**Instructions:** Carefully read each question below and provide as much detail as necessary to completely answer what is asked.

1. What is LDAP? How would you describe what it does to a non-technical person? (2 points)
2. Draw a picture that you would use to help explain the previous question. (4 points)
3. What is an example of an LDAP namespace? (2 points)
4. Using your example from the previous question; what would be the root entry? (2 points)
5. What is an example of an LDAP container object? What about a leaf object? (2 points)
6. What are attributes and give 3-examples of them. (4 points)
7. For each acronym, define what it is and give an example of it. (10 points)
   1. DIT
   2. DN
   3. CN
   4. RDN
   5. DC
8. What are two ways we could go about installing OpenLDAP on our Ubuntu Server? (2 points)
9. What commands would we use to run two instances or clones of nginx web server? Please provide 2 commands, which use the following names: nginxone, nginxtwo. (6 points)
10. On the left side of this paper, create a diagram of a database, a table, and a tuple. Be sure to label each one. (3 points)
11. On the right side of this paper, draw two tables and show the primary and foreign key relationship between both. (3 points)
12. On the back of this exam, please provide an example of an IT process, list out any problems/issues within the process, and what might you do to either improve it or simplify the process. Attention to detail is important. (6 points)
13. What technology did you learn about this semester that was the most useful? What wasn’t so useful? (2 points) Extra Credit: Explain why for both. (2 points)