: Computer Aided Drug Development (MPH 203T)
(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 procedure involved, before and during data collection process for clinical data collection and management.
2. Explain about the bottom-line examples of computers in market analysis
3. Describe about screening designs in pharmaceutical experimental design.

Short Notes

(9x5=45)

4. Explain on regulatory aspects of QbD in pharmaceutical product development
5. Explain about biowaiver considerations.
6. Explain on solubility and intestinal permeation in computational modeling of drug disposition.
7. Describe any one technology involved in robotics
8. Explain the pharmaceutical development and risk assessment in ICH Q8.
9. Explain in details of computer simulation for isolated tissues and organs
10. State the theoretical background and one application with example of computational fluid dynamics in pharmaceuticals.
11. Discuss the computational modeling of P-gp, BCRP, Nucleoside Transporters and hPEPT1.
12. Enlist the ethics of computing in pharmaceutical research.
