

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

Day : **Friday**
Date : **04-07-2014**

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** Describe techniques used to sequence large genomes. (10)
- Q.2** Discuss epigenetic control of gene expression. Write a note on how DNA is folded into a chromosome. (10)
- Q.3** What is a gene therapy? Discuss transfection technique using a retrovirus vector. (10)
- Q.4** Write elaborate notes on: (10)
- a) Micro RNA
 - b) BAC library.

SECTION-II

- Q.5** Write an essay about applications of animal cell culture. (10)
- Q.6** Define totipotency and pluripotency. Discuss clinical applications of stem cells. (10)
- Q.7** What is Data mining? Write about techniques used to quarry database. (10)
- Q.8** Write elaborate notes on: (10)
- a) Cryo-preservation
 - b) Phylogenetic tree.

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