

Qual Exam Cover Page, Spring 2022

Part I: Algorithms

March 4, 2022, Friday, 9am–4pm – SC 2102

Part II: Automata and Complexity

March 11, 2022, Monday, 9am–4pm – SC 2102

Instructions

- (A) This is a closed book/internet exam. You would have to submit a signed copy of a statement saying that you had not used any book/internet research in doing the exam, and had not communicated about the exam, during the exam period (March 1 and 2 any plane on earth), with other participants.
- (B) Each part of the exam has four problems worth 100 points each. Read all the problems carefully to see the order in which you want to tackle them. You have an 8 hours window to submit the exam.
- (C) Write clearly and concisely. You may appeal to some standard algorithms/facts from textbooks unless the problem explicitly asks for a proof of that fact or the details of that algorithm.
- (D) If you cannot solve a problem, to get partial credit write down your main idea/approach in a clear and concise way. For example you can obtain a solution assuming a clearly stated lemma that you believe should be true but cannot prove during the exam. However, please do not write down a laundry list of half-baked ideas just to get partial credit.
- (E) In problems with multiple parts, if you cannot solve a part, you can still solve subsequent parts (assuming that claims from earlier parts are true) and get partial credit.
- (F) Please answer each question in its own file, and upload it to gradescope. That would make grading somewhat easier for us.

May the vaccine be with you!
