

LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Revision
		<u>UNIT-I</u>				
		<u>Operational Amplifiers</u>	I			
1	17-10-13	General considerations one stage op-amps, two-stage op-amp gain		CR		
2	18-10-13	Boosting, straght compensation Input voltage limitation Slow rates		CR		
		<u>CURRENT MIRRORS</u> <u>SINGLE STAGE AMPLIFIERS</u>	I			
3	18-10-13	Simple CMOS, BJT current mirrors		CR		
4	24-10-13	currcote wilson wilson current mirrors		CR		
5	25-10-13	Common source follower common gate Amplifier		CR		
		<u>NOISE</u>	I			
6	25-10-13	Noise in noise, thermal noise, flicker noise Noise in op-Amp		CR		
7	30-10-13	Noise in common source stage noise Band width		CR		
		<u>UNIT-II</u>	II			
		<u>PHASE LOCKED LOOP</u> Design				
8	31-10-13	PLL concept & PLL loop in the Locked Range condition		CR		
		Integrated circuits, PLL's phase detector				
9	01-11-13	VCO case study, Analysis of 560B monolithic PLL		CR		
		PLL				

LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
		UNIT - III				
		<u>SWITCHED CAPACITOR CIRCUITS</u>	III			
10	01.11.13	Basic building blocks op-amp capacitor switches non-overlapping capacitors		OR		
11	07.11.13	Basic operation and Analysis - register equivalence of switch capacitor		CR		
12	08.11.13	parasitic nonlinear Integrator and parasitic Invertive Integrator Signal Flowgraph Analysis		CR		
13	08.11.13	First order filter switch shunting, full differentiation filter charged Injection		OR		
14	21.11.13	switched capacitor gain circuits, parallel resistor capacitor circuit		CR		
15	22.11.13	parallel table gain circuit, other switched capacitor circuits, Full wave rectifier peak detector simulation oscillators		OR		
		UNIT - IV	IV			
		LOGIC FAMILIES AND CHARACTERISTICS				
16	22.11.13	CMOS, TTL, ECL Logic families		PPT		
17	27.11.13	CMOS/TTL Interfacing comparison of logic families		PPT		

LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
		UNIT - IV COMBINATIONAL LOGIC DESIGN USING VHDL	IV			
18	28.11.13	VHDL Modeling for Decoder, Encoder multiplexer		PPT		
19	29.11.13	Comparing Adder and Subtractor SEQUENTIAL DESIGN using VHDL	IV	PPT		
20	29.11.13	VHDL modelling for latch, D/F's, counter, shift register		PPT		
21	05.12.13	FSM, ASM on soft		PPT		
		UNIT - V				
		DIGITAL INTEGRATED SYSTEMS BUILDING BLOCKS	V			
22	05.12.13	Multiplexers and Decoders		PPT		
23	06.12.13	Barrel shifter, Counter Digital single bit Adder		PPT		
		MEMORIES	V			
24	11.12.13	Ram Internal structure 2-to-decoding command		PPT		
		type, timing and Application				
25	12.12.13	RAM Internal structure		PPT		
		CPLD	V			
26	13.12.13	xc9500 series family CPLD structure		PPT		
		CLB Internal structures				
27	13.12.13	I/O Block Internal structure		PPT		

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
		<u>FPGA</u>	V			
28	19.12.13	conceptual overview of FPGA		PPT		
29	20.12.13	demutualization Based on CLB Internal Architecture				
		I/O Block Architecture		PPT		
		<u>UNIT-VI</u>				
		<u>COMPARATORS</u>				
30	20.12.13	using op-Amp for a Comparator, Chi-square	VII	CR		
		Injection emv. latch comparators				
		<u>NYQUIST RATE A/D CONVERTERS</u>	VII			
31	26.12.13	Decoder Based converters Resister String converters		CR		
32	27.12.13	Folded Register, String converter, binary scaled		CR		
		converter				
33	29.12.13	Binary weighted Register converter, reduced Resistance Ratio Ladder		CR		
34	03.01.14	R-2R Based converter Thermo motor code		CR		
		current mode D/A converter				
		<u>NYQUIST RATE A/D CONVERTER</u>	VII			
35	04.01.14	Integrating converter, successive approximation converter		CR		
36	04.01.14	DAC Based Successive Approximation, Flash converters		CR		

Time Interleaved A/D converter