CS225
Spring 2020
ESE

Indian Institute of Technology Patna

Department of Computer Science and Engg

CS225: Switching Theory

Total marks: 100

Instructions

Attempt all the questions. Marks are given in [ ].

Submit by date: 14 July 2020/ 11:00PM

Submissions must be sent to the following link (Document A1, A2 and A3-Single file) and Files A2.circ, A3.circ

https://docs.google.com/forms/u/0/d/e/1FAIpQLSeP4jEPTC_bYisq28QHuRhXRTVpgmc-JFvTrVKNEphS552ljg/formResponse

Submissions must be also uploaded to the following link in a single zip file (use roll number as the filename);

https://u.pcloud.com/#page=puplink&code=FJP7ZllgXT9XE19YGLPPdBqb8cSygXHXV

Make appropriate assumption if required. Do not send any response to the personal emails of the instructor. If you do so, your paper will not be evaluated.

Assignments:

A1: Write a critical analysis report on Computer memory Architectures: Past and Present. (Use tables for critical comparison, type Architecture, Number of Transistors, , Memory Capacity, speed, year of introduction, application, power consumption, technology used etc.)

[30 Points]

A2: Identify a practical problem that you are familiar which can be formulated as a Finite State Machine (FSM). Clearly state the problem and solve using one of the FSM design approaches. Show all

the states, inputs , outputs, and design steps. Each state is represented with a circle, and each transition with an arrow. Simulate the solution using Logicsim and include screen shots in the assignment file (Also submit *.circ file; use filename Roll_no_ A2.circ)

[40 Points]

A3: Design an experiment which conveys one of the concepts in CS225. Clearly state the aim of the experiment, method of solving , and solution. Create a logic-sim set up and simulate the same to convey the concept and include screen shots in the assignment file(Also submit also *.circ file; use file name:Rollno_A3.circ

[30 Points]