Seat No.:	Enrolment No.
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		GUJARAT TECHNOLOGICAL UNIVERSITY	
		BE – SEMESTER V • EXAMINATION – WINTER - 2012	
U		de: 150402 Date: 12-01-2013	
•		ame: Immunology	
		30 pm to 05:00 pm Total Marks: 70	
Instr	uctio		
		ttempt all questions.	
		Take suitable assumptions wherever necessary. igures to the right indicate full marks.	
	Э. Г	igures to the right mulcate fun marks.	
Q.1	(a)	Explain the steps involved in the production of monoclonal antibody.	10
	(b)	What are the different types of grafts?	04
0.3	(-)		07
Q.2	(a) (b)	Write short notes on innate immunity. What are the different classes of Ig? Explain their biological activity.	07 07
	(D)	OR	U/
	(b)	What are the factors that influence immunogenicity?	07
	. ,	•	
Q.3	(a)	Explain the principle of ELISA. Explain any two types of ELISA.	09
	(b)	Explain the mechanism of action in delayed type hypersensitivity.	05
Q.3	(a)	OR What is the technique used for identification of specific protein in a given	09
Ų.S	(a)	mixture of protein? Explain it.	UF
	(b)	Explain active immunization.	05
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Q.4	(a)	What are the functions of complement?	07
	(b)	Plasmid DNA can be used as vaccine. Comment.	07
Q.4	(a)	OR Explain how complement is activated when antigen-antibody complex is	07
Ų.Ŧ	(a)	present.	U/
	(b)	Explain the concept of multivalent subunit vaccine.	07
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Q.5	(a)	With the help of neat diagram explain the life cycle of HIV.	07
	(b)	With the help of one example explain IgG mediated hypersensitivity.	07
Q.5	(a)	OR With the help of neat diagram explain the life cycle of malarial parasite.	07
V. .5	(b)	Explain Arthus reaction.	07
