LESSON PLAN

Name of the Faculty : **Devi Prassan**
Discipline : **Electronics and Communication Engg.**
Semester : **5th**
Subject : **Digital Communication**
Work Load (Lecture/practical) per week in hours: Lecture-03, Practical-03

Week	Lecture	Topic	Practical 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	Modeofmodemsoperation(lowspeed,mediumspeedandhighspeed		
	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		