<b>Enrollment No:</b> _	Exam Seat No:	
	C.U.SHAH UNIVERSITY	
	<b>Summer Examination-2017</b>	

**Subject Name :** Genetics

**Subject Code**: 4LS03MBO1/4SC03GEN1 **Branch**: **B.Sc.**(Microbiology)

Semester: 3 Date: 29/03/2017 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.

Q-1		Attempt the following questions:	(14)
	a) b) c) d) e) f) g) h) i) k)	What is F-plasmid? What is reverse transcriptase? What is stop codon? Write full form of RNA. What is Muton? Write full form of DNA. Write types of RNA (any two).  Expand IPTG. Z form is related to DNA. True/False Addition of glucose to protein in known as Glycosilation. True/False. Major and minor grooves are present in ds-RNA. True/False.	1 1 1 1 1 1 1 1 1 1 1
	l) m) n)	What is the net charge on DNA? Bacteriophage is a virus. True/False. Clover leaf model is related to DNA. True/False	1 1 1
	A B	Attempt all questions What is genetic map? Explain it with example. Explain Okazaki fragments in DNA replication with diagram	(14) 7 7
	A B	Attempt all questions What are transposons? Explain their role in transformation. Explain Whatson-Krick model of DNA.	(14) 7 7



Q-4		Write short notes on-	(14)
	$\mathbf{A}$	Meselson Stahl experiment	7
	В	Structure of ribosomes	7
Q-5		Attempt all questions	(14)
	$\mathbf{A}$	Explain secondary structure of RNA with suitable diagram.	7
	В	Briefly explain the central dogma of molecular biology.	7
Q-6		Write short notes on-	(14)
	$\mathbf{A}$	Bacteriophage	7
	В	Conjugation	7
Q-7		Attempt all questions	(14)
	$\mathbf{A}$	Briefly explain the experiment which proved that DNA is the genetic material?	7
	В	Explain Types of mutations with suitable examples.	7
Q-8		Attempt all questions	(14)
•	A	What is law of Dominance? Explain it with example.	7
	В	What is Transcription? Briefly explain this process in bacteria.	7

