

**Second Semester M. Pharm Degree Regular/Supplementary Examinations
May 2022
M.Pharm (Pharmaceutics)**

Paper III: Computer Aided Drug Development (MPH 203T)

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 in detail about the computer-aided development of pharmaceutical emulsion.
2. Describe the ICH Q8 guideline on quality by design.
3. Explain the ethics of computer in pharmaceutical research and regulation of computer systems

Short Notes **(9x5=45)**

4. Descriptive versus mechanistic modeling.
5. Nucleoside transporters.
6. Population modeling.
7. Legal protection of innovative use of computer in R&D.
8. Bio waiver consideration.
9. Artificial intelligence (AI).
10. Computer simulation in isolated tissues.
11. Factorial design.
12. Pharmaceutical automation
