

Aditya Institute of Technology and Management (Autonomous), Tekkali
II Year B.Tech (Electronics and Communication Engineering) – 2nd Sem.

SECTION – B


ANALOG COMMUNICATIONS

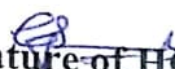
LESSON PLAN

Periods	Date (Tentative)	Topic	Unit No	Teaching Methodology
1	06.12.16	Introduction: Introduction to communication system,	Unit I	Chalk & Board
	07.12.16			
3	09.12.16	Need for modulation, classification of modulations.		Chalk & Board
4	09.12.16	Amplitude Modulation: Time domain description;		Chalk & Board
5	13.12.16	frequency domain description;		Chalk & Board
6	14.12.16	Single tone and multi tone AM modulation;		Chalk & Board
	16.12.16			
8	16.12.16	Power relations in AM wave; Problem solving		Chalk & Board
9	20.12.16	current relations in AM wave; Problem solving		Chalk & Board
10	21.12.16	Generation of AM Waves – Square Law Modulator,		Chalk & Board
11	23.12.16	Switching Modulator.		Chalk & Board
12	23.12.16	Detection of AM wave: Square Law Detector,		Chalk & Board
13	27.12.16	Envelope Detector.		Chalk & Board
14	28.12.16	Problem solving		Chalk & Board
15	30.12.16	DSBSC Modulation: Time domain and frequency domain description,	Unit II	Chalk & Board
16	30.12.16	Generation of DSBSC Wave - Balanced Modulators,		Chalk & Board
17	3.1.17	Ring Modulator.		Chalk & Board
18	4.1.17	Coherent detection of DSBSC Modulated wave,		Chalk & Board
19	6.1.17	COSTAS Loop.		Chalk & Board
20	6.1.17	SSB Modulation: Frequency domain description,		Chalk & Board
21	17.1.17	Freq. discrimination method for generation of AM SSB Modulated wave,		Chalk & Board
22	18.1.17	Time domain description,		Chalk & Board
23	20.1.17	Phase discrimination method for generating AM SSB Modulated wave.		Chalk & Board

24	20.1.17	Demodulation of SSB wave,		Chalk & Board
25	24.1.17	VSB Modulation,		Chalk & Board
26	25.1.17	Comparison of AM Techniques,		Chalk & Board
27	27.1.17	Applications of different AM Systems.		Chalk & Board
28	27.1.17	Angle Modulation: Basic concepts,	Unit III	Chalk & Board
29	31.1.17	Single tone frequency modulation, Single tone phase modulation,		Chalk & Board
30	1.2.17	Spectral Analysis of Sinusoidal FM and PM signals,		Chalk & Board
31	3.2.17	Differences between FM and PM, Narrow band FM, Wide band FM,		Chalk & Board
32	3.2.17 7.2.17	Constant Average Power, Transmission bandwidth of FM Wave -		Chalk & Board
34	8.2.17	Generation of FM and PM Signals - Direct and indirect methods.		Chalk & Board
35	10.2.17	Detection of FM wave - Balanced Frequency discriminator,		Chalk & Board
36	10.2.17	Zero crossing detector,		Chalk & Board
37	14.2.17	Phase locked loop,		Chalk & Board
38	15.2.17	Comparison of FM & AM		Chalk & Board
39	17.2.17	Multiplexing: Frequency Division Multiplexing,		Chalk & Board
40	17.2.17	Time Division Multiplexing, Comparison between TDM and FDM.		Chalk & Board
41	21.2.17	Problem solving		Chalk & Board
42	22.2.17	Radio Transmitters: Classification of Transmitters,	Unit IV	Chalk & Board
43	24.2.17 24.2.17	AM Transmitter, Effect of feedback on performance of AM Transmitter,		Chalk & Board
45	28.2.17	FM Transmitter – Variable reactance type and phase modulated FM Transmitter,		Chalk & Board
46	7.3.17	Frequency stability in FM Transmitter.		Chalk & Board
47	8.3.17	Radio Receivers: Classification of Receivers - Tuned radio frequency receiver,		Chalk & Board
48	10.3.17	Superhetrodyne receiver,		Chalk & Board
49	10.3.17	RF section and Characteristics - Frequency changing and tracking,		Chalk & Board
50	14.3.17	Intermediate frequency, AGC,		Chalk & Board
51	15.3.17	Communication Receiver,		Chalk & Board
52	17.3.17	FM Receiver,		Chalk & Board

53	17.3.17	Comparison with AM Receiver, Amplitude limiting		Chalk & Board
54	21.3.17	Problem solving		Chalk & Board
55	24.3.17 24.3.17	Pulse Modulation: Types of Pulse modulation,	Unit V	Chalk & Board
57	29.3.17	PAM (Single polarity, double polarity) Generation & demodulation of PAM;		Chalk & Board
58	31.3.17	Generation & demodulation of PWM;		Chalk & Board
59	31.3.17	Generation and demodulation of PPM.		Chalk & Board
60	4.4.17	Noise in analog modulation: Signal-to-Noise ratios,		Chalk & Board
61	7.4.17	AM receiver model, SNR for coherent reception,		Chalk & Board
62	7.4.17	noise in AM receivers in using envelope detection,		Chalk & Board
63	11.4.17	FM receiver model,		Chalk & Board
64	12.4.17	FM Threshold effect, Pre-emphasis & de-emphasis.		Chalk & Board


Signature of the faculty


Signature of HOD/ECE