



DO-M-2011126

Seat No. _____

M. Pharm. (Sem. II) (CBCS) Examination

April / May – 2015

NDDS : Multidisciplinary & Regulatory Aspects

(Multidisciplinary / Elective Paper - II)

Time : 3 Hours]

[Total Marks : 80

Instructions:

1. Answer and tie both the sections separately
2. Figure to the right indicates marks
3. Answer any three (3) questions from each section
4. Que. One (1) & Que. Five (5) are compulsory
5. Draw neat and clean diagrams as required

SECTION – I

Que.1 Answer Any SEVEN out of given TEN questions

(7x2 = 14)

- a) Define microsphere.
- b) What is controlled drug delivery system?
- c) What do you mean by *In situ* gelling system?
- d) Define multiple emulsion.
- e) Enumerate the approaches of colon targeted drug delivery system.
- f) Give advantages of Nano suspension.
- g) Enumerate the evaluation parameters of transdermal patch.
- h) Give advantages of emulgel.
- i) What is novel drug delivery system?
- j) Give advantages of novel drug delivery system.

Que.2 Answer the following.

- a) Write a short note on Gastro-Retentive drug delivery system.

(13)

Que.3 Answer the following.

- a) Explain manufacturing methods of microspheres. (7)
- b) Discuss the formulation of liposome. (6)

Que.4 Answer the following.

- a) Write a short note on transdermal drug delivery system. (7)
- b) Discuss the criteria for the selection of drug for colon targeted drug delivery system. (6)

SECTION – II

Que.5 Answer Any TWO out of given THREE questions. (2x7 = 14)

- a) Write a short note on evaluation of colon targeted tablets.
- b) Write a short note on micro particulate drug delivery system.
- c) Give applications of nanoparticles with respect to pharmaceutical field.

Que.6 Answer the following.

- a) Write a short note on liposomal drug delivery system. (13)

Que.7 Answer the following.

- a) Discuss the Formulation development aspects of Herbal Products. (13)

Que.8 Answer the following.

- a) Write a short note on niosomes. (7)
- b) Discuss recent advances of semisolid dosage form. (6)