Vivekananda College of Engineering & Technology, Puttur [A Unit of Vivekananda Vidyavardhaka Sangha Puttur ®] Affiliated to VTU, Belagavi & Approved by AICTE New Delhi

CRM08

Rev 1.10

CSE

28/06/2022

CONTINUOUS INTERNAL EVALUATION - 1

Dept: CSE	Sem / Div: 4/A &B	Sub: Data Communication	S Code:18CS46
Date:06/07/22	Time: 3.00-4.30	Max Marks:50	Elective: N

Note: Answer any 2 full questions, choosing one full question from each part.

Q	N	Questions	Marks	RBT	CO's			
	PART A							
1	a	What is Data Communication? Explain the fundamental characteristics and components of a data communication system.	10	L2	COI			
	b	With neat diagram explain four basic network topologies.	10	L2	CO1			
	c	Explain different forms of data representation.	5	L2	CO1			
OR								
2	a	Explain the transmission impairment of media	10	L2	CO1			
	b	With a neat diagram explain the layers in TCP/IP protocol suit	10	L2	CO1			
		How do you measure performance of a network? Explain	5	L2	CO1			
PART B								
3		Define line coding. Represent the sequence 10100110 using polar and bipolar schemes	10	L3	CO2			
1		Compare and explain Serial and Parallel data transmission modes	10	L2	CO2			

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	c	Explain Quadrature PSK and its implementation	5	L2	CO2			
	OR							
4	a	Write about Pulse Code Modulation (PCM) and discuss the steps involved in the quantization process.	10	L3	CO2			
	b	Explain Amplitude Shift Keying.	10	L2	CO2			
		We have an available bandwidth of 100kHz which span from 200 to 300kHz. What are the carrier frequency and the bit rate if we modulated our data by using ASK with d=1?		L3	CO2			

Prepared by: Radhika Shetty D S/Bhanupriya M P

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