

LESSON PLAN

Teaching(*)

Remarks

LESSON PLAN

Subject Code & Name: 20EST205 & Digital Logic Design

Branch: C.S.E /IT/CSM/CSD

Class / Semester: II/I

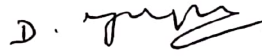
Academic Year: 2023-24

Contact Hour (Cumulative)	Topic	Unit No.	Teaching Methodology
1	Blooms Taxonomy fundamentals. Outcome based education. Review of Number Systems: Introduction to Number Systems: Decimal, Binary, Octal and Hexadecimal	I	Chalk & Board
2	Base conversion methods.		"
3	Base conversion methods.		"
4	Complements of numbers and its importance. r's & r-1's complement subtraction with examples		"
5	BCD codes, Excess 3 codes		"
6	Gray codes and Conversions		"
7	Problems and Solutions		"
8	Problems and Solutions		"
	Logic Operations:	II	
9	Gates - AND, OR, NOT, NAND, NOR, XOR, XNOR		Chalk & Board
10	Boolean theorems		"
11	Complements and dual of logic expressions		"
12	Standard SOP, POS		"
13	Minimization of logic functions using theorems		"
14	Minimization of logic functions using theorems		"
15	Multilevel NAND-NAND realization		"
16	Multilevel NOR-NOR realization		"
	Minimization of switching functions:		
17	Using K-map (2,3 variable)		"
18	Using K-map (4 variable)		"
19	Problems on Quine-McCuskey Method		PPT
20	Combinational Logic Circuits - I	III	
21	Design of Half & Full Adders		Chalk & Board
22	Design of Half Subtractor & Full Subtractor		"
23	Design of carry look ahead adder		"
24	Design of 4-bit binary adder		"
25	Design of 4-bit binary Subtractor		"
26	Design of BCD Adder		"
27	Design of Excess-3 adder		"
28	Discussion and Problems solving		
	Combinational Logic Circuits - II	IV	
29	Design of Decoders		Chalk & Board

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30	Design of Encoders		"
31	Design of Priority encoder		"
32	Design of multiplexers-2x1, 4x1		"
33	Design of multiplexers-8x1, 16x1		"
34	Design of De-multiplexers		"
35	Comparators 2 bit and 4 bit		"
36	BCD to 7segment display		PPT
37	Problems and Solutions		Chalk & Board
38	Introduction to programming logic devices, PLA realization	V	"
39	PAL realization, PROM realization		"
40	Realization Boolean Function PROM,PAL,PLA		"
41	Realization of Boolean function using PROM,PAL,PLA		PPT
42	Programming Tables of PLA, PAL and PROM		PPT
43	Programming Tables of PLA, PAL and PROM		PPT
44	Comparison of PAL,PLA,PROM		Chalk & Board
45	Problems and Discussions		Chalk & Board
46	S-R Latch, Flip-Flop, D Flip-Flop, T Flip-Flops, J-K,	VI	Chalk & Board
47	Conversion of Flip-Flops		"
48	Design of Ripple counters		"
49	Design of synchronous counters: 4-bit binary		"
50	Design of shift Registers, Design of buffer shift registers		PPT
51	Design of Bi-directional shift registers, Design of universal shift register		PPT
52	Design of Johnson & Ring counters		Chalk & Board
53	Discussion on end semester examination		Chalk & Board


FACULTY


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(Dr. D.Yugandhar)


HEAD OF THE DEPARTMENT