AMAZON-II (2012 COURSE – CBCS) : JULY- 2014
SUBJECT ADVANCE CORE SUBJECT-III – ADVANCED PHARMACEUTICS-III

Day : Friday
Date : 04-07-2014

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

N.B.:

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

SECTION-I

Q.1 Give an account of in vitro and in vivo models for drug absorption studies. **(10)**

Q.2 Explain the factors influencing drug distribution. **(10)**

Q.3 Elaborate on clinically significant drug – drug interactions and its influence on pharmacokinetic parameters of the drugs. **(10)**

Q.4 Write notes on : **(10)**
a) pH partition hypothesis
b) Bioactivation and its significance.

SECTION-II

Q.5 Derive the equation to obtain the pharmacokinetic parameters for IV infusion assuming one component open model. **(10)**

Q.6 Explain the approaches to improve the bioavailibility of a BCS Class-II drug. **(10)**

Q.7 Elaborate on the study designs employed to establish bioequivalence. **(10)**

Q.8 Write notes on : **(10)**
a) Dose adjustment in renal failure
b) Michaelis – Menten kinetics.

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AMAZON – II (CBCS) (2012 COURSE): JULY- 2014
SUBJECT: ADVANCE CORE SUBJECT – II: ADVANCED PHARMACEUTICS – II

Day: Wednesday
Date: 02-07-2014

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

N. B.:

1) Answer any **THREE** questions from Section I and Section – II each.
2) Both the sections should be written in the **SEPARATE** answer books.
3) Figures to the right indicate **FULL** marks.

SECTION-I

Q.1 Give an account of Design and working of different types of implantable osmotic pumps. **(10)**

Q.2 Describe in detail injectable implant technology. **(10)**

Q.3 Discuss the advanced techniques for the fabrication of microsphers. **(10)**

Q.4 Write notes on: **(10)**

a) Mechanism of bioadhesion

b) Penetration Enhancers

SECTION - II

Q.5 Discuss therapeutic and diagnostic applications of nanoparticulate systems in cancer treatment. **(10)**

Q.6 Discuss physiological basis and formulations consideration in pulmonary drug delivery systems. **(10)**

Q.7 Discuss Colon targeting approaches and drug delivery system. **(10)**

Q.8 Write notes on: **(10)**

a) Characterization of liposomes

b) Intrauterine Devices

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KARNAFULI - II (CBCS) (2012 COURSE) : JULY.- 2014
SUBJECT : ADVANCE CORE SUBJECT - II : ADVANCED PHARMACOLOGY - II

Day : Wednesday
Date : 02-07-2014

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

N.B.

1) Answer any **THREE** questions from Section - I and any **THREE** questions from Section - II.
2) Figures to the right indicate **FULL** marks.
3) Answers to Section - I and Section - II should be written in **SEPARATE** answer books.

SECTION - I

Q.1 Describe the ethics in clinical trial. **(10)**

Q.2 Describe the clinical pharmacology of calcium channel blockers. **(10)**

Q.3 Describe role of prostaglandins in relation to inflammation and reproduction. **(10)**

Q.4 Write elaborate notes on: **(10)**

a) *In vitro* and *in vivo* tests for immunological investigation
b) Therapeutic drug monitoring

SECTION - II

Q.5 Explain the toxicity and toxicity amelioration of anticancer drugs. **(10)**

Q.6 Describe the current concepts in treatment of HIV infection (AIDs). **(10)**

Q.7 Classify antiulcer agents. Describe the mechanism of action and adverse effects of H2 receptor antagonists. **(10)**

Q.8 Write elaborate notes on: **(10)**

a) Oral hypoglycaemic agents
b) General principles of cancer chemotherapy

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