	Enrollmo	ent No:	Exam Seat No:			
	C.U.SHAH UNIVERSITY Summer Examination-2018					
	Subject 1	Name: Genetics				
	Subject (	Code: 4LS03MBO1	Branch: B.Sc (Microbiology)			
	Semester	r:3 Date: 28/03/2018	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 question	ns:	(14)		
Atte	a) b) c) d) e) f) g) h) i) j) k) l) mpt any f	What is alleles? What is test cross? What is genome? What is emasculation? Define recon. Define phenotype. Define induced mutation. What is pilli? Define prophage. What is prions? What is linkage? What is mode of DNA replication What is okazaki segments? What is role of ligase?  four questions from Q-2 to Q-8	on in E.coli ?			
Q-2	a) b)	-	rding to Watson and Crick model. ape model of t RNA with the help of diagram.	(14) (7) (7)		
Q-3	a) b)	Attempt all questions What is conjugation? What is ro What is mutation? Explain the conjugation?	ole of F factor in conjugation ? detection and isolations of mutation.	(14) (7) (7)		



Attempt all questions

Write a note on Generalized transduction.

Briefly describe the history of molecular biology.

Q-4

a)

**b**)

**(14)** 

**(7)** 

**(7)** 

Q-5		Attempt all questions		
	a)	Explain the principle of independent assortment with example.	<b>(7)</b>	
	<b>b</b> )	Write a note on DNA polymerase.	<b>(7</b> )	
Q-6		Attempt all questions		
	a)	What do you mean by competence cell? what is role in transformation process with the help of diagram?	<b>(7</b> )	
	• \	with the help of diagram ?	( <b>-</b> )	
	<b>b</b> )	Write a note on genetic map of E.coli.	(7)	
Q-7		Attempt all questions	(14)	
	a)	Write a note on lambda phage.	<b>(7)</b>	
	<b>b</b> )	Explain the life cycle of virulent bacteriophage.	<b>(7)</b>	
Q-8		Attempt all questions	(14)	
*	a)	Explain various model of DNA replication.	(7)	
	<b>b</b> )	Explain the meselson stahl experiment of DNA.	(7)	

