

SINHAGAD-I (CBCS) : WINTER - 2015
SUBJECT : ADVANCED PHARMACEUTICAL BIOTECHNOLOGY-I

Day : **Friday**
Date : **08-01-2016**

Time : **10:00 AM 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** Explain the control dogma of molecular biology. (10)
- Q.2** What do you understand by Automated DNA sequencing? Explain the dideoxy chain termination method of DNA sequencing. (10)
- Q.3** Explain the following tools used in DNA manipulation- (10)
- a) Restriction enzymes
 - b) Ligase.
- Q.4** Write short notes on (Any Two) (10)
- a) Exons and introns
 - b) RNA splicing
 - c) Nucleosomes.

SECTION-II

- Q.5** Write the importance of rDNA technology for the production of therapeutic proteins. (10)
- Q.6** Explain with suitable examples different advances in PCR technology. (10)
- Q.7** What is a cDNA library? Write key steps in constructing a cDNA library. (10)
- Q.8** Write short notes on (Any Two) (10)
- a) Hot start PCR
 - b) Reverse transcriptase
 - c) Recombinant vaccine.

* * *