

Lecture Schedule for session (aug-dec) , 2020

Course Code:- Digital Communication systems

Course Title:- PCC ECE 502

S. No.	Topic Name	No. of lectures	Date of delivering lectures	Time slot
UNIT I				
1.	Introduction to digital communication, application, advantages and disadvantages	1	18/08	10:00 to 11:00
2.	Block diagram of digital communication system.	1	19/08	3:00 to 4:00
3.	Sampling.	2	21/08, 22/08	2:00 to 3:00 12:00 to 1:00
4.	Quantisation & quantization error.	1	24/08	11:00 to 12:00
5.	Signal to noise ratio due to quantization.	1	25/08	10:00 to 11:00
6.	Companding	1	26/08	3:00 to 4:00
7.	DPCM System	1	28/08	2:00 to 3:00
8.	Delta Modulation.	1	29/08	12:00 to 1:00
9.	Adaptive delta modulation.	1	31/08	11:00 to 12:00
UNIT II				
10	Introduction to line coding schemes and properties.	1	1/09	10:00 to 11:00
11	NRZ (unipolar & bipolar)	1	2/09	3:00 to 4:00
12	RZ, manchester	1	4/09	2:00 to 3:00
13	AMI	1	5/09	12:00 to 1:00
14	HDBn	1	7/09	11:00 to 12:00
15	B8ZS	1	8/09	10:00 to 11:00
16	Solved examples	1	9/09	3:00 to 4:00
UNIT III				
17	Introduction to modulation and digital modulation, synchronous and asynchronous.	1	11/09	2:00 to 3:00
18	ASK modulation & demodulation.	1	12/09	12:00 to 1:00
19	Bandwidth and frequency spectrum of FSK	2	14/09, 15/09	11:00 to 12:00 10:00 to 11:00
20	FSK detection using PLL	1	16/09	3:00 to 4:00
21	BPSK transmission and BPSK spectrum	1	18/09	2:00 to 3:00

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22	BPSK detection	1	19/09	12:00 to 1:00
23	QPSK	1	21/09	11:00 to 12:00
24	QPSK demodulator	1	22/09	10:00 to 11:00
25	DPSK	1	23/09	3:00 to 4:00
UNIT IV				
26	Introduction to base band signal receiver, Gaussian probability distribution function.	2	25/09, 26/09	2:00 to 3:00 12:00 to 1:00
27	Power spectral density function and additive white Gaussian noise	1	28/09	11:00 to 12:00
28	Probability of error in optimum filter	2	29/09, 30/09	10:00 to 11:00 3:00 to 4:00
29	Probability of error in matched filter	1	3/10	12:00 to 1:00
30	Probability of error in ASK	1	5/10	11:00 to 12:00
31	Probability of error in BFSK	2	6/10, 7/10	10:00 to 11:00 3:00 to 4:00
32	Probability of error in BPSK	2	9/10, 10/10	2:00 to 3:00 12:00 to 1:00
33	Probability of error in QPSK	1	12/10	11:00 to 12:00
UNIT V				
34	Spread spectrum and its advantages.	1	13/10	10:00 to 11:00
35	PN sequences and its generation.	1	14/10	3:00 to 4:00
36	DSSS	2	16/10, 17/10	2:00 to 3:00 12:00 to 1:00
37	FHSS	2	19/10, 20/10	11:00 to 12:00 10:00 to 11:00
38	Maximum length and grey codes	1	21/10	3:00 to 4:00
39	Problems in spread spectrum	1	23/10	2:00 to 3:00

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