

2018

Time : 2 hours

Full Marks : 40

Answer any four questions

All questions carry equal marks

Candidates are required to answer in their own words  
as far as practicable

( MOLECULAR BIOLOGY )

1. Explain the structure and organization of human genome.
2. Write short notes on :
  - (i) C-value paradox
  - (ii) DNA renaturation kinetics.
3. Describe the process of DNA repair and recombination.

4. Write short notes on :
  - (i) Prokaryotic replication
  - (ii) Rec A and recombinases.
5. Describe the mechanism of prokaryotic transcription.
6. Write short notes on the following :
  - (i) Transcription and post transcription modification
  - (ii) RNA editing.
7. Describe regulation of gene expression in prokaryotes and eukaryotes.
8. Write about the method of DNA sequencing.