

LESSON PLAN

NAME OF FACULTY : Anuj Gupta
DISCIPLINE : EEE
SEMESTER : 8th
SUBJECT : Modern trends in Communication
LESSON PLAN DURATION : 15 WEEKS (FROM JANUARY , 2018 TO APRIL, 2018)
WORK LOAD (LECTURE/PRACTICAL)PER WEEK (IN HOURS) :4 LECTURE, 1 Tutorial

WEEK	THEORY	
	Lecture Day	Topic (Including Assignment/Test)
1st	I	Introduction of syllabus & its complete overview
	II	Sampling theorem & its description proof of sampling theorem for bandlimited signal
	III	
	IV	
2nd	I	Bit rate & detection level
	II	Pulse code modulation & its block diagram
	III	Introduction to use code
	IV	
3rd	I	Detection & correction of code
	II	ASK & FSK techniques DPSK & QPSK techniques
	III	
	IV	
4th	I	Introduction of Satellite Communication & its frequency used terms
	II	Orientation of Satellites Transmission path & its losses
	III	
	IV	
5th	I	Satellite system flux density
	II	
	III	Link budget calculation
	IV	
6th	I	Multiple Access technique & its types
	II	
	III	
	IV	
7th	I	Introduction to optic fiber communication & its complete overview
	II	Principle of optical fiber communication & total internal reflection
	III	
	IV	
8th	I	Step index & graded index optic fiber
	II	Single mode & multimode fiber communication
	III	Rayleigh scattering waveguide dispersion, total dispersion
	IV	
9th	I	Losses of optical fiber communication
	II	
	III	
	IV	
10th	I	Introduction of Optical Communication & its overview
	II	LED & semiconductor laser diode
	III	
	IV	
11th	I	PN photodiode
	II	Block diagram of optic communication system avalanche photodiode & its operation design of pattern detector
	III	
	IV	
12th	I	Connectors, splices & its types
	II	
	III	
	IV	
13th	I	Losses of optical communication
	II	Numerical Aperture & its derivation
	III	
	IV	Numericals of Numerical Aperture
14th	I	Loss budget & its calculation
	II	Material dispersion
	III	Inter modal dispersion
	IV	Noise consideration & its losses
15th	I	bending & combined losses
	II	Practice Session & Revision
	III	
	IV	