Roll No. | | | | | | | | | | | | | Total No. of Pages :02

Total No. of Questions : 09

M.Sc.(BT) (2011 to2017) (Sem.–2)

MOLECULAR BIOLOGY

Subject Code :MSBT-110

M.Code : 15014

Time : 3 Hrs. Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students has to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students has to attempt any TWO questions.**

SECTION-A

1. Write brief note on the following :

a) Leucine Zipper Motif

b) Response Elements

c) CpG island

d) iRNA

e) SRP

f) Snurposome

g) N-glycosylation

h) Polyadenylation

i) Telomerase

j) Photoreactivatiou

SECTION-B

2. How does Cot curve kinetics helps to explain genome complexity?

3. Explain briefly the process of replication of plasmid DNA.

4. How do spliceosomes assemble and function in eukaryotes?

5. Discuss regulation of Trp operon in *E.coli.*

6. Describe retroviral genome replication.

SECTION-C

7. Explain in detail Phage Lambda gene expression regulation during lytic and lysogenic cycles.

8. Write an account of secretory protein synthesis in eukaryotic cells.

9. Discuss post transcriptional processing of eukaryotic mRNA.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.