Enrollment No: _____ Exam Seat No:_____

C.U.SHAH UNIVERSITY

Summer Examination-2017

Subject Name : Immunology & Clinical Microbiology

Subject Code : 4SC05ICM1 **Branch: B.Sc.(Microbiology)**

Semester : 5 **Date : 28/03/2017** **Time : 02:30 To 05:30** **Marks : 70**

Instructions:

(1) Use of Programmable calculator & any other electronic instrument is prohibited.
(2) Instructions written on main answer book are strictly to be obeyed.
(3) Draw neat diagrams and figures (if necessary) at right places.
(4) Assume suitable data if needed.

Q-1 **Attempt the following questions:** **(14)**

a)	Define antigen.	1
b)	What do you mean by antibody?	1
c)	Name primary lymphoid organs.	1
d)	What are types of T-Cells?	1
e)	What is Haemagglutination?	1
f)	What is the application of RIA?	1
g)	Which antibody is most abundant in our body?	1
h)	What is hinge region?	1
i)	What is the function of variable region?	1
j)	What is the function of IgM?	1
k)	What is the structural variation in IgA?	1
l)	Name monomeric immunoglobulins.	1
m)	Define Inflammation.	1
n)	Name any two specimen used in clinical microbiological examination.	1

Attempt any four questions from Q-2 to Q-8

Q-2 **Attempt all questions** **(14)**

a)	Write a note on Innate type of immunity.	**7**
b)	Enlist various factors influencing immunogenicity.	**7**

Q-3 **Attempt all questions** **(14)**

a)	Write a note on acquired type of immunity.	**7**
b)	What are Antigen presenting cells? Describe their role	**7**

Q-4 **Attempt all questions** **(14)**

a)	Write a note on Immunoelectrophoresis.	**7**
b)	Explain the technique of Western blotting for immunological application.	**7**

Q-5 **Attempt all questions** **(14)**

a)	Write a note on Autoimmunity.	**7**
b)	What is Fluoroscence? Explain its application in Immunology.	**7**

Q-6			
		Write a note on Process of Hematopoiesis with figure and labels.	**14**
Q-7		**Attempt all questions**	**(14)**
	a)	Write a note on various epitopes and receptors present on immunoglobulins.	**7**
	b)	Describe in detail about different cells and organs involved in immune system.	**7**
Q-8		**Attempt all questions**	**(14)**
	a)	Explain complement immune system briefly.	**7**
	b)	Explain Hypersensitivity reaction in detail.	**7**