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Internal Assessment Test 1 – March. 2018

Sub:	Computer Communication Networks					Sub Code:	15EC64	Branch	ECE		
Date:	11/03/2018	Duration:	90 min's	Max Marks:	50	Sem / Sec:	VI A,B			OBE	
										CO	RBT

Answer any one question from each part

		MARKS	CO	RBT
	Part1			
1	Explain the major components of components of data communication system and explain different topologies followed in computer network	[10]	CO1	L2
2	What are the three criteria necessary for efficient networking and also explain i) Encapsulation and de-capsulation ii) Multiplexing and demultiplexing	[10]	CO1	L2
	Part2			
3	With a neat diagram explain the TCP/IP protocol model and give a brief description of each layer	[10]	CO1	L2
4	Compare TCP/IP and OSI reference model and explain different addressing schemes.	[10]	CO1	L2
	Part3			
5	Explain bit stuffing and unstuffing and byte stuffing and unstuffing with example.	[10]	CO1	L2
6	Explain Address Resolution Protocol (ARP), with neat diagram.	[10]	CO1	L2
	Part4			
7	Explain CSMA and show behavior of three persistence methods of CSMA.	[10]	CO1	L2
8	Explain CSMA/CA and frame exchange time line diagram with proper figures.	[10]	CO1	L2
	Part5			
9	Define pure ALOHA with proper figure.	[10]	CO1	L2
	In slotted aloha network transmits 200 bit frames on a shared channel of 200 Kbps. What is the throughput if the system produces: a)1000 frames/sec b) 500 frames/sec c) 250 frames/sec.	[10]	CO1	L2
10.	Explain stop and wait protocol with block diagram, FSM and flow diagram.	[10]		

6 (a)	Explain cable TV network for data communication	[05]	CO1	L2
(b)	Describe SS7 signaling	[05]	CO1	L2
7 (a)	Explain TCP/ IP protocol suite	[10]	CO1	L2
8 (a)	Differentiate between TCP/IP model and OSI model.	[06]	CO1	L2
(b)	Relate the following to the layer in OSI model	[04]	CO1	L3

8 (b) continued:

i. Interface to transmission media
ii. Route determination
iii. provide access for end user
iv. format and code conversion services