LONG ESSAY (Answer any Three)www.FirstRanker.com www.FirstRanker.eom www.FirstRanker.eom

- 1. Explain different system parameters effecting drug release through controlled drug delivery systems.
- 2. Define 'nanoparticles'. Classify them. Explain any two methods of preparation in detail.
- 3. Explain the different formulation aspects that should be considered in the preparation of transdermal patches.
- 4. What are polymers? Classify them. Explain in detail the applications of biodegradable and non-biodegradable polymers in drug delivery.

SHORT ESSAY (Answer any Nine)

9 X 5 = 45 Marks

- 5. Briefly discuss different targeting techniques with reference to levels of targeting.
- 6. Write a note on gene therapy.
- 7. Explain the formulation and evaluation of nasal drug delivery systems.
- 8. Write the applications of bioelectronic medicines in drug delivery.
- 9. Describe the formulation and evaluation aspects of skin ointments.
- 10. Describe various causes for protein destabilization.
- 11. Discuss feedback regulated drug delivery systems.
- 12. What are monoclonal antibodies? Give their applications.
- 13. Write the significance of iontophoresis in Transdermal delivery of drugs.
- 14. Discuss the applications of microemulsions in drug delivery.