



**Advances in Drug Delivery Systems**

**(Revised Scheme 4)**

**Q.P. CODE: 9339**

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary. Answer any ten questions.

**LONG ESSAY (Answer any TEN)**

**10 X 10 = 100 Marks**

1. What are controlled release formulations? Discuss the concept of controlled release formulations with their merits and demerits.
2. Discuss the properties and applications of any two polymers of natural origin used in controlled drug delivery systems.
3. Discuss the formulation and evaluation of ion-exchange controlled drug delivery systems.
4. Explain bio-respective feedback regulated controlled drug delivery system with example.
5. Discuss nasal mucoadhesive drug delivery systems with examples.
6. Discuss the diagnostic applications of monoclonal antibodies with respect to cancer. Enumerate the advantages and limitations of targeted drug delivery systems.
7. Discuss the factors affecting transdermal permeation of drugs.
8. What are implants? Discuss the logical considerations in the development of intra-uterine implants.
9. Discuss the applications of carbon nano tubes and dendrimers in drug delivery.
10. Write a note on transferosomes and ethosomes as drug delivery vesicles.
11. Define depot preparations. Explain various approaches for depot preparations.
12. Write in detail on biodegradable and non-biodegradable polymer with examples and their applications.

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