Quiz Number 5

Close Book; Close Notes
Time Given=15 minutes

“I certify that I have neither received nor given unpermitted aid on this examination and that I have reported all such incidents observed by me in which unpermitted aid is given.”

Signature ____________________________

Name ____________________________ Student ID ____________________________

Problem 1: [2 points] Give at least one scenario when using XDR is more expensive than using native data format?

Problem 2: [3 points] A fictitious network has several machines with various architectures; each architecture uses different native representation of data. Assume that the total number of different architectures is five. Thus we are confined to only five different data formats. If all the clients in the network are confined to machines with three different architectures and all the servers are running on the two remaining architectures, what is the total number of different versions of client-server program an application programmer may need to write?

Problem 3: [5 points] Let the file permissions for user, group, and other are represented by concatenated octal digits. That is, 644 which is equivalent to 110 100 100 denotes read permissions for user, group, and other in addition to write permissions for user. Consider the creation of a text file in the system. In each of the following cases, write the resulting permissions for the file in the concatenated octal digits format:

(a) umask was set to 032; resulting permissions:

(b) umask was set to 033; resulting permissions:

(c) umask was set to 077; resulting permissions:

(d) umask was set to 022; resulting permissions:

(e) umask was set to 044; resulting permissions: