

QP CODE: 113327

Reg. No:.....

**First Semester M.Pharm Degree Regular/Supplementary Examinations
March 2020**

M.Pharm (Pharmaceutics)

Paper III – Modern Pharmaceutics (MPH103T)

(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 the concept, parameters and techniques of optimization in pharmaceutical formulation.
2. Explain the types of validation and concept of URS, DQ, IQ, OQ and PQ
3. Explain the various approaches for sales forecasting, inventory management, budget and cost control

Short Notes

(9x5=45)

4. Explain manufacturing of large and small volume parenterals
5. Explain the factorial designs and its applications in pharmaceutical formulations
6. Scope and merits of validation and explain process validation of tablets
7. Explain the CGMP practices pertaining to material management, handling and transportation in a pharmaceutical industry
8. Explain the properties of tablets influenced by compression
9. Explain the diffusion parameters and dissolution parameters
10. Explain the theories of pharmaceutical dispersion and stability studies of SMEDDS
11. Explain the validation and calibration of equipments as per ICH guidelines
12. Explain the Higuchi and Peppas plot and its significance.
