

Q.P. Code : 361301

(3 Hours)

[Total Marks : 100

- 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. Answer **any two** of the following: **10**
- (a) Explain Smbclient, smbmount commands with suitable example.
 - (b) Explain the use of cron files.
 - (c) Explain the concept of subnetting with example.
 - (d) Write a short note on GRUB.
2. Attempt **any three** of the following: **15**
- (a) Write the importance of rc scripts.
 - (b) Explain the concept of runlevel used in Linux.
 - (c) What is RAID? Write different types of RAID. Explain various levels of RAID.
 - (d) Write the purpose of any five directories of / .
 - (e) Write the basic steps used to boot the system.
 - (f) Write the duties of system administrator.
3. Attempt **any three** of the following: **15**
- (a) Explain the concept of NFS with suitable example.
 - (b) What is CIDR ? Explain with suitable example.
 - (c) Explain the concept of DHCP with example.
 - (d) Write the advantages and disadvantages of NFS.
 - (e) Explain any five NFS export options.
 - (f) List various files used in Linux to add a system to network. Explain.

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

15

- (a) Write the steps to configure squid.
- (b) Explain how to optimize samba service?
- (c) Write the purpose of various NTP utility programs.
- (d) List options of the global section of samba configuration file. Also write the purpose of each.
- (e) List the secure services and explain them with suitable example if any.
- (f) Explain the scp and sftp services with suitable example.

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

15

- (a) List and explain different types of Domain Name Servers.
- (b) Explain the working of POP3 and IMAP.
- (c) Explain any five directives of vsftpd.conf file.
- (d) Give example of zone file. Explain
- (e) List key components that are essential for email to work. Explain in short.
- (f) Write the advantages of vsftpd.

6. Attempt **any three** of the following:

15

- (a) Write the steps to configure mailman.
- (b) What is the purpose of MPM ? Explain different approaches to process creation and control.
- (c) Explain the directory block of httpd.conf file.
- (d) Write a SSI script that will display long listing of /root.
- (e) Explain the working of Apache web server.
- (f) Write a short note on content negotiation.

7. Attempt **any three** of the following:

15

- (a) List various commands used to manage the groups in Linux. Also write the purpose of each.
- (b) Explain how to optimize web service.
- (c) Explain with suitable example user creation using command.
- (d) Explain rpmquery command with options.
- (e) Explain with example how password of multiple users can be changed in a single operation.
- (f) What are the advantages of shadow password over traditional password system?