

MCA (Revised)

Term-End Examination

December, 2009

04094

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) How distributed operating system is better than network operating system ? Explain. 4
 - (b) Explain the different methods used in LAN data transmissions. 6
 - (c) Which protocol is used by TFTP at the transport layer ? Also, give any two advantages of TFTP over FTP. 5
 - (d) List the different file systems supported by windows 2000 ? Why the new version NTFS provided by windows 2000 has better performance and reliability. 5
 - (e) Write the steps in window 2000 for creating a group called "Programmer" and for adding a user named "Rajeev." Assume user is already a member of guest account. 5

- (f) List any five standard control features those should be implemented for user passwords. 5
 - (g) What is "Backup Domain Controller" in Window NT ? Explain its importance in Security Management. 5
 - (h) Write a shell program to 'Reverse' an Input string. 5
- 2.
- (a) What is the kernel approach of operating system design ? How does this differ from client-server approach ? Explain its advantages. 8
 - (b) What is X-Window system ? Explain the X-windows library and X-Toolkit. 5
 - (c) Give an advantage and a disadvantage of enabling offline files in windows XP environment. Also mention some useful option that can be set for users with an unreliable network connection. 7
- 3.
- (a) Explain the method to change the file permissions using octal mode and rwx mode, in LINUX. Give an example for each case where we want to change the permission of a file called nav.txt such that only the owner may have all the permissions on this file and others will have only read permission. 5

- (b) List the important components of domain name server. Also, explain how the Domain Name Server is configured in LINUX. 9
- (c) Explain the importance of pipes, filters and redirection commands in LINUX. Give an example for each. 6
- 4. (a) What are print servers ? How are these configured ? Also, in Windows explain the importance of print queue management. 7
- (b) What is Kerberos ? How is it used in window 2000 network for client authentication ? Explain the complete authentication process. 7
- (c) What are the functions and purpose repeater ? Which layer of OSI model does it operate in ? Can we use repeaters to join two cable segments using different access methods ? Justify your answer. 6
- 5. Describe the following with illustrative examples or diagrams as needed : 4x5=20
 - (a) Wide Area Network
 - (b) SNMP Architecture
 - (c) Fault Tolerant System
 - (d) Windows 2000 layered Architecture

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