[Time: 3 Hours] [Max. Marks: 100]

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.