

Code: 13R00801

B.Pharm IV Year II Semester (R13) Regular Examinations April 2017

NOVEL DRUG DELIVERY SYSTEMS

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) What is the rationale of design of extended release formulation?
 - (b) List out factors to be considered in CR formulation.
 - (c) What is diffusion controlled drug delivery system?
 - (d) Define matrix tablet.
 - (e) What is nanosphere and nanocapsule?
 - (f) Write any four techniques for preparation of nanoparticles.
 - (g) Define transdermal drug delivery system.
 - (h) What are the advantages of TDDS?
 - (i) Give the applications of nasal drug delivery system.
 - (j) Write any three mechanisms involved in bio-adhesive drug delivery system.

PART – B
(Answer all five units, 5 X 10 = 50 Marks)**UNIT – I**

- 2 Write ideal properties of drug for:
- (a) SR formulation.
 - (b) Delayed release dosage form.

OR

- 3 Define the following terms:
- (a) Sustained release.
 - (b) Extended release.
 - (c) Timed release.
 - (d) Controlled release.
 - (e) Delayed release.

UNIT – II

- 4 Describe commonly used polymers with relevant properties, suitable for making CR formulation.

OR

- 5 What are the advantages and disadvantages of oral controlled drug delivery system?

UNIT – III

- 6 Write a note on evaluation test of nanoparticle.

OR

- 7 Define novel carriers. Explain about formulation of liposomes.

UNIT – IV

- 8 Write in detail about evaluation test for transdermal patches.

OR

- 9 Explain about permeation of drugs through skin layers

UNIT – V

- 10 Discuss the design and evaluation of nasal drug delivery system.

OR

- 11 Write in detail about mucoadhesive polymers and their properties.
