

(2½ 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 three of the following:**15**

- Why Red Hat Linux and Fedora has been so successful? Explain.
- Explain any five commands to view the contents of text files.
- Explain cut copy, paste and deleting operation in Vi editor.
- What do you understand by mounting devices? Give example of mounting a USB flash drive.
- How to set up your own repository?
- Explain installing and updating packages with yum.

2. Attempt any three of the following:**15**

- What is use of fstab? Explain contents of fstab.
- What is a swap space? Write procedure to add swap space.
- What is NetworkManager configuration file? Explain any five network configuration file variables.
- Write steps to enable and test the ssh server.
- Explain different fields of /etc/passwd.
- Write short note on connecting to an LDAP Server.

3. Attempt any three of the following:**15**

- Define Tables, Chains, and Rules. Explain most common elements of rules.
- Write short note on IP Masquerading.
- Write steps to encrypt and decrypt files using GPG.
- Explain subdirectories need to store the certificate. Write procedure to create your own Certificate Authority.
- Explain setting up NFSv4 with export options.
- Write steps to set up a Samba server with example.

4. Attempt any three of the following:**15**

- Explain the DNS lookup process.
- Write short note on DHCP (Dynamic Host Configuration Protocol).
- Explain different parameters used in the /etc/postfix/main.cf file.
- Explain components play role in the process of Internet mail.
- What are modes of Apache? Explain some performance parameters for these modes.
- How configure an Apache server to use LDAP?

5. Attempt any three of the following:**15**

- What are different ways to execute shell script? Explain in detail.
- What is boot loader? Explain content of grub.conf file.
- Explain different standard components (items) used in HA (High-Availability) cluster.
- Write tips for Troubleshooting a Nonoperational Cluster.
- Explain setting up the network installation server.
- Explain kickstart file to perform an automated installation.