	Enrollmo	ent No:		Exam Seat No:				
			C.U.SHAH I	JNIVERSITY				
	Winter Examination-2018							
	Subject 1	Name: (	Genetics					
	Subject Code: 4LS03MBO1			Branch: B.Sc. (Microbiology)				
	Semester	:: 3	Date: 04/12/2018	Time: 02:30 To 05:30	Marks: 70			
	Instruction	ons:						
				other electronic instrument is p	prohibited.			
	<ul><li>(2) Instructions written on main answer book are strictly to be obeyed.</li><li>(3) Draw neat diagrams and figures (if necessary) at right places.</li></ul>							
			at diagrams and figures (if fiech	essary) at right places.				
Q-1		Attem	pt the following questions:			(14)		
	a)	Bacter	riophage causes infection in pla	ants. (True/False)				
	<b>b</b> )		on can cause mutation. (True/l					
	<b>c</b> )	-	smid carries virulence gene. T					
	<b>d</b> )		present in(plasmid					
	e) f)		enzyme converts RNA into D d has single stranded DNA mo					
	g)		A tail is added in DNA. True					
	<b>h</b> )	What is	s the net charge on DNA?					
	i)	conserv	vative)	in nature. (Dispersive/ Sen	ni			
	<b>j</b> )	_	opy number of plasmid is good	<u> </u>				
	<b>k</b> )			of genetic materials. (True/Fal	lse)			
	l) m)		an cause cancer. (True/False) Full form of pUC.					
	m) n)		igase helps in joining the two	segments of DNA. True/False				
Atte	mpt any f	our que	estions from Q-2 to Q-8					
Q-2		Attem	pt all questions					
•	a	Explain	n the process of conjugation in	bacteria with suitable diagram		<b>(7</b> )		
	b	Explain	n clover leaf model of t-RNA			<b>(7</b> )		
Q-3		Attem	pt all questions					
	a	-	n the law of dominance with su	-		<b>(7)</b>		
	b	Explair	n the semi-conservative model	of DNA replication.		<b>(7)</b>		



**(7**)

**Attempt all questions**What is mutagenesis? Explain the types of mutagens.

Q-4



	b	Explain the double helical structure of DNA with suitable diagram.	(7)
Q-5		Write Short notes on-	
	a	Types of mutation	<b>(7</b> )
	b	Transduction	(7)
Q-6		Attempt all questions	
_	a	Write the properties of DNA polymerase.	7
	b.	What is plasmid? Write different types of plasmids.	7
Q-7		Write Short notes on-	
_	a	Types of RNA	<b>(7</b> )
	b.	Structure of lambda phage	<b>(7</b> )
Q-8		What is transcription? Explain the process of transcription in prokaryotes with suitable diagram.	(4+10)

