Important: This is a closed book test. You cannot use any books, notes, paper, or electronic device but are permitted to use one 5×3 note card with your self-prepared notes. *Do not log into the computer during the test, or use any electronic or communications device. Change your cell phones to silent mode.* Any calculations and rough work can be done on the back side of the test pages. If there is a syntax error in any program segment, just write it down and you will get full credit for the problem. You will lose five points for not writing your name.

1. [6 pt] Name one non-IT-related service that the cloud consumer can safely assume will be handled by the cloud service provider, regardless of the cloud service being used.

2. [6 pt] We have been talking about moving applications into the cloud, and discussed their pros and cons. Can you think of a class of applications that are *not* suitable for the cloud?

3. [10 pt] I am starting a new company to analyze videos. I'll need a lot of storage as videos consume quite a bit of disk. Additionally, I'll need ample computational power, possibly running applications concurrently. I have discovered some very good tools to facilitate development in Windows but the deployment will be more effiicently handled in the Linux environment. All the pointers say that I need to move to cloud. I have found that SaaS is the most attractive service, followed by PaaS and IaaS, in that order. Given the above information, which service do you recommend. Why?

4. [6 pt] As the Internet arrived, "software vendors could ... deliver services as hosted solutions, eliminating the need to procure and manage hardware on-site." How is this different from SaaS?

5. [6 pt] Briefly explain the stack components of PaaS.

6. [6 pt] What circumstances will justify the deployment of a private cloud in a corporation? Comment on both risk factors and human resources.

7. [6 pt] Briefly describe the reasons to choose RESTful services?

8. [6 pt] What factors will you use to audit security in an SaaS deployment?