

Lesson Plan		
Name of the Institute:	CVRP	
Department:	ETC	
Semester/Division/Branch:	5th/ETC	
Subject Name with code:	VLSI & EMBEDDED SYSTEM Th.2	
Total No. of Class (Required):	60	
Faculty Name:	SUCHISMITA SATPATHY	
Class No.	Brief Description of the Topic/Chapter to be taught	Remarks
1	HistoricalprospectiveofMOS.	
2	Basicoperationof MOSFET.	
3	StructerandOperationof MOSFET.	
4	MOSFETV-Icharecteristics.	
5	MOSFETscalingandsmallgeometry effect.	
6	MOSFETcapacitance.	
7	ModellingofMOSFET,SPICELEVEL-1,LEVEL-2&LEVEL-3Model.	
8	DoubtClearingclassforChapter-2	
9	DoubtClearingclassforChapter-2	
10	MOSfabricationprocess.	
11	N-MOSfabricationprocess.	
12	C-MOSfabricationprocess.	
13	MOSfabricationprocessby n-well onp-substrate.	
14	C-MOSfabricationprocessbyp-well onn-substrate.	
15	Layoutdesignrule.	
16	StickDiagramofC-Mos.	
17	VLSIdesignmethodology.	

18	Y-Chart.	
19	DoubtClearingclassforChapter-3	
20	DoubtClearingclassforChapter-3	
21	Basicn-MOS Charecterstics.	
22	DescribtionofInverterwithresistiveload,activeenhancementload.	
23	Activedepletionn-MOSinverter.	
24	Detailsofc-MOSinverterwith charecteristics.	
25	Inventordesign.	
26	DoubtClearingclassforChapter-4	
27	DoubtClearingclassforChapter-4	
28	Staticlogic.	
29	Staticc-MOSlogic circuit.	
30	XOR andXNORc-MOS logic circuit.	
31	ComplementaryPassTransisterlogic(CPL)	
32	Dynamiclogicanddifferencewithstatic logic.	
33	Highperformancedynamicc-MOS circuit.	
34	D-RAM,S-RAMandFlashMemeory.	
35	SRFlipflop.	
36	ClockedSR-FlipflopandD-Latch.	
37	DesignlanguageofSPL&HDL.ExplanationofHDL&EDAtools.	
38	DesignstratergyandconceptofFPGA.DesignflowusingVHDLandPackage Xlinx.	
39	RTL,GateLevelLanguage	
40	VHDLusingCPLDorFPGA	
41	BasicVLSI Testing.	
42	Simulationatvariouslevelincludingtimingverification,faultsmodels.	

43	DoubtClearingclass.	
44	DoubtClearingclass.	
45	EmbeddedSystemsOverview,listofembeddedsystems	
46	CharacteristicsofembeddedSystem,example–ADigitalCamera	
47	EmbeddedSystemsTechnologies--Technology–Definition	
48	TechnologyforEmbeddedSystems-ProcessorTechnology-ICTechnology	
49	DesignTechnology-ProcessorTechnology,GeneralPurposeProcessors–Software, BasicArchitectureofSinglePurposeProcessors– Hardware	
50	DesignTechnology-ProcessorTechnology,GeneralPurposeProcessors–Software, BasicArchitectureofSinglePurposeProcessors– Hardware	
51	Application–SpecificProcessors,Microcontrollers,DigitalSignalProcessors(DSP)	
52	Application–SpecificProcessors,Microcontrollers,DigitalSignalProcessors(DSP)	
53	ICTechnology-FullCustom/VLSI,	
54	ICTechnology-FullCustom/VLSI,	
55	Semi-CustomASIC(GateArray&StandardCell),PLD (ProgrammableLogicDevice)	
56	Semi-CustomASIC(GateArray&StandardCell),PLD (ProgrammableLogicDevice)	
57	BasicideaofArduinomicrocontroller	
58	DoubtClearingclass.	
59	DoubtClearingclass.	
60	RevisionandDoubtclearing class	



(Sign. of Faculty/LA)
Prepared by(LessonPlan):



(Sign.ofH.O.D/In-charge)
Reviewed by