

No. of Printed Pages : 4

MCS-022

M.C.A. (REVISED)/B. C. A. (REVISED)

Term-End Examination

June, 2022

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

Time : 3 Hours

Maximum Marks : 100

Weightage : 75%

Note : (i) *Question No. 1 is compulsory.*

(ii) *Attempt any **three** questions from the rest.*

1. (a) Explain the output of the following Linux/Unix commands : 5
- (i) date who
 - (ii) diff abc.txt xyz.txt
 - (iii) man who
 - (iv) ls-a
 - (v) pwd

P. T. O.

Download all NOTES and PAPERS at Stude

- (b) Explain the concept of filters and pipelines in Linux operating system. Give example for each. 5
- (c) What is the default location of print spooler in Windows NT ? Name the different permissions that can be set for printers in Windows NT. Explain the significance of each. 5
- (d) What do you understand by disk striping ? What are the limitations of disk striping ? List the RAID levels. 5
- (e) Describe the structure and characteristics of any *two* types of guided transmission media. 5
- (f) Differentiate between data terminal equipment and data transmission equipment. Give example of each. 5
- (g) What is VPN ? Write the purpose of VPN and name the VPN technologies supported by Windows 2000. 5
- (h) Explain the architecture of Simple Network Management Protocol (SNMP), with the help of a suitable diagram. 5

2. (a) Write 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. Support your code with suitable comments for better readability. 10
- (b) Compare multiprocessing and multitasking. Give suitable example for each. 10
3. (a) List and explain various network topologies. Write *one* advantage and disadvantage of each. 10
- (b) With reference to security system and facilities, explain the following : 10
- (i) System Access Control
- (ii) Data backup and off-site retention
4. (a) Discuss the functionality of user and kernel modes of Windows 2000 operating system. 10

- (b) Explain the process and thread management in Linux Operating System. 10
5. Write short notes on the following : 4×5=20
- (a) Microkernel Architecture
 - (b) Data Backup Strategies
 - (c) Auditing in Windows 2000
 - (d) Group policy in Windows 2000
 - (e) Active directory in Windows 2000