

[Time: 3 Hours]

[Max. Marks: 75]

Drug Delivery System**Q.P. CODE: 5128**

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. Discuss in detail on diffusion and dissolution controlled oral drug delivery system.
2. Explain various approaches of transdermal drug delivery systems.
3. Write the merits and limitations of mucoadhesive delivery systems. State on transmucosal permeability and their limitations.
4. Discuss the various physicochemical and biological properties of drugs that influences designing of sustained release products.

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

5. Write a note on pH controlled drug delivery systems.
6. Discuss the design and development of occuserts.
7. Write a note on Mucoadhesive polymers.
8. Write a note on feed back regulated drug delivery system.
9. Explain the factors affecting transdermal permeation of drugs.
10. Write notes on single shot vaccines?
11. Give different components of transdermal drug delivery systems.
12. Write a note on Buccal DDS.
13. Classify permeation enhancers with their mechanisms
14. Explain the formulation of delivery systems of proteins and other macromolecules.

* * * * *