QP CODE: 112327	Reg. No:

## First Semester M.Pharm Degree Supplementary Examinations July 2023 M.Pharm (Pharmaceutics)

Paper II – Drug Delivery System (MPH 101T)

(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 in detail about osmotic drug delivery system with examples.
- 2. Define transdermal drug delivery system and explain the components of transdermal drug delivery system.
- 3. Discuss in detail about factors affecting the formulation of sustained release drug delivery system.

Short Notes (9x5=45)

- 4. Discuss briefly about ophthalmic formulations with examples.
- 5. Summarize the concept of telepharmacy.
- 6. Explain the principles of mucoadhesion.
- 7. Explain the modulations of gastrointestinal (GI) transit time and approaches to extend GI transit.
- 8. Describe the mechanism of antigen uptake involved in vaccination.
- 9. Annotate the limitations of protein drug delivery system.
- 10. Explain pH activated drug delivery system
- 11. Articulate about 3D printing and its applications.
- 12. Describe the properties and application of any two synthetic polymers

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