LESSON PLAN

Name of the Faculty : Anita Rani
Discipline : Electronics and Communication Engg.
Semester : Vth
Subject : Digital Communication

Week	Theory		Practical
	Lecture	Topic	Topic
1st	1	Introduction to Basic block diagram of digital communication systems	Observe wave forms at input and output of pulse code modulator with CRO.
	2	Comparison of digital with analog communication systems.	
	3	Revision	
2nd	4	Sampling theorem and its basic concept.	Observe wave forms at input and output of pulse code modulator with CRO.
	5	Introduction to PAM, PPM	
	6	Introduction to PPM, PWM	
3rd	7	Quantization and error of Quantization	Transmission of data using MODEM.
	8	PCM and its advantage and disadvantage	
	9	Concept of COMPANDING	
4th	10	DPCM and its advantage and disadvantage	Transmission of data using MODEM.
	11	DELTA Modulation and its advantage and disadvantage	
	12	ADAPTIVE DELTA Modulation	
5th	13	Frequency hopping spread spectrum technique	Observe wave forms at input and output of QPSK modulators
	14	Revision	
	15	Revision	
6th	16	**1st Sessional Test**	Observe wave forms at input and output of QPSK modulators
	17	Principle of working of Amplitude shift keying (ASK)	
	18	Basic block diagram of Amplitude shift keying (ASK)	
7th	19	Frequency Shift keying (FSK)	Observe wave forms at input and output of PSK modulators
	20	Phase Shift Keying(PSK)	
	21	Quadrature Phase shift keying (QPSK)	

8th	**22**	Two tone modulation	Observe wave forms at input and output of PSK modulators
	23	Revision	
	24	Introduction to data transmission	
9th	**25**	Characteristics/working of data transmission circuits	Observe the working of space and time switching circuit.
	26	Bandwidth requirements,	
	27	Data transmission speeds	
10th	**28**	Noise, cross talk	Observe the working of space and time switching circuit.
	29	Echo suppressors	
	30	Distortion, equalizers	
11th	**31**	Revision	Revision & Viva
	32	**2nd Sessional Test**	
	33	Need of modems	
12th	**34**	functions of modems	Revision & Viva
	35	Mode of modems operation (low speed, medium speed and high speed	
	36	Modem interconnection	
13th	**37**	Modem data transmission speed,	Revision & Viva
	38	Modem modulation methods	
	39	Revision	
14th	**40**	Space and time switching:	Revision & Viva
	41	Working principle of STS switches.	
	42	Working principle of TST switches.	
15th	**43**	Revision	Revision & Viva
	44	Revision	
	45	**3rd Sessional Test**	
16th	**46**	Revision	Revision & Viva
	47	Revision	
	48	Revision	