DAI-003-2044004   Seat No. _____

B. Sc. (IT) (Sem. IV) (CBCS) (W.E.F. 2019) Examination

April - 2022

CS - 22 : Operating Systems Concept with UNIX/LINUX

Faculty Code : 003
Subject Code : 2044004

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

Instructions : (1) All questions are compulsory.
                          (2) Numbers in the right margin indicate marks.

1 (a) Objective type questions :   **4**
        (1) What is operating system ?
        (2) SJN _____.
        (3) Give the name of memory placement policy in operating system.
        (4) What is process ?
    (b) Attempt any **one** out of two :   **2**
        (1) Explain preemptive scheduling algorithm.
        (2) What is physical memory and virtual memory.
    (c) Attempt any **one** out of two :   **3**
        (1) Explain PSTD.
        (2) Explain function of operating system.
    (d) Attempt any **one** out of two :   **5**
        (1) Explain round robin algorithm with example.
        (2) Explain Paging in detail.

2 (a) Objective type questions :   **4**
        (1) Give the definition of who command.
        (2) What is the use of cron command ?
        (3) Use of chown command.
        (4) Give the command name of tools for sorting.
    (b) Attempt any **one** out of two :   **2**
        (1) Explain tools for mathematical calculation commands.
        (2) Explain any two command for file and directory.
    (c) Attempt any **one** out of two :   **3**
        (1) Explain commands for columns and fields.
        (2) Explain commands for finding pattern in files.
    (d) Attempt any **one** out of two :   **5**
        (1) Explain I/o redirection and piping.
        (2) Write a short not shell.

3   (a)   Objective type questions :   4
           (1)   What is variable in unix ?
           (2)   Use of PS2 system variable.
           (3)   Give the syntax of case statement.
           (4)   LILO _____.
     (b)   Attempt any **one** out of two :   2
           (1)   Explain GNU GPL concept.
           (2)   What is the use of TERM ?
     (c)   Attempt any **one** out of two :   3
           (1)   Write a shell script to perform arithmetic operator.
           (2)   Give the difference between open source and freeware.
     (d)   Attempt any **one** out of two :   5
           (1)   Explain in features of linux operating system.
           (2)   Write a shell script for Fibonacci series.

4   (a)   Objective type questions :   4
           (1)   What is GNOME ?
           (2)   What is KDE ?
           (3)   What is x-window manager ?
           (4)   GRUB _____.
     (b)   Attempt any **one** out of two :   2
           (1)   What is package manager in linux ?
           (2)   How many way to install any software in linux ?
     (c)   Attempt any **one** out of two :   3
           (1)   Write a step to install any software in linux.
           (2)   Who is the founder of linux ?
     (d)   Attempt any **one** out of two :   5
           (1)   Explain x11 configuration file.
           (2)   Write a short note on window manger.

5   (a)   Objective type questions :   4
           (1)   What is WINE ?
           (2)   FTP _____.
           (3)   DNS _____.
           (4)   How to create user in linux ubuntu give the command for that ?
     (b)   Attempt any **one** out of two :   2
           (1)   Explain firewall.
           (2)   What is Use of LDAP ?
     (c)   Attempt any **one** out of two :   3
           (1)   Explain samba server.
           (2)   Explain apache server.
     (d)   Attempt any **one** out of two :   5
           (1)   Write short note FTP server.
           (2)   How to configure DNS server ?