SUMMER TRAINING (6 Weeks) – 2014

VLSI Design & FPGA Implementation

DAY	THEORY	PRACTICAL
	WEEK – 1	
1	**Overview to Digital Design:** Introduction to Digital Design	Introduction to EDA Tools
2	Digital Design-1	Design Entry Tools
3	Digital Design-2	Simulation Tools
4	Digital Design-3	Lab- Exercise
5	Finite State Machine concepts	Lab- Exercise
	WEEK – 2	
6	Introduction VLSI Design flow	Test-1
7	Introduction to VHDL	Lab- Exercise
8	Various Modeling styles	Lab- Exercise
9	Data types	Lab- Exercise
10	Data types /VHDL statements	Assignment-1
	WEEK – 3	
11	VHDL Modeling of Combinational circuits- 1	Lab- Exercise
12	VHDL Modeling of Combinational circuits -2	Lab- Exercise
13	VHDL Modeling of sequential circuits – 1	Lab- Exercise
14	VHDL Modeling of sequential circuits – 2	Lab- Exercise
15	Test -2	Lab- Exercise
	WEEK – 4	
16	FSM based Modeling of Digital Circuits-1	Lab- Exercise
17	FSM based Modeling of Digital Circuits-2	Lab- Exercise
18	Introduction to: Full-Custom, Semi-Custom Design	Introduction to Xilinx FPGA Kit
19	FPGA Based Design Flow	Lab- Exercise
20	FPGA Based Design Flow	Lab- Exercise
	WEEK – 5 & 6	
Project : Design and Implementation of a Digital Circuit In the mid of 6th week each student will submit a project report which will be having significant contribution in total grading for the training.		