

Dec.-23-0531

CS-604 (Linux Administration)

B.Tech. 6th (CBCS)

Time : 3 Hours

Max. Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Candidates are required to attempt five questions in all selecting one question each from sections A, B, C, D and all the subparts of the questions in Section E.

SECTION - A

1. (a) What is Open Source Software (OSS) and how does it work? What are the advantages of OSS? (5)
- (b) Compare the terms single users, multiple users and network users in view of operating system architecture. (5)
2. (a) What is the GNU Public License? Is GNU the same as Linux? (5)
- (b) How you can say command line provides power, control, and flexibility to the Linux users? Discuss. (5)

SECTION - B

3. (a) Explain about the domain and host naming conventions and the concept of subdomains with suitable example. (5)
- (b) Explain the importance of POP server and IMAP server. (5)

4. (a) Discuss about the features of apache module. (5)
- (b) Explain, how the SMTP protocol sends a message from one host to another. (5)

SECTION - C

5. (a) Explain the utility of Network File System (NFS) in Linux. Also discuss about features of each NFS version. (5)
- (b) Discuss the procedure to configure NFS clients under Linux System. (5)
6. (a) Discuss the impact in user's login process after NIS has been deployed for use. (5)
- (b) What is the use of SAMBA? Describe the SAMBA administrative functions. (5)

SECTION - D

7. (a) Explain the process creation mechanism with suitable diagram. (5)
- (b) Write a shell script to find the factorial of given number. (5)
8. (a) Write and explain the different commands to manage network resources. (5)
- (b) Write a shell script to find whether the given number is prime or not. (5)

SECTION - E (Compulsory)

9. (a) What is the significance of GNOME and KDE?
- (b) How X-Window System differs from the Windows GUI?

[P.T.O.]

- (c) Why does Linux not have a registry?
- (d) What do you mean by active and passive FTP?
- (e) What do you mean by mail transport agents (MTAs), mail delivery agents (MDAs), and mail user agents (MUAs)?
- (f) What is the use of Secure Shell (SSH) client program?
- (g) What do you mean by Host and Guest operating System?
- (h) What is the responsibility of DHCP server?
- (i) What is shell script?
- (j) Explain different shell tasks in detail. (10×2=20)