Enrollment No: _____ Exam Seat No:_____

C.U.SHAH UNIVERSITY

Summer Examination-2018

Subject Name: Scope and applications of Microbiology

Subject Code: 4SC01SAM1 **Branch: B.Sc (Microbiology)**

Semester: 1 **Date: 07/04/2018** **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 paratope .
b) What is antigen ?
c) Define hapten .
d) Define epitope .
e) Define interspecies interaction .
f) Define vaccination .
g) Which type of immunoglobin take part in primary and secondary immune response ?
h) What is virus ?
i) Who is father of microbiology ?
j) Who is father of medical microbiology ?
k) Who proposed germ theory of disease ?
l) Define sterilization .
m) What is causative agent of botulism ?
n) What is causative agent of syphilis ?

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

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

a) Explain the biodeterioration . **(7)**
b) Explain the historical background of immunology . **(7)**

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

a) Explain microbial interaction with the help of examples. **(7)**
b) Explain the scanning electron microscope. **(7)**

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

a) What is immunity? Explain the different types immunity. **(7)**
b) Write a note on biofertilizers. **(7)**

Q-5		**Attempt all questions**	**(14)**
	a)	Write a note on role of microorganism in fermentation .	**(7)**
	b)	Explain the spontaneous generation theory .	**(7)**
Q-6		**Attempt all questions**	**(14)**
	a)	Explain the phase contrast microscope .	**(7)**
	b)	Explain the moist and dry heat sterilization .	**(7)**
Q-7		**Attempt all questions**	**(14)**
	a)	Write a note on primary and secondary immune response with the help of graph .	**(7)**
	b)	Write a note on virus history .	**(7)**
Q-8		**Attempt all questions**	**(14)**
	a)	Explain the structure, characteristics and function of basic immunoglobin,enzymatic action on immunoglobin.	**(7)**
	b)	Write a note on biodegradation .	**(7)**