

Write the use and syntax of the following
Total number of printed pages-3

44/52 (6) BCA/ITB-HC-6016 SADL

2024

**SYSTEM ADMINISTRATION
USING LINUX**

Paper : BCA-HC-6016/ITB-HC-6016

Full Marks : 60

Time : Three hours

**The figures in the margin indicate
full marks for the questions.**

1. Answer the following questions : 2×5=10

- (a) What do you mean by System Administrator?
- (b) What are *two* types of Linux user mode?
- (c) What is the difference between the home directory and the working directory?
- (d) Define absolute and relative path names.
- (e) Write the function of if config command.

Contd.

2. Write the use and syntax of the following Linux commands : $1 \times 10 = 10$

(i) mk dir

(ii) pwd

(iii) ls-a

(iv) chown

(v) who

(vi) su

(vii) umask

(viii) echo

(ix) sort

(x) kill

3. Answer the following questions : **(any three)**

(a) What is the Linux shell? What types of shells are there in Linux? Write the use of them. $2+3+5=10$

(b) Write the meaning of the following Linux commands : $2 \times 5 = 10$

(i) chmod ug+x linux.txt

(ii) chmod 755 dnx.txt

(iii) chmod a-rw shell.txt

(iv) chmod 777 process.txt

(v) chmod o-rwx abc.txt

(c) Describe about the format and specification of the /etc/shadow file.

10

(d) Briefly explain the directory structure of Linux Operating System.

10

(e) Briefly explain the different classes of IP address. Write *five* differences between IPv4 and IPv6 address.

$5+5=10$

4. Write short notes on : **(any two)** $5 \times 2 = 10$

(a) Piping and redirection

(b) Hard link and soft link

(c) Netstat and ping

(d) System Monitoring and logging