C.U.SHAH UNIVERSITY Summer Examination-2017

Subject Name: Microbial Physiology & Biochemistry

	Subject	Code: 4LS02MBO1/4SC02MPB1	Branch: B.S	c.(Microbiology)	
	Semeste Instructio		ime : 02:00 To 05:00	Marks : 70	
	(1) 1 (2) 1 (3) 1	Use of Programmable calculator & a instructions written on main answer Draw neat diagrams and figures (if a Assume suitable data if needed.	book are strictly to be ol	beyed.	
Q-1		Attempt the following questions	:		(1 x 14=14)
	a)	What is asymmetric carbon?			
	b)	What is hexose sugar?			
	c)	Keratin is type of lipid. True/False			
	d)	Write names of two disaccharides.			
	e)	What is monosaccharide?			
	f)	Beta oxidation is required for breakde	own of polysaccharides. Tr	ue/False.	
	g)	What is pure culture?			
	h)	Prolien is the simplest amino acid. Th	rue/False		
	i)	What is nucleotide?			
	j)	Glucose is a type of pentose sugar. The	rue/False.		
	k)	What is zwitterion?	T		
	l)	Peptide bond is present in fatty acids.			
	m)	What do you mean by essential an Write full form of NAG and NAM			
A tto	n) mnt anv f	Four questions from Q-2 to Q-8.	1.		
Alle	mpt any i	tour questions from Q-2 to Q-6.			
Q-2	}	Write notes on-			
·	a	Denaturation of DNA			7
	_				_
	b	Isolation of pure microbial culture			7
Q-3	5	Attempt all questions			
	a.	Explain the structure of DNA double	helix.		7
	b.	Explain physical conditions required	for bacterial growth.		7
Q-4	ļ	What do you mean by Growth cur	ve? Explain various phas	ses of a typical	(4+10)



bacterial growth curve.

Q-5	a.	Attempt all questions What are enzymes? Explain the conditions affecting enzyme activity.	7	
	b.	Explain difference between DNA and RNA.	7	
Q-6	a.	Write notes on- Continuous culture		
	b.	Fibrous proteins	7	
Q-7	_	Attempt all questions	-	
	a.	Explain the properties of saturated and unsaturated fatty acids.	7	
	b.	What is glycosidic bond? Explain types of glycosidic bond.	7	
Q-8		Write notes on-		
	a.	Mechanism of enzyme action	7	
	b.	Diauxic growth	7	

