



**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.

**LONG ESSAY (Answer any TWO)**

**2 X 20 = 40 Marks**

1. Explain the dissolution and combination of dissolution and diffusion controlled drug delivery systems.
2. Give a note on development and evaluation of polymeric nano particles.
3. Explain pH controlled and osmotic controlled drug delivery systems.

**SHORT ESSAY (Answer any FIVE)**

**5 X 10 = 50 Marks**

4. Explain the various theories of muco adhesion.
5. Explain ion exchange controlled drug delivery systems.
6. Give a note on development and evaluation of buccal drug delivery systems with its applications.
7. Explain the concept of permeation of drugs through skin and factors affecting permeation.
8. Explain the various approaches for injectable controlled release formulations.
9. What are monoclonal antibodies? Give their diagnostic and therapeutic applications.

**SHORT NOTES**

**2 X 5 = 10 Marks**

10. Iontophoresis
11. Problems related to monoclonal antibodies

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