	Seat No.:	Enrolment No.
--	-----------	---------------

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI • EXAMINATION – WINTER 2013

	ect Code: 160401 Date: 27-11-201 ect Name: Advanced Molecular Biology –II	.3
	e: 02:30 pm to 05:00 pm Total Marks: 7	'0
	 Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 	
Q.1	(a) What is Hfr and F prime strain? Explain the process of F prime conjugation.(b) Explain the mechanism of generalized transduction with a neat diagram.	07 07
Q.2	(a) Explain generation of splice and patch products during homologo recombination.(b) Explain life cycle of M13 virus with a very neat diagram.	ous 07
	(b) How does DNA packaging occur in an empty head of virus?	07
Q.3	(a) How are introns and exons distinguished from each other? Explain bas chemistry of removal of introns.	sic 07
	(b) Explain the divalent cation method for artificial competence development. OR	07
Q.3	(a) Explain the process of assembly of different components of T4 virus with a not diagram.(b) Explain the phenomena of transforming DNA integration in <i>Streptococci Pneumonia</i>.	
Q.4	 (a) Explain chain termination method of DNA sequencing. (b) Define the term conduction. Explain it with a neat diagram. 	07 07
Q.4	(a) Explain the process of spliceosome mediated splicing of RNA.(b) Draw a neat diagram of Retrovirus and explain significance of all its parts.	07 07
Q.5	(a) Explain the phenomena of lambda genome integration into the chromosome a bacterial cell.	of 07
	(b) Brief on the Integrons.	07
Q.5	 OR (a) Justify: "Recombination factories facilitate meiotic recombination". (b) Compare by citing examples the movement mechanisms involved during RN mediated and DNA mediated transposition. 	07 IA 07
