

(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 All (Each of 5Marks)

(15)

## (a) Multiple Choice Questions:

- On \_\_\_\_\_ the domain's configuration files resides.
  - Caching server
  - Primary server
  - Secondary server
  - Root name server
- A LDAP directory is a tree of data entries that is hierarchical in nature and is called the Directory Information Tree (DIT).
  - True
  - False
- Which of the following is not a valid run-level?
  - 3
  - 0
  - 8
  - 1
- DHCP stands for \_\_\_\_\_.
  - Dynamic Host Creation Protocol
  - Dynamic Host Configuration Protocol
  - Defined Host Configuration Protocol
  - Dedicated Host creation Protocol
- Which file is read by init to get the default runlevel?
  - /etc/profile
  - /etc/init
  - /etc/boot
  - /etc/inittab

## (b) Fill in the blanks : (www, mod\_ftp, jabber server, rules, org, directions, FTP server, IRC server, mod\_ssl)

- \_\_\_\_\_ is an open standard for instant messaging.
- The vsftpd package is used for the \_\_\_\_\_ software.
- A chain is simply a list of \_\_\_\_\_ that act on a packet flowing through the system.
- \_\_\_\_\_ apache module provides strong cryptography for the Apache web server.
- In website 'www.support.example.org,' \_\_\_\_\_ is the top level domain.

## (c) Short Answers:

- The /etc/passwd File
- Role of IMAP server.
- What is IP Aliasing?
- What is caching server?
- Role of samba server.



Q. 2 Attempt the following (Any THREE)(Each of 5Marks) (15)

- (a) What is the importance of /etc/fstab in linux file system?
- (b) Explain the following variables supported in xinetd services:
  - i) socket\_type
  - ii) user
  - iii) server
  - iv) wait
  - v) protocol
- (c) Write steps to configure Netfilter.
- (d) What is GNU public license? Explain advantages and disadvantages of open source software.
- (e) What is kernel and where do you find kernel source code? Explain how to unpack the kernel source code.
- (f) Explain what are targets? List any 5 targets used in preparing the kernel.

Q. 3 Attempt the following (Any THREE) (Each of 5Marks) (15)

- (a) Write a short note on FTP.
- (b) Define Apache. Write its benefits.
- (c) Discuss POP in regards with following points:
  - i) Reasons why POP was created?
  - ii) Idea behind POP.
- (d) Explain OpenSSH.
- (e) Write syntax along with example to define Primary and Secondary Zone in named.conf file of BIND.
- (f) What is SMTP? Explain.

Q. 4 Attempt the following (Any THREE) (Each of 5Marks) (15)

- (a) Write any five components of NFS.
- (b) Explain steps to configure NIS Server.
- (c) State any five options of DHCP configuration file.
- (d) Discuss phpMyAdmin.
- (e) List and explain implementations of Distributed File Systems (DFS).
- (f) What is LDAP? Explain.

Q. 5 Attempt the following (Any THREE) (Each of 5Marks) (15)

- (a) Write five predefined chains of IPtables.
- (b) List and explain DNS record types.
- (c) Explain any five common directives or options that are used in Apache's configuration file.
- (d) Write a short note on PostgreSQL.
- (e) Define the following terms:
  - i) Physical Volume
  - ii) Logical Volume
  - iii) Physical extent
  - iv) Logical Extent
  - v) Volume group

