

MCA (Revised)
Term-End Examination
June, 2007

**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.

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1. (a) What are the goals of computer security ? 5
- (b) Describe the microkernel approach in modern operating systems. Also write the advantages of this approach. 5
- (c) What is a repeater and what are its uses and characteristics ? 5
- (d) What are the offline file features in Windows XP and how would you enable them and disable them ? 5
- (e) How can you change the password in Linux ? What are the precautions that should be taken while choosing a password ? 5

- (f) Write a Linux shell script to shift all characters in a file forward by 3 characters. (Thus 'a' becomes 'd', while 'z' becomes 'c'.) 5
- (g) What are the different principles of user authentication and how are they used ? 6
- (h) Describe the available security features while managing pointers in Windows 2000. 4
2. (a) Describe the various kinds of transmission media with their characteristics, advantages and disadvantages. 8
- (b) How does the remote access mechanism in Windows 2000 work and how can it be configured ? 8
- (c) What is a UPS and why is it used ? Describe the different kinds of UPS systems. 4
3. (a) Describe the working and usage of the vi editor in Linux with the help of Add, Delete, Copy, Find and Replace commands. 10
- (b) Show how to configure the Apache web server for the Linux operating system. 6
- (c) What are the security controls that should be implemented for access to a computer system ? 4
4. (a) Describe the structure and usage of Active Directory in Windows 2000. 8

- (b) How would you use an instant messaging application like Yahoo Messenger in Linux ? Explain with the help of commands. 8
 - (c) What is a gateway ? Describe its purpose and working. 4
5. Describe the following with suitable examples : 20
- (i) The three types of data flow
 - (ii) Structure of Unix operating system
 - (iii) Features of "Write" command in Linux
 - (iv) Domains in Windows 2000

