

(2 ½ Hours)

[Total Marks: 75]

- N.B. 1) All questions are compulsory.
 2) Figures to the right indicate marks.
 3) Illustrations, in-depth answers and diagrams will be appreciated.
 4) Mixing of sub-questions is not allowed.

Q. 1 Attempt ANY FOUR from the following:**(20M)**

- (a) Explain the following user management commands.
 1. useradd 2. usermod 3. groupadd 4. groupmod 5. groupdel
- (b) Explain the role of firewall for protecting Linux network from security Threats.
- (c) What are runlevels in Linux? Explain the commands used to manage services.
- (d) Describe the stages involved in the Linux boot process.
- (e) Explain the working of rpm command with various options and Examples.
- (f) Explain Scheduling of process with cron command.

Q. 2 Attempt ANY FOUR from the following:**(20M)**

- (a) Write a short note on DNS and its Hierarchy.
- (b) Write down the steps to configure APACHE for Basic Website Services.
- (c) Explain how to configure SSH server and clients.
- (d) Write use of SMTP. List and Explain the key components that are essential for email to work.
- (e) Explain how to install and configure vsftpd server.
- (f) Explain the following:
 1. POP 2. IMAP

Q. 3 Attempt ANY FOUR from the following:**(20M)**

- (a) Explain how to install and configure NFS server and client.
- (b) Explain the steps for Setting up samba File server.
- (c) Discuss the importance of NIS. Explain Daemons and processes associated with NIS.
- (d) Explain the working of LDAP protocol.
- (e) Explain different Distributed File System (DFS) implementations.
- (f) Define MySQL. Explain steps involved in installing and configuring MySQL server.

Q. 4 Attempt ANY FIVE from the following:**(15M)**

- (a) Write any three differences between TCP and UDP protocol.
- (b) Explain the function of the ifconfig command in detail.
- (c) Describe the significance of the /etc/resolv.conf file in Linux.
- (d) Explain the purpose of the /etc/fstab file in Linux.
- (e) Write any three differences between FTP and SFTP.
- (f) Explain the concept of DHCP and its features.