

2015

Time : 2 hours

Full Marks : 40

The questions are of equal value.

*Answer any **four** questions.*

(MOLECULAR BIOLOGY)

1. Give a comparative account of Genome organisation in a prokaryotic cell and an eukaryotic cell.
2. Write short notes on the following :
 - (a) Cot Curve
 - (b) DNA renaturation kinetics
3. Describe the various methods of DNA repair in an eukaryotic cell.
4. Write short notes on the following :
 - (a) Cre / Lox recombination
 - (b) Enzymes in replication

5. Give an account of the role of various transcription factors in eukaryotic system.
6. Write short notes on the following :
 - (a) Genetic code and its properties
 - (b) DNA methylation
7. Explain the principle of Maxam-Gilbert method of DNA sequencing. Add a note on the application of DNA sequencing.
8. Write short notes on the following :
 - (a) Next-Gen Sequencing
 - (b) Types of ribozymes

