

Your name:

CSE 30341 Operating Systems: Module 5 Exam

OPEN BOOK, OPEN NOTES, CLOSED ELECTRONIC SEARCHES

INDIVIDUAL EFFORT

DURATION: 30 MINUTES

Keep It Simple. You may write your justification for your answer in the space below. I may look at the argument to give partial credit. You can also use these argument to convince me in person that your answer was correct (using only the assumptions and arguments written by you in the answer). Football penalty rules do not apply to his exam, there will be no penalty for you in trying to convince me

- 1) Exercise 12.8: Could a RAID level 1 organization achieve better performance for read requests than a RAID level 0 organization (with nonredundant striping of data)? If so, how?
- 2) You are in the market to buy a new hard disk for your desktop. You are debating between two hard disks, disk A: offers 100 GB of storage and operates at 15000 RPM while disk B: offers 300 GB of storage operating at 4200 RPM. They both cost the same. Assume that you only require 50 GB of storage. Under these circumstances, which hard disk would you choose and why? (your answer should specify the expected workload in justifying your answer)
- 3) Your friend builds a new RAID scheme that mirrors two partitions in the same disk. Do you think that this is a good idea? Explain your rationale?

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4) Discuss the strengths and weaknesses of implementing an access matrix using capabilities that are associated with domains (Exercise 14.6)

5) How can systems that implement the principle of least privilege still have protection failures that lead to security violations? (Exercise 14.14)