## 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:  $2\times5=10$ 
  - (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.

Write the use and syntax of the following 2. 1×10=10 Linux commands

ASOS

- (i) o mk dir 071 (A) 2 (a) SE (A)
- (ii) pwd
- (iii) ls-a
- (iv) chown
- (v) who
- (vi) su
- (vii) umask
- (viii) echo
- (ix) sort
- (x) kill
- Answer the following questions: (any three) 3.
  - What is the Linux shell? What types of (a) shells are there in Linux? Write the 2+3+5=10use of them.
  - Write the meaning of the following (b) Linux commands:  $2 \times 5 = 10$ 
    - chmod ug+x linux.txt (i)
    - chmod 755 dnx.txt (ii)
    - (iii) chmod a-rw shell.txt
    - (iv) chmod 777 process.txt
    - chmod o-rwx abc.txt (v)

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

10

- Briefly explain the directory structure (d) of Linux Operating System. 10
- Briefly explain the different classes of (e) IP address. Write five differences between IPv4 and IPv6 address.

5+5=10

- Write short notes on: (any two)  $5\times2=10$ 
  - Piping and redirection (a)
  - (b) Hard link and soft link
  - (c) Netstat and ping
  - System Monitoring and logging (d)