QP CODE: 113327 Reg. No:.....

## First Semester M.Pharm Degree Supplementary Examinations July 2023

## 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. What are the optimization techniques in pharmaceutical formulation and processing.
- Discuss in detail about the manufacturing process model and government regulations and in validation.
- 3. Discuss the objectives and policies of cGMP. Write the GMP requirements and layout of buildings, services, equipments and their maintenance for solid dosage form products.

Short Notes (9x5=45)

- 4. Discuss briefly about response surface method.
- 5. Explain in detail about
  - a) Effect of friction
  - b) Solubility
- 6. Detail about the Heckels plots and Peppas plots.
- 7. Discuss about industrial and personal relationship.
- 8. What is statistical design and explain various types of design.
- 9. Define preformulation and explain drug excipients interactions.
- 10. Explain the physics of consolidation and distribution of forces.
- 11. Discuss the preformulation requirements for developing pharmaceutical dispersions.
- 12. Explain the following
  - a) Linearity concept of significance
  - b) Chi square test

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