

## UNIVERSITY OF TEHRAN

## Electrical and Computer Engineering Department Digital Logic Design, ECE 367 / Digital Systems I, ECE 894 Spring 1399-00

## Computer Assignment 1 Basic Switch and Gate Structures in SystemVerilog Week 3

Name:	
Date:	

## **Deliverables:**

Generate a report that includes item discussed below for each of the five parts of this CA.

- A. Show the circuit diagram that you are analyzing. Show gates and/or transistors according to the specified delays.
- B. Hand-simulate the circuit you have shown in Part A and write your expected values. For example, indicate what values you expect for the worst-case delays and express your reason for that.
- C. Show your SystemVerilog description of the design you are simulating and the testbench for it. Best is to use the Snip tools to get the image from Notepad++. This way you see all keywords and indentations. Make sure your SV codes are properly indented and all line-up rules are followed.
- D. Show an image of the project that you have created in ModelSim for the simulation of your circuit.
- E. When simulation is complete, or even if you have a partial simulation, include an image of the output waveform showing signal names being displayed.

Make a PDF file of your report and name it with the format shown below: FirstinitialLastnameStudentnumber-CAn-ECEmmm

Where *nn* is a two-digit number for the Computer Assignment, *mmm* is the three-digit course number under which you are registered, and hopefully you know the rest. For the *Firstinitial* use only one character. For *Lastname* and for the multi-part last names use the part you are most identified with. Use the last five digits of your student id (exclude 8101) for the *Studentnumber* field of the report file name.