First Semester M.Pharm Degree Regular/Supplementary Examinations June 2024
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. Discuss about manufacture and evaluation of large and small volume parenterals.

2. Define pharmaceutical validation and write its scope and merits. Discuss the general guidelines for the validation and calibration of pharmaceutical equipment.

3. Define dissolution and discuss the diffusion layer theories that influence drug dissolution using Noyes-Whitneys equation.

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

4. Explain in detail about inventory management and control sales forecasting and cost control.

5. What is ANOVA. Explain its applications in drug development.

6. Discuss in detail about physics of tablet compression.

7. Write short notes on

   Statistical design

   Contour design

8. Discuss about the validation and calibration master plan in pharmaceutical validation.

9. Explain physiological and formulation consideration in large volume parenterals.

10. Define solubility. What are the ideal solubility parameters and four factors affecting solubility.

11. Define students T- test. Are there any significant differences between the testing conditions.

12. Explain pharmacokinetic parameters and their significance.

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