	Enrollm	ent No:		Exam Seat No:				
		$\mathbf{C}.\mathbf{H}$	SHAH I	UNIVERSITY	7			
					-			
	Winter Examination-2018							
	Subject Name: Chemical Structure & Macromolecules							
	Subject Code: 4SC01CSM2			Branch: B. Sc. (Microbiology)				
	Semeste	r: 1 Date: 0	3/12/2018	Time: 02:30 To 04:30	Marks: 50			
	(2) (3)	Use of Programmable Instructions written or	n main answer bond figures (if neo	other electronic instrument book are strictly to be obeyed. essary) at right places.	is prohibited.			
Q-1		Attempt the follow	ing questions:			(10)		
a) Define: Hydrogen bond						01		
	b) Give an electronic configuration of Cr and Cu.							
	c)	What are Anomers?	•			01		
	d)	How many function	al groups present	t in carbohydrates?		01		
	e)	Introduce the term '	Peptide Bond'.	·		01		
	f)	Define: Phosphopro	oteins			01		
	g)	Which sugar is pres	ent in RNA?			01		
	h)	Which base is not for	ound in DNA?			01		
	i)	What are optical iso	omers?			01		
	j)	What is difference b	between L and $oldsymbol{\ell}$?	(In sense of isomers)		01		
Atte	empt any	four questions from	Q-2 to Q-8					
Q-2	}	Attempt all question	ons			(10)		
	a)			termination of molecular wei	ight.	05		
	b)	·		nethod, 0.20g of an organic s	•	05		
	,	•		nter and (ii) 74.6 mL of N_2 g	<u> </u>			
				ance. [Take Atomic weight				
		O=16 & N=14]		Q				
Q-3	}	Attempt all question	ons			(10)		
-	a)	Explain classification	on of carbohydrat	es with examples.		05		
	b)	Give following reac				05		



(i) Osazone formation (ii) Acetylation

Attempt all questions			
a)	Discuss two method of synthesis of polypeptide.	05	
b)	Classify proteins on the basis of their composition.	05	
	Attempt all questions		
a)	Explain the highlights of Watson and Crick DNA model.	05	
b)	Give the difference between DNA and RNA.	05	
	Attempt all questions		
a)	Explain Kjeldahl's methods in detail with figure.	05	
b)	Write a note on Dumas method for estimation of nitrogen with figure.	05	
	Attempt all questions	(10)	
a)	What is chemical bond? Explain any two chemical bonds with appropriate examples.	05	
b)	Write a note on mutarotation with proper diagram.	05	
	Attempt all questions	(10)	
a)	Give biological importance of insulin, glutathione and vasopressin.	05	
b)	Explain primary, secondary and tertiary structure of protein.	05	
	a) a) b) a) b) a) b)	 a) Discuss two method of synthesis of polypeptide. b) Classify proteins on the basis of their composition. Attempt all questions a) Explain the highlights of Watson and Crick DNA model. b) Give the difference between DNA and RNA. Attempt all questions a) Explain Kjeldahl's methods in detail with figure. b) Write a note on Dumas method for estimation of nitrogen with figure. Attempt all questions a) What is chemical bond? Explain any two chemical bonds with appropriate examples. b) Write a note on mutarotation with proper diagram. Attempt all questions a) Give biological importance of insulin, glutathione and vasopressin. 	

