MCA (Revised)

Term-End Examination

June, 2008

MCS-022 : OPERATING SYSTEM CONCEPTS AND NETWORKING MANAGEMENT

Time : 3 hours   Maximum Marks : 100

Note : Question number 1 is **compulsory**. Answer any **three** questions from the rest.

1. (a) Describe the auditing facilities of Windows 2000.   5

    (b) What steps can one take to enhance the physical security of a computer ?   5

    (c) Why is it important to disable the NULL session on a computer in a network ? How can you do this in Windows 2000 ?   5

    (d) What is the general format of a Linux command ? How would you handle special characters in an argument to a command ?   5

    (e) What are the advantages of Linux as an operating system over those of the Microsoft family ?   5

    (f) How would you harden a Windows 2000 system to reduce the vulnerability of a guest account ?   5

(g) How can a Windows 2000 machine be assigned an IP address at startup ?   5

(h) How does a thread differ from an operating system process ?   5

2. (a) Describe the File Transfer Protocol (FTP) and the usage of the ftp utility. What are its security loopholes ?   10

(b) You have a file in Linux on which you do not have write permission. If you do have write permission on the directory in which the file is located, how can you change the contents of the file ?   6

(c) What are the characteristics of the 7 RAID levels ?   4

3. (a) Describe the working of the IPsec framework for private transmission over an IP network.   10

(b) What are the standard input, standard output and standard error in Linux ? How are they used in pipelines and filters ?   6

(c) Describe the cal command and its important options.   4

4. (a) What is symmetric multiprocessing ? Describe its architecture and benefits.   8

(b) How does one set up a domain in Windows 2000 ? How are trust relationships between domains established ?   8

(c)   How does the shadow password file enhance security
       in Linux ?   4

5.   Describe the following with examples where needed :

                                                              4×5=20

(a)   Dynamic IP address allocation

(b)   Full, incremental and differential backup

(c)   we command in Linux

(d)   Windows Explorer