

Enrollment No: \_\_\_\_\_

Exam Seat No: \_\_\_\_\_

# C.U.SHAH UNIVERSITY

## Summer Examination-2016

Subject Name : World of microbes

Subject Code : 4LS01MBO1/4SC01WOM1

Branch: B.Sc.(Microbiology)

Semester : 1

Date : 29/04/2016

Time : 10:30 To 01:30

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.

<b>Q-1</b>	<b>Attempt the following questions:</b>	<b>(14)</b>
	a) Define microbiology.	1
	b) Define thermal death time.	1
	c) Define immunization.	1
	d) Define semi-synthetic media	1
	e) Define pasteurization.	1
	f) Define immunology.	1
	g) Define chemolithotrophs.	1
	h) What is pure culture?	1
	i) What is QUAC?	1
	j) Write principle of gram staining.	1
	k) What are leucostain?	1
	l) Draw a well labelled diagram of typical bacterial cell.	1
	m) What is principle of negative staining	1
	n) Define endospore.	1

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

<b>Q-2</b>	<b>Attempt all questions</b>	<b>(14)</b>
	A Write in detail: Spontaneous generation theory.	<b>14</b>
 <b>Q-3</b>	 <b>Attempt all questions</b>	 <b>(14)</b>
	A Explain germ theory of disease in detail	7
	B What is immunization? Explain scope of microbiology in detail	7



<b>Q-4</b>	<b>Attempt all questions</b>	<b>(14)</b>
<b>A</b>	Explain all components of a typical bacterial nutrient media.	<b>7</b>
<b>B</b>	Explain replica plate technique with diagram	<b>7</b>
<b>Q-5</b>	<b>Attempt all questions</b>	<b>(14)</b>
<b>A</b>	Explain classification of microorganism on the basis of carbon source.	<b>7</b>
<b>B</b>	Explain Fluorescent microscopy in detail with diagram.	<b>7</b>
<b>Q-6</b>	<b>Attempt all questions</b>	<b>(14)</b>
<b>A</b>	Explain components of cell wall of Gram negative bacteria in detail with diagram.	<b>7</b>
<b>B</b>	Explain gram staining in detail with process flow chart.	<b>7</b>
<b>Q-7</b>	<b>Attempt all questions</b>	<b>(14)</b>
<b>A</b>	Explain classification of dyes in detail.	<b>7</b>
<b>B</b>	Explain negative staining in detail.	<b>7</b>
<b>Q-8</b>	<b>Attempt all questions</b>	<b>(14)</b>
<b>A</b>	Explain “Heat as physical agent to control microbes”	<b>7</b>
<b>B</b>	Explain role of iodine as chemical agent to control microbes. Explain phenol coefficient method	<b>7</b>

