D 28442		(Pages : 2)	Name
			Reg. No
T	HIRD SEMESTER M.	Sc. DEGREE EXAMINATION	, FEBRUARY 2007
		Microbiology	
	M.I	B. 32 T—MOLECULAR BIOLOGY	
	(4	As per 2005 admission syllabus)	
Time:	Three Hours		Maximum: 80 Marks
		Section A	
		Answer all questions. Each question carries 2 marks.	
Write	very briefly on:		
1.	C-Value Paradox.		
2.	Selfish DNA.		
3.	Wobble Hypothesis.		
4.	Temperate phage.		
5.	Transposase.		
6.	F-Plasmid.		
7.	Operon.		
8.	Nucleotide.		
9.	SOS repair.		
10.	Viral oncogenes.		
11.	Histone.		
12.	RNA polymerase.		
13.	Rolling circle replication.		
14.	RNA splicing.		
15.	Antisense RNA.		
16.	PCR.		
17.	Leucine Zipper.		
18.	House-keeping gene.		
19.	Klenow fragment.		

20. Bacteriophage Mu.

 $(20 \times 2 = 40 \text{ marks})$

Turn over

Section B

Answer any five questions.
Each question carries 8 marks.

Write notes on:

- 1. mRNA processing in Eukaryotens.
- 2. Controll of gene expression in Prokaryotes.
- 3. Chromosome organization.
- 4. Gene transfer mechanisms in Bacteria.
- 5. Characteristics of cancerous cells.
- 6. Watson and Crick model of DNA.
- 7. Transposable elements in Prokaryotes.

 $(5 \times 8 = 40 \text{ mark}'')$

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