

Roll No

MPY-PCS(B)

M.Pharmacy III Semester

Examination, November 2019

Parenteral, Inhalation and Intranasal Drug

Delivery Technology

(Elective)

Time : Three Hours

Maximum Marks: 70

- Note :** i) Attempt any five questions.
ii) All questions carry equal marks.

1. a) Explain the formulation aspects of peptides and proteins parenterals. 7
b) What are the different stabilizers used for parenteral formulations of peptides and proteins. 7
2. a) Describe the designing of depot systems of parenterals. 7
b) Write a note on IVIVC of depot systems of liposome and microspheres. 7
3. Explain materials used for implants, its method of sterilization and kinetics of drug release from parenteral implants. 14

4. a) Explain pharmacokinetics and pharmacodynamics of therapeutic aerosols. 7
b) Write a note on delivery of peptides and vaccines through lungs. 7
5. a) Describe Nasal drug delivery devices. 7
b) How nasal drug delivery act as targeted drug delivery? 7
6. Explain the following :
 - a) Marketed parenteral products of peptides and proteins. 7
 - b) Marketed depot systems : Trelstar^R, lupron^R. 7
7. a) Explain the controlled release micro pump, drug eluting stents as parenteral implants. 7
b) Discuss about physical and mechanical factors affecting drug delivery to lungs. 7
8. Write a note on :
 - a) Metered Dose Inhalers (MDI) 7
 - b) Applications of Nasal drug delivery systems. 7
