SUMMER TRAINING (6 Weeks) – 2014

ADVANCED MICROCONTROLLER (AVR) & ITS INTERFACING

DAY	THEORY	PRACTICAL
WEEK – 1		
1	Introduction to Embedded Systems	AVR Studio demo
2	Embedded Systems Development Environment	AVR Studio demo
3	Familiarization with components	STK 500 Demo
4	Introduction to Microprocessor/ Micro controller	STK 500 Demo
5	RISC AVR 8515 Architecture	Lab- Exercise
WEEK – 2		
6	Addressing Modes	Lab- Exercise
7	Programming (Data Handling)	Lab- Exercise
8	Programming (Branching Instruction)	Lab- Exercise
9	Programming (Arithmetic/Logical)	Lab- Exercise
10	Test-1	Lab- Exercise
WEEK – 3		
11	Timers and Counters-1	Lab- Exercise
12	Timers and Counters -2	Lab- Exercise
13	Interrupts, Interrupt handling	Lab- Exercise
14	Push Button Interfacing	Lab- Exercise
15	Test-2	Lab- Exercise
WEEK – 4		
16	LED interfacing	Lab- Exercise
17	Interfacing LCD Displays	Lab- Exercise
18	Seven Segment Display	Lab- Exercise
19	Serial Communication	Lab- Exercise
20	Relays	Lab- Exercise
WEEK – 5-6		
Projects based on Microcontroller Interfacing		