## Lesson Plan

Name of Faculty	:
Discipline	:
Semester	:
Subject	:
Lesson Plan Duration	:
Work Load (Lecture/Practical) p	oer week (in hours):

Dr. Suman Rani, Assistant Professor CSE 6<sup>th</sup> Fundamental of Communication Systems (OE/ECE/4-T) 15 weeks Lectures-03

Week	Theory		Actual Covered	Signature
	Lecture Day	Topic (Including Assignment/Test)		
	1	UNIT-1 Introduction to Communication System,		
1 <sup>st</sup>	2	Terminologies for Communications Systems		
	3	Electromagnetic spectrum and typical application		
2 <sup>nd</sup>	4	concept of electrical communication		
	5	modes and media of Communication		
	6	Elements of analog Communication system		
3 <sup>rd</sup>	7	Need for modulation.		
	8	Amplitude Modulation: Theory of AM		
	9	Mathematical expression		
4 <sup>th</sup>	10	Waveforms		
	11	modulation index		
	12	types of AM		
	13	Generation of AM: Square law modulation,		
5 <sup>th</sup>	14	Switching modulator,		
	15	Balanced modulator.		
	16	Frequency Modulation: Theory of FM		
6 <sup>th</sup>	17	Mathematical expression		
	18	waveforms, modulation index		
7 <sup>th</sup>		1 <sup>st</sup> Minor Test		
8 <sup>th</sup>	19	Narrow band and Wide band FM		
	20	Comparison between AM and FM;		
	21	Generation of FM: Direct Methods-Varactor diode modulator		
9 <sup>th</sup>	22	Indirect method-Armstrong FM system.		
	23	Digital modulation techniques: Sampling theorem		
	24	ASK techniques theory, mathematical expressions		
10 <sup>th</sup>	25	FSK techniques theory, mathematical expressions		
	26	PSK techniques theory, mathematical expressions		
	27	Block diagram of generation		
11 <sup>th</sup>	28	Block diagram of degeneration.		
	29	Digital Modulation (CBS)		
	30	PCM (CBS)		
	31	DPCM (CBS)		1
12 <sup>th</sup>	32	Revision Unit-1		
	33	Revision Unit-2		
13 <sup>th</sup>	34	Revision Unit-3		
	35	Revision Unit-4		
	36	MCQ Based on unit1		
14 <sup>th</sup>		2 <sup>nd</sup> Minor Test		
	37	MCQ Based on unit 2		
15 <sup>th</sup>	38 39	MCQ Based on unit 3 MCQ Based on unit 4		