

Time: (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 four of the following:** 20
  - a. What are the different duties of Linux System Administrator?
  - b. How to set up your own repository?
  - c. Explain installing & updating package with YUM?
  - d. What are different commands for process-management?
  - e. Explain Cron in detail for job scheduling?
  - f. Why Red Hat Linux & Fedora has been so successful? Explain.
2. **Attempt any four of the following:** 20
  - a. Write a short note on connecting to an LDAP server?
  - b. What are different SSH security settings? Explain.
  - c. What is the use of fstab? Explain contents of fstab.
  - d. Explain different fields of /etc/passwd.
  - e. Explain the function of passwd command with its option?
  - f. What are the seven layers of the OSI model and explain their basic function?
3. **Attempt any four of the following:** 20
  - a. What is NFS? What are advantages & disadvantages of NFS?
  - b. Write steps to set up a Samba server with example?
  - c. Write a short note on DNS and its hierarchy?
  - d. What do you mean by File Transfer Protocol? Explain its working.
  - e. Explain the types of FTP?
  - f. What is SMTP, POP, IMAP?
4. **Attempt any Three of the following:** 15
  - a. What is boot loader? Explain content of grub.conf file.
  - b. Write a short note on secure shell?
  - c. How configure an Apache Server to use LDAP?
  - d. Explain setting up the network installation server?
  - e. What is LDAP? Explain its features.
  - f. Explain the working of DHCP.