

## UNIT-1 (60)

1. What is responsibility of a network administrator? (3)

Or

Why is network administration required? Discuss its goal and limitations? (3)

2. Why is system administration required? Discuss its goal and limitations? (2)
3. State & briefly explain any five system component that is to be managed by system administrator? (2)
4. Compare the WINDOWS & UNIX operating system based upon following criteria: (2)
  - File system
  - Memory management
  - Device management

Or

Difference between windows & UNIX operating system?

Or

What is main characteristic of UNIX file system?

5. Explain the directory structure of UNIX?
6. Briefly explain system performance tuning? (3)
7. What do you mean by open source software? How it is useful? List adv and disadv (4)
8. What do you mean by process? What are its various states? How process activities can be monitored?
9. How various processes are controlled in WINDOWS operating system?
10. Discuss the process of booting and shutting down of operating system i.e. UNIX /WINDOWS? (2)
11. Discuss the process scheduling in case of GNU PROJECTS?
12. What is action taken for killing a process?
13. What are advantages and disadvantages of running a process in the background? Having run a process in the background ? if you logs out what would happen to process then ?
14. Why schedules are required in a system? Differentiate between long term schedules & short term schedules?
15. What are various circumstances under which a process calls for process killing? How we can restart a process later?
16. .Discuss any three approaches which are used for disk spaces allocation.
17. What is swapping? Why it is required? (4)
18. What are difficulties encountered in integrating multiple operating system ? (2)
19. 17. Short note on backup and restoration?

Or

GNU PROJECTS backup & restoration.

20. What is difference between system software & application software? How system software installed and upgraded?
21. Describe NTFS file standard? Lists its advantages and disadvantages? (10) ()

22. How the file system can be partitioned? What are main factors affecting this partitioning? Why partitioning is required?
23. What do you understand by file system? Differentiate between UFS, NFS&NTFS?
24. Write various steps followed in creating partitions in Linux operating system.
25. Write short note on cloning systems?
26. Why is it important to able to identify users by their username? What role does logs & audits play in system & network administration?
27. What is role of privileged accounts? Do non-securable operating systems have such accounts?
28. What role thus grub play in the booting process?
29. Explain any 5 administrative commands along with there syntax?

## **UNIT-2(60)**

30. What is format of Class-A, B, C addresses? Discuss subnet addressing with help of e.g.? What is their requirement? How masking is done in subnetting?
31. Difference between fixed & variable masks? What is significance of each of them?
32. Write and explain any two techniques for TCP/IP trouble shooting? (2)

Or

What are the various steps required for TCP/IP trouble shooting? Discuss

Or

Write the use & syntax of following TCP/IP troubleshooting commands?

Ping, ipconfig, traceroute, ifconfig & netstat (2)

33. Write the procedure followed for configuration and authentication in dial up method? Explain any one protocol used in dial up network? (2)
34. Differentiate between static and dynamic routing? (3)
35. What is proxy server? What its benefits? Write the various steps of configuring a proxy server? (2)
36. What is router? Write and explain the procedure to configure a windows box as router?
37. Discuss working of RIP? And need of routing protocol (3)
38. Write step to configure DNS server? what role a DNS server plays (3)
39. Write a short note on python scripting tools?
40. What is VLAN? What is significance of VLAN?

Or

what is VLAN? What does trunking & frame tagging provide in establishing a VLAN? (10)()

41. Discuss BGP routing protocol?
42. What are various issue handled in network management?
43. Explain NAT and its purpose? (3)
44. Discuss OSPF routing protocol?
45. Define PPP & RAS?
46. Write various steps to be followed in configuring web server?(2)

47. Write a procedure for configuring SAMBA server?
48. SNMP protocol performs the functions of which network layer. What are the functions of SNMP? Justify the statements 'SNMP works as watch dogs'?
49. Write a shell programs to find the greatest among three numbers entered through the keyboard?

## **UNIT-3&4 (40)**

50. What is security planning? Discuss various categories of security? How they are implemented? Discuss significance of each of them.(2)

OR

What are the various levels at which security can be implemented in a system? Discuss how security is implemented.

51. What is DOS Attack? How does DOS can be detected & prevented? (3)
52. What do mean by a firewall? How it is different from IDS?and different type of firewall

Or

What is firewall? What are various filtering rules that firewall follow? Write what firewall can & can not block?

53. In your words explain how access control and monitoring is performed by administrator?
54. Write a short note on Perl scripting?
55. What is TCP Wrappers? (3)
56. Write short note on shell scripting?
57. Write a short note on CERT? (2)