



1. Differentiate between sustained and controlled drug delivery systems and explain diffusion controlled drug delivery systems.
2. Define Personalized Medicine. Explain customized drug delivery.
3. Discuss iontophoretic transdermal drug delivery with examples.
4. Discuss the theories of mucoadhesion and advantages and disadvantages of buccal mucoadhesive drug delivery.

**SHORT ESSAY (Answer any Nine)**

**9 X 5 = 45 Marks**

5. Discuss the concept and rationale for controlled drug delivery.
6. Explain any two methods to overcome the corneal barrier.
7. Briefly discuss enzyme activated drug delivery systems.
8. Explain transdermal delivery of vaccines.
9. Briefly discuss the evaluation of protein delivery systems.
10. Discuss the applications of synthetic polymers in controlled drug delivery.
11. Describe the advantages and limitations of gastro-retentive drug delivery.
12. Discuss the factors affecting skin permeation of drugs.
13. Write a note on bioerodible ocular inserts.
14. Describe mucoadhesive polymers.

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