

AMAZON-II (CBCS -) : SUMMER - 2015
SUBJECT : ADVANCED PHARMACEUTICS-II

Day : Thursday
Date : 02-07-2015

Time : 10:00AM TO 1:00 P.M.
Max. Marks : 60.

N.B.:

- 1) Attempt any **THREE** questions from Section-I and any **THREE** questions from Section-II.
- 2) Figures to the **RIGHT** indicate full marks.
- 3) Answers to both sections should be written in **SEPARATE** answer books.

SECTION-I

- Q.1** Discuss design of controlled release ophthalmic drug delivery system. (10)
- Q.2** Write methods to obtain microspheres along with their evaluation and applications. (10)
- Q.3** Write about development and evaluation of parenteral drug delivery systems. (10)
- Q.4** Write short notes on: (10)
- a) Bioadhesive polymers
 - b) Components and evaluation of transdermal patches.

SECTION-II

- Q.5** Write about formulation approaches and evaluation of peptide and protein delivery. (10)
- Q.6** Discuss issues and consideration of polymeric micelles for their design and development into final dosage form. (10)
- Q.7** Discuss method of preparation, characterization and applications of nanoparticulate systems. (10)
- Q.8** Write short notes on: (10)
- a) Intrauterine devices
 - b) Monoclonal antibodies in targeted delivery.

* * *

AMAZON-II (CBCS): SUMMER - 2015
SUBJECT: ADVANCED PHARMACEUTICS-III

Day: Saturday
Date: 04-07-2015

Time: 10:00AM TO 1:00PM
Max. Marks: 60

N.B.:

- 1) Attempt any **THREE** questions from Section-I and Attempt any **THREE** questions from Section-II.
- 2) Figures to the right indicate full marks.
- 3) Answers to both sections should be written in the **SEPRATE** answer book.

SECTION-I

- Q.1 Explain the influence of pH and pka on drug absorption. [10]
- Q.2 Give a detailed account of kinetics of protein binding. [10]
- Q.3 Explain the different physiological barriers to drug distribution. [10]
- Q.4 Write elaborate notes on: [10]
- a) Methods to study drug absorption
 - b) Bioactivation and its significance

SECTION-II

- Q.5 Explain the approaches for bioavailability enhancement for BCS class III drugs. [10]
- Q.6 Derive the expression for plasma concentration applying the laplace transform for a drug administered EV assuming one compartment model and first order kinetics. [10]
- Q.7 Explain the estimation of km and Vm using the Michaelis Menten equation. [10]
- Q.8 Write notes on: [10]
- a) Non compartmental modeling
 - b) Statistical Designs in BA-BE studies.