2011000105020001
Third Year B.C.A. (Sem – V)
Examination March-2023
Unix & Shell Programming (502)

Seat No:

[Time: Three Hours]   [Max. Marks: 70]

Student's Signature

Instructions: **(1) All questions are compulsory.**
                           (2) Figures to the right indicate full marks.

Q.1   **Answer The Following: (Any 5)**   **(14)**
   1. Differentiate between $* and $@.
   2. What do you mean by command substitution?
   3. Define redirection. What are the symbols for redirection?
   4. What is purpose of Super block?
   5. Explain –u, -n, -r option of sort.
   6. What does chmod 615 file 1 command do?
   7. List default files permission when umask is set 333.

Q.2   **Answer The Following (Any 3)**   **(14)**
   1. Explain structure of Unix File system.
   2. Explain characteristics of Unix OS.
   3. Explain Absolute and Relative file access permissions with example.
   4. Explain mode of vi.

Q.3   **Answer The Following**   **(6)**
   (a) Write a script to accept the filename and a word from user and count the occurrence of that
       word in a file.

                                              OR

   (a) Write a shell script that displays the content of the file that has maximum size in the current   **(6)**
       directory and deletes the file if user wants to.
   (b) Explain at and batch command.   **(4)**
   (c) Explain any 2 communication commands.   **(4)**

Q.4   **(a) Write commands for following: (Any 7)**   **(14)**
   1. Write a grep command to display line from emp file which does not contain the word"
      director".
   2. Write a grep command to count employees who working in computer department from file
      emp.
   3. Write a grep command to display line which starts with "The" from file 1.
   4. Write a sed command to replace "Patel" with "Shah".
   5. Write a command to count number of characters in a last line of file 1.
   6. Display the processes of user 'BCA01'.

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7. Write a command to change all lowercase letters of a file 1 to upper case.
8. Write a command that selects the lines from file 1 that start with one or more blank spaces.

Q.5   Do as following: (Any 2)   **(14)**
(a) Explain array in awk.
(b) Explain system variables in awk.
(c) 1. Write an awk script to sum 2nd, 3rd and 4th fields of file and display it.
    2. Write an awk script to display lines from 5 to 56.

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