CONTINUOUS INTERNAL EVALUATION- 3

Dept:EC	Sem / Div:VI	Sub:Digital Communication	S Code:18EC61
Date:04-08-2021	Time: 9:30-11:00 am	Max Marks: 50	Elective:N
Note: Answer any 2 full questions, choosing one full question from each part.			

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QN		Questions	Marks	RBT	COs
		PART A			
1	a	With a neat block diagram Explain the digital PAM transmission through bandlimited base band channels and obtain the expression for ISI.	10	L2	CO4
	b	Explain the model of a spread spectrum digital communication system.	10	L2	CO5
	c	Explain the effect of de-spreading on narrow band interference	5	L2	CO5
		OR			
2	a	What is eye pattern? With a neat diagram explain the timing features pertaining to eye diagram and its interpretation for the baseband binary data transmission system.	10	L2	CO4
	b	Explain the generation and demodulation of direct sequence spread spectrum signal with the relevant waveforms and spectrum.	10	L2	CO5
	c	Write a short note on application of spread spectrum in wireless LANs.	5	L2	CO5
		PART B			
3	a	What are adaptive equalizers? Explain the linear adaptive equalizer based on the MSE criterion.	10	L2	CO4
	b	With a neat block diagram explain the frequency hopped spread spectrum.	10	L2	CO5
	c	Write a note on low detectability signal transmission as an application of direct sequence spread spectrum.	5	L2	CO5
		OR			
4	a	State and prove Nyquist condition for zero ISI.	10	L2	CO4
	b	With a neat diagram explain the generation of PN sequences and state its properties.	10	L2	CO5
	c	Compare Direct sequence spread spectrum technique with Frequency hopped spread spectrum technique.	5	L2	CO5

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