

2022

( Held in 2023 )

BACHELOR OF COMPUTER APPLICATION

Paper : BCAHG1016

( **System Administration and Maintenance** )

Full Marks : 60

Pass Marks : 24

Time : 3 hours

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

1. Choose the correct answer from the following : 1×5=5

(a) Which command is used to identify **file type** in Linux?

(i) Type

(ii) File

(iii) F info

(iv) Info

(b) Which option of **rm command** is used to remove a directory with all its subdirectories?

(i) -b

(ii) -o

(iii) -p

(iv) -r

(c) Core of Linux Operating System is

(i) shell

(ii) kernel

(iii) terminal

(iv) command

(d) Kernel modules are present in

(i) /lib directory

(ii) /root directory

(iii) /boot directory

(iv) None of the above

(e) What is BIOS?

(i) Firmware

(ii) Hardware

(iii) Middleware

(iv) Software

2. Answer the following questions :  $2 \times 5 = 10$

(a) What is Linux/Unix? Write the command to print the current working directory.

(b) Define firmware.

(c) What is kernel? What is the role of kernel?

(d) What is device driver? Name the types of device driver.

(e) What is shell? Name the commonly used shells on different UNIX/LINUX variants.

3. Answer any five from the following questions :  $5 \times 5 = 25$

(a) What is GUI in Linux? Explain the components of GUI.

(b) Write the difference between Linux/Unix and other operating systems.

(c) Explain the client-server networking model.

(d) Write a brief history of Windows Operating System development.

(e) What is file system? Explain two types of file system.

- (f) Explain the functions of BIOS.
- (g) Write the commands for the following tasks in Linux (any five) :
- (i) Create directory
  - (ii) Remove directory
  - (iii) Change directory
  - (iv) Rename directory
  - (v) Change permission for a directory
  - (vi) Display the current date
  - (vii) List all the files of a directory

4. Answer any two from the following questions : 10×2=20

- (a) Explain the basic of file system architecture of UNIX/LINUX.
- (b) Give a brief overview how you can create active directory in Windows 2003/2008.
- (c) Write short notes on any two of the following :
  - (i) Firewall
  - (ii) LAN
  - (iii) Antivirus

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