## CS 5323 SPRING 2018 EXAMINATION 1 PROF. RAVI SANDHU DUE MONDAY MAR 26, 2018 BY MIDNIGHT CENTRAL

- Each examination is to be solved by students individually. Students can access whatever material they choose but cannot discuss with **anyone**.
- It is highly unlikely that web browsing will effectively help with the solution. Anything you find on the web may well be wrong and too complicated. Spend more time and effort thinking. Don't waste all your time browsing. Some browsing is appropriate and should help craft a good answer.
- If your answer is based on material you found elsewhere, you must cite the source. No penalty for using an external source. Failure to cite a source is an act of academic misconduct.
- I am not looking for a specific or "correct" answer. I am looking for demonstration that you can think through the question and answer it coherently based on my lectures and supporting material. I have not thought through what my own answer to these questions might be. I am interested in seeing what answers the class can come up with.
- If you have doubts about the meaning of any of the questions, note that in your answer and explain how you understood the question.
- Discussion and mention of irrelevant issues will be penalized.
- Use of incorrect and sloppy English will be penalized.

Answer all questions. All questions have equal weight.

Each question has maximum 1 page allowance for answer in 11 point font single space.

You are not required to use the full space.

A significantly shorter answer is likely to be inadequate.

## **Submission Guidelines**

- Solutions are to be submitted by email in pdf to ravi.utsa@gmail.com with
  - o subject title "Exam 2: <lastname, firstname>"
  - o name of attached file: "Exam 2: <lastname, firstname>.pdf"
- Text must be typed. Hand drawn figures are acceptable if appropriate but must be scanned and incorporated in submitted pdf. Figures must fit within the specified size limit for the entire answer.

- 1. Consider definition 1 in the RBAC96 paper provided on the class web site (Sandhu, R. S., Coyne, E. J., Feinstein, H. L., & Youman, C. E. 1996. Role-based access control models. IEEE Computer, 29(2), 38-47.) Suppose the requirement in the fifth bullet is changed from union to intersection. Present a use case for which this modified definition would be useful.
- 2. Would you recommend this change?

There are only 2 questions