

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[BPHARM 1022]

**OCTOBER 2022
(MARCH 2022 EXAM SESSION)**

Sub. Code: 2075

**B. PHARMACY DEGREE EXAMINATION
PCI Regulation 2017 - SEMESTER VII
PAPER IV - NOVEL DRUG DELIVERY SYSTEM
Q.P. Code : 562075**

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)

1. Write the concept of controlled drug delivery system. Explain the approaches for the controlled release formulations based on dissolution.
2. State various methods to prepare liposomes.
3. What is an implant? Explain the formulation of implants with a suitable example.

II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)

1. Write methods of preparing nanoparticle.
2. Explain about microballoons as gastroadhesive drug delivery system.
3. Describe the components of transdermal DDS.
4. Discuss in detail about mucosal drug delivery system.
5. What are niosomes? Write its applications in targeted drug delivery system.
6. Explain the pharmaceutical applications of microspheres.
7. Describe in detail about formulations aspects of Nasal spray.
8. Write mechanism of controlled drug release in ophthalmic drug delivery.
9. Discuss briefly on intra-vaginal drug delivery system.

III. Short answers on: Answer ALL questions. (10 x 2 = 20)

1. Define Microencapsulation technique.
2. Biological half- life.
3. Application of intrauterine drug delivery system.
4. What is Transdermal drug delivery system?
5. Define buccal drug delivery system.
6. Apparent volume of distribution.
7. Iontophoresis.
8. What are the ideal requirements of ocular drug delivery system?
9. Nebulizer.
10. Gastroretentive drug delivery system.
