

[Time: 3 Hours]

[Max. Marks: 75]

Customized Drug Delivery System**Q.P. CODE: 5110**

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary.

LONG ESSAY (Answer any Three)**3 X 10 = 30 Marks**

1. Explain in detail about biodegradable and non-biodegradable polymers. Discuss in brief about characterization of polymers.
2. What are buccal drug delivery systems? Explain the various approaches and evaluation of buccal drug delivery systems.
3. Explain the formulation of various types of transdermal delivery systems.
4. Define solid lipid nanoparticles. Discuss the methods of formulation and evaluation of solid lipid nanoparticles.

SHORT ESSAY (Answer any Nine)**9 X 5 = 45 Marks**

5. Discuss Activation modulated Drug delivery system.
6. Explain the concept of partition controlled Drug delivery system.
7. Discuss the nasal delivery approach for brain targeting.
8. Explain the evaluation parameters of liquid sustained release systems.
9. What are permeations enhancers? Explain their mechanisms in transdermal drug delivery with examples.
10. Explain formulation and evaluation aspects of skin creams.
11. Discuss the steps for production of monoclonal antibodies.
12. Write a note on gene therapy.
13. Discuss the importance of telepharmacy in the treatment.
14. Describe specialized pharmaceutical emulsions.
