**Indian Institute of Information Technology (IIIT) Chittoor, Sricity Questionnaire for BTP-Progress Evaluation**

**Wednesdays, 3:30 – 5pm**

**Spring 2016**

1. Describe what you have done in the last 3 weeks.

* Familiarization with Verilog HDL language.
* Familiarization with Xilinx Software
  + - * Writing the program
      * Simulation (Timing diagram)
      * RTL design layout(Behavioural and gate level)
* Read about Programmable Logic Devices and their design aspects(ROM, PLA, PAL, 16R4, 22V10)
* Simulated some combinational and sequential circuits (adder, Flip-Flop, counter, Register).

2. How many times did you meet / talk with your faculty / guide?

* 5-6 times.

3. How many papers / articles / technical materials have you read in the last 3 weeks?

* Following the video lectures on Digital VLSI System Design by Prof. S. Srinivasan and Dr. S. Ramachandran (IIT Madras)
* Digital Logic and Design (Morris mano)
* Verilog Tutorial PDF’s

4. Provide a brief summary of your learning?

* I am able to successfully write the program in verilog in Xilinx and able to simulate it. I have written programs for simple logic gates, combinational logic circuits and sequential logic circuits.

5. What development / programming / practical activity did you do in the last 3 weeks?

Wrote program and simulated successfully for the following:-

* + - Simple logic gates
    - Adder (2-bit, 4-bit, user defined number of bits)
    - Multiplexer and demultiplexer
    - Encoder and decoder
    - Flip-Flop
    - Memory using D-FF

6. How close/far are you from the milestone set by your Guide?

* + Require some more time and experimentation with the FPGA kit.

7. What specific challenges are you facing/you faced in the last 3 weeks?

* + Working with Xilinx
  + I don’t have the FPGA kit so synthesis part and implementation part is still left.

8. Propose your plan for the next 3 weeks; as agreed with your supervisor. It would be verified in the next round (Q1).

Random Access Memory design starting with 8byte, 32byte, MB, GB etc. I should be able to create a memory and store values in the memory whose address can be used to read the data.