

KARNAFULL-II (CBCS) (2012 COURSE): JULY-2014
SUBJECT: ADVANCED CORE SUBJECT-III: ADVANCED PHARMACOLOGY-III

Day : Friday
Date : 04-07-2014

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

N.B. :

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

SECTION-I

- Q.1** Discuss the biosynthesis of Nitric oxide, its pharmacological effects and clinical conditions in which nitric oxide may play a part. (10)
- Q.2** Discuss about the Antioxidants and their therapeutic implications. (10)
- Q.3** Describe the recent trends in opiate receptors and drugs acting on them. (10)
- Q.4** Describe the recent trends in Angiotensin receptors and drugs acting on them. (10)

SECTION-II

- Q.5** Describe the recent trends in Insulin receptors. (10)
- Q.6** Describe the recent trends in Ion channels and their modulators. (10)
- Q.7** Discuss about the basic concept of chronopharmacology and its implications to drug therapy. (10)
- Q.8** Discuss the concept of gene therapy and recent developments in the treatment of various hereditary diseases. (10)

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SINHAGAD-II (CBCS – 2012 COURSE) : JULY- 2014
SUBJECT : ADVANCE CORE SUBJECT-II :
ADVANCED PHARMACEUTICAL BIOTECHNOLOGY-II

Day : *Wednesday*
Date : *02-07-2014*

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) Both the sections should be written in **SEPARATE** answer books.
- 3) Figures to the **RIGHT** indicate full marks.

SECTION-I

- Q.1** Discuss hybridoma technology. Discuss application of monoclonal antibodies in cancer therapy (10)
- Q.2** Describe inflammation. Describe the principal factors and cell types, which mediates inflammation (10)
- Q.3** Describe how multiplexing could be achieved in recombinant vaccines. What are its advantages over conventional vaccines? (10)
- Q.4** Write elaborate notes on: (10)
- a) Flow-cytometry
 - b) western blotting

SECTION-II

- Q.5** Describe technique of gene shuffling. Discuss key objectives of protein engineering. (10)
- Q.6** What is whole cell immobilization? What are its applications? (10)
- Q.7** Outline a down-stream process for recovery of recombinant protein describing key steps involved. (10)
- Q.8** Write elaborate notes on: (10)
- a) Enzyme inhibitor
 - b) Km value

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