Name of the Faculty : **Poonam, Guest faculty(ECE)**
Discipline : **ME**
Semester : **3rd**
Subject : **BASICS OF ELECTRONICS ENGINEERING**
Lesson Plan Duration: 15 Weeks
load (Lecture/Practical per week in hours: Lectures-03

Week	Theory		Actual covered
	Lecture day	**Topic(including assignment/test)**	
1	1	Energy Band in solid	
	2	Semiconductor materials	
	3	Classification of semiconductors,Energy distribution of electrons	
2	4	Mass action law	
	5	Effect of temperature on semiconductor	
	6	Charge density in a semiconductor,Drift current	
3	7	Diffusion current density	
	8	Total current density	
	09	Conductivity PN Junction Theory	
4	10	Depeltion theory	
	11	V-I equation and characteristics	
	12	Resistance levels, Piece wise linear characteristics and equivalent circuit	
5	13	Zener diode ,LED	
	14	Photodiode	
	15	Transition and Diffusion Capacitance	
6	16	Reverse recovery time	
	17	Varactor Diode	
	18	Load line analysis of diode circuit	
7		**I st Minor Test**	
8	19	Half Wave Rectifier ,Full wave rectifier	
	20	Numerical problems on rectifier	
	21	Clippers ,Clampers	
9	22	**Assignment Questions**	
	23	Voltage multiplying circuits	
	24	Zener voltage regulator, BJT introduction	
10	25	Physical structure and operation of BJT	
	26	Transistor equations, Transistor amplifying action	
	27	Types of configuration and their characteristics curve	
11	28	Thermal Runway	
	29	Heat sink	
	30	Operating point of transistor, Requirement of biasing	
12	31	Fixed bias and potential divide circuit	
	32	FET,Types,construction,equations and curves	
	33	Comparison of FET andf JFET	
13	34	MOSFET, MOSFET as an amplifier	
	35	Introduction to Thermistor	
	36	Optocoupler, SCR	
14		**IInd Minor Test**	
15	37	DIAC	
	38	**Assignment Evaluation**	
	39	TRIAC, UJT	