

Code: R7 420404

**R7** 

## B.Tech IV Year II Semester (R07) Advanced Supplementary Examinations, June 2012

## DIGITAL DESIGN THROUGH VERILOG

(Common to ECE and ECC)

Time: 3 hours Max Marks: 80

Answer any FIVE questions All questions carry equal marks

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- 1 Write short notes on:
  - (a) Programming language interface.
  - (b) Concurrency.
- 2 (a) Write a verilog code for master slave JK flip flop using NAND gates.
  - (b) Design module to illustrate use of the wand-type net and test bench with stimulation results.
- 3 (a) Explain forever loop.
  - (b) Explain briefly about stratified event queue.
- 4 (a) Design CMOS switch with a single control line.
  - (b) Write short notes on Bi-directional gates.
- 5 (a) Explain clearly about hierarchical access.
  - (b) Design verilog module for right shifter.
- 6 (a) Draw an SM chart for the control unit.
  - (b) Explain briefly about SM block with feedback.
- 7 (a) Write differences between FPGA and CPLD.
  - (b) Explain clearly about dice roll controllers.
- 8 Give detailed cycle by cycle operation for 6805 instructions.

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