	Enrollm	ent No:						
		C.U.SH	AH UNIVERSIT	$\mathbf{Y}$				
		Winte	r Examination-2018					
	Subject Name: Data Communication and Networking							
	Subject (	Code: 4TE07DCN1	Branch: B.Tech (EC)					
	Semester		18 Time: 10:30 To 01:30	Marks :70				
	Instruction		atom be any other alactuania instrume	ant is muchibited				
		<del>-</del>	ator & any other electronic instrume answer book are strictly to be obey	<u>=</u>				
			ares (if necessary) at right places.	cu.				
		Assume suitable data if need						
Q-1		Attempt the following qu	estions.	(				
Q-1	a)	State the function of router		(				
	<b>b</b> )	Why protocols are needed	?					
	<b>c</b> )	Define Service Primitives.						
	d)	State the application of con	<u>-</u>					
	<b>e</b> )		en regenerative repeater and amplifi	er.				
	<b>f</b> )	What is the function of SM						
	g)	Which layer is responsible Define Protocol Stack.	e for segmentation?					
	h) i)	What is a virtual circuit?						
	j)	What is Piggybacking?						
	k)	What is Gateway?						
	l)	What is the function of fire	ewall?					
	m)	Define Selective Flooding.						
	n)	What is Hub?						
Atter	npt any f	four questions from Q-2 to	Q-8					
Q-2		Attempt all questions		(				
	(a)	What do you mean by tong	ology? Explain bus and star topolog	V				

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Q-2	(a) (b)	Attempt all questions What do you mean by topology? Explain bus and star topology. What are different transmission impairments? Differentiate between Circuit switched network and Packet switched network.	(14)
Q-3	(a)	Attempt all questions  Draw the layered architecture of OSI model. Explain the functions of each layer	(14)
	<b>(b)</b>	of OSI model. Write a short note ATM	
Q-4		Attempt all questions	(14)



	(a)	Explain TCP/IP model in detail.		
	<b>(b)</b>	How do guided media differ from unguided media? Explain guided media in		
		detail.		
Q-5		Attempt all questions	(14)	
	(a)	Explain the functions of physical layer and Data link layer in brief.		
	<b>(b)</b>	Explain Wavelength Division Multiple Access Protocols.		
Q-6		Attempt all questions	(14)	
	(a)	Explain Sliding window protocol using GO back to N.		
	<b>(b)</b>	Explain Leaky Bucket Algorithm.		
Q-7		Attempt all questions	(14)	
	(a)	What is Digital Signature? List the methods used for Digital Signature and explain them in detail		
	<b>(b)</b>	Explain DNS with necessary diagram.		
Q-8		Attempt all questions	(14)	
-	(a)	Explain different types of routing in detail.		
	<b>(b)</b>	What is cryptography? Explain Symmetric Key Algorithms in detail.		

