

Lesson Plan / Teaching Plan / Lecture Plan with Progress : B Tech 3rd Semester : 2025-26

Course		Analog Electronic circuits (ELU-203-V)		Faculty :Ms. Vineeta Choudhary	
S. No.	Lecture No	Topic Description	Teaching Pedagogy	Reference Material	Remarks
1	1	P-N junction diode, V-I characteristics of a diode	Board and Projector	Notes and Books	
2	2	Review of half and full Rectifiers	Board and Projector	Notes and Books	
3	3	Zener Diodes and Types	Board and Projector	Notes and Books	
4	4	Clamping Circuits and its working	Board and Projector	Notes and Books	
5	5	Clipping Circuits and its working	Board and Projector	Notes and Books	
6	6	Revision Class	Board and Projector	Notes and Books	
7	7	Basic of BJT its Structure	Board and Projector	Notes and Books	
8	8	I-V Characteristics of a BJT	Board and Projector	Notes and Books	
9	9	BJT as an switch	Board and Projector	Notes and Books	
10	10	BJT as an Amplifier	Board and Projector	Notes and Books	
11	11	Small Signal Model	Board and Projector	Notes and Books	
12	12	biasing circuits of BJT	Board and Projector	Notes and Books	
13	13	common-emitter amplifier, common-base amplifier, common-collector amplifier	Board and Projector	Notes and Books	
14	14	Small Signal equivalent circuits, High-frequency equivalent circuits	Board and Projector	Notes and Books	
15	15	Revision Class	Board and Projector	Notes and Books	
16	16	MOSFET structure and I-V characteristics and as a switch and as an amplifier	Board and Projector	Notes and Books	
17	17	Small signal model and Biasing circuits	Board and Projector	Notes and Books	
18	18	Common- source, gate, drain amplifiers	Board and Projector	Notes and Books	
19	19	Small Signal equivalent circuits, circuits- gain, input, and output impedances,	Board and Projector	Notes and Books	
20	20	Transconductance	Board and Projector	Notes and Books	
21	21	High frequency equivalent circuit	Board and Projector	Notes and Books	
22	22	Revision Class	Board and Projector	Notes and Books	
23	23	Differential amplifier; power amplifier; direct coupled multi- stage amplifier	Board and Projector	Notes and Books	
24	24	Internal structure of an operational amplifier	Board and Projector	Notes and Books	
25	25	Ideal op-amp	Board and Projector	Notes and Books	
26	26	Non- idealities in an op- amp(Output offset voltage, input, bias current, slew rate,	Board and Projector	Notes and Books	
27	27	Revision Class	Board and Projector	Notes and Books	
28	28	IDEALized analysis of op-amp circuits, inverting and non-inverting amp	Board and Projector	Notes and Books	
29	29	Selection Sort, Differential amplifier, instrumentation amplifier, integrator	Board and Projector	Notes and Books	
30	30	Insertion Sort, active filter, P, PI and PID controllers and lead/ lag	Board and Projector	Notes and Books	
31	31	Quick Sort, compensator using op amp, voltage regulator, Analog to digital convertor	Board and Projector	Notes and Books	
32	32	convertor	Board and Projector	Notes and Books	
33	33	Merge Sort, Oscillators(Wein bridge and phase shift), Hysteresis comparator,	Board and Projector	Notes and Books	
34	34	Heap Sort; Performance and Comparison among all the methods	Board and Projector	Notes and Books	
35	35	Hashing Zero crossing detector, Square wave and triangular wave generators	Board and Projector	Notes and Books	

36	36	Collision resolution, Precision rectifier, Monoshot, Graph search & traversal algo	Board and Projector	Notes and Books	
37	37	gain bandwidth product	Board and Projector	Notes and Books	

Study Material / Reference Books			
	T1	Sanjeev Gupta, Analog Electronic circuits, Khanna Publications.	
	R1	Nagrath and Kothari, Analog electronics, Dhanpat Rai publications	