

**VINAYAKA MISSION'S RESEARCH FOUNDATION  
(DEEMED TO BE UNIVERSITY), SALEM**

**B.PHARM. DEGREE EXAMINATION – July 2021  
Seventh Year**

**NOVEL DRUG DELIVERY SYSTEM**

Time : Three hours

Maximum: 75 marks

I. Write essays on any **TWO** questions: (2 x 10 = 20)

1. Elaborate the role of physiochemical and biological properties of drug in controlled release formulations.
2. Write a detailed note on development and application of IUD.
3. Illustrate the formulation and evaluation of Liposomes.

II. Write short answers on any **SEVEN** questions: (7 x 5 = 35)

4. List out the applications of Gastroretentive drug delivery.
5. Principle of bioadhesion.
6. Classify and list out the permeation enhancers with suitable examples.
7. Method of preparation of microencapsulation.
8. Classify polymers with suitable examples for each.
9. Enlist the advantage and disadvantage of targeted drug delivery.
10. Drug delivery approaches to overcome the ocular barriers.
11. Formulation consideration for buccal delivery.
12. Write a short note on metered dose inhalers.

III. Write short notes on : (10 x 2 = 20)

13. Define inflatable drug delivery system with examples.
14. Define sustained release.
15. Dry powder inhalation.
16. List the method of preparation used in nanoparticle formulations.
17. Mucoadhesion.
18. Enlist the advantages of implantable drug delivery.
19. Types of TDDS.
20. List any four hydrophilic polymers.
21. List the evaluation parameters performed for TDS.
22. Nanoparticles.

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