

Lesson Plan of the 3rd Semester for session 2024-25

Name of the faculty:	Ms. Malik Neha Dayanand
Designation:	Assistant Professor
Discipline:	Computer Science and Engg.
Semester:	III rd sem
Subject:	Digital Electronics
Subject Code:	ESC-CSE-205G
Lesson Plan duration:	15 weeks
Work Load per week in hours:	Lectures- 03

Week	Lecture day	Topic (Including Assignment/Test)
UNIT - I		
1	1	Digital Signals, Digital Circuits
	2	AND, OR, NOT, NAND, NOR, XOR
	3	Boolean Algebra
2	4	Examples of ICgates
	5	Number System:- Binary, Signed Binary, Octal, Hexadecimal
	6	Binary arithmetic, One's and Two's Complements
3	7	Arithmetic Codes
	8	Error Detecting and Correcting Codes
	UNIT- II	
4	9	Standard Representation for logic functions
	10	Simplification of logic functions
	11	Minimization of logical functions
5	12	Don't care conditions
	13	Multiplexer
	14	Demultiplexer
6	15	Decoders
	16	Adders
	17	Subtractors
7	18	BCD arithmetic
	19	Carry lookahead adder
	20	Serial adder
8.	21	ALU, Elementary ALU
	22	Popular MSI chips

	23	Digital Comparator
	24	Parity Checker/generator
9.	25	Code Converters
	26	Priority Encoders
	27	Decoders/drivers for display devices
10.	28	Q-M method of function realization
	UNIT – III	
	29	A1-bit memory
	30	The circuit properties of Bistable latch
11.	31	The Clocked SR flipflop
	32	J-K-T and D types flipflops
	33	Applications of flipflops
12.	34	Shift registers
	35	Applications of shift registers
	36	Serial to parallel converter
13.	37	Parallel to serial converter
	38	Ring Counter, sequence generator
	39	Ripple counter
14.	40	Synchronous counters
	41	Counters design using flipflops
	42	Special counter IC's, Asynchronous sequential counters, Applications of counters
	UNIT – IV	
15.	43	Digital to analog converters
	44	Analog to digital converters
	45	Semiconductor memories and programmable logic devices