AAR-003-003410   Seat No. _____

B. C. A. (Sem. IV) (CBCS) Examination

April / May – 2016

CC-22 : Operating System Concepts With Linux/Unix

Faculty Code : 003

Subject Code : 003410

Time : $2\frac{1}{2}$ Hours]   [Total Marks : **70**

1   Select the appropriate answers from the following :   **20**

   (1)   Which is the not operating system?

      (A)   Ubuntu   (B)   Red Hat Linux

      (C)   IBM AS/400   (D)   Sandisc

   (2)   Which of the following commands is used for time stamping?

      (A)   cd   (B)   cat

      (C)   touch   (D)   ls

   (3)   Which of the following commands is used to remove file?

      (A)   rm   (B)   rmdir

      (C)   cp   (D)   dp

   (4)   Which of the following commands is used to list out the directory and files?

      (A)   cal   (B)   ls

      (C)   cd   (D)   none of these

   (5)   Which of the following commands is used to create a file?

      (A)   cat   (B)   grep

      (C)   ls   (D)   none of these

   (6)   Which of the following commands is used to change permissions of files?

      (A)   grep   (B)   cal

      (C)   chmod   (D)   chmode

(7) Which of the following commands is used for pattern matching?

(A) grep   (B) cal

(C) mv   (D) bc

(8) Which of the following commands is used to display the system date and time?

(A) date   (B) time

(C) cdate   (D) none of these

(9) Which of the following commands is used to display the calendar?

(A) cl   (B) cal

(C) mv   (D) calender

(10) Which of the following commands is used to display the terminal type?

(A) cp   (B) tty

(C) grep   (D) none of these

(11) GRUB means _____.

(A) Grand Unified BootLoader

(B) Grand Universal Boot

(C) Grand Unified Base

(D) Grand Universal Base

(12) Linux uses _____ directory to store system configuration files.

(A) /bin   (B) /dev

(C) /boot   (D) /etc

(13) How much work is completed in given time is known as _____.

(A) Turnaround time   (B) Waiting time

(C) Utilization time   (D) Throughput

(14) Which is the desktop environment in ubuntu?

(A) GNOME   (B) IDE

(C) DEO   (D) terminal

(15) Correct syntax of while loop?

(A) while [condition]   (B) while (condition)

(C) while condition   (D) none of these

(16) Which command is used to create a directory in linux?

(A) rmdir   (B) mkdir

(C) cd   (D) dir

(17) Which command is used to send message to all login users?
  (A) write   (B) wall
  (C) tty   (D) telnet
(18) Which command is used to send message to only one user?
  (A) write   (B) wall
  (C) tty   (D) telnet
(19) Which of the shell variable to display last command's status?
  (A) $$ (B) $#
  (C) $?   (D) $0
(20) Which of the system variable to display the current shell name?
  (A) $SHELL   (B) $HOME
  (C) $TERM   (D) $PATH

2   (A) Answer the following questions : (any **three**)   6
      (1) Explain History of Linux.
      (2) Explain Unix architecture.
      (3) Explain Process Life Cycle Diagram.
      (4) Explain Types of shell.
      (5) Explain Cursor movement command in VI editor.
    (B) Attempt (any **three**) :   9
      (1) Explain Process Scheduling algorithm FCFS with example.
      (2) Explain File test operators in shell scripting.
      (3) Explain any two communication commands.
      (4) Explain samba server.
      (5) Write a shell script program to enter any no. and check that no. is odd or even.
      (6) Write a shell script program to enter any year and check that year is leap year or not.
    (C) Attempt the following questions : (any **two**)   10
      (1) Explain GNOME desktop.
      (2) Explain Redirection and piping.
      (3) Explain Linux Booting Process.
      (4) Explain if statement in shell scripting with example.
      (5) Explain case structure in shell scripting with example.

3 (A) Answer the following questions : (any **three**)   **6**

    (1) What is CPU scheduling.

    (2) What is SJN in operating system.

    (3) Explain Round robin scheduling policy.

    (4) Explain types of files in linux.

    (5) Explain grep command.

    (6) Explain sort command.

(B) Attempt (any **three**) :   **9**

    (1) Explain features of Linux.

    (2) Explain any two process related commands.

    (3) Explain Firewall services in Linux.

    (4) Explain LILO, CUI, and GUI.

    (5) Explain FTP services.

    (6) Explain wine software.

(C) Attempt (any **two**) :   **10**

    (1) Write a shell script to enter any file and check that file is directory file or not.

    (2) Write shell script to demonstrate positional parameter.

    (3) Write shell script to enter any no. and display the factorial of that no.

    (4) Write shell script to enter any file and check that file has read permission to it or not.

    (5) Write shell script to print following pyramid :

        1

        1   2

        1   2   3

        1   2   3   4

        1   2   3   4   5