

Subject: Principles of communication Engg.			Teacher: Mrs Manita Rani	
Week	Theory		Practical day	Topic
	Lecturer	Topic Covered		
1st	1st	Introduction to communication and its Applications, Block diagram of Transmitter and receiver	1st	
	2nd	radio freq spectrum and Intro to signals, Need of Modulation and demodulation		to observe an AM wave on CRO
	3rd	Assignment on First Unit		
2nd	1st	Carrier & side band component & modulation Index	2nd	
		derevation of expression for AM Wave		
	2nd	Spectrum & BW of AM wave, Comparision of Bands & area of		to obtain AM wave from Square law modulator
	3rd	power distribution in carrier & side bands		
3rd	1st	Expression of FM wave , Modulation Index, BW of FM signal	3rd	
	2nd	Carson Rules, Noise of FM signal, Preemphasis & Deemphasis		
	3rd	Comparison of FM & AM		
4th	1st	First Sessional	4th	
	2nd	expression of PM wave ,		File Check and Viva
	3rd	Comparison with FM		
5th	1st	Modulation Index	5th	
	2nd	Assignment on Fourth Unit		to obtain modulating signal from FM detector circuit
	3rd	Circuit Diagram of collector		
6th	1st	base modulator	6th	
	2nd	Square law modulator		
		*Assignment on 4th unit		to observe PAM, PPM, PWM
	3rd	Switching modulator		
7th	1st	*Assignment on 5th unit	7th	
	2nd	Balance modulator		to obtain modulating signal from AM detector circuit
	3rd	Revision of 4th unit		
	1st	Circuit Diagram of reactance modulator		

8th	2nd	Working of reactance modulator	8th	
	3rd	Varactor of Diode modulaton		
9th	1st	Armstrong Phase modulator	9th	
	2nd	Assignment		File Check and Viva
	3rd	VCO Phase modulator		
10th	1st	Stabilasion of carrier	10th	
	2nd	Assignment of 4th unit		to observe PAM, PPM, PWM and compare with analog singal
		AFC Block Diagram		
	3rd	Revision of 6th unit		
11th	1st	Assignment	11th	
		2nd Sesional		
	2nd	Demodulation of AM wave using Diode Deceptor Circuit		
	3rd	Concept of Clipping, Formula of RC time		
12th	1st	Minimum distortion	12th	
	2nd	Demodulation of AM wave using synchronous Decection		to feed an analog signal to a PCM modulator
	3rd	Basic Principle of FM		
		Revision of 7th unit		
13th	1st	Slope Detector, FM demodulator	13th	
		Foster Seeley Discriminator		
	2nd	Ratio Dector, Quadrature Detector		File Check and Viva
		Assignment		
	3rd	PLL FM demodulator		
		Revision of 8th unit		
14th	1st	sampling theorem, TDM	14th	
		FDM, PAM		
	2nd	PPM, PWM		to study delta modulation and demodulation
		PCM, DPCM		
	3rd	Advantage of PCM		

	5th	Revision of 9th unit		
15th	1st		15th	
	2nd	Limitation of DM, Concept of ADM		File Check and Viva
		Revision of 9th unit		
	3rd	Assignment and 3rd Sessional		