

LESSON PLAN

Name of the Faculty : Ms.Shriya Bhojwani

Discipline : B.tech

Semester : 2nd Semester

Subject : Elements of Electronics Engineering

Lesson Plan Duration : 15 weeks (from January, 2018 to April, 2018)

Work Load (Lecture / Practical) per week: Lectures-03

Week	Theory	
	Lecture day	Topic (including assignment / test)
1 st	1 st	<ul style="list-style-type: none"> Overview of Semiconductors
	2 nd	<ul style="list-style-type: none"> PN junction diode and Zener diode
	3 rd	<ul style="list-style-type: none"> Diode circuits: rectifiers (bridge type only)
2 nd	4 th	<ul style="list-style-type: none"> Filters
	5 th	<ul style="list-style-type: none"> Clippers and Clampers
	6 th	<ul style="list-style-type: none"> BJT construction, operation, characteristics (CB, CE and CC configurations) and uses
3 rd	7 th	<ul style="list-style-type: none"> JFET
	8 th	<ul style="list-style-type: none"> MOSFET construction, operation
	9 th	<ul style="list-style-type: none"> Assignment I
4 th	10 th	<ul style="list-style-type: none"> MOSFET construction, operation, characteristics (CS configuration) and uses.
	11 th	<ul style="list-style-type: none"> Binary, Decimal, octal and Hexadecimal number systems and conversions
	12 th	<ul style="list-style-type: none"> Boolean Algebra, De Morgan's theorem
5 th	13 th	<ul style="list-style-type: none"> Logic gates (AND, OR, NOT, NAND, NOR, XOR, XNOR),
	14 th	<ul style="list-style-type: none"> Test I
	15 th	<ul style="list-style-type: none"> Combinational and sequential circuits
6 th	16 th	<ul style="list-style-type: none"> Introduction to flip-flops (S-R & J-K).
	17 th	<ul style="list-style-type: none"> Role, importance and applications of general-purpose test instruments like Multimeter: Digital & Analog
	18 th	<ul style="list-style-type: none"> Cathode Ray Oscilloscope (CRO)
7 th	19 th	<ul style="list-style-type: none"> Function/Signal Generator
	20 th	<ul style="list-style-type: none"> Photoconductive cell and Photovoltaic cell
	21 th	<ul style="list-style-type: none"> Assignment II
8 th	22 nd	<ul style="list-style-type: none"> Solar cell
	23 rd	<ul style="list-style-type: none"> Photodiodes and Phototransistors
	24 th	<ul style="list-style-type: none"> Test II

9 th	25 th	<ul style="list-style-type: none"> Seven segment display: Common anode and Common cathode connections and applications
	26 th	<ul style="list-style-type: none"> LCD DISPLAY: Types of liquid crystals
	27 th	<ul style="list-style-type: none"> Group Activity I
10 th	28 th	<ul style="list-style-type: none"> Types of LCD display:- Dynamic scattering and field effect type
	29 th	<ul style="list-style-type: none"> LCD Construction
	30 th	<ul style="list-style-type: none"> Working of LCD
11 th	31 th	<ul style="list-style-type: none"> Advantages, Disadvantages and Applications of LCD
	32 nd	<ul style="list-style-type: none"> Test III
	33 rd	<ul style="list-style-type: none"> Block diagram of a basic communication system
12 th	34 th	<ul style="list-style-type: none"> Frequency spectrum
	35 th	<ul style="list-style-type: none"> Need for modulation -
	36 th	<ul style="list-style-type: none"> Methods of modulation
13 th	37 th	<ul style="list-style-type: none"> Principle of AM
	38 th	<ul style="list-style-type: none"> Principle of FM
	39 th	<ul style="list-style-type: none"> Principle of PM
14 th	40 th	<ul style="list-style-type: none"> Pulse analog modulation
	41 th	<ul style="list-style-type: none"> Pulse digital modulation
	42 nd	<ul style="list-style-type: none"> AM transmitters & receivers
15 th	43 rd	<ul style="list-style-type: none"> Group Activity II
	44 th	<ul style="list-style-type: none"> FM transmitters
	45 th	<ul style="list-style-type: none"> FM receivers