	Enroll	nent No:		Exam Seat No:		
			C.U.SHAH U	UNIVERSITY		
			Winter Exa	mination-2020		
	Subject	t Name :	Principles of Biochemistry			
	Subject Code: 5SC01PBC1			Branch: M.Sc. (Microbiology)		
	Semest	er: 1	Date: 09/03/2021	Time: 11:00 To 02:00	Marks: 70	
	(2) (3)	Use of P Instruction Draw ne	rogrammable calculator and a ons written on main answer bo at diagrams and figures (if neo suitable data if needed.	•	prohibited.	
Q-1		Attemp	SECT of the Following questions	ΓΙΟN – I	7	
	a. b. c. d.	There a most or Vitamir in blood Tyrosin	re total common ami ganisms. K promotes γ-carboxylation d clotting. True/False e is an aromatic amino acid.	reak acid and a weak base. True/Ino acids that are used to produce of glutamate residues on protection.	e proteins in	
	e. f. g.	pH is hydroge	an Okazaki fragment? the(negative/poen ion concentration. NA has net negative charge?	ositive) logarithm to the base	10 of the	
Q-2	a b	Structur	short notes on- e of water ace between glucose and fructo	se sugar	7 7	
0.2		Dl. a.4		OR	-	
Q-2	a b	Photosy Hydrog	onthesis en bonding		7	
Q-3	a b	Explain	ot all questions the four levels of protein structu transcription? Explain the steps		7 7	



What do you mean by weak molecular forces? Explain their types and importance in

Q-3

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SECTION - II

Q-4	Attempt the Following questions			7	
		a.	Both hydrolysis and denaturation can cause a protein to lose its function. True/False		
		b.	The major organic molecules that make up the plasma membrane of the cell are and		
		c.	What is activation energy?		
		d.	Dextrose is identical to glucose. True/False		
		e.	Lactulose is a milk sugar. True/False		
		f.	What is gluconeogenesis?		
		g.	Write the names of fat-soluble vitamins?		
Q-5			Write short notes on-		
	a		Acid base concept	7	
	b		Phi and Psi angles of amino acids	7	
			OR		
Q-5	a		Structure of lipid bilayer	7	
	b		Pentose sugars	7	
Q-6			Write short notes on-		
	a		Biopolymers	7	
	b		Buffers	7	
			OR		
Q-6			Attempt all Questions		
	a		What are Immobilized enzymes? Explain their industrial applications.	7	
	b		Explain the process of DNA replication in prokaryotic cell.	7	

