

Ty Bsc (IT) / (v) / Linux Administration / (70)

Q.P. Code : 23213

(Time: 2  $\frac{1}{2}$  hours)

Total Marks: 75

- N. B.:
- (1) All questions are **compulsory**.
  - (2) Make **suitable assumptions** wherever necessary and **state the assumptions** made.
  - (3) Answers to the **same question** must be **written together**.
  - (4) Numbers to the **right** indicate **marks**.
  - (5) Draw **neat labeled diagrams** wherever **necessary**.
  - (6) Use of **Non-programmable** calculators is **allowed**.

1. Attempt **any two** of the following: 10

- a. What are different Linux distributions? Explain each in brief.
- b. Explain the duty of the Linux system administrator in backing up and restoring files.
- c. Explain the booting process of the Linux operating system in detail.
- d. Explain the Extended 3 file system.

2. Attempt **any two** of the following: 10

- a. What are the different types of shells in Linux? Explain.
- b. Which are the network configuration files that are required to be changed while setting up a system or moving the system? Explain.
- c. What is Network file system? Explain in detail. Explain the two important NFS configuration files for using the features of NFSv4.
- d. What is dynamic host configuration protocol? How are DHCP server and client configured on Linux?

3. Attempt **any two** of the following: 10

- a. What is Samba? What is server message block? Explain
- b. How are samba users created? Explain with examples.
- c. What is timeserver? Why is it required? What are the different types of time servers? How is it configured?
- d. What is a caching proxy? What are the uses of a caching proxy server?

4. Attempt **any two** of the following: 10

- a. Discuss the http protocol and following daemons available in Linux: sshd, ftpd.
- b. How is xinetd server configured? Explain.
- c. Explain the nsswitch.conf and resolv.conf files. What are their uses?
- d. Explain the seven configuration statements used in named.ca file.

5. Attempt **any two** of the following: 10

- a. What is POP3? What is IMAP4? Explain and compare them.
- b. How is vsftpd run over SSL? What are the SSL-related configuration directives for vsftpd over SSL? Explain.
- c. How can anonymous ftp access be disabled in vsftpd? Explain.
- d. Explain the configuration process of Postfix mail server?

6. Attempt **any two** of the following: 10

- a. What are the changes in Apache 2.0 compared to Apache 1.x? Explain.
- b. Explain the userdel and usermod command with options and arguments.
- c. How can we build packages from source rpms? Explain the various valid build stages.
- d. What are the advantages of shadow passwords over traditional password system?

[TURN OVER]

7. Attempt **any three** of the following:
- a. Explain the RAID levels 0,1,5,6 and 10.
  - b. Explain the showmount command with options and example.
  - c. Explain in detail the configuration process of squid.
  - d. What are zone statements? Explain the different values for the zone statement.
  - e. What is vsftpd? Enumerate and explain its features and usability enhancements. What are the distinguishing features of ProFtpd?
  - f. Explain the AddHandler, AddLanguage, AddDefaultCharset and AddCharset directives.
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