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**MCS-022** 

## MCA (Revised) / BCA (Revised) Term-End Examination

## MCS-022 : OPERATING SYSTEM CONCEPTS AND NETWORKING MANAGEMENT

Time : 3 hours

Maximum Marks : 100 (Weightage 75%)

Note: Question no. 1 is compulsory. Answer any three questions from the rest.

1. (a)	Explain the features of User mode and Kernel mode of Windows 2000 operating system. 5
(b)	List and explain the significance of any five networking devices. 7
(c)	Explain the file access control methods provided by Linux operating system. Give an example for each. 8
(d)	Write the step-by-step procedure to configure domain name server in Linux operating system.
(e)	List and describe the different security features in Windows 2000 operating system. 10
(f)	Define Distributed Operating System. 2
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- 2. (a) Write a Linux shell script that will convert all numeric digits present in a text file into "\*". The path of the text file would be given by the user.
  - (b) Explain the following with reference to file organisation of Windows 2000 operating system:

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- (i) File Replication Service
- (ii) NTFS
- (iii) FAT 16
- (iv) FAT 32
- **3.** (a) Which protocol is used by TFTP at the transport layer ? Also, give any two advantages of TFTP and FTP.
  - (b) Discuss the importance of "Backup Domain Controller" in Windows 2000 operating system.
  - (c) What is virtual memory ? Explain the abstract model of virtual to physical address mapping with reference to Linux operating system.
- 4. (a) Write the steps to change the password in Linux ? What are the precautions that should be taken while choosing a password ?
  - (b) Describe the concept of encryption using EFS services.

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- What is a filter ? Give two examples to demonstrate the use of filters in Linux/Unix.
- (d) Explain the output of the following Linux/Unix commands :
  - (i) \$ date who
  - (ii) \$ diff abc.txt xyz.txt
  - (iii) \$ man who
  - (iv) \$ ls -a

(c)

(v) \$ pwd

5. Write short notes on the following :

 $4 \times 5 = 20$ 

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- (a) RAID Levels
- (b) TCP/IP Model
- (c) SNMP Architecture
- (d) Virtual Private Network

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