	Enrollmo	ent No: Exam Seat No:				
		C.U.SHAH UNIVERSITY	_			
	Summer Examination-2019					
		Name: Immunology & Clinical Microbiology Code: 4SC05ICM1 Branch: B.Sc. (Microbiology) :: 5 Date: 19/03/2019 Time: 10:30 To 01:30 Marks: 70				
	(2) I (3) I	Ons: Use of Programmable calculator & any other electronic instrument is prohibited. Instructions written on main answer book are strictly to be obeyed. Oraw neat diagrams and figures (if necessary) at right places. Assume suitable data if needed.				
Q-1		Attempt the following questions:	(14)			
	a)	Define F _c .				
	b)	Define adjuvant.				
	c)	Define paratope.				
	d)	Define avidity.				
	e)	Expand ADCC.				
	f)	Light chains and heavy chains of antibodies are joined by hydrogen bond. T/F				
	g)	Fusion between a plasma cell and a tumor cell creates a myeloma. T/F				
	h)	B cells mature in the liver while T cells mature in the thymus .T/F				
	i)	Antigen and antibody are linked by covalent bonds. T/F				
	j)	B and T cells are produced by stem cells that are formed in				
	k)	Father of immunology				
	1)	Antibody that exists mostly as a pentamer				
	m)	Antibody involved in allergic reactions				
	n)	Maximum precipitation occurs in Ag-Ab reaction in				
		Cour questions from Q-2 to Q-8	(4.4)			
Q-2		Attempt all questions	(14)			
	(a)	Discuss in detail any one primary lymphoid organ with the help of labeled	(7)			
	(L)	diagram.				
	(b)	Describe the structure, characteristics and functions of IgG.	(7)			
Q-3		Attempt all questions	(14)			
	(a)	Explain the mechanism involved in innate immunity and add note on its advantages.	(7)			



Write an essay on delayed type hypersensitivity reactions.

Explain the process of monoclonal antibody production by hybridoma technology. Give clinical uses of monoclonal antibodies

Discuss in detail the elements of complement system.

Attempt all questions

(b)

(a)

(b)

Q-4

(7)

(14)

(7)

(7)

Q-5		Attempt all questions	(14)
	(a)	Give reasons why?	(7)
		1)Secondary immune response is faster than the primary immune response	
		2)Most antigen result in polyclonal sera	
	(b)	Write in detail about humoral mediated immunity.	(7)
Q-6		Attempt all questions	(14)
	(a)	Give the significance of agglutination reaction in serology.	(7)
	(b)	Write an essay on the collection, transport & examination of specimen	(7)
Q-7		Attempt all questions	(14)
	(a)	Discuss autoimmunity and its associated diseases giving examples of each.	(7)
	(b)	Describe the processing and presentation of exogenous antigens.	(7)
Q-8		Attempt all questions	(14)
	(a)	Write a note on the following-	(7)
	. ,	1) Immunoelectrophoresis.	, ,
		2) Phagocytosis	
	(b)	Describe the structure and functions of MHC class I and class II molecules.	(7)

