23242

3 Hours / 70 Marks   Seat No.

Instructions :   (1)   All Questions are *compulsory.*

       (2)   Illustrate your answers with neat sketches wherever necessary.

       (3)   Figures to the right indicate full marks.

       (4)   Assume suitable data, if necessary.

Marks

1.   **Attempt any FIVE of the following :**   **10**

(a)   Enlist any 2 LINUX shells along with its features.

(b)   Enlist any two internal and two external LINUX commands.

(c)   Describe pipe operator with example.

(d)   Write any four points to justify need of backup.

(e)   Enlist any four TCP/IP configuration files.

(f)   State any four features of LINUX file systems.

(g)   State syntax of 'while' command in shell program and describe it.

2.   **Attempt any THREE of the following :**   **12**

(a)   Describe working of RAID0 and RAID1 with diagram.

(b)   Describe commands stepwise with syntax for creating, editing and saving a file in Vi editor.

(c)   Draw diagram for architecture of LINUX and describe its layers.

(d)   Describe use of following commands with example :

       (i)   wall   (ii)   who

3. **Attempt any THREE of the following :** 12

(a) Describe role of administrator.

(b) Describe use of following commands with example – (i) ifconfig (ii) ping.

(c) With suitable example differentiate between 'grep' and 'fgrep' commands.

(d) Write appropriate commands for following tasks :

(i) To create file   (ii) To copy file

(iii) To rename file   (iv) To delete file

4. **Attempt any THREE of the following :** 12

(a) Demonstrate process state transition along with diagram.

(b) Illustrate use of 'chmod' command along with example.

(c) Write a shell script to check if numeric values of two variables are same or not. Accordingly display message.

(d) Write stepwise procedure to create a new user as 'user1' and create a group as 'group1, then make user1 as member of group1. (Write it along with syntax of required commands)

(e) Describe NIS with any two topologies.

5. **Attempt any TWO of the following :** 12

(a) Write a shell script to accept a number from user and calculate factorial of that number.

(b) Describe any six Operating System Services.

(c)   Give commands for performing following tasks :

(i)   To see help (manual reference) of 'ls' command.

(ii)   To change password of user1.

(iii)   To create directory as 'DIR1'.

(iv)   Move file 'abc' to 'DIR1' directory.

(v)   Display type of file 'abc'.

(vi)   Display default permissions of file 'abc'.

6.   **Attempt any TWO of the following :**   **12**

(a)   Describe following along with command (syntax) and example :

(i)   Wildcard

(ii)   Input Redirection

(iii)   Output Redirection

(b)   Describe any four functionality of superuser. Also describe how to acquire superuser status along with commands.

(c)   Write down stepwise procedure to configure LINUX DHCP server and client along with syntax of commands.

———————————