Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

		BE - SEMESTER-VIII EXAMINATION - SUMMER 2016		
Subject Code:180404		Code:180404 Date:18/05/201	Date:18/05/2016	
Su	bject	Name:Nano-Biotechnology		
Tiı	me:10	0:30 AM to 01:00 PM Total Marks:	<b>70</b>	
Inst	tructio	ns:		
		Attempt all questions.		
	2.	ı v		
	3.	Figures to the right indicate full marks.		
Q.1	(a)	Define Nano-Biotechnology. Write in brief historical background of Nano-Biotechnology.	07	
	<b>(b)</b>	Explain the properties of nanotubes.	07	
Q.2	(a)	Comment on movable nanobiomachine.	07	
<b>~·-</b>	(b)	Explain the construction of nanopores.	07	
		OR		
	<b>(b)</b>	Give biological function of Restriction Modification Enzyme.	07	
Q.3	(a)	Explain the mission of NanobioICT	07	
	<b>(b)</b>	What are different types of biomaterial?	07	
		OR		
Q.3	(a)	Explain Molecular Viterbi Algorithm	07	
	<b>(b)</b>	What are the applications of biomaterials?	07	
<b>Q.4</b>	(a)	Prove that cell is a nanobiomachine.	10	
	<b>(b)</b>	Explain the term lab on chip.	04	
0.4	(-)	OR	16	
Q.4	(a) (b)	Give example of the link between signaling pathway and molecular movement. Explain the application of Nanodots.	1( 04	
Q.5	(a)	What are the risks of using nanoparticles?	07	
	<b>(b)</b>	Enlist the application of Nano-Biotechnology.	07	
		OR		
Q.5	(a)	Explain the working of biosensors.	07	
	<b>(b)</b>	What are the various emerging field in the field of Nano-Biotechnology?	07	

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