

(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.